

Long-Distance Agreement in Icelandic: Locality restored

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Abstract The subject-predicate agreement system in Icelandic appears to show sensitivity to the morphological marking of case, instead of the syntactic position of the argument to be agreed with (Zaenen et al. 1985, Sigurðsson 1993, 1996, among others). Furthermore, agreement with the Nominative object appears to be optional and may be disrupted by an intervening Dative argument (Watanabe 1993, Schütze 1993, 1997, Chomsky 2000, Holmberg and Hróarsdóttir 2003, Boeckx and Hornstein 2003, Nomura 2005, Bobaljik 2008, Árnadóttir and Sigurðsson 2012, among others). This article contributes to the existing discussion by proposing a new empirical generalization about the nature of Long-Distance Agreement (LDA), i.e., agreement which occurs in a bi-clausal environment, and its interaction with Dative interventions. Based on the new data from an Icelandic variety called Icelandic B (Sigurðsson and Holmberg 2008), I argue that LDA takes place only if the intervening Dative argument undergoes independently motivated A-movement to the edge of *v*P. The core idea is that the locus of agreement with the Nominative object is *v* – its Case licenser: LDA arises only if *v* can probe the Nominative argument in the absence of the Dative argument (Chomsky 2000, Béjar and Rezac 2003, Rezac 2004, 2008b, Sigurðsson and Holmberg 2008, among others). The proposed analysis thus accounts for the Icelandic patterns in a strictly derivational and locality-based manner, without any recourse to post-syntactic operations, optionality in agreement or significant modifications in the theory of ϕ -feature Agree, thus restoring the Icelandic agreement system to normalcy.

Keywords Icelandic · Long-Distance Agreement · Locality · ϕ -Agree · Dative intervention · phases

1 Agreement in bi-clausal environment

The example in (1) demonstrates a basic agreement fact about Icelandic: overt morphological agreement of the finite predicate is not uniformly governed by an argument in a specific

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syntactic position; instead the finite verb may agree with an argument in Nominative, irrespective of the argument's syntactic position (Sigurðsson 1993, 1996, among others).¹ Thus in (1), the agreement is with the morphologically Nominative argument *ambáttir* 'slaves,' even though syntactically it is an object of the passive predicate.

- (1) það voru konungi gefnar ambáttir í vetur.
 EXPL were.PL king.DAT given slaves.NOM in winter

'A king was given female slaves in winter.'

The puzzling fact about Icelandic is that in a bi-clausal environment² agreement appears to be optional.³ Thus in (2), the verb may agree with the Nominative subject of the small clause, *tölvurnar* 'the computers', or it may surface with default agreement (3.SG). I will refer to this type of agreement in a bi-clausal environment as Long-Distance Agreement (henceforth, LDA). While the pattern reported in (1) is robust for all Icelandic speakers, the agreement facts discussed further are subject to a dialectal variation. As Sigurðsson and Holmberg (2008) described in a significant detail there are (at least) three varieties of Icelandic that differ as to whether or not they allow agreement with a Nominative object in other configurations (see also Árnadóttir and Sigurðsson 2012). Since the focus of this article is the nature of Dative intervention, I solely use data from the variety called by Sigurðsson and Holmberg Icelandic B, as this is the only variety in which the relevant contrast is attested. As for the facts and the analysis for Icelandic A and Icelandic C, I refer the reader to Sigurðsson and Holmberg's work.⁴

- (2) a. Einhverjum stúdent finnst tölvurnar ljótar.
 some student.DAT finds.SG computers.DEF.NOM ugly.NOM
- b. Einhverjum stúdent finnast tölvurnar ljótar.
 some student.DAT find.PL computers.DEF.NOM ugly.NOM

¹ See Zaenen et al. (1985) for arguments that quirky subjects in Icelandic are syntactically subjects, and consequently, Nominative-marked arguments can be objects etc.

² I use the term 'bi-clausal' as a cover term for a variety of structures in which the matrix verb takes a predicative structure as its complement, i.e., in some cases, as in (2) below, the embedded clause is a small clause without an overt predicate (AP), while in others there is an overt predicate. As far as I can tell there are no differences in the relevant agreement pattern, thus for the purposes of this article I simplify their internal structure and treat all small clauses as if they were based on a verbal predicate.

³ Agreement with a Nominative argument can be optional in mono-clausal environment as well. There is a high degree of inter-speaker variability but also, lexical predicates differ in whether or not they allow optionality (Ussery 2009, 2011, Árnadóttir and Sigurðsson 2012). Even though some of these facts might follow from the proposal put forward here, a careful investigation of this variability goes beyond the scope of this study.

⁴ Unless indicated otherwise, the judgments reported in this article are from 9 native speakers of Icelandic B (using the Icelandic varietal classification defined in Sigurðsson and Holmberg 2008; I interviewed several speakers of Icelandic A and C as well. However, their judgements are not included as the speakers do not share the critical agreement contrast investigated here, i.e., the contrast originally reported in Holmberg and Hróarsdóttir (2003).) They all are originally from Reykjavík, have a college education or higher, and were born between 1976 and 1982. Data were collected either as a forced choice, using truth-value judgment tasks (Skopeteas et al. 2006, Matthewson 2004), or via elicitation. The core judgments reported in the article were shared by all 9 speakers of Icelandic B I interviewed.

‘Some student finds the computers ugly.’ (Holmberg and Hróarsdóttir 2003, p. 999, (9))

Interestingly, LDA in a bi-clausal environment is sensitive to a presence of a potential Dative intervener. As noticed by Watanabe (1993) and Schütze (1993, 1997), if a Dative argument (‘experiencer’) linearly intervenes between the finite verb and the Nominative argument, the otherwise optional agreement with the Nominative argument is excluded, (3).

- (3) a. Það virðist einhverjum manni hestarnir vera seinir.
 EXPL seems.SG some man.DAT horses.DEF.NOM be slow.NOM
 (Diagram: A dashed line with arrows at both ends connects the boxed *seems.SG* to the *hestarnir* Nominative argument.)
- b. *Það virðast einhverjum manni hestarnir vera seinir.
 EXPL seem.PL some man.DAT horses.DEF.NOM be slow.NOM
 (Diagram: A solid line with an arrow at the end connects the boxed *seem.PL* to the *hestarnir* Nominative argument. An ‘x’ is placed below the line between the Dative and Nominative arguments.)

‘A man finds the horses slow.’ (Holmberg and Hróarsdóttir 2003, p. 1010–1011, (39))

The interaction with a Dative argument led to analyses in terms of defective intervention (Chomsky 2000, Béjar and Rezac 2003, Boeckx 2003, Rezac 2004, 2008b, Sigurðsson and Holmberg 2008), and analyses that argue that LDA arises only if the infinitival complement undergoes restructuring in the sense of Wurmbrand (2001) (Nomura 2005, Bobaljik 2008).

However, as observed by Holmberg and Hróarsdóttir (2003), not all Dative arguments behave as interveners in an LDA configuration, providing an intriguing counterexample to the existing proposals. As the examples in (4) show, some Dative arguments are transparent to LDA. If LDA was blocked because of defective intervention, all Datives should block LDA. If the presence of a Dative experiencer correlated with a non-restructuring infinitival complement, no Dative should be transparent to LDA either.

- (4) a. Það finnst mörgum stúdentum tölvurnar ljótar.
 EXPL finds.SG many students.DAT computers.DEF.NOM ugly.NOM
 (Diagram: A dashed line with arrows at both ends connects the boxed *finds.SG* to the *tölvurnar* Nominative argument.)
- b. Það finnast mörgum stúdentum tölvurnar ljótar.
 EXPL find.PL many students.DAT computers.DEF.NOM ugly.NOM
 (Diagram: A solid line with an arrow at the end connects the boxed *find.PL* to the *tölvurnar* Nominative argument.)

