Agreement vs Concord in Icelandic

1 Introduction

Passive participle, floated quantifier, and secondary predicate data from Icelandic have played a crucial role in theories of infinitives. In particular, these data have been used to argue that Icelandic PRO bears case (Andrews 1990, Landau 2006, Sigurðsson 1991/2008, among others). In recent years, these data have also been marshaled both by those arguing for and those arguing against the Movement Theory of Control (Bobaljik and Landau 2009; Boeckx and Hornstein 2006; Boeckx, Hornstein, and Nunes 2010; Sigurðsson 2008). The purpose of this squib is not to weigh in on the debate about theories of control and raising. Rather, I examine the patterns within the data themselves and I suggest that verbal agreement (passive participles) and concord (floated quantifiers/secondary predicates) are not variations of the same phenomenon.

This idea contrasts with two types of analyses. The first type, building on parallels between DPs and CPs, argues that both agreement and concord are established in the syntax via a probe-goal relationship (e.g., Baker 2008, Carstens 2000). The second kind of analysis argues that both types of features are established at PF, via a feature-copying mechanism (e.g., Embick and Noyer 2007, Halle and Marantz 1993, Sigurðsson 2006a). I argue that the Icelandic data suggest a more nuanced approach, namely that agreement phenomena should not be treated with a one-size-fits-all approach.

In Icelandic, verbs and passive participles agree only with structurally case-marked DPs (nominative/accusative). Floated quantifiers and secondary predicates, on the other hand, agree with whatever DP they modify, irrespective of the case of the DP. I show that
this difference suggests that agreement morphology and concord morphology come about via different mechanisms. I argue that because of its relationship to case, verbal agreement – including passive participle agreement – should be determined in the syntax. I suggest an analysis of passive participles based on Bhatt’s (2005) idea of covaluation. I show that the case-assigning head covaluates the case feature on the participle when the head probes a DP. By contract, I suggest that floated quantifier concord and secondary predicate concord comes about via a combination of syntactic and post-syntactic mechanisms. I argue that case is assigned to a DP in the syntax while the concord features are copied onto the relevant items at PF.

2 Agreement, Concord, and Structural Case

DP-internal concord generally involves case, gender, and/or number features while verbal agreement generally involves person, gender, and/or number features. In their agreeing forms, passive participles in Icelandic morphologically pattern like floated quantifiers and secondary predicates. That is, all three items show case, gender, and number features. On the surface, this pattern seems to suggest that passive participle agreement is a form of concord. However, passive participles syntactically behave like verbs, even though their morphology differs.

Icelandic verbs agree in person and number with nominative DPs, as shown in (1). In 0, the verb does not agree with the dative subject. Rather, the verb appears in the default form, which is homophonous with the third person singular.
(1) a. Við lásum/*las bókina.  b. Þið lásuð/*las bókina.
   we.nom read.1pl/dft book.the.acc.sg  you.nom.pl read.2pl/dft book.the.acc.sg
   ‘We read the book.’             ‘You read the book.’

(Sigurðsson 1996, ex 14-15)

(2) Stelpunum leiddist/*leiddust í skólanum.
   girls.the.dat.pl bored.dft/*3pl in school.the.dat
   ‘The girls were bored in school.’  (Thrúinsson 2007, ex 4.31)²

In passives, the participle agrees in case, number, and gender with the nominative subject. The auxiliary patterns like main verbs and also agrees (in person and number) with the nominative, as shown in (2)a. Just as in actives, when there is not a nominative, the verb appears in the default form. In (2)b, neither the auxiliary nor the passive participle agrees with the dative subject.

(2) a. Strákarnir voru aðstoðaðir/*aðstoðað.  b. Strákunum var hjálpað.
   boys.the.nom was.3pl aided.nom.pl.masc/*dft  boys.the.dat was.dft helped.dft
   ‘The boys were aided.’             ‘The boys were helped.’

