Post-verbal subjects and agreement

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Postverbal subjects and agreement: Specificational Copular Clauses in Faroese

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In this paper we discuss a type of copular clause – specificational copular clauses – in which subject properties may be split between two nominative noun phrases. In particular, while the first noun phrase occupies the canonical preverbal subject position, in some languages the finite verb can agree with the postverbal nominative. Such agreement might be expected, on some theoretical assumptions, to show person restrictions. We discuss this phenomenon in two SVO Germanic languages – Icelandic and Faroese – and present new data from Faroese showing that the person effect here follows from the existence of distinct probes for Number and Person agreement.

1. Introduction: Postverbal subjects and agreement

The hallmarks of subjects in Germanic and beyond are a number of properties that cluster together in simple sentences (for lists of subject properties, see Keenan 1976 and more recently Falk 2006; Bickel 2011). Subjects agree with the verb in Number and Person; they appear in nominative case; they are usually the highest argument of the verb; in SVO languages they usually appear in a position preceding the verb. There are a number of well-known exceptions to this cluster of properties especially with postverbal subjects, i.e. subjects that do not appear in the default position. In many of these cases, the default subject position is occupied by an expletive, while the noun phrase that shows subject properties follows the verb, as e.g. in existential sentences and there-V sentences in English, as in (1), and in so-called specificational and existential clefts as in (2) and (3) respectively.

(1) a. There is one even prime number.
   (McNally 2011: 1830)

   b. There sat an old woman resting on a stone.
   (BNC example, cited from Hartmann 2008: 90)

(2) ... it was Pound who had been thinking of it.
   (BNC example, cited from Hartmann 2016)
Besides these structures where the canonical subject position is occupied by an expletive, there are also cases where this position can be occupied by a locative or temporal phrase as in English locative inversion:

(4) a. Among the guests was sitting my friend Rose.
b. Back to the village came the tax collector.
   (Bresnan 1994: 75)

   While the postverbal noun phrases in these examples are not in the default subject position, there are still reasons to call them subjects. They can control subject-verb agreement and they are the highest argument of the verb (with the possible exception of example (2)).

   In this paper, we add to the discussion a different and in our view interesting case, namely Specificational Copular Clauses (SCCs) (see Higgins 1979; Akmajian 1979; these are the ‘inverse’ copular clauses of Moro 1997). This type of copular clause is exemplified in three languages in (5). In SCCs, subject properties are distributed between two nominative noun phrases. In Germanic, we find variation within and across languages as to whether the copula agrees with DP1 or DP2. (5) illustrates this for English, Icelandic, and Faroese (the latter two languages often referred to as ‘Insular Scandinavian’, to distinguish them from the ‘Mainland Scandinavian’ languages of Danish, Norwegian and Swedish).

   (5) He wonders...
   a. ... if [DP1 the problem] is [DP2 your parents].
   b. ... hvort [DP1 aðalvandamálið] er/eru [DP2 foreldrarín].
   c. ... um orsókin til eldin var/vóru tey brennandi kertiðjósini í stóvuni.

   In this paper we concentrate on Insular Scandinavian, as these languages have two properties that are insightful for the discussion of postverbal subjects. Like the other Scandinavian languages, both Icelandic and Faroese are SVO languages which have a fairly rigid SVO word order in subordinate (non-V2) clauses, with the subject generally preceding the verb (except for the restricted cases of stylistic fronting). They do
not have, for example, any parallel to the kind of scrambling found in German and to a lesser extent Dutch. But unlike the other Scandinavian languages, and crucially for our purposes, both Icelandic and Faroese have retained agreement morphology on finite verbs, morphology which has been lost in all the standard varieties of the Mainland Scandinavian languages.

The aims of this paper are three-fold. First, in order to extend the empirical basis for discussion of agreement in SCCs crosslinguistically, we present new data from the least well-studied of the standard Scandinavian languages, Faroese. Second, we will use this new set of data, together with data that we have already published from Icelandic, to argue that Number and Person probes can be distinct heads, each of which probe downwards. Given this proposal, depending on the landing site of the preverbal subject, three options for agreement arise: full agreement with DP1, full agreement with DP2, and agreement with DP2 in number only. We will argue that while this pattern is straightforwardly manifested in Icelandic, it can also be detected more indirectly in Faroese. Third, we will discuss the role of subject-verb agreement as a criterion for subjecthood in light of our results.

2. Subject properties and agreement in Specificational Copular Clauses

Specificational copular clauses show an unusual and potentially revealing split in prototypical subject properties. On the one hand, DP2 has frequently been argued to have the semantic status of subject of predication (see e.g. Heggie 1988; Moro 1991, 1997; Heycock 1992; Mikkelsen 2005; den Dikken 2006). On the other hand, DP1 can be shown to occupy the canonical structural subject position. For example, if we look at the Insular Scandinavian languages we find that SCCs are possible in embedded wh-clauses, see (5b,c), where topicalization / embedded V2 is not possible (see e.g. Heycock et al. 2010); in these clauses the preverbal position occupied by DP1 is the canonical subject position.