‘Many students find the computers ugly.’ (Holmberg and Hróarsdóttir 2003, p. 1000, (13))

The pattern raises the question of what the difference between (3) and (4) is. According to Holmberg and Hróarsdóttir (2003), LDA is conditioned by the ϕ -feature values of the intervening Dative argument. According to their proposal, the Dative argument is transparent to LDA only if the Dative argument and the Nominative goal share the same values of ϕ -features.⁵

I will argue that the generalization put forward in Holmberg and Hróarsdóttir (2003) is not empirically correct, a fact which in turn invalidates the proposed analysis. The argument

⁵ Thus they adopt the defective intervention analysis but modify it in the spirit of multiple-Agree proposals, such as that of Hiraiwa (2005).

will come from a new empirical observation, namely, that there are some Dative arguments that share their ϕ -features with the Nominative probe, yet they still behave as interveners for the Agree relation between the finite verb and the Nominative argument. In order to account for the data, I will propose a new generalization which will tie the difference between transparent and opaque Dative arguments to an independent syntactic property: I will show that only Dative arguments that may independently undergo Object Shift⁶ (Holmberg 1986, Thráinsson 2001) may be transparent to LDA.⁷ Thus, the proper characterization of the intervention properties cannot be stated in terms of ϕ -feature-value congruence. Instead, it needs to be stated in structural terms, more precisely, in terms of locality. More precisely, I will argue that LDA arises only if there is no intervening argument between the probe (v) and the Nominative argument at the time when Agree takes place. The structure in (5) schematically gives the relevant configurations of v P, including the infinitival complement of V. For concreteness, the infinitival complement here is a small clause (PredP), as in (4). Note that the verb is *in situ*, even though in the final structure, it will raise to the inflectional domain.⁸

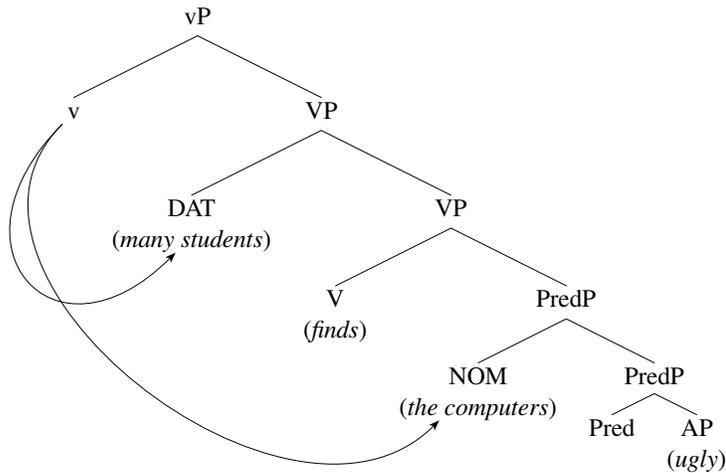
⁶ As I discuss in Section 3, I assume the Dative argument is merged as an internal argument. Thus I use the term Object Shift as a cover term for semantically motivated movement of an internal argument that targets the specifier of v P.

⁷ It is a common property of all the cases to be discussed in this article that the relevant movement is semantically motivated. I do not have a principle explanation for why it should be so. The pattern seems to suggest that only a semantic movement is capable of merging a specifier of v P in the absence of an external argument. One possibility is that there is a connection between an existential closure and having a specifier, as in Diesing (1992). The other option is that the ability to merge a specifier of this sort results from an independent economy condition on the syntax-semantics interface. Unfortunately, I am not aware of any data or theoretically motivated argument which would clearly distinguish between these two options.

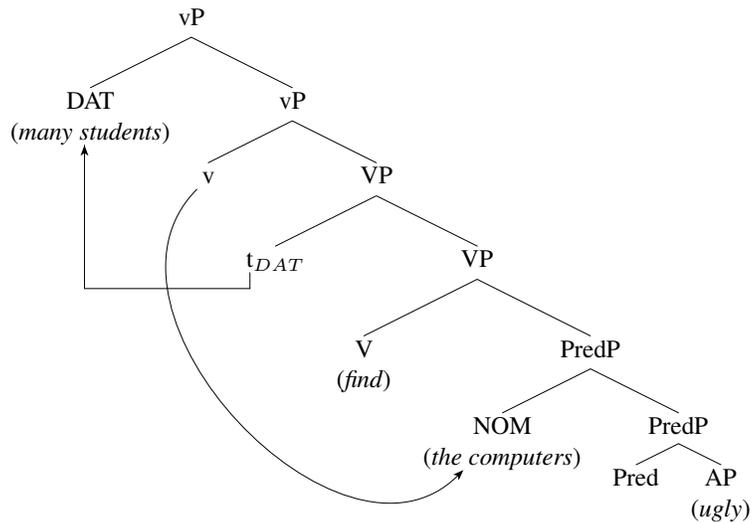
⁸ I will come back to the ϕ -Agree interactions between the v P and the inflectional domain in Section 4. Note also that the implicit assumption here is that there is no T head in the embedded small clause. Since the embedded structures are infinitival complements, it is not given a priori that the T projection is needed (see Wurmbrand 2001 and much of the following work). I will return to the question of T in more detail in Section 4, but note that since these are infinitival structures and since there is no external argument, T is not necessary for licensing.

Also, the reader might worry that since Icelandic might be a language with V-to-C movement (Bowers 2002), as pointed out by an anonymous reviewer, the critical movements might target higher structure, and consequently T might still be the relevant locus of agreement. Putting aside that the V-to-C analysis is somewhat controversial as *það* can appear in non-V2 environments (relative clauses, adjunct since-type clauses, embedded wh-clauses, etc.; Angantýsson 2011 and the literature cited there), my understanding is that the shift would ultimately be inconsequential because the critical probe is a syntactic object – i.e., any theory of Agree that makes a connection between ϕ -feature agreement and case licensing will need to acknowledge the role of a v -like head (see Marantz 2007, Sigurðsson 2012 and Schäfer (2012) for converging analyses). Furthermore, the fact that at least the clearly predicative small complements are infinitival adds another complication which yet again requires rethinking the locus of agreement. I will elaborate more on these issues in Section 3 and Section 4.

(5) a. *LDA:



b. ✓LDA:



Section 2 provides empirical support for this new generalization, and Section 3 proposes an analysis in terms of *v* acting as a single probe and the Nominative argument being the closest goal in the search domain at the relevant time of the derivation. Since LDA arises only if the Dative argument may be removed from the probing domain, we expect to find LDA whenever the Dative argument may be moved out of the probing domain. Section 3.2 explores this prediction by investigating Dative arguments that undergo EPP-driven Movement (Bobaljik and Jonas 1996, Vangsnes 2002). As we will see, the prediction is indeed borne out.

Since LDA is predicted to take place only if the potential intervener is removed out of the probing domain before Agree takes place (Chomsky 2000, Béjar and Rezac 2003, Rezac 2004, 2008b), the timing of syntactic operations is crucial. Section 4 refines the proposed system by looking closely at the question of when exactly Agree takes place and how ϕ -feature Agree between matrix T and the lower structure gets established. Since the relevant configurations concern v while the morphological reflex of the finite agreement appears on the finite verb in T, it is unlikely that LDA is an instance of a post-syntactic agreement (contra Bobaljik 2008). Section 4.1 explores the predictions made by the refined system in the domain of wh -movement. Section 4.2 addresses the seeming paradox, namely, the fact that even though the relevant Agree takes place in syntax, it still seems to respect a morphologically based accessibility hierarchy (Marantz 1991). I will argue that a morphological Nominative results from mapping onto a DP without any additional case layer (Rezac 2008b, Richards 2008, Pesetsky 2013). Thus it is the only type of noun phrase which may be minimally searched for D and in turn become a source of ϕ -feature valuation. Section 5 concludes the article.

2 Toward a new generalization: Object Shift feeds LDA

According to Holmberg and Hróarsdóttir (2003) LDA across a potential Dative intervener is possible only if the values of ϕ -features on the Nominative goal and the Dative intervener are identical. The problem with this generalization is that it does not extend to other lexical items with the same ϕ -feature values.⁹ We can see this if we compare one of their original examples, in (4), repeated below, with its minimally different counterpart given in (6). In both (4) and (6), the Nominative argument is the subject of the small clause and it is in the plural, while the potential intervener is plural in both of these configurations. Yet, only the Dative in (4) enables LDA. The Dative in (6) blocks it. The contrast is entirely unexpected under the generalization proposed by Holmberg and Hróarsdóttir.