   (Boeckx and Hornstein 2006, ex 2-3)

Unlike main verbs, auxiliaries, and passive participles, secondary predicates and floated quantifiers agree with whatever DP they modify, irrespective of the case of that DP. In (3) the floated quantifier ‘both’ agrees with the subject in both sentences. Likewise, in (4) the secondary predicate ‘alone’ agrees with both the nominative and the dative subject.
The descriptive generalization that arises from these data is that passive participles (like verbs) agree only with nominatives. The theoretical generalization is that passive participles (like verbs) agree only with both structurally case-marked DPs.

Sigurðsson (2006a) argues that the varied patterns in morphological agreement in Icelandic suggest that Agree, which applies in the syntax, should be distinguished from PF agreement. Further, he argues that all agreement phenomena should be determined at PF. I, however, think that the sensitivity to the structural/non-structural case distinction is an important one, and should inform any analysis of agreement/concord in Icelandic.
Structural case is generally argued to be assigned to a DP based on its structural position, not on its semantic content/theta role. In nominative-accusative systems, nominative is assigned to the DP that is merged in Spec,vP and accusative is assigned to the DP that is sister to V. The structural case-assigning heads are, therefore, T and v. Non-structural case, on the other hand, is tied to a particular theta role. Following Legate 2008 and Woolford 2006a, I adopt the proposal that non-structural case is assigned to the specifier by a v head specified for that case value. “Structural case” v assigns accusative under c-command and “inherent case” v assigns case to its specifier. Dative, is, therefore, assigned to the DP merged in Spec,vP\text{Dat}.

This distinction between structural and non-structural case has implications for agreement. Building on previous work, Woolford 2006b makes the observation that in nominative-accusative systems, verbs agree with nominatives (while in ergative-absolutive systems, verbs agree with absolutes) and the Icelandic facts conform to this generalization. As proposed in Chomsky 1995/2000, both case and φ-features are valued via the same Agree operation. As a result of T probing the DP goal in order to value [uφ], the DP is assigned case. The analysis in (5)a makes the prediction that when a DP has its case valued by a different head, that DP cannot value [uφ] on T. This prediction is borne out in Icelandic (and a host of other languages). In (5)b, v\text{Dat} assigns case to the DP in its specifier.

\begin{align*}
(5) \text{a.} & \quad \text{case} \\
& \quad \begin{array}{c}
T[\text{Nom}] \\
[\text{[vφ]}]
\end{array} \quad \begin{array}{c}
\text{DP[φCase]} \\
[\text{[v]}]
\end{array} = (1) \\
& \quad \text{agreement} \\
\text{b.} & \quad \text{*case} \\
& \quad \begin{array}{c}
T[\text{Nom}] \\
[\text{[vφ]}]
\end{array} \quad \begin{array}{c}
\text{vP\text{Dat}} \\
[\text{[v]}]
\end{array} \quad \begin{array}{c}
\text{DP[Dat]} \\
[\text{[vφ]}]
\end{array} \quad v\text{Dat} = 0 \\
& \quad \text{*agreement}
\end{align*}
In the next section, I show that the analysis in (5) coupled with the Bhatt’s (2005) idea of covaluation accounts for passive participle agreement in Icelandic.

3 Passive Participles

Hindi-Urdu exhibits long-distance agreement in some infinitival constructions. A matrix verb can agree with an embedded object. Verbs in Hindi-Urdu agree with the highest DP within the clause that is morphologically unmarked for case. Ergative subjects appear in clauses with perfective aspect, and ergative DPs bear the suffix –ne. Since ergative DPs bear an overt case marker, they do not trigger verbal agreement. In simplex clauses with ergative subjects, if there is a non-case-marked object, the verb agrees with that DP. However, in constructions with ergative subjects and infinitival complements, the matrix verb either appears in the default form or it agrees with the embedded object. In (6)a, the matrix verb and auxiliary, as well as the infinitival verb all appear in the default masculine singular form. However, in (6)b, the embedded object tehni ‘branch’ triggers agreement on all three verbs.

(6) No LDA, default agreement on matrix verb and infinitive

Shahrukh-ne [tehni kaat-naa] chaah-aa thaa.


‘Shahrukh wanted to cut a/the branch.’

b. LDA, matrix verb agrees with infinitive and embedded object

Shahrukh-ne [tehni kaat-nii] chaah-ii thii.