Taking DP2 not only to be the semantic subject of predication, but also the structural subject of predication in the small clause selected by the copula results in an inversion structure of these sentences as illustrated in (6) with an English example.4
Inversion analysis of copular clauses

Considering English alone, DP1 ends up being a more prototypical subject than DP2, even if it is not the subject of predication. It is in the canonical subject position and it controls agreement – see example (7), where the two noun phrases differ in number:

(7) *The cause of the fire was/were burning candles.*

However, cross-linguistically, agreement is not always with DP1, see the Italian example in (8) cited from Moro’s (1991, 1997) seminal work on SCCs:

(8) *Il colpevole sono/è io/me.*

‘The culprit is me.’

This difference between English and Italian has been explained by relying on two further differences (Moro 1997). First, in English DP2 is accusative, and therefore is not accessible for agreement relations (for discussion of the relation between ‘unmarked’ case and agreement, see Bobaljik 2008). Second, as Italian is a pro-drop language that allows postverbal subjects more generally, examples like (8) can be analysed as having a pro in the preverbal subject position that agrees with DP2 in phi-features.5

(9) \[
\begin{array}{c}
\text{IP} \\
\text{DP1} \quad \text{IP} \\
\text{pro} \quad \text{BE} \\
\text{t} \quad \text{VP} \\
\text{V} \quad \text{be} \\
\text{DP2} \quad t_{DP1} \\
\text{Sc} \\
\text{John} \\
\end{array}
\]

This kind of explanation has been challenged from three perspectives. First, on the theoretical side: since Moro first published on this topic, it has become more common to assume that agreement, as an instance of the more abstract notion Agree, can (or in fact must) apply ‘downward’ (see in particular Chomsky 2000) rather than in a Specifier-Head configuration as proposed.
in Chomsky (1981) and more recently defended in Koopman (2006). Second, there are a number of Germanic languages that are like English in not being pro-drop, but unlike it having nominative case on both DPs in specificational copular constructions: these languages include at least Dutch, German, Faroese and Icelandic. Contra what would be predicted by Moro’s proposal, these languages also allow – to differing extents – the ‘Italian’ pattern of agreement with DP2 (see den Dikken 1998 for this point with respect to Dutch).

Third, this analysis is challenged by an additional possible type of agreement that we have observed in Icelandic. Here we find speaker variation with respect to DP1 vs DP2 agreement, but even more importantly, there is a third option, which we descriptively call number-only DP2 agreement: that is, DP2 controls number, but not person agreement, as in (10).

(10) Hann var að velta fyrir sér hvort aðalvandamálið væru þið.
    he was wondering if main problem.DEF be.3.PL you.PL
    ‘He was wondering whether the main problem is you.PL’

Hartmann & Heycock (2016, 2017) report a production experiment where participants were asked to fill in a gap where the copula was expected. In cases like (10), native speakers of Icelandic produce this morphologically distinct pattern of number-only DP2 agreement in a third of the relevant cases.6

To account for the three different patterns that we found in Icelandic production, we proposed the structure in (11):

(11) 

\[
\begin{array}{c}
P\{erso\}nP \\
[1] \\
Pn' \\
Pn \quad N[umbe]rP \\
[2] \\
Nr' \\
Nr \quad TP \\
[3] \\
T' \\
T \quad VP \\
[4] \\
v' \\
be \\
SC \\
DP2 \quad DP1
\end{array}
\]
The basic assumptions of the account are that (i) agreement proceeds ‘downwards’ and (ii) SCCs are inversion structures, i.e. DP1 moves from the small clause across DP2 to its surface position. Furthermore, we assume for Icelandic, following the proposal made by Sigurðsson & Holmberg (2008) on independent grounds, that Number and Person are two independent probes, with Person the higher of the two. The crucial set of data for the distinction of number and person in Sigurðsson & Holmberg (2008) is based on the DAT-NOM constructions, where number agreement with the low nominative is possible, but person agreement is not (see Sigurðsson 1991, 1996, Taraldsen 1995, 1996 as well as many subsequent authors; see Heycock & Hartmann 2018 for discussion in comparison to specificational copular clauses based on experimental work).

We argue that Icelandic speakers vary with respect to which of the intermediate landing sites [1] to [4] is used by DP1 (cf. 11); and we assume that this can also be a point of variation between languages, i.e. which positions are available can vary. English allows either [3] or [4]. Both positions are below the Person and Number probe (which in English might be conflated to one probe), so DP1 is the first noun phrase that the probe encounters for downwards Agree.7 Italian (and the other DP2 languages) allows only [1] (above both person and number probes), whereas in Icelandic speakers can have all positions available (possibly as a case of competing grammars, see Kroch 1989). In sum, assuming downwards agreement (as we do); for DP2 agreement to arise, DP1 has to move above the respective agreement probe. Additonally, it is important to note that we have to assume the differentiation of Person and Number for Icelandic in order to account for the number-only agreement pattern (Hartmann & Heycock 2016, 2017), and we will argue for this differentiation in Faroese below. It is possible though that the two probes conflate to one, e.g. in German or English.

