**Abstract:** This paper examines the Icelandic CP and shows that the same type of Icelandic ev-

idence that was used to argue for the case-marking of PRO can also be used to detect the case-

marking of CP. Floating quantifiers show overt morphological agreement with a corresponding

CP, suggesting that CP is case-marked. The findings have consequences for any theory of the

distribution of case features.

Keywords: case, CP, agreement, Icelandic

1 Introduction

The similarities and differences of noun phrases and sentences are an old puzzle. Work on nomi-

nalizations has examined the extent to which the two may share internal structure (Chomsky 1970)

and the external distribution of the CP resembles the DP as Thráinsson (1979) argued for at length

focusing on Icelandic (using the terminology of the time). Yet, the CP and the DP are not identical

and one difference is that CP is not obviously associated with morphological case.

This paper shows that the evidence that Sigurðsson (1991) used to reveal the case of PRO can

be extended to the Icelandic CP. Just as certain elements overtly agree with the case of PRO, the

same types of elements overtly agree with the case of CP. This is shown in (1) where the dative

case of a CP subject is realized morphologically on the element báðu 'both'.<sup>2</sup>

(1) [CP Að hann hefði logið og svikið loforð] var báðu haldið fram.

had lied and betrayed promise].DAT was both.DAT held forth

'It was both claimed that the he had lied and broken a promise.'

<sup>1</sup>Abbreviations: 1=1st person, 2=2nd person, 3=3rd person, ACC=accusative, CP=complementizer phrase (also

for \$\overline{S}\$ from early literature), KP=case phrase, DAT=dative, DP=determiner phrase, F=feminine, GEN=genitive,

M=masculine, N=neuter, NOM=nominative, PL=plural, PP=prepositional phrase, QP=quantifier phrase, SG=singular.

<sup>2</sup>Prescriptively, another element hvor tveggia 'each of two' would be appropriate in examples which involve 'both'

but the usage reported in the paper reflects normal everyday language. Both variants show the relevant case agreement.

The finite verbs gets 3SG default agreement in the absence of a nominative DP as reflected by the gloss 'was' (features

not written out for simplicity). In all the examples in the paper, a CP argument is accompanied by such default verb

agreement. The issue of (the absence of)  $\phi$ -features on CP is interesting, but the squib focuses only on the case facts.

1

The case agreement with the CP is interesting because it is the exact type of evidence that provides the strongest support for the case of PRO. Such evidence can thus be extended to support the view that CP can be case-marked and that the case of a CP can be realized morphologically. The present study does not contradict the view that a CP may not (always) need case (cf. Pesetsky 1982); rather, it provides evidence to the effect that when a CP is case-marked, it is not only in terms of some abstract licensing mechanism but in terms of a morphologically realizable property.

The paper shows that CP arguments can be case-marked. In such cases, I adopt the view that CP is case-marked directly. However, the main contribution of the paper is not to explore the structural details of the relevant configurations but rather to show that that case is indeed assigned in environments where the argument is a CP rather than a DP. Thus, the findings are also relevant for theories where the CP itself would not be case-marked, but rather linked to some silent element that has a case value, e.g., a CP trace or a silent pronoun. Such theories will be discussed below.

The paper is organized as follows. Section 2 presents some background on the case syntax of Icelandic and the types of diagnostics that have been applied in the literature to detect elusive case-marking as in the case of PRO. Section 3 presents the core evidence for overt case agreement with CP. Section 4 discusses some theoretical implications of the findings. Section 5 concludes.

## 2 Background on case and its empirical diagnostics

Icelandic grammatical subjects are not always nominative; they can appear in any morphological case (Andrews 1990; Thráinsson 1979; Zaenen et al. 1985; Sigurðsson 1989). While subjects in the language are nominative by default and direct objects accusative, some verbs assign other cases to their subjects as demonstrated by the verb *leiðast* 'to be bored' in (2) which takes a dative subject.

(2) Henni/\*Hún leiddist. (Sigurðsson 1991:328) her.DAT/\*she.NOM bored. 'She was bored.'

Analyzing a dative as a grammatical subject does not carry much weight unless we agree on some diagnostics for subjecthood and the literature takes the ability to be PRO to be a reliable sign of subject status. In Icelandic, PRO can correspond to a nominative (3) as well as a dative (4) element.