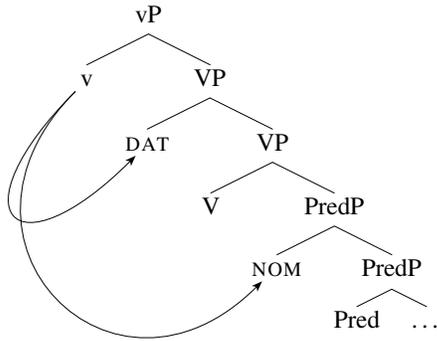
- (4) a. Það finnst mörgum stúdentum tölvurnar ljótar.
EXPL finds.SG manystudents.DAT computers.DEF.NOM ugly.NOM
 b. Það finnst mörgum stúdentum tölvurnar ljótar.
EXPL find.PL many students.DAT computers.DEF.NOM ugly.NOM
 ‘Many students find the computers ugly.’
- (6) a. Það finnst fáum börnum tölvurnar ljótar.
EXPL finds.SG few children.DAT.PL computer.DEF.NOM.PL ugly.NOM
 b. *Það finnst fáum börnum tölvurnar ljótar.
EXPL find.PL few children.DAT.PL computer.DEF.NOM.PL ugly.NOM
 ‘Few children find the computers ugly./There are few children that find the computers ugly.’

I argue that the presence or absence of LDA is not dependent on the value of ϕ -features of the Dative intervener. Instead LDA depends on whether or not the Dative intervener may have undergone Object Shift, i.e., semantically motivated movement to the edge of vP (Holmberg 1986, Thráinsson 2001). Thus, Datives that always block LDA – I will call them Datives of the A-class (Dative-A) – correspond to DPs that on independent syntactic grounds cannot

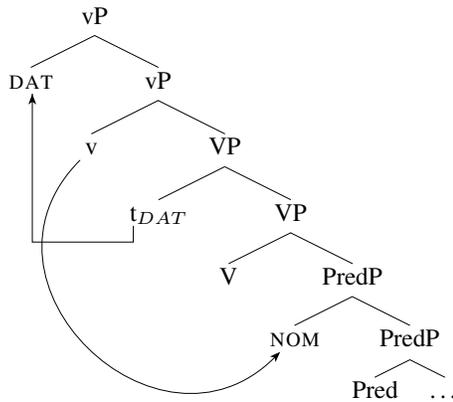
⁹ Recall that the data reported here are only from speakers of Icelandic B (Sigurðsson and Holmberg 2008; see note 4). More precisely the data reported here are only from the speakers who report intervention with some Datives, as in (3), but not with those discussed in Holmberg and Hróarsdóttir (2003), as in (4).

undergo Object Shift. Hence, they stay below v at the time when Agree takes place. In contrast, Datives that are transparent to LDA – I will call them Datives of the B-class (Dative-B) – may independently undergo Object Shift, i.e., they may raise above v , which is, as I argue, the structural configuration necessary for LDA to take place. In contrast, if Dative-B does not undergo Object Shift, for the purposes of LDA it behaves like Dative-A, i.e., it blocks agreement with the Nominative argument and in turn it creates the illusion of agreement with the Nominative argument being optional. The relevant configurations are repeated below. The structure in (5-a) corresponds to a configuration with Dative-A, i.e., a Dative argument that does not undergo Object shift, while (5-b) corresponds to Dative-B, i.e., a Dative argument that undergoes Object Shift.

(5) a. Dative-A \rightarrow OS: *LDA:



b. Dative-B \rightarrow OS: \checkmark LDA:



In order to execute the argument, let us first summarize the basic distributional facts about Long-Distance Agreement with a Nominative argument in a bi-clausal environment. First, as we saw in (2), if no argument intervenes between the finite verb and the Nominative argument, agreement is optional. Thus, whatever theory of agreement we adopt, it needs to allow for two possible agreement patterns in the absence of a possible intervener. Second, as we saw in (3), if a Dative argument linearly intervenes between the finite form and the

Nominative argument, LDA is sometimes blocked (Watanabe 1993, Schütze 1997). Third, there are some Dative arguments that may linearly appear between the finite verb and the Nominative argument, yet LDA is still licit, as in (4), which we saw earlier. A schematic survey of the basic configurations is given in (7). The \succ sign indicates c-command relations at the surface representation.¹⁰

- (7) a. DAT-A/DAT-B \succ verb.SG/PL \succ NOM.PL
 b. verb.SG/*PL \succ DAT-A \succ NOM.PL
 c. verb.*SG/PL \succ DAT-B \succ NOM.PL

As mentioned already, Holmberg and Hróarsdóttir (2003) were the first to observe that not all Dative arguments behave as interveners – Datives in the plural are transparent to LDA. This generalization cannot be correct, however, because the speakers who have a contrast between (3) and (4), do not find LDA across certain other plural Datives equally acceptable. As the examples in (8)–(11) demonstrate, there are Dative arguments in the plural that systematically block LDA.

- (8) a. Það finnst fáum börnum tölvurnar ljótar.
EXPL finds.SG few children.DAT.PL computer.DEF.NOM.PL ugly
 b. *Það finnst fáum börnum tölvurnar ljótar.
EXPL find.PL few children.DAT.PL computer.DEF.NOM.PL ugly
 ‘There are few children that find the computers ugly.’
- (9) a. Það finnst báðum köttumum mýsnar góðar.
EXPL finds.SG both cats.DEF.DAT mice.DEF.NOM tasty
 b. *Það finnst báðum köttumum mýsnar góðar.
EXPL find.PL both cats.DEF.DAT mice.DEF.NOM tasty
 ‘Both the cats find the mice tasty.’
- (10) a. Það finnst næstum öllum börnum tölvurnar ljótar.
EXPL finds.SG almost all children.DAT.PL computer.DEF.NOM.PL ugly
 b. *Það finnst næstum öllum börnum tölvurnar ljótar.
EXPL find.PL almost all children.DAT.PL computer.DEF.NOM.PL ugly
 ‘Almost all children find the computers ugly.’
- (11) a. Það finnst hverjum ketti mýsnar góðar.
EXPL finds.SG each cat.DAT mice.DEF.NOM tasty
 b. *Það finnst hverjum ketti mýsnar góðar.
EXPL find.PL each cat.DAT mice.DEF.NOM tasty
 ‘Each cat finds the mice tasty.’

¹⁰ I will have nothing to say about the grammar of the speakers who don’t share the critical contrast in (5), i.e., speakers of Icelandic A and Icelandic C of Sigurðsson and Holmberg (2008). Note that if the proposal is on the right track, LDA arises only in a particular syntactic configuration which is sensitive to Object Shift, head movement, phase-hood and Agree properties of the relevant phase head. The variation in Long-Distance Agreement thus might stem from a variation in any of these domains, not only from the domain of ϕ -feature Agree. A careful exploration of the relevant variables goes beyond the scope of the present work but I refer the reader to some possibilities explored in Sigurðsson and Holmberg (2008), especially the idea that there might be additional differences in the height of Dative arguments.

Yet, the observation made by Holmberg and Hróarsdóttir does not seem to be entirely accidental as other Dative arguments in the plural systematically allow for LDA. Note that there are non-trivial limitations to testing the properties of the interveners as the relevant configuration seems to arise only in transitive expletive constructions, and the set of Dative DPs that can occur in this type of construction is rather restricted. For instance, non-quantificational DPs and proper nouns are excluded from the relevant position, as are personal pronouns (e.g., Vangsnes (2002) and references cited therein). Yet, some other plural Datives behave as predicted by Holmberg and Hróarsdóttir (2003), as seen in (12)–(13).

- (12) a. Það finnst akkúrat þremur börnum tölvurnar
EXPL finds.SG exactly three children.DAT.PL computer.DEF.NOM.PL
 ljótar.
ugly
- b. Það finnst akkúrat þremur börnum tölvurnar
EXPL find.PL exactly three children.DAT.PL computer.DEF.NOM.PL
 ljótar.
ugly
 ‘Exactly three children find the computers ugly.’
- (13) a. Það finnst nokkrum köttum mýsnar góðar.
EXPL finds.SG few-of.DEF cats.DAT mice.DEF.NOM tasty
- b. Það finnst nokkrum köttum mýsnar góðar.
EXPL find.PL few-of.DEF cats.DAT mice.DEF.NOM tasty
 ‘Few of the cats find the mice tasty.’