In light of the notion of subject discussed above, this means that agreement cannot be associated with a single, unique, subject position, nor with a single unique subject noun phrase. In SCCs in the languages we discussed, DP1 agreement is associated with DP1 first moving to positions [3] or [4] before subsequent movement to a position higher than the finite verb (TP, Spec,NumP, SpecPersonP or some higher projection). DP2 agreement arises when DP1 first moves to a position above both agreement probes, and number-only DP2 agreement – as in (10) above – appears when the first landing-site for DP1 is between the two agreement probes.
3. SCCs in Faroese: further evidence for two agreement probes

3.1. Introduction

As mentioned above, Faroese is the only other standard Scandinavian language besides Icelandic that retains any agreement morphology in the paradigm for finite verbs. Investigating this language therefore offers us the possibility of extending the empirical basis for the understanding of how ‘subject’ agreement works in these cases where there are two potential controllers for agreement.

We conducted two studies: a fill-in-the-blanks production study and a rating study, comparable to the Icelandic studies reported in Hartmann & Heycock (2016, 2017). The aim was to test for the effects of Person and Number agreement in SCCs in Faroese, looking into the core cases in which we have a mismatch of DP1 and DP2 in Number only, in Person only and in Number and Person, as illustrated in (12). For all three cases the postnominal noun phrase was a pronoun.

(12) A: DP.SG _____Pronoun.3.PL
    B: DP.SG _____Pronoun.2.SG
    C: DP.SG _____Pronoun.2.PL

Although Faroese retains verbal agreement, there is more syncretism in the paradigm than in Icelandic. In particular, in contrast to Icelandic, there is no distinct morphological marking in the plural for any verb, including the copula, in either past or present.

(13) Verbal paradigm of Faroese copula

<table>
<thead>
<tr>
<th></th>
<th>Present</th>
<th>Past</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person</td>
<td>Singular</td>
<td>Plural</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Singular</td>
</tr>
<tr>
<td>1</td>
<td>ert</td>
<td>eru</td>
</tr>
<tr>
<td>2</td>
<td>ert</td>
<td>eru</td>
</tr>
<tr>
<td>3</td>
<td>er</td>
<td>eru</td>
</tr>
</tbody>
</table>

More specifically, if Faroese also has available as a landing site for DP1 the position [2] in (11), this cannot be directly visible in the morphology (contrasting in this with Icelandic). As there is no person morphology in the plural, ‘number-only’ agreement with a 2nd plural DP2 (12C) would be indistinguishable from ‘full’ DP2 agreement. If DP2 is 2nd person singular (12B), person is distinctively marked – but in this case, ‘number-only’ agreement would be indistinguishable from agreement with
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DP1. Thus, we cannot, in principle, find direct evidence for the number-only agreement observed in Icelandic (10) and thus cannot expect to find direct evidence for a split in the probes as in Icelandic. However, as Faroese also shows variation in agreement (see Heycock 2012; Hartmann & Heycock 2017), we might be able to see the effect of ‘number only’ DP2 agreement in differences in the frequency of the choice of the forms chosen: as just outlined, number-only DP2 agreement – associated with landing site [2] – would show up as an increased rate of apparent DP1 agreement in (12B), compared to (12C), as illustrated in Table 1.

<table>
<thead>
<tr>
<th>DP1 position:</th>
<th>[1]</th>
<th>[2]</th>
<th>[3]</th>
<th>[4]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition B</td>
<td>2.SG</td>
<td>3.SG</td>
<td>3.SG</td>
<td>3.SG</td>
</tr>
<tr>
<td>Condition C</td>
<td>1/2/3.PL</td>
<td>1/2/3.PL</td>
<td>3.SG</td>
<td>3.SG</td>
</tr>
</tbody>
</table>

Table 1. Morphological expression of agreement predicted for the 4 potential landing sites for DP1

For the rating experiments, we expect that some speakers may accept only one of the landing sites as possible, while others may accept a range of landing sites for DP1. Whatever the exact variation might be, we expect that the rating for 3sg agreement would increase in (12B), as this agreement would be acceptable for all speakers who allow for any or all or the positions [2], [3], [4] as opposed to (12C), where this agreement would only be acceptable for speakers who allow DP1 to move to position [3], [4].

Conversely, if we do not find a difference between the three options (12A-C) in both the production and the rating experiment, we do not have evidence for a split of person and number probes in Faroese.