- (3) Strákana langar ekki til [að PRO segja sögu]. boys.the.ACC wants not for [to PRO.NOM tell story] 'The boys do not want to tell a story.'
- (4) Hana langar ekki til [að PRO leiðast]. (Sigurðsson 1991:329) her.ACC wants not for [to PRO.DAT bore] 'She does not want to be bored.'

We know from (2) that 'to be bored' takes a dative subject and that PRO in (4) corresponds to the dative, but an unpronounced element does not show any dative morphology. The crucial evidence, for the literature on non-nominative subjects as well as the present study on the CP, comes from elements like floating quantifiers which agree overtly with the case of the subject. The following examples from Sigurðsson (1991:331) demonstrate this point.

- (5) Strákunum leiddist öllum í skóla. boys.the.DAT bored all.DAT in school 'The boys were all bored in school.'
- (6) Strákarnir vonast til [að PRO leiðast ekki öllum í skóla]. boys.the.NOM hope for [to PRO.DAT bore not all.DAT in school] 'The boys hope that they will not all be bored in school.'

Example (5) shows that the floating quantifier 'all' agrees in case with an overt dative subject. Example (6) furthermore shows that the quantifier agrees in the same way with a dative PRO. As argued by Sigurðsson, such examples are evidence that non-nominative subjects exist and also that PRO is case-marked. Note that the controller in the main clause is in the nominative case so the source of the dative is not there. The evidence is quite convincing because the floating quantifier manifests overt morphological case. Having reviewed these background facts about Icelandic case and how it can be detected, we are well equipped to turn to the case of CP.

# 3 Overt case agreement with CP

In this section we will focus on Icelandic predicates which can take either a DP complement or a CP complement and show evidence that a CP is case-marked the same way as a DP in the same position. Consider first the verb *segja* 'to tell/say'.

- (7) María sagði [DP sögu].

  Mary.NOM told [DP story.ACC]

  'Mary told a story.'
- (8) María sagði [CP að hann hefði komið, séð og sigrað].

  Mary.NOM told [CP that he had come seen and conquered]

  'Mary said that he had come, seen, and conquered.'

The main verb in these examples is a canonical NOM-ACC verb so the direct object in (7) is in the accusative case. The DP and the CP have a similar distribution, particularly in Icelandic (Thráinsson 1979); thus it is natural to ask whether the CP participates in the case system by virtue of being a similar syntactic object. Consider the passivized variants below with a floating quantifier 'all'.

- (9) Sagan var öll sögð (af Maríu). story.NOM was all.NOM told (by Mary) 'The whole story was told (by Mary).'
- (10) [CP Að hann hefði komið, séð og sigrað] var allt sagt. [CP that he had come seen and conquered]. NOM was all. NOM told 'All of it was said, that he had come, seen and conquered.'

As in English, the theme of a NOM-ACC verb is realized in the nominative case in an Icelandic passive as shown in (9).<sup>3</sup> Here, the quantifier agrees with the subject in case, as well as gender (feminine) and number (singular). A parallel example with a CP theme is shown in (10). Here, the quantifier is nominative, neuter, singular. The values are consistent with CP being case-marked the same way as DP but they are also compatible with these being default values for the relevant features and that no actual agreement takes place. Consider, in contrast, the Icelandic verb *halda fram* 'claim', literally 'hold forth', which is shown in the active voice below.

- (11) María hélt [DP bessu] fram. Mary.NOM held [DP this.DAT] forth 'Mary claimed this.'
- (12) María hélt fram [CP að hann hefði sigrað]. Mary held forth [CP that he had won] 'Mary claimed that he had won.'

<sup>&</sup>lt;sup>3</sup>This applies to the Canonical Passive in Icelandic which contrasts with a New Impersonal Passive, a distinct construction analyzed in Maling and Sigurjónsdóttir (2002); Eythórsson (2008); Jónsson (2009); Sigurðsson (2011).

Example (11) shows that this verb lexically assigns dative case to its object and thus one can ask whether the CP in (12) receives lexical dative case as well. Note that the relative position of the object and the particle is sensitive to the heaviness of the object; a DP object is pronounced after the particle, just as the CP, if the DP is heavy as shown below. Note that dative morphology is realized on multiple elements here due to noun-modifier concord.