Shahrukh-erg branch.fem. cut-inf.fem. want-pfv.fem. be.past.fem.sg

‘Shahrukh had wanted to cut the branch.’ (Bhatt 2005, EX 6)
Bhatt (2005) proposes a restructuring analysis to account for this contrast. Restructuring infinitives are argued to contain less functional structure, and as such, do not constitute independent domains (see Wurmbrand 2001 for a detailed discussion). Bhatt (2005) argues that the construction in (6)a is non-restructuring; the embedded clause is a full clausal complement. Since the embedded object is not in the same domain as the matrix T, T cannot probe the object. Consequently, there is default agreement on the matrix verb and the infinitive. Bhatt (2005) argues that (6)b is a restructuring infinitive. Since this clause is not a full clausal complement, the embedded object is actually in the same domain as the matrix T and the condition on agreement is met. Bhatt (2005) proposes that in (6)b, the matrix T verb probes the embedded object, and in doing so covaluates the unvalued φ-features on the infinitive. The infinitive agrees with the embedded object only when the matrix verb does as well.

Given that Icelandic passive participles agree with a DP when a structural case-assigning head probes that DP, I propose that Agree, as illustrated in (5)a, in addition to covaluation, can account for the morphology displayed on passive participles. The analysis for (2)a is shown in (7)a. T probes the DP and assigns nominative case. Because the participle also has an unvalued case feature and is in the c-command domain of T, T also assigns nominative to the passive participle via covaluation. The DP, in turn, values the φ-features on T and covaluates the φ-features on the participle.

\[
\begin{align*}
\text{(7) a. } & \quad T_{\text{Nom}} \downarrow \text{PassPart}_{u\text{Case}} \downarrow \text{DP}_{u\text{Case}} = (2)a \\
& \quad [u\phi] \quad [u\phi] \quad [\phi] \\
\text{b. } & \quad T_{\text{Nom}} \downarrow \text{PassPart}_{u\text{Case}} \downarrow \text{DP}_{\text{Dat}} \downarrow \text{v}_{\text{Dat}} = (2)b \\
& \quad [u\phi] \quad [u\phi] \quad [\phi]
\end{align*}
\]
Unlike in (7)a, in (7)b, T does not assign case to the DP. (I assume that dative is assigned by $v_{\text{Dat}}$ irrespective of whether the DP is a subject or an object.) Consequently, T cannot value the case feature on the participle. Nor can the DP value the $\varphi$-features on the participle because the DP does not value the $\varphi$-features on T. As a result, the participle appears in the default form. The analysis in (7)a also applies to passive participle agreement in passivized ECM constructions. The participle agrees with the accusative passivized objects as a consequence of $v$ probing both items.

4 Floated Quantifiers and Secondary Predicates

In the previous section, I presented an analysis of passive participles in which morphological agreement is a direct consequence of Agree applying, or failing to apply, in the syntax. In this section, I comment on previous proposals, and in doing so, suggest what a PF analysis of concord might look like.

One analysis of Icelandic DP-internal concord which combines syntactic probing and PF feature-copying is found in Norris (2012). Like the approach put forth in this paper, Norris (2012) also argues that agreement is of a fundamentally different nature than concord. Following Lamontagne and Travis (1987) and Bittner and Hale (1996), Norris adopts a structure in which the highest level of the DP is KP and K “collects” features in the syntax. When a DP is assigned case, K receives the case feature. K probes its c-command domain and receives values for gender (from N) and number (from Num). At PF, an AGR node (in the spirit of Embick and Noyer 2007 and Noyer 1997), attaches to every lexical item inside the DP that needs to be spelled out with concord features and copies the features that have been collected in K.
Both Norris’ (2012) analysis and the observations put forth in this paper reject the idea that DP-internal concord is analogous to verbal agreement (see Baker 2008 and Carstens 2000, among others). One of the reasons that Norris (2012) provides for rejecting this proposal is that verbal agreement and concord generally display different features. Norris (2012), however, does not discuss participle agreement in Icelandic. As I have illustrated, agreeing participles do display the same features as concord items. The issue in Icelandic is whether the noun that is triggering the agreement/concord bears structural or non-structural case, not the agreement/concord features themselves. However, an analysis akin to Norris’s delivers the right result.