A potential confound is that the same potential difference between (12B) and (12C) might also be explained by taking syncretism in person to be a repair mechanism when a probe downwards agrees/tries to agree with a noun phrase in person, as proposed for the Icelandic DAT-NOM cases in Schütze (2003); Sigurðsson & Holmberg (2008); Ackema & Neeleman (2017). Downwards person agreement has been argued to be problematic generally (see for example Baker’s 2008 SCOPA) or at least for some configurations, including Icelandic dative-nominative constructions (see Boeckx 2000; Preminger 2014 and references therein). In such cases, ‘low’ non-3rd person nominative arguments can simply be ungrammatical. For the case of Icelandic dative-nominative constructions, Schütze (2003) has argued that if the relevant non-3rd person
agreement morphology on the verb shows morphological syncretism with 3rd person, downwards agreement with a non-3rd person nominative can improve or even be considered to be unproblematic (for more detailed discussion see Hartmann & Heycock 2018).

If syncretism as repair mechanism indeed is the relevant factor also in the SCC construction that we are investigating, we would expect for the production study that speakers would produce DP1 agreement forms (3sg) more frequently in condition (12B) than in (12C), where the syncretic form of the verb does not restrict DP2 agreement. Thus, an account in terms of the effect of syncretism as repair mechanism and one that relies instead on assuming two distinct agreement probes make the same predictions for the production study. However, the two different types of account make different predictions for the rating study. In particular, the split probe account predicts that ratings for apparent DP1 agreement will be different between (12B) and (12C). In (12B), 3rd person agreement (apparent DP1 agreement) would be produced (and hence accepted) by speakers who allow DP1 to move to any position lower than [1], since number-only DP2 agreement in this configuration (associated with position [2]) gives rise to the same form as full DP1 agreement (associated with positions [3] and [4]). In (12C), on the other hand, 3rd person singular agreement will only be produced/accepted by speakers who allow DP1 to move to positions [3] and [4]. Thus, the split probe account predicts that ratings for DP1 agreement in (12C) will be lower overall than ratings for DP1 agreement in (12B). On the other hand, the syncretism account predicts that DP2 agreement will be more acceptable in (12C) than in (12B), and predicts that there will be no effect on the acceptability of DP1 agreement. We present the experiments in sections 3.2 and 3.3, and discuss the results of the two experiments in the light of the predictions in section 3.4.

3.2. Person agreement in Faroese specificational copular clauses: Production study

3.2.1. Design and materials

The production study was intended to test the extent to which Faroese speakers produce DP2 agreement in a specificational sentence when DP2 is a non-3rd person pronoun. We already know from an earlier production study reported in Heycock (2009, 2012) and discussed also in Hartmann & Heycock (2017) that at least some Faroese speakers produce DP2 agreement in Number in specificational sentences, but that earlier work did not investigate agreement in Person. In this production study we elicited forms of the copula in the five conditions set out and exemplified in (14) and (15).8
(14) A: DP.SG Pronoun.3.PL
   B: DP.SG Pronoun.2.SG
   C: DP.SG Pronoun.2.PL
   D: DP.SG NEG Pronoun.3.PL
   E: DP.SG NEG Pronoun.2.SG

(15) Hann ivadíst í, um ...

   ‘He wondered if’ ...
   A: høvuðstrupulleikin tey
      main_problem.DEF they
      ‘the main problem them’
   B: høvuðstrupulleikin tú
      main_problem.DEF you.SG
      ‘the main problem you.SG’
   C: høvuðstrupulleikin tit
      main_problem.DEF you.PL
      ‘the main problem you.PL’
   D: høvuðstrupulleikin ikkí tey
      main_problem.DEF not they
      ‘the main problem not them’
   E: høvuðstrupulleikin ikkí tú
      main_problem.DEF not you.2.SG
      ‘the main problem not you.SG’

Conditions A and B were intended to allow us to determine whether DP2 agreement is less frequently chosen when it involves agreement for Person (Condition B) or for Number (Condition A). Conditions B and C are similar to each other in that both involve a 2nd person DP2, so agreement with DP2 in either case would involve Person agreement, but DP2 is singular in Condition B and plural in Condition C.9

Conditions D and E are the same as Conditions A and B except that they include the negative marker ikkí before the position for the finite verb. This is included because we want to make sure that participants do not parse the clauses containing the copula as instances of V2, with DP1 a topIALIZED predicate, the finite copula in second position, and DP2 a subject in the canonical preverbal subject position. As discussed earlier, we have attempted to eliminate the possibility of such a parse by making the copular clause an embedded interrogative – a configuration which in all the Scandinavian languages is known to resist the possibility of ‘Embedded V2’. An immediately pre-verbal position for negation in a Faroese clause is an additional signal that the clause does not involve V2, and that DP2 is in a low position within vP or VP. If these conditions do not differ from A/B, we can conclude that the embedded wh-interrogative context does, as intended, exclude a V2 analysis.
We constructed 15 items along the lines of (15), and divided them among 5 lists, so that condition and each item was seen an equal number of times, with each participant seeing each condition 3 times, but never seeing more than one example from each item (Latin Square Design). Each list therefore contained 15 test items, and in addition 24 fillers, including 4 examples designed to elicit 2nd person singular forms for the copula *vera*, as mentioned in note 9 and below in section 3.2.3. Each list was randomized per participant.