(13) María hélt fram [DP einhverju fáránlegu rugli sem enginn trúði] Mary held forth [DP some.DAT ridiculous.DAT nonsense.DAT that nobody believed] 'Mary claimed some ridiculous nonsense that nobody believed.'

Lexical case is preserved under passivization. The examples in (14) show this; the theme is realized as a dative subject. The examples also contain a floating quantifier which agrees with the dative subject case. This is shown for floating *einn* 'one' (14a), *báðir* 'both' (14b), and *allur* 'all' (14c).

- (14) a. [DP Pessu] var einu haldið fram. [DP this.DAT] was one.DAT held forth 'Only this was claimed.'
  - b. [DP Pessu og hinu] var báðu haldið fram. [DP this.DAT and the.other.DAT] was both.DAT held forth 'This and that other thing were both claimed.'
  - c. [DP Dessu, hinu og fleiru] var öllu haldið fram. [DP this.DAT the.other.DAT and more.DAT] was all.DAT held forth 'This, and that other thing, and some more things, were all claimed.'

Crucially, a CP in this position also triggers dative agreement on a floating quantifier. The examples in (15) show this for the same quantifiers as above.

- (15) a. [CP Að hann hefði sigrað] var einu haldið fram. [CP that he had won].DAT was one.DAT held forth 'It was only claimed that the he had won.'
  - b. [CP Að hann hefði logið og svikið loforð] var báðu haldið fram. [CP that he had lied and betrayed promise].DAT was both.DAT held forth 'It was both claimed that the he had lied and broken a promise.'
  - c. [CP Að hann hefði komið, séð og sigrað] var öllu haldið fram. [CP that he had come, seen and conquered].DAT was all.DAT held forth 'It was all claimed that the he had come, seen and conquered.'

This is interesting because the type of evidence that uncovered the case of PRO (Sigurðsson 1991) is also found where a finite CP is the locus of the case-marking. The evidence also carries over to infinitival CP. The verb *sleppa* 'skip' takes a dative argument as the following passives show.

- (16) a. [DP bessu] var einu sleppt. [DP this.DAT] was one.DAT skipped 'Only this was skipped.'
  - b. [DP Dessu og hinu] var báðu sleppt. [DP this.DAT and the.other.DAT] was both.DAT skipped 'This and that other thing were both skipped.'
  - c. [DP Dessu, hinu og fleiru] var öllu sleppt. [DP this.DAT the.other.DAT and more.DAT] was all.DAT skipped 'This, and that other thing, and some more things, were all skipped.'

The examples in (16) are parallel to (14) but the difference is that in the case of *sleppa* 'skip', the dative DP position alternates with an infinitival clause rather than a finite CP. Examples (17), parallel to (15), show that this CP also triggers case agreement on a floating quantifier.

- (17) a. [CP Að yfirheyra Jón] var einu sleppt. [CP to interrogate John].DAT was one.DAT skipped 'It was only skipped to interrogate John.'
  - b. [CP Að yfirheyra og dæma Jón] var báðu sleppt. [CP to interrogate and sentence John].DAT was both.DAT skipped 'It was both skipped to interrogate and sentence John.'
  - c. [CP Að yfirheyra, dæma og hengja Jón] var öllu sleppt. [CP to interrogate, sentence and hang John].DAT was all.DAT skipped 'It was all skipped to interrogate, sentence and hang John.'

For agreement with an accusative element, we can consider impersonal *vanta* 'to be lacking/missing', shown with an accusative DP in (18). It will be assumed here that the CP in (19) is also in the accusative case but the case diagnostics are ambiguous here because unlike the case of a DP, a floating quantifier with a CP is always in the neuter singular (plausibly default values because CP lacks  $\phi$ -features) and this yields NOM/ACC syncretism in the quantifier, e.g., *allt* 'all' in (19).

(18) Hún mætti en [DP strákana] vantaði alla. she attended but [DP boys.ACC.M.PL] lacked all.ACC.M.PL 'She attended but all the boys were missing.'

(19) Margt tókst en [CP að hún, hann og þau mættu] vantaði allt.

Many succeeded but [CP that she, he and they attended] lacked all.ACC.N.SG 'Many things worked out but not that she, he and they would attend.'