In light of these facts, it is clear that restrictions on LDA across a Dative argument cannot be reduced to the ϕ -feature properties of the goal and the potential intervener. The question then is whether there is another syntactically relevant property which would account for the attested distribution. I argue that there indeed is a syntactic correlation which groups together the Dative arguments transparent to LDA, to the exclusion of the Dative arguments that systematically block LDA; namely, the intervention behavior of a Dative argument correlates with its Object Shift properties (Holmberg 1986, Thráinsson 2001). A new generalization stating the correlation is given in (14).

- (14) *New generalization:*
 A Dative argument is transparent to LDA only if the Dative DP can independently undergo Object Shift (OS).

Thus, for the speakers for whom, for instance, *fáum köttum* ‘few cats.DAT.PL’ blocks LDA, the same quantificational DP cannot undergo Object Shift, i.e., semantically motivated movement to the edge of *vP* in a canonical Object Shift environment. As we see in (15)–(16), if a DP that cannot undergo Object Shift appears as an object in a finite clause in which the main verb undergoes head movement to T,¹¹ the DP must follow the sentential negation *ekki*.

- (15) a. Mýs elska *ekki fáa ketti*.
mice love not few cats

¹¹ Which is the structural precondition of Object Shift. Note that other properties of Object Shift are investigated in Section 3.1.

- b. *Mýs elska **fáa ketti ekki**.
mice love few cats not
 ‘Mice do not love few cats.’
- (16) a. Mýsnar elska **ekki hvern kött**.
mice love not each cat
 b. *Mýsnar elska **hvern kött ekki**.
mice love each cat not
 ‘The mice do not love each cat.’

In contrast, quantificational DPs that are transparent to LDA can independently undergo Object Shift, i.e., as we see in (17)–(18), they may linearly precede the sentential negation. The relevant fact here is that full DPs in Icelandic, unlike their pronominal counterparts, undergo Object Shift optionally.

- (17) a. Mýsnar elska **ekki akkúrat þrjá ketti**.
mice.DEF love not exactly three cats
 b. Mýsnar elska **akkúrat þrjá ketti ekki**.
mice.DEF love exactly three cats not
 ‘The mice do not love exactly three cats.’
- (18) a. Mýsnar elska **ekki nokkra ketti**.
mice.DEF love not few-of.DEF cats
 b. Mýsnar elska **nokkra ketti ekki**.
mice.DEF love few-of.DEF cats not
 ‘The mice do not love few of the cats.’

The correlation between LDA and Object Shift is summarized in the table in (19). Note that for six speakers, the division is exactly as in (19). Three speakers reported a couple of quantifiers from the yes-OS group as not being able to undergo Object Shift. Crucially, these speakers also reported that these quantifiers were opaque for LDA. That is, the correlation between Object Shift and LDA was strictly deterministic for all interviewed speakers of Icelandic B: if a quantifier underwent Object Shift for a given speaker, LDA was possible. In contrast, if a speaker rejected Object Shift of a given quantifier, the speaker also did not accept LDA across this quantifier. In other words, there was no optionality in the reported judgements once the Object Shift facts were taken into account.¹²

¹² Some authors, most notably Ussery (2009, 2011) and Árnadóttir and Sigurðsson (2012), report agreement with Nominative object as being optional. However, if the findings reported in this article are on the right track, to properly evaluate the argument for agreement optionality, one would need to control for other possible differences in the grammar of the speakers, and a potential structural ambiguity in the investigated structures. Some concrete examples are explored in Section 4.1.

(19) *Correlation between LDA and Object Shift:*

Quantifier	Is LDA possible?	Is OS possible?
almost all	no	no
few	no	no
all	no	no
both the	no	no
almost all the	no	no
each	no	no
many	yes	yes
three	yes	yes
exactly three	yes	yes
few of the	yes	yes
some pl	yes	yes

3 The Analysis

The new generalization about LDA, stated in (14), crucially ties LDA to Object Shift. As argued in Thráinsson (2001) and the work cited there, Object Shift is a syntactic operation that targets a specifier of *vP* (Holmberg 1999, Nilsen 2003, Fox and Pesetsky 2005). Consequently, LDA takes place only if the Dative argument does not intervene between *v* and the Nominative object. The relation between T and the Nominative object remains unaltered, as the Dative argument intervenes between T and the Nominative argument irrespective of whether the Dative argument has undergone Object Shift.

This observation might seem puzzling in the light of work such as that of Chomsky (2000), Anagnostopoulou (2003), Béjar and Rezac (2003), Rezac (2004, 2008b), Sigurðsson and Holmberg (2008, among others), which crucially ties ϕ -feature Agree to case licensing, and in turn to T. Notice, however, that the locus of agreement in the constructions investigated here is in non-finite complements, and that the Nominative argument is syntactically an object. Consequently, irrespective of whether or not there is T in the non-finite complement (small clause), and whether or not infinitive T might be able to assign Case, T cannot be the primary locus of ϕ -feature agreement with the Nominative object simply because it does not license it. In other words, even though the Nominative object is morphologically realized as Nominative, syntactically it is an object and as such must be licensed by *v* (Sigurðsson 2012, see also Schütze (1993) and Harley (1995) for an argument in the same direction, and Bobaljik (2008) for a related discussion, especially in the connection to the PCC effects). Thus, I argue that in order to understand the Dative intervention pattern in Icelandic, we must shift the locus of agreement with the Nominative object to *v*, and separate it from the ϕ Agree morphologically manifested on finite T (see Marantz 2007, Schäfer 2012 and Sigurðsson 2012 for converging analyses).

Furthermore, I assume phase-based Agree, i.e., that all unvalued features must be checked and valued before Transfer (Chomsky 2001, 2004, 2013, among others). Consequently, if *vP* is a phase, the ϕ -features that act as a probe for agreement within the *vP* must be located on *v* (see Boeckx 2004, Pesetsky and Torrego 2007 for ideas in a similar direction). If the relevant ϕ -features appear on T, it must be via Agree between T and *v* (modulo Agree with other functional heads potentially intervening between T and *v*).

We are now in a position to derive the agreement patterns we have established. The analysis I propose closely follows the analysis proposed for Dative intervention facts in

Chomsky (2000), with the caveat that the locus of Agree is v as the relevant Case licenser. Let us start with the bi-clausal environments. I assume that v probes for the closest DP that can match and value its features. Match and valuation, however, take place only if the DP goal – more precisely, its label – is equipped with a complete set of valued ϕ -features. Since the closest goal is the Dative argument and since the Dative argument cannot value ϕ -features of the probe,¹³ the unvalued features on v are checked but not valued. The result is default agreement, i.e., 3SG.¹⁴

In contrast, if the Dative argument raises to Spec, v P, v is free to probe the Nominative object directly.¹⁵ In turn, the ϕ -features on v get checked and valued by the ϕ -complete set on the Nominative object. The result is 3PL agreement.

Since propositional predicates such as *seem* do not have any external argument, I assume that the Dative argument, i.e., the ‘experiencer’ with respect to whom beliefs expressed by the predicate are evaluated, is an internal argument of the matrix verb. This structure may be modeled either as a VP-shell or some form of an applicative structure (see Larson 1988, Hale and Keyser 2002; specifically for Icelandic see Harley 1995, Rezac 2008b, Wood 2015, among others). What matters to our current purposes is that the Dative argument is in its base-generated position asymmetrically c-commanded by v and in turn it intervenes between the probe (v) and its goal (the Nominative object). Thus, if the experiencer does not move above v , the Dative is the closest potential goal for v ; however, since it is not Nominative, it cannot value the ϕ -features on v , and in turn LDA cannot be established. In contrast, if the Dative experiencer moves to Spec, v P, v is free to probe the Nominative argument and agree with it in its ϕ -features.