3.2.2. Participants and procedure

Participants were found through the professional and personal contacts of the authors. 53 self-described native speakers of Faroese participated. One participant was excluded as they gave their native language as Swedish, and a second because they had too many missing values, that is, there was no verb form provided. The age range of the participants was 18-76, with a mean age of 44.

The experiment was conducted online using the OnExp package,\textsuperscript{10} with the sentences containing a blank displayed on screen one at a time, with no possibility to return to revise previous choices. The test phase was preceded by a practice session.

3.2.3. Data treatment and results

All the verb forms that were entered by participants for the test items were coded for DP1 agreement (3rd singular) or DP2 agreement (plural in conditions A, C, and D, 2nd singular in conditions B and E). Forms of any verb other than the copula *vera* were discarded.

As mentioned in note 9, speakers from the southern dialect area have lost the distinct -t ending for 2nd person singular in the present tense of the copula when it occurs in the ‘inverted’ order, preceding the 2nd person pronoun. The fillers contained 4 examples designed to elicit 2nd person forms of the copula, 3 of them in the inverted order. We coded the forms of the copula chosen in each of these conditions for whether or not they showed the distinctive 2nd person singular -t ending. There were ten speakers who produced a form without this ending (= *er*) at least once in the inverted order (a subset – seven – of these ten speakers also provided a form without the -t ending in the non-inverted order). In the results presented below we have removed all the data from these ten participants.

The results from the 41 remaining participants are given in Table 2, and in graphical form in Figure 1.
Table 2. Conditions and results of the Faroese production study

The relative frequencies of copulas in agreement with DP1 (f) were transformed as usual – arcsine(square-root(f)) – and we calculated planned contrasts with participant (F1) or item (F2) as random factors. We tested the influence of DP2 differing in phi-features with DP1 in only Number, or in only Person (A vs B); and the effect of 2nd singular vs 2nd plural DP2 – a Person mismatch only or (syncretic) Person and Number mismatch – in B vs C. Note that although we coded ‘DP1’ and ‘DP2’ agreement, in Conditions B and E ‘DP1’ agreement falls together with number-only DP2 agreement, as discussed in section 3.1 above.

There is a clear preference for 3sg agreement in Condition B compared to a dispreference for this agreement in Conditions A and C. The contrast is significant both between A and B (F1 (1,40) = 25,0***

<table>
<thead>
<tr>
<th>Condition</th>
<th>DP1 φ-features</th>
<th>Agreement with</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DP1</td>
<td>DP2</td>
</tr>
<tr>
<td>A</td>
<td>3s</td>
<td>3p</td>
</tr>
<tr>
<td>B</td>
<td>3s</td>
<td>2s</td>
</tr>
<tr>
<td>C</td>
<td>3s</td>
<td>2p</td>
</tr>
<tr>
<td>D</td>
<td>3s</td>
<td>3p</td>
</tr>
<tr>
<td>E</td>
<td>3s</td>
<td>2s</td>
</tr>
</tbody>
</table>
As can be seen from the figures in Table 2, the preference for DP1 agreement in the first case (Condition B: 88% DP1 agreement, 12% DP2 agreement) is more marked than the preference for DP2 agreement in the second (Condition C: 34% DP1 agreement, 66% DP2 agreement).

The presence of pre-verbal negation does not have any effect on agreement preferences (A vs D: F1(1,40) < 1; F2(1,14) < 1; B vs E: F1(1,40) < 1; F2(1,14) < 1). This indicates that indeed we were correct in our assumption that setting up the copular clauses to be embedded interrogatives was enough to guarantee that participants parsed them as SCCs with DP1 in subject position rather than as some kind of embedded Verb Second construction with non-subject topicalization.

### 3.3. Person agreement in Faroese specificational copula clauses: Rating study

Alongside the production study of agreement in SCCs in Faroese, we conducted a rating study using the ‘thermometer’ paradigm (Featherston 2008), which is a version of the magnitude estimation technique (see Bard et al. 1996). Participants rate each sentence in relation to two reference sentences. The reference sentences are provided with a fixed score: one, a rather good sentence, is assigned the value 30, one, a less natural sentence, is assigned the value 20. Participants were asked to rate the naturalness of individual examples by providing numerical scores for individual sentences. As with the magnitude estimation technique this allows participants to make finer grained judgments and to make distinctions between more or less unacceptable sentences.

#### 3.3.1. Design and materials

The experiment investigated judgments on person agreement in the eight conditions set out in Table 3. The first six of these conditions correspond to conditions A-C in the production study: the rating conditions come in pairs with the first member of each pair showing DP1 agreement and the second DP2 agreement. The last two conditions are intended to provide lower and upper bounds on the ratings for specificational clauses in Faroese with pronouns in the focal position. Condition D has a 3rd person plural DP1 and a 2nd person plural DP2, with the copula showing ‘default’ 3rd singular agreement. Our expectation, given our prior work on English and Icelandic, is that this type of agreement is ungrammatical (in an SCC the verb always agrees either with DP1 or with DP2). Conversely, in Condition E both DPs are 3rd singular, so there is no possible conflict in agreement.
In the present tense in Faroese 1st Person is distinctively marked in the singular, thus DP2 agreement in Condition B is an instance of unambiguous non-3rd person agreement with DP2.\textsuperscript{12} As noted earlier, Number-only agreement (agreement resulting from the position between the Person and Number probes) would result in morphologically 3sg agreement, coded as DP1 agreement in the singular, see B:1 in (16).