The examples are consistent with the idea that a floating quantifier can realize an accusative case of a CP and although the form *allt* is homophonous with the nominative, the dative examples above suggest that this is the realization of an accusative case value.

Some verbs in Icelandic take genitive objects in the active voice like *sakna* 'to miss' in (20). As before, it is possible to float an agreeing genitive quantifier in the passive in (21).

- (20) Jón saknaði [DP stelpnanna]. John missed [DP girls.the.GEN] 'John missed the girls.'
- (21) [DP Stelpnanna] var allra saknað. [DP girls.the.GEN] were all.GEN missed 'The girls were all missed.'

As for dative CP, a floating quantifier can agree with the genitive case of a CP; see (22).

(22) [CP Að hann hefði komið, séð og sigrað] var alls saknað. [CP that he had come seen and conquered].GEN was all.GEN missed 'It was all missed that he had come, seen and conquered.'

The case agreement facts show that a CP in a case position in Icelandic can trigger overt morphological case agreement on floating quantifiers. Let us consider the implications of this.

## 4 Theoretical implications

The previous section speaks against any naive understanding of CP being caseless. The case mechanism is clearly active in environments where the argument is a CP rather than a DP. This leaves unanswered the question of which element gets the case value, i.e., whether (i) CP is directly casemarked or (ii) case is assigned to some covert element that CP is linked to. I will adopt the former analysis because it is, in my opinion, the most straightforward approach for Icelandic and I will elaborate on this view in this section. Even if future investigations conclude that the case values are really associated with some covert CP-associated element and not the CP itself, the empirical point

remains that case is indeed assigned in environments where the argument is a CP rather than a DP. The view that CP is directly case-marked will be adopted here because this is the most obvious interpretation of the case agreement facts in the absence of a clear motivation for an intermediate silent element. I will now consider analyses according to which such an element is either a CP trace or a silent pronoun and illustrate why I prefer an analysis where CP is directly case-marked.

First, let us consider an analysis where the element with the case value is a CP trace. Stowell (1981) developed a Case Resistance Principle (CRP) according to which a CP cannot be case-marked directly whereas a trace of it its movement can. According to the CRP, a CP of the type under discussion cannot stay in a case-position or be case-marked directly. When CP appears to occur in subject position, as in the crucial examples above, Stowell adopts a variant of Koster's (1978) analysis, proposing that an apparent subject CP is actually in a higher Topic position, associated with a silent element in the true subject position. To adhere to the CRP, a CP must undergo string-vacuous topicalization out of the subject position (or, alternatively, extrapose to the right). Accordingly, only a trace of a CP can be case-marked – but not the CP itself. Although a floating quantifier can be understood as always involving movement which strands Q (see Sportiche 1988), and thus leaves a QP-internal DP trace behind, I follow Stowell (1981:153) in assuming that the CRP concretely requires a CP in the subject position to "move to a non-A-position".

This line of reasoning depends on Koster's motivation for placing apparent subject CPs in Topic position. Koster argued that the unavailability of topicalization in subordinate clauses correlates with the unavailability of apparent (clause-initial) CP subjects in the same clauses. The correlation would be explained if the Topic position is unavailable in general in the relevant subordinate clauses. However, as shown by Thráinsson (1979:102), Icelandic allows topicalization in subordinate clauses where English would not allow it.

(23) Jón veit [CP að Harald elskar María]. John knows [CP that Harold.ACC loves Mary.NOM] 'John knows that Harold Mary loves.'

The fact that topicalization is grammatical in this environment where a CP subject would still need to extrapose (as in English) suggests that whatever demands the extraposition of a CP "downstairs"

is not related to the availability of topicalization. This undermines the motivation for adopting the Koster account for Icelandic. It seems more likely that a clause-initial CP really is in the subject position in Icelandic, and thus CP itself is case-marked rather than its trace, although there might be cross-linguistic variation in the structural position of subject-like CPs (see Lohndal 2014). Thus, it remains a plausible analysis that Icelandic CP can be case-marked directly.

Another approach to maintaining a caseless CP is to say that a CP which appears to be in a case position is in fact an appositive/parenthetical element on a case-bearing pronoun, the only difference being that this pronoun is sometimes covert. Under this analysis, the dative CP examples would have the following structure, dative 'it' being covert (as in Li 2013).