Sigurðsson (2006a) suggests two possible analyses of secondary predicate concord, one analogous to a raising structure and the other analogous to a control structure. Building on this observation, I suggest the analyses in (8) and (9), with the subject DP being assigned case in the syntax in both derivations. A raising analysis, in which the subject is merged inside the AP, is illustrated in (8). Here, Olaf raises out of the AP to Spec,vP, where it is assigned nominative by T. In (8)b, Olaf moves to the specifier of vP_{Dat} (and then moves to Spec,TP), since non-structural case is assigned in a spec-head configuration.

\[(8) \quad \text{a. T} \ [vP_{\text{Olaf}} [\text{VP went} [\text{AP} \text{Olaf alone}]]] \quad \text{b.} \ [vP_{\text{Dat}} \text{Olaf} [\text{VP bored} [\text{AP} \text{Olaf alone}]]] \]

Assuming that concord is more local than agreement, I suggest that there is a case-sharing mechanism between Olaf and the trace. At PF, an AGR node attaches to alone and copies the features of the trace. The alternative is to have v_{Dat} assign case under c-
command to the AP. The $\varphi$-features would still need to be copied in a way akin to the DP-internal concord analysis. The problem, though, is that a case-assigning head would be probing an AP, as opposed to a DP, and this, intuitively, does not seem like the right way to go. While semantically, the argument slots of secondary predicates are saturated by the noun they modify, Olaf and alone do not form a DP. As such, neither T nor $v_{Dat}$ would be able to assign case to alone.

The control analysis for (4) is in (9).

(9) a. $T[vp\text{ Olaf} [vp\text{ went } [AP PROi alone]]]$ b. $[v_{Dat}\text{ Olaf } [vp\text{ bored } [AP PROi alone]]]$

Again, the case-assigning head does not probe the AP, so the subject shares its case with PRO and an AGR node attaches to alone at PF.

5 Conclusion

I have presented an argument for treating agreement morphology and concord morphology with different mechanisms. Additionally, I have shown that this difference is motivated not by the features themselves. Agreeing passive participles display the same features as floated quantifiers and secondary predicates. The crucial difference is that passive participles appear in the default when the construction does not contain a structurally-case marked DP. Passive participle agreement operates the way verbal agreement operates. When T probes a DP in order to value case, that DP values the $\varphi$-features on T. The only difference between verbal agreement and passive participle agreement is that the participle is covaluated by both T/$v$ and the DP.
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For arguments that the Dative is a subject (as opposed to a fronted object), see Jónsson (1996, 2003), Sigurðsson (2004), Thráinsson (2007), Zaenen, Maling, and Thráinsson (1985), among others.

There is, of course, some overlap between theta role and structural position. For instance, cross-linguistically, datives tend to mark experiencers, beneficiaries, and goals, and this is true in Icelandic as well. Dative subjects of active sentences are experiencers and dative subjects of passives have any of those three theta roles.

See Butt 2006, Chapter 4, among others, for a detailed discussion of structural and non-structural case.

Icelandic does not always conform to this generalization. In constructions with non-nominative subjects and nominative objects, verbs optionally agree with the nominative object. See Sigurðsson and Holmberg (2008) for discussion.

See Sigurðsson (2006b) for an alternative proposal in which T is separated from nominative case licensing and in which there are no specifier positions.

Accounts differ on which functional heads are present in restructuring infinitives. Wurmbrand (2001) argues that restructuring clauses in German are bare VPs, while Bhatt (2005) analyzes Hindi-Urdu restructuring clauses as containing vP and TP, but not CP. Providing evidence from pronoun forms in restructuring clauses that have been passivized, Bhatt (2005) argues that the embedded v assigns accusative to embedded objects irrespective of whether the clause is restructuring.

The other reason that Norris (2012) cites is that verbal agreement and concord also have different distributions. While agreement appears on items along the verbal spine, concord may appear on items in specifier or adjunct positions.

It should be noted that these are common approaches to resultatives. See Kratzer 2004 and references therein.
References


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