This is, of course, only a rough sketch of the analysis. It crucially relies on a particular order of syntactic operations, namely, that the movement of the Dative argument needs to precede Agree. The empirical question is whether Agree may take place before the movement as well but LDA arises only if Agree takes place after the movement, or whether Agree always takes place only after the movement. In Section 3.1, we will see evidence that Agree must take place after the movement, hence the timing of these two operations is fixed. The other question we will need to answer is how the values of v interact with the higher phase, namely, the ϕ -features on T. Recall that even if the Dative argument raises to Spec, v P, it still intervenes between T and v /Nominative argument. We will return to ϕ -Agree interactions with the matrix T in Section 4. The remainder of this section investigates some predictions the current analysis makes but before we consider these predictions, first let us shortly address a certain theoretical question the current analysis poses.

As an anonymous reviewer correctly pointed out, the analysis falls short when it gets to another set of facts which I do not consider here, namely, a person restriction on Nominative objects. In Icelandic – and this fact holds for all of its varieties – Nominative objects cannot be in the 1st or 2nd person. Only 3rd person Nominative objects are grammatical (Taraldsen 1995, Sigurðsson 1996, among others). Recent analyses of the data, especially those of Béjar and Rezac (2003), Rezac (2004, 2008b), Richards (2008), Sigurðsson and Holmberg (2008) and Sigurðsson and Holmberg (2008) argue for Person and Number features being separate probes, where only the Person feature is directly tied to Case licensing. The basic

¹³ I will discuss why Dative arguments differ from Nominative arguments in their ϕ -feature properties in Section 4.2.

¹⁴ I will come back to the question of default agreement and its timing in more detail in Section 4.

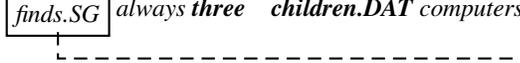
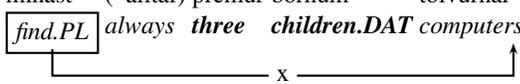
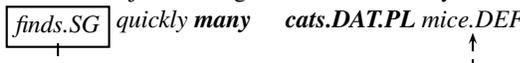
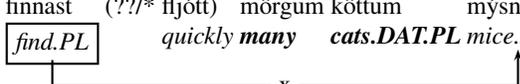
¹⁵ As an anonymous reviewer pointed out, I need to assume that copies become invisible for Agree. Though this is a common assumption in Chomsky’s work, it is far from trivial. Unfortunately, I do not have anything insightful to say about this potential issue, beyond what is in the existing literature, especially in the work on Dative displacement and the issues of activity condition (Rezac 2004, 2008b, Richards 2008, among others).

idea is that after the unvalued Person feature probes the Dative goal, the Number probe can under certain circumstances – be it displacement of the Dative argument, as in Béjar and Rezac (2003), Rezac (2008b), or a valued Person feature on the Dative argument, as in Rezac (2004), Richards (2008) – probe the Nominative object and agree with it in number. The assumption is that since only 1/2 person on the Nominative object needs to be checked for the derivation to converge, 3 person Nominative objects are grammatical because they lack a (valued) person feature, and consequently checking their number feature suffices. I have two reasons to use the model proposed in Chomsky (2000) instead. While the first one is essentially aesthetic, the other one concerns some non-trivial complications that arise with the separate-Person-Number approaches; an appropriate treatment of which would go far beyond the scope of this article. First, since there is no Number agreement across the Dative argument, at least not in the configurations discussed here, the simpler system suffices for the present purposes. A model that treats Number and Person as separate probes in principle allows Number agreement across a Dative argument as long as both the Dative argument and the Nominative object are 3rd person (it is this very property that is used in Holmberg and Hróarsdóttir 2003 to make Agree across certain Datives possible). In other words, the basic mechanism of these systems in fact predicts that there should be no Dative intervention as long as the Nominative object is in 3 person, contrary to the facts. In order to amend this incorrect prediction, Béjar and Rezac (2003), Rezac (2004, 2008b) impose further restrictions on Match (spelled out in detail in Béjar 2003), reminiscent of Chomsky’s ϕ -completeness. Even though the tools are only reminiscent of each other (note that the notion of ϕ -completeness is fundamentally incompatible with the probe separation), as far as I can tell their empirical coverage is identical. (I am not sure how exactly the problem would be dealt with within the model proposed in Richards 2008, but presumably a similar mechanism needs to be invoked.) In other words, the implementation is in the relevant respects identical to that of Chomsky (2000). The second reason – and this is a point brought up by Bobaljik (2008) – these proposals crucially assume that T is a Case licensor. Consequently, the restriction on 1/2 Nominative objects should be lifted in infinitival environments (note that this prediction is explicitly spelled out in Béjar and Rezac (2003) in connection to PCC obviation in Georgian nominalized structures). However, as Bobaljik demonstrates, this prediction is not borne out, i.e., the person restriction on Nominative objects holds in infinitival complements as well. It is not immediately obvious how the proposed model could be modified to account for these facts. I assume some modification along the lines suggested in this article – i.e., that the Nominative object is licensed by v , and consequently, the feature distribution is different – is needed but for that more work on Case licensing in infinitival environments needs to be done (see some preliminary thoughts in this direction in Schütze 1993 and Harley 1995).

3.1 Predictions of the Object Shift analysis

The proposed analysis crucially relies on the assumption that LDA arises only if the potentially intervening Dative argument undergoes Object Shift. In this section we will investigate the predictions this analysis makes, namely, we will investigate the relative position of the Dative argument and adverb as an indicator of the proposed movement. In the second part of this section we will investigate the semantic properties of the Dative intervener in relation to LDA. Since Object Shift is semantically-motivated movement, we expect Dative arguments blocking LDA to be interpreted differently than Dative arguments opaque for LDA.

We know that Object Shift is limited to constructions in which a verb has overtly moved outside of VP. Furthermore, Object Shift can take place across an adverb (Holmberg 1986, 1999).¹⁶ The analysis proposed here thus makes a clear prediction about the correlation between Object Shift and LDA; namely, we predict that if LDA is dependent on Object Shift, LDA should not be possible if a low adverb linearly precedes the Dative argument. As we see in (20)–(21), this prediction is borne out. In the examples in (20-a) and (21-a), the adverb precedes the Dative argument which means that the Dative argument did not undergo Object Shift. Consequently, the finite verb cannot agree with the Nominative argument and the verb surfaces with the default 3.SG inflection. The plural agreement is possible only if the adverb is not present, as witnessed by the examples in (20-b) and (21-b). In other words, LDA is possible only if the Dative argument might have undergone Object Shift; even though in this case it would have to be a string-vacuous movement. If Object Shift is blocked, so is LDA, which is correctly predicted by the current analysis.

- (20) a. Það finnst alltaf þremur börnum tölvurnar ljótar.
 EXPL finds.SG always *three children.DAT computers.DEF.NOM ugly*

- b. Það finnst (*alltaf) þremur börnum tölvurnar ljótar.
 EXPL find.PL always *three children.DAT computers.D.NOM ugly*

- ‘Three children always find the computers ugly.’
- (21) a. Það finnst fljótt mörgum köttum mýsna góðar.
 EXPL finds.SG quickly *many cats.DAT.PL mice.DEF tasty*

- b. Það finnst (??/* fljótt) mörgum köttum mýsna góðar.
 EXPL find.PL quickly *many cats.DAT.PL mice.DEF tasty*

- ‘Many cats quickly find the mice tasty.’

On the other hand, the analysis predicts that if the Dative argument precedes a low adverb, which is possible only if the Dative argument underwent non-string vacuous Object Shift, LDA should be obligatory. As we can see in (22), this prediction is borne out as well. Notice that for LDA to be obligatory in this configuration, it is necessary that Agree takes place only after Object Shift.

- (22) a. Það finnst mörgum köttum (??/* fljótt) mýsna góðar.
 EXPL finds.SG *many cats.DAT.PL quickly mice.DEF tasty*


¹⁶ As we saw in (15)–(16), Object Shift also crosses negation particle ‘ekki’. I do not use ‘ekki’ here though because the scope interaction between sentential negation and quantifiers adds an additional level complexity which is non-trivial to control for but it also makes the utterances harder for speakers to judge.