(24)  $[_{DP} \text{ Pvi/} \varnothing \ [_{CP} \text{ að hann hefði sigrað}]]$  var einu haldið fram.  $[_{DP} \text{ it.DAT } [_{CP} \text{ that he had won}]]$  was one.DAT held forth 'It was only claimed that he had won.'

Here, the silent structure needs to be motivated. Any analysis along such lines would suggest that a configuration with an overt pronoun and a CP should have the same syntactic properties as an apparent bare CP. It would therefore have to explain why the structure with the overt pronoun (25) is a robust island for the purpose of extraction whereas the bare CP is not (26) (see Thráinsson 1979:195–197; Wood to appear).

- (25) \*  $[_{DP}$  Pessu viðhorfi $]_i$  talaði Jón um  $[_{DP}$  það  $[_{CP}$  að hann hefði haldið fram  $t_i]]$   $[_{DP}$  this opinion].DAT spoke John about  $[_{DP}$  it  $[_{CP}$  that he had held forth  $t_{DAT}]]$  Intended: 'John spoke about having claimed this opinion (to be right).'
- (26) ? [ $_{DP}$  Pessu viðhorfi] $_i$  talaði Jón um [ $_{CP}$  að hann hefði haldið fram  $t_i$ ] [ $_{DP}$  this opinion] spoke John about [ $_{CP}$  that he had held forth  $t_i$ ] 'John spoke about having claimed this opinion (to be right).'

These examples are evidence that there is no silent pronoun on top of the CP in (26). The most straightforward analysis of these facts is that the CP itself is the locus of case valuation.

Having considered two types of analyses where an (apparent) case-marked CP would be caseless but associated with a silent case-bearing element, I conclude that a theory with a directly case-marked CP is more straightforwardly appropriate for the Icelandic data under discussion. Of course, such brief comments are not the final word on whether CP is case-marked directly or needs some additional structure to appear in a case position. Settling such questions in a definitive manner is a task for the future. However, any version of case theory in which the case mechanism is effectively turned off when the argument is a CP is incompatible with the evidence.

These findings also resonate with certain other observations about CP case in Icelandic. Consider, for example, constructions with a CP subject and an accusative DP object as shown below for a finite (27) and an infinitival (28) CP (see Sigurðsson 2003; Thráinsson 2007:195–196).

- (27) [CP Að Gunnar skyldi ekki hafa mætt] drap alveg stemninguna. [CP that Gunnar should not have attended] killed totally mood.the.ACC 'It killed the mood that Gunnar did not attend.'
- (28) [CP Að syngja of hátt] gæti angrað hana. [CP to sing too loudly] could irritate her. ACC 'Singing too loudly could irritate her.'

In a case theory like the dependent case approach of Marantz (2000), see also Yip et al. (1987), an accusative argument should not surface in the absence of a nominative argument. Here, the most obvious analysis of (27–28) is that the CP is the nominative element in question. This type of evidence fits well with the view that CP can be case-marked but the evidence is indirect because there is no nominative morphology in these examples.

If the discussion in this paper is on the right track and the CP and the DP are quite similar with respect to case valuation, there are a couple of ways in which the theory can accomodate such a situation. One way is to posit a case feature on the C head. Another is to say to that the CP and the DP share some edge structure. For example, there could be a KP (case phrase) on top of each of them. No attempt will be made here to settle such questions as they are beyond the scope of a squib. CP can be case-marked but the formal details of what that means remain open for discussion.

#### 5 Conclusion

This paper has shown that the Icelandic evidence which has been used so fruitfully to analyze the case of PRO is also relevant for the issue of CP case-marking. A chain of evidence was reviewed which emerged out of the literature on non-nominative subjects and the case of PRO and this line

of research was extended to the case of CP by studying floating quantifiers which agree overtly in case-marking with a CP. This was taken to be evidence that CP can be case-marked. Yet, it was acknowledged that it may also be the case that CP is not case-marked directly in such cases but can rather be associated with a silent intermediete element that can host the relevant case values. At a general level, the paper offers an avenue of future inquiry by revealing a parallelism between the diagnostics available in Icelandic for detecting the case of PRO and the case of CP.

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