The pairs in B vs C can thus show whether or not the decrease in DP2 agreement observed in the production study when DP2 is singular is due to an effect of syncretism, or instead provides us with indirect evidence for two distinct probes – that is, whether it is an effect of number-only agreement. If the effect is due to syncretism, we expect DP2 agreement in Condition B to be rated lower than DP2 agreement in Condition C where Person is syncretic. If on the other hand, the effect is due to number-only DP2 agreement we expect that (apparent) DP1 agreement will be rated better in Condition B than in Condition C: DP1 agreement in B will be accepted by all speakers who allow number-only agreement as well as those who allow DP1 agreement, while DP1 agreement in C will be accepted only by speakers who accept DP1 agreement.

24 items were constructed to appear in each of the conditions set out in Table 3 above, and 8 lists constructed so that participants would see three examples of each condition, with each example drawn from a different item (Latin Square Design). To exclude a V2 parse, the copular clause always appeared in the form of an embedded polar interrogative and contained the negative marker, \textit{ikki} in Faroese. (16) gives examples of one item in all conditions:

(16) \begin{verbatim}
Tey ivadust í, um ...
they wondered if
A:1hovudstrapulleikin ikki er tey
main_problem.DEF not be.3.SG they
‘the main problem isn’t them’
\end{verbatim}
Each list contained 24 of the test items for the experiment, randomized and interspersed with 12 items from another experiment not discussed here, and 36 other fillers.

3.3.2. Procedure and participants

Participants were recruited through the professional and personal contacts of the authors and were invited to take part in a lottery for internet gift vouchers. From the 80 participants (10 per list) we excluded 1 participant, as they gave Icelandic as their mother tongue. All the other participants were self-described native speakers of Faroese.

The questionnaire was administered online using the OnExp package. Materials were grouped into individual blocks of up to 6 sentences in order to avoid too many examples of the same type following each other; both blocks and sentences within blocks were randomized for each participant. Before rating the test sentences participants went through two practice stages in line with the original methodology of magnitude estimation: in the first stage, participants had to provide an estimate of the line length of one line in relation to two reference lines assigned the values of 30 and 20 (with 30 being assigned to the longer line). This stage is followed by a practice stage training the task of rating the acceptability of sentences in relation to two reference sentences (the same references are used for the practice stage and the test sentences).
3.3.3. Results

Raw judgments were z-transformed per participant (with fillers included), in order to normalize for the different ways in which individual participants may have used the scale. A few participants used 0 as a rating: these were changed to the lowest possible rating, namely 1. Table 4 gives the mean ratings and z-scores for the 8 conditions; the z-scores are graphed in Figure 2.

<table>
<thead>
<tr>
<th>Schematic Example</th>
<th>Agreement on Verb</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DP1</td>
<td>DP2</td>
<td></td>
</tr>
<tr>
<td>DP1</td>
<td>raw</td>
<td>z-score</td>
<td>raw</td>
</tr>
<tr>
<td>A Number</td>
<td>the problem</td>
<td>they</td>
<td>21.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>23.1</td>
</tr>
<tr>
<td>B Person Singular</td>
<td>the problem</td>
<td>I</td>
<td>22.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>23.3</td>
</tr>
<tr>
<td>C Person Plural</td>
<td>the problem</td>
<td>you.pl</td>
<td>21.5</td>
</tr>
<tr>
<td></td>
<td>raw</td>
<td></td>
<td>23.3</td>
</tr>
<tr>
<td>D Default</td>
<td>the winners</td>
<td>you.pl</td>
<td>20.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E Full Match</td>
<td>the problem</td>
<td>she</td>
<td>23.2</td>
</tr>
</tbody>
</table>

Table 4. Rating scores on agreement in Faroese SCCs per Conditions

The two baseline conditions for ungrammatical ‘default’ agreement (D) and grammatical agreement without a mismatch in Number or Person (E) show, as expected, that the former is rated very low and the
latter significantly higher. Nevertheless it should be noted that even the latter was rated rather low with respect to the full range of examples in the experiment (including the fillers).

Turning to the other three pairs of conditions, it is striking that in all three cases the member of the pair showing DP2 agreement is ranked significantly higher than the member showing DP1 agreement.

We can compare the pairs with non-3rd person DP2 in terms of the two factors Agreement Controller (DP1 vs DP2) and Environment (person mismatch in singular (B), and person and number mismatch (C)) parallel to the environments of the production experiment.