- b. Það finnst mörgum köttum fljótt mýsnar góðar.
 EXPL find.PL many cats.DAT.PL quickly mice.DEF tasty
-

‘Many mice find quickly the mice tasty.’

As we have seen, the current analysis makes clear predictions about cases in which we can test whether or not Object Shift took place, based on the relative position of the Dative argument and a low adverb. The analysis makes a clear prediction about cases in which Object Shift must have been a string vacuous movement as well. Note that Object Shift has an interpretive effect (e.g., Diesing and Jelinek 1995, Diesing 1992, Thráinsson 2001): if an argument undergoes Object Shift, it must be interpreted as given or specific; in contrast, if an argument does not undergo Object Shift it may be interpreted as new or non-specific. Consequently, if LDA is dependent on Object Shift, LDA should be correlated with the Dative argument being interpreted as if it underwent Object Shift, i.e., a Dative transparent for LDA should be interpreted as given or specific. On the other hand, if the default agreement is a reflex of the Dative argument staying *in situ*, we expect the default verbal agreement to correlate with the *in situ* interpretation of the Dative argument, i.e., the Dative argument should be interpreted as being new or non-specific. In other words, the current analysis predicts that there is no optionality in LDA. Instead the presence or absence of LDA has interpretive consequences, which in turn correspond to two distinct syntactic structures. As we see in (23), this prediction is borne out as well. If the verb does not agree with the Nominative argument, as in (23-a), the Dative argument is interpreted as an unspecified group of students. This is exactly what we expect if the quantificational DP stays *in situ*. In contrast, if the verb agrees with the Nominative argument, as in (23-b), the Dative argument must denote a group of students already established in the discourse. This is exactly the interpretation we expect if the Dative argument underwent Object Shift.

- (23) a. Það finnst mörgum stúdentum tölvurnar ljótar.
 EXPL finds.SG many students.DAT computers.DEF.NOM ugly
-

‘(In general,) many students find the computers ugly.’

- b. Það finnst mörgum stúdentum tölvurnar ljótar.
 EXPL find.PL many students.DAT computers.DEF.NOM ugly
-

‘There are many students (and I know who they are) who find the computers ugly.’

3.2 The case of EPP-driven Movement

Note that the key property of the proposed analysis is that a potential Dative intervener may move out from the probing domain of *v* before Agree between *v* and the Nominative argument takes place. If this is correct, we predict that any other type of movement which would move the Dative argument to the edge of *v*P or higher should yield LDA as well. In this section we will investigate agreement properties of structures in which the Dative argument undergoes EPP-driven movement.

Bobaljik and Jonas (1996) showed convincingly that in Icelandic Transitive Expletive Constructions, which are the constructions we use here to investigate LDA, external argu-

ments may appear in two distinct positions lower in the structure. Typically, the external argument raises from its base-generated position, i.e., it surfaces at the higher of the two lower subject positions. This movement arises for two reasons: first, as argued for independently by Alexiadou and Anagnostopoulou (2001), if two arguments in VP need to be assigned Case, one of them must move out; second, the higher subject position is associated with an EPP-feature.¹⁷ Crucially, in the structures we investigate there is no external argument and the Dative argument does not need to be licensed for Case,¹⁸ hence neither of the two arguments, be it the Dative argument or the Nominative argument, needs to raise for Case. I argue that this is precisely what we have seen in examples in which the Dative argument remained *in situ* and consequently LDA was blocked.

The question is why the Dative argument did not need to raise because of the EPP. I argue, following Alexiadou and Anagnostopoulou (1998), that the EPP may be satisfied either by XP-movement or by head movement.¹⁹ Since all the examples we investigated so far involved head movement to T – a necessary structural prerequisite for Object Shift to take place – the EPP was always satisfied. Unless the Dative argument moved for semantic reasons (Object Shift), it stayed *in situ*.

The situation is different if there is no head movement. The prediction is clear: If there is no head movement, then the EPP of the lower projection must be satisfied by XP movement of the closest DP, i.e., the Dative argument. Consequently, if the Dative argument must raise, we expect that LDA should be obligatory irrespective of the type of the Dative argument. In other words, even Dative arguments that don't undergo Object Shift, and hence block LDA, should become transparent as long there is no head movement. As the examples in (24)–(26) demonstrate, this prediction is borne out.

- (24) a. ??/*Það hefur næstum öllum köttum fundist fiskarnir góðir.
EXPL has almost all cats found fish.DEF.PL good
 a. Það hafa næstum öllum köttum fundist fiskarnir góðir.
EXPL have almost all cats found fish.DEF.PL good
 ‘Almost all cats have found the fish tasty.’
- (25) a. ??/*Það hefur fáum köttum fundist fiskarnir góðir.
EXPL has few cats found fish.DEF.PL good
 a. Það hafa fáum köttum fundist fiskarnir góðir.
EXPL have few cats found fish.DEF.PL good
 ‘Few cats have found the fish tasty.’
- (26) a. ??/*Það hefur báðum köttunum fundist fiskarnir góðir.
EXPL has both cats.DEF found fish.DEF.PL good
 a. Það hafa báðum köttunum fundist fiskarnir góðir.
EXPL have both cats.DEF found fish.DEF.PL good
 ‘Both of the cats have found the fish tasty.’

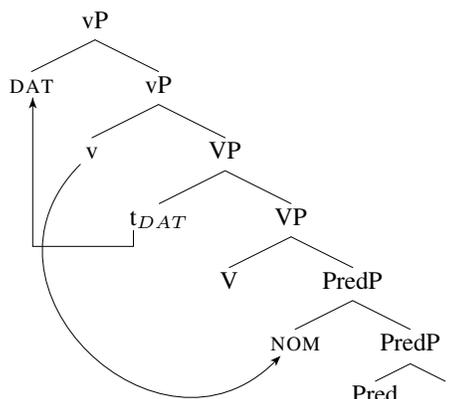
The tree in (27) schematically gives the configuration which allows *v* to enter into local Agree after the Dative argument undergoes EPP-driven Movement to *v*P.

¹⁷ See especially Vangsnes 2002, but also the discussion in Svenonius 2000 on topic-like properties of the attested movement.

¹⁸ See Rezac 2008a, Richards 2008, Pesetsky 2013 for proposals how Case licensing of Dative argument could be done.

¹⁹ See also Kučerová 2014 for further evidence for mixed EPP systems.

(27) *EPP-driven Movement in a bi-clausal environment:*



Note that the examples in (24)–(26) contain Dative interveners that in an Object Shift configuration always block LDA (see the table in (19)). The fact that the very same Dative intervener blocks LDA in an Object-Shift configuration but not in an EPP-driven-Movement configuration is entirely unexpected under a theory which attempts to reduce argument-intervention effects to ϕ -feature configurations. On the other hand, the contrast straightforwardly follows from the analysis put forward in this article.

4 Phases, Transfer, and Agreement

The crucial assumption underlying the proposed analysis is that *v* is the source of agreement with the Nominative argument. In other words, LDA is possible only if (i) *v* agrees with the Nominative argument, and (ii) there is no other argument intervening between *v* and the Nominative argument at the point when Agree takes place. The fact that the morphological reflex of the agreement appears on T is a result of a later Agree between T and *v* (Marantz 2007), a point to which we will return shortly. As we have seen, however, there is another crucial component, namely, the timing of Agree within the *vP*. The empirical evidence presented so far strongly suggests that Agree between *v* and the Nominative argument is established only after the potential Dative intervener moves to the Spec of *vP*.²⁰ This raises the question of the timing of Agree with respect to phase-hood and Transfer (Chomsky 2001, 2004, 2008, 2013, among others).