There is a main effect of the factor Agreement Controller, as we would expect from inspection of the graph: DP2 agreement is in both cases rated higher than DP1 agreement ($F_1(1,78)=34.366, p < .0001$, $F_2(1,23)=36.570, p < .0001$). Additionally there is also an interaction between the two factors ($F(1,78)=6.417, p < .02 , F_2(1,23)=4.558, p < .05 p = .044$). That is to say, the preference for DP2 agreement over DP1 agreement is greater when DP2 agreement is with a 2nd person plural pronoun than a 2nd person singular. Importantly, however, we can see from the graph that this difference is because DP1 agreement is rated higher when DP2 is 2nd singular (B) than when it is 2nd plural (C).

3.4. Discussion: Agreement in Person in Faroese production and rating tasks

3.4.1. Evidence for two agreement probes in Faroese

The results of the two experiments show that there is indirect evidence for two agreement probes in Faroese. In the production we can see this indirect evidence in the frequency of the production of specific forms. As discussed above, number-only agreement with DP2 falls together with DP1 agreement only in Condition B, hence the prediction that apparent DP1 agreement should be most frequent in this condition (see Table 1 above). And this is indeed what we find, as shown in Table 2 and Figure 1. However, we noted above that this result might find an alternative explanation in terms of syncretism. In order to rule out this hypothesis, we need to look at the rating data, where the two approaches make different predictions. If syncretism were the crucial factor, ratings for DP2 agreement should decrease in condition B (with distinct person marking on the verb) as opposed to Condition C. This is not what we see in the data. On the contrary, we observe what would be expected under an analysis of number-only agreement: ratings for DP1 agreement improve in this condition. Here apparent DP1 agreement can be inter-
interpreted as the result of both DP1 agreement and number-only DP2 agreement, and thus it is presumably acceptable not only for speakers who allow a low position for DP1, but also for those speakers allowing the position immediately below Number. That is, apparent DP1 agreement is rated highly by two groups of speakers: those who accept DP1 agreement (for whom the landing site for DP1 is one of the two lowest positions, [3] and [4]) and those for whom position [2], between the Person and Number probes, is a possible landing site.

Thus, we conclude that the Faroese production and rating data provide further support for the analysis of variation in agreement in SCCs along the lines of different target positions as in (11). And we have indirect support for the assumption of two agreement probes – separately motivated in Icelandic – in Faroese.

3.4.2. Further results

‘Inflation’ of ratings for DP2 agreement in comparison to production. A couple of further aspects of our findings require some discussion. First, we should consider the difference between the results from the production and rating study. Overall the rating study showed higher ratings for DP2 agreement throughout than would have been expected from the production study. Consider for example the two conditions in the production task where DP1 and DP2 are both 3rd Person, differing only in Number (Conditions A and D). In these conditions there was an essentially equal split between production of DP1 agreement or DP2 agreement. In the rating task, however, we found a clear preference for DP2 agreement over DP1 agreement in the corresponding conditions (the two A conditions in the ratings task). And in fact, in the rating task, DP2 agreement was always given (statistically significant) higher ratings than DP1 agreement.

We cannot be certain what accounts for the overall effect that DP2 agreement is rated higher, across the board, than we would have expected from the production study. We speculate that the rating task may be more subject to normative/prescriptive pressures than the production task, and that participants who may have a variable system may perceive DP2 agreement as the correct form and give it higher ratings than are warranted by their own actual use. So while both experiments converge on showing that DP2 agreement is part of the grammar of at least some speakers of Faroese, we hypothesize that it is at most only weakly preferred to DP1 agreement.

If we assume that this normative pressure applies in all cases, we can make sense of the apparent discrepancy in the effect of a non-3rd person singular pronoun as DP2. Recall that while speakers produced
the DP1 agreement pattern in (17a) much more frequently than the DP2 pattern in (17b), they rated the DP1 agreement pattern in examples like (18a) lower than the DP2 agreement pattern in (18b):

(17)  
\[
\text{Hann ivaðist í, um ...}
\]
he wondered if  
‘He wondered if ...’

a.  
\[
\text{høvðstrupulleikin (ikki) er tú}
\]
main_problem.DEF (not) be.3.SG you.SG  
‘the main problem isn’t you.SG’

b.  
\[
\text{høvðstrupulleikin (ikki) ert tú}
\]
main_problem.DEF (not) be.2.SG you.SG  
‘the main problem is you.SG’

(18)  
\[
\text{Hann ivaðist í, um ...}
\]
he wondered if  
‘He wondered if ...’

a.  
\[
\text{høvðstrupulleikin ikki er eg}
\]
main_problem.DEF not be.3.SG I  
‘the main problem isn’t me’

b.  
\[
\text{høvðstrupulleikin ikki eri eg}
\]
main_problem.DEF not be.1.SG I  
‘the main problem isn’t me’

Let us assume that the ‘inflation’ in the ratings for DP2 agreement – by hypothesis, an overlay of a prescriptive norm – was constant across all relevant conditions. How might we estimate the size of this effect? The difference in ratings between DP1 vs DP2 in Condition A amounts to .22. At the same time, we know that in production, DP1 and DP2 agreement were produced at the same rate in equivalent examples, which should correspond to a zero difference in the ratings. So we conclude that the ratings for DP2 agreement are too high by .22. If we reduce the ratings for DP2 agreement for Person in examples like (18b) by the same amount, they are now lower than the ratings for DP1 agreement in this type of configuration (examples like (18a)). So this would then be in line with the finding that in production, DP1 agreement is produced more frequently in this configuration than DP2 agreement (e.g. (17a) rather than (17b)).