Note that since Agree is phase-based, all features must be checked and valued before Spell-Out (Chomsky 2000, 2004, 2013, among others). If the Dative argument does not raise and in turn intervenes between *v* and the Nominative argument at the point of Spell-Out, unvalued ϕ -features must be set to their default value, otherwise the derivation would crash. The question is whether the features might get set to their default value before the Dative argument raises to the edge of the phase. I argue that this is not the case. If this was possible, we should see some form of optionality in LDA. I thus argue that ϕ -features get set

²⁰ Or perhaps adjoins to *vP*.

to their default value only at the point of Spell-Out, i.e., the default valuation is a last resort grammatical operation (Schäfer 2012).²¹

Let us now turn to the issue of the valued ϕ -features appearing on matrix T in the final derivation. So far we have investigated Agree within the lower structure, i.e., *vP*. Now we turn to the question of how the valued ϕ -features on the phase head of the small clause get passed onto the matrix T head where they morphologically appear. Note that it cannot be the case that the matrix T directly probes the Nominative object. Putting aside non-trivial complications that arise regarding Agree occurring across a phase boundary, in the structure we investigate, the Dative argument always intervenes between the matrix T head and the Nominative object. Hence, if T were able to probe the Nominative object directly, the short movement of the Dative argument to the edge of *vP* should make no difference for the agreement pattern. Thus, the relationship between matrix T and the Nominative object within the small clause must be indirect.²² I argue that the ϕ -feature values get passed to the matrix T head via *c*-selection modeled as Agree (see, for instance, Adger 2003). The derivation proceeds as follows. First, the matrix V head selects for the small clause as its complement. Since the matrix verbs in the relevant configurations are unaccusative verbs, there is no external argument to value ϕ -features on *v*, or on T in the matrix clause. The closest accessible argument is the complement (object) of the matrix verb, i.e., the small clause. However, since the small clause is a phase, the only features accessible to the higher probe (i.e., features that are minimally searchable, if we were to use the terminology of Chomsky 2013) are the features of the small clause head, i.e., the features of *v*.²³ Thus, the matrix T will agree in ϕ -features of the Nominative object only if *v* agreed with the Nominative object before the small clause got spelled-out.

4.1 Timing in *wh*-movement: the role of *d*-linking

The proposal makes a striking prediction. For the small clause to be merged as the complement of the matrix verb, the small clause must be a phase. However, this does not mean that the small clause has been sent to Transfer, i.e., that its linear order has been fixed (Fox and Pesetsky 2005, among others). This means that the Dative argument might be able to move out of the small clause after the ϕ -features of the small-clause phase head (*v*) have already been valued.²⁴ Consequently, even if in the final representation, the Dative argument

²¹ See also the discussion in Anagnostopoulou (2003), Béjar and Rezac (2003), Rezac (2008b) about the requirement that the Dative argument be displaced in order for Agree with the Nominative object to take place, which implicitly relies on a similar assumption.

²² It has been suggested that arguments that undergo *A'*-movement become invisible to ϕ -feature Agree, for example, in Rezac (2008b). One might wonder whether that might be the case here as well. Note, however, that Object Shift behaves as *A*-movement and so does EPP-driven movement. Hence, such an explanation won't do.

²³ Note that the mechanism is entirely parallel to the way we captured agreement facts in mono-clausal environments in Section 3. The only difference is that there the goal was the Nominative object itself. Note, however, that even though we didn't say it explicitly even in the case of the Nominative object, the goal is in fact represented by the features of *D*, i.e., the phase head of the Nominative object. Thus in both cases the probe is the phase head of the complement structure, be it a small clause, or a Nominative object itself.

²⁴ Notice that the crucial cases we look at involve structures with head movement to T. One might thus wonder whether the relevant difference is indeed the difference of Spell-Out vs Transfer, or whether perhaps we might see here an effect of phase extension in the sense of den Dikken (2007). I will leave the question of phase extension and its possible relations to Agree across a phase boundary for future research, but see some intriguing interactions from the domain of restructuring in Alexiadou et al. (to appear).

does not linearly intervene between *v* and the Nominative argument because it moved to the left periphery, LDA should still be blocked.

In other words, we expect to find opacity effects whenever the Dative argument undergoes Internal Merge after *v* establishes Agree.²⁵ The empirical case that lends itself to testing this prediction is wh-movement of the Dative argument. As we will see in this section, this prediction is borne out.

The idea we are pursuing here is that LDA strictly reflects the order of syntactic operations. If this is indeed correct, we expect LDA to interact with the exact path of cyclic wh-movement of wh-Dative argument. Specifically, we expect that if a wh-Dative argument must move through the specifier of *v*P of the small clause, be it for Object Shift, or EPP-driven Movement, *v* will probe the Nominative argument only after the Dative argument moves out from the probing domain. Consequently, we expect LDA to be obligatory. In contrast, if the wh-Dative argument does not move to the specifier of *v*P before *v* probes the Nominative argument, LDA will be blocked even though the wh-Dative will move to CP later in the derivation.

(28) *Summary of the predictions:*

- a. *v* probes NOM after DAT moves → LDA obligatory
- b. *v* probes NOM before DAT moves → LDA blocked

I argue that whether or not LDA is established depends on whether the wh-argument is interpreted as d-linked (Pesetsky 1987, 2000, Heim 1987, Enç 1991, among others). Specifically, I argue that for a wh-argument to be interpreted as d-linked, it must move through the specifier of *v*P, in a way that is analogical to Object Shift.²⁶ Consequently, since such a wh-Dative argument will evacuate the probing domain of *v* before *v* probes for the Nominative argument, we expect LDA to be obligatory. In contrast, if a wh-Dative argument is to be interpreted as non-d-linked, such a wh-argument will move to CP only after *v* probed the Nominative argument. In turn, we expect LDA to be blocked.

Note that Icelandic wh-phrases, exactly like their English counterparts, may or may not have a specified d-linked form. Thus, for instance, *hverjum* ‘to whom’ may be interpreted as d-linked or non-d-linked, depending on the context. In contrast, a phrase like *hvaða köttum* ‘which cat’ can only be d-linked. Consequently, we expect the following interactions:

(i) If the wh-argument did not block LDA, it must have undergone Object Shift. Consequently, if LDA is established, the wh-argument must be interpreted as d-linked (specific); (ii) If LDA is blocked, the wh-argument did not undergo Object Shift. Consequently, the wh-argument must be interpreted as non-d-linked (not specific).

If we take into account the morphological status of d-linking on the wh-argument, we make three predictions: (i) If the wh-word must be interpreted as d-linked (as in *hvaða köttum* ‘which cat’), we predict LDA to be obligatory; (ii) If the wh-word must be interpreted as non-d-linked, LDA should be blocked; (iii) If the wh-word could be interpreted either as d-linked or non-d-linked, LDA appears to be optional but the agreement disambiguates the interpretation of the wh-word.

As the examples in (29)–(31) demonstrate, the predictions are borne out. If the wh-word must be interpreted as d-linked because of its morphological form, as in (29), LDA is obligatory. If the wh-word is not morphologically specified but the context determines that there is no specific group the wh-word inquires about, LDA is blocked, as approximated in (30). As exemplified in (31), if the agreement appears to be optional, native speakers

²⁵ See Georgi (2014) for a related investigation of opacity effects in syntax.

²⁶ See the discussion of semantic consequences of Object Shift in Thráinsson (2001) for more details.

associate the plural agreement with a question about a specific group, while the singular agreement signifies that no specific group was established.²⁷

- (29) LDA *obligatory = d-linked*:
- a. *Hvaða köttum virðist mýsnar góðar?
which cats.DAT seems.SG mice.DEF.NOM tasty
- b. Hvaða köttum virðast mýsnar góðar?
which cats.DAT seem.PL mice.DEF.NOM tasty
- ‘To which cats do the mice seem to be tasty?’
- (30) LDA *blocked = non-d-linked*:²⁸
- a. Hverjum mundi hafa virst hestarnir vera seinir?
whom.DAT would.SG have seemed horses to-be slow
- b. *Hverjum mundu hafa virst hestarnir vera seinir?
whom.DAT would.PL have seemed horses to-be slow
- ‘To whom (in general) would have seemed the horses to be slow?’
- (31) LDA *optional = if LDA then d-linked, if no LDA then non-d-linked*:
- a. Hverjum virðist mýsnar góðar?
whom.DAT seems.SG mice.DEF.NOM tasty
 ‘To whom (in general) do the mice seem to be tasty.’
- b. Hverjum virðast mýsnar góðar?
whom.DAT seem.PL mice.DEF.NOM tasty
 ‘To whom (from a specified group) do the mice seem to be tasty?’

Before we conclude this section note that the same reasoning extends to structures in which the Dative argument moves to Spec,TP (or Spec,CP as argued for, for example, in Bowers (2002), as in (2) repeated below.

- (2) a. Einhverjum stúdent finnst tölvurnar ljótar.
some student.DAT finds.SG computers.DEF.NOM ugly
- b. Einhverjum stúdent finnast tölvurnar ljótar.
some student.DAT find.PL computers.DEF.NOM ugly
-

‘Some student finds the computers ugly.’ (Holmberg and Hróarsdóttir 2003, p. 999, (9))

²⁷ These judgements were collected as a truth-judgement task (Matthewson 2004). In order to facilitate judgments I created a series of scenarios based in an animal-testing laboratory because it allows for a straightforward, yet precise, modification of the context. For the scenarios in which we expected the *wh*-word to be *d-linked*, the scenario established that there are two distinct groups of animals the question might have been about – thus only interpretations involving *d-linked* reading was judged as true in the given situation. For the *non-d-linked* scenario, the context didn’t specify any group of animals. For the speakers to accept the sentence as true in a given scenario (more precisely, the propositions in the set of its possible answers to be true), they needed to judge the *wh* word as referring to a non-specific group.

²⁸ As an anonymous reviewer pointed out, the main verb remains in situ in this minimal pair, hence we expect the Dative argument to undergo EPP-driven movement and in turn LDA to be obligatory. Note, however, that this follows only if there is no other element that could satisfy the EPP. Kučerová (to appear) argued that perfective ‘have’ can in fact satisfy the EPP of the *vP* phase, hence no additional NP-movement is necessary.

As an anonymous reviewer pointed out the optionality of agreement in these structures, confirmed by the survey reported in Ussery (2009, 2011), is expected under the current proposal because exactly as with the *wh*-Datives, the fronted Dative argument may either move to *Spec,vP* before the agreement is established – and then it is interpreted as specific – or it moves out only later which results into the default agreement option. Unfortunately, even though my preliminary data collection confirms the interpretative correlation expected under the current account, I do not have conclusive evidence. There are two reasons for results being inconclusive. First, since the fronted position comes with a possible Topic interpretation and since Topic interpretations are the easiest to describe by a naive linguistic informant, I found that the speakers often retreated to the specific interpretation when they were not sure how to describe their intuition. While in the Object Shift and the *wh*-movement cases, it was possible to sharpen the judgements either by adding adverb or by having the *wh*-word morphologically marked, I am not aware of a comparable test for the fronted subject position. In other words, even though the judgements were in the expected direction, the cut was less clear than with *wh*-words. Second, since the quantifiers that do not undergo Object Shift, are excluded from the fronted position on independent grounds, it is not possible to construct minimal pairs parallel to the minimal pairs used in the rest of the article. (I suppose it is because their interpretation does not lend itself easily to the Aboutness Topic interpretation associated with the fronted position; Reinhart 1981, Endriss 2009.) In order to confirm this prediction, one would need to explore a wider range of Dative arguments than those investigated in the current study.

Furthermore, the proposal predicts that agreement with a Nominative object in a mono-clausal environment should be optional as well, as long as the Dative argument is fronted and *vP* triggers Transfer. In other words, if the Dative argument is base generated below *v* and if it is possible for the argument to move via the specifier of *vP*, then agreement is expected to reflect the exact derivational path of the movement of the Dative argument. As an anonymous reviewer pointed out, this prediction seems to be borne out with verbs like *líka* ‘like’, as in (32). However, to investigate the underlying structures of mono-clausal environments and possible differences in the base-generated position of Dative arguments goes beyond the scope of this article. I will thus leave it to future research.

- (32) *Mörgum stúdentum líkar/líka peningarnir*
many students.DAT like.SG/PL money.DEF.NOM.PL
 ‘Many students like money.’

4.2 Agreement with Nominative

Note that one of the hallmarks of the Icelandic agreement system is that it tracks morphological case, instead of abstract case, i.e., a case which would correspond to a particular syntactic configuration (Marantz 1991). Yet, the proposed analysis crucially assumes that finite-verb agreement is determined in syntax, unlike proposals such as that of Bobaljik (2008) who argues that agreement must happen in the post-syntactic component because it is dependent on morphologically realized case, i.e., something which is determined after the narrow syntax.

I argue that this conclusion is not inevitable. First of all, notice that Nominative in Icelandic is not determined lexically, in the sense of being a quirky case. Instead, Nominative is the default case, which is the case assigned to the structurally highest noun phrase

in the T+v domain that does not receive lexically determined case.²⁹ One way to understand this is to adapt the proposal put forward by Rezac (2008a) and later by Pesetsky (2013) who argue that Nominative, unlike other cases, corresponds to a DP structure without any additional case/prepositional level. In other words, while the Dative, for instance, is a structure which contains a DP embedded within a K(ase)/prepositional functional projection, Nominative corresponds to a structure in which the DP is the outermost maximal projection.

I suggest that the fact that only Nominative triggers finite agreement follows from two assumptions. First, Nominative is a morphological realization of a DP without any additional functional layer.³⁰ Second, a K head carries an unvalued PERSON feature, which is necessary for K to be a licenser of a DP it selects for.³¹ When the relevant functional head probes a Nominative DP for a valued PERSON feature, it searches for the content of D. Since D is the source of unvalued ϕ -features (by the virtue of being a phase head) and since by the time Agree with the verbal head takes place, these features have been valued, the finite verbal probe gets automatically valued by all the valued ϕ -features on D, not only by the PERSON feature. In turn, v/T becomes valued for PERSON, number, and possibly gender.

What happens if the closest goal is Dative? Notice first that for a Dative DP to behave as an argument, it must be grammatically marked as such, in other words it must carry a valued PERSON feature. I follow the spirit of Rezac's analysis and argue that the case assigning functional head – let us call it K – probes D as part of the c-selection Agree between DP and K. However, since K carries only an unvalued PERSON feature and not the complete set of unvalued ϕ -features, K gets valued only for the PERSON feature. If the finite verbal head probes for a valued PERSON feature and if the structurally closest argument is Dative, the PERSON feature on the verbal head will get valued. However, since K is not valued for any other ϕ -feature, the other ϕ -features will fail to be valued. Consequently, only Nominative will trigger agreement with the full set of ϕ -features.

5 Conclusions

The article provides further evidence to the existing debate that agreement is always strictly local, and that illusions of Long-Distance Agreement result from a local configuration being undone in the process of derivation (see Bhatt 2005 and Boeckx 2004 for Hindi, Nomura 2005 and Bobaljik 2008 for Icelandic for a somewhat different approach to the subject). Consequently, there is no optionality in agreement. A distinct agreement always corresponds to a distinct structure (and possibly to a distinct interpretation).³² The novel contribution of this article lies in new empirical generalizations about the nature of Long-Distance Agreement in Icelandic, and in providing empirical support for a phase-based notion of Agree and the nature of Spell-Out vs Transfer interactions in the process. Finally, the article provides an empirical motivation for predicate agreement to take place in syntax, even if Agree itself seems to be sensitive to the morphological output. I argue that the pattern is a side-effect of

²⁹ Adapting the original proposal from Marantz (1991).

³⁰ I assume that a non-lexically assigned Accusative is a DP as well but since it never appears without a Nominative argument being structurally closer to a probing functional head, it will never trigger finite agreement as Nominative does.

³¹ But see Richards (2008) for an implementation in which the outer layer carries a valued Person feature. Crucially, for our purposes the two proposals do not differ as to whether or not the ϕ -features on DP may be accessed.

³² The empirical pattern described in this pattern is reminiscent of the LDA facts in Hindi as reported in Keine (2013). Keine's theoretical approach is rather different in that it relies on an independent notion of restructuring and it relativizes Agree to the height of the probe.

the morphological case realization and Agree being sensitive to the same syntactic property, i.e., to whether or not D is the head minimally searchable by the probing verbal head.

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