Overall low ratings for SCCs in Faroese. A point that merits further research is that, as mentioned briefly in section 3.3.3, overall the ratings for SCCs were relatively low, regardless of agreement. As can be seen clearly in Figure 3, even the condition where both DPs are 3rd sin-
gular (the ‘full match’ condition F) gets ratings that are below the mean for the whole experiment including the fillers. Work that we are currently conducting on Dutch suggests a similar pattern. In that language it seems that this is due to a strong dispreference for pronouns as the foci in these specificalional clauses, regardless of Person or the specifics of agreement morphology, but we do not have data to establish whether this is true of Faroese. We can speculate that pronouns are typically taken to encode ‘old’ information and that particularly in the absence of an establishing context, this sets up a conflict with the obligatory post-copular focus in this construction (see e.g. Heggie 1988; Heycock 1994; Williams 1997 for discussion of the focus restriction), but testing whether this is the case remains for further work.

4. Conclusion and Implications for Agreement and Subjecthood

In this paper we have presented the results of a production and a rating study on Faroese SCCs. We have established that, in production, the choice of agreement between DP1 and DP2 is affected by the Person of DP2. Strikingly, however, the rating study reveals that the acceptability of agreement with DP2 remains constant, it is the acceptability of (apparent) agreement with DP1 that varies. We have argued that this initially puzzling pattern can be explained with an analysis where the landing site of DP1 can vary with respect to two different agreement probes, namely Person and Number. If DP1 moves to a position below Number and Person, this results in DP1 agreement. If it moves to a position above both Person and Number, it is inaccessible to the agreement probes and the result is full agreement with DP2. Importantly, there is a third possibility: movement to a position below Person but above Number, resulting in what we analyse as ‘number only’ agreement with DP2, which in some cases in Faroese is morphologically indistinguishable from DP1 agreement, giving rise to the variation in judgments that we document. This type of agreement is manifested quite directly in Icelandic (Hartmann & Heycock 2016, 2017); here we have argued that its effects are also detectable in Faroese.

The study of SCCs in Insular Scandinavian in general and Faroese in particular is important for the discussion of (non-)canonical (post-verbal) subjects from two perspectives. First, the two probes with their specifiers are relevant for the availability of different (pre-verbal) subject positions, the number and height of which might vary crosslinguistically; thus these positions might not only vary with respect to information-structural properties in the lower and higher IP-level see among
others É. Kiss 1996, Cardinaletti 1997, 2004, Belletti 2004); functional categories can also provide different positions.

Second, the study here also shows that agreement is a very indirect diagnostic for subjecthood. In the analysis presented, we assume that agreement probes search downwards and agree with the closest accessible noun phrase. Thus, agreement is a diagnostic for the highest accessible argument below the agreement probes. While the highest accessible argument often coincides with other subject properties (agent, the single nominative argument, occurrence in default subject positions), this is not necessarily the case. It is only in more complex structures, such as the ones discussed here, that we can see how exactly agreement and other subject properties diverge.

Acknowledgements

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Notes

1 Note that this is not necessarily the case for postverbal subjects in SVO languages generally, see e.g. the discussions in Samek-Lodovici (2002), Bentley (2013) and references therein.
2 Note that in Germanic transitive verbs are usually excluded in these configurations; this is different from a sub-type of Italian postverbal subjects, see Leonetti (this volume) and references therein.
3 Note that we use the labels DP1 and DP2 for the linear position of these noun phrases for ease of exposition. Nothing is implied about the base positions of these DPs. Furthermore, we assume a general analysis of noun phrases as DPs, but nothing hinges on this, and we will not discuss the internal structure of these nominals here.
4 We abstract away from the question of whether there is a projection for the copula distinct from VP.
5 There is an issue as to what the role of pro is in the compositional interpretation of (9). We put this aside here.
6 A reviewer pointed out it might be problematic that we used the noun orsök ‘cause’ as DP1 in the experiment on which we base our observation that number-only
agreement is possible in Icelandic: the reviewer reports that for some speakers of Icelandic this noun appears in non-standard uses to behave like a plural neuter noun and reports examples from internet pages. We have not been able to establish how common this use may be: none of the native speaker consultants we have subsequently asked about this issue allows it, and it is not reported in dictionaries. However, even if some of our participants were to allow orsök as plural form, we only used orsök twice in our materials, with 13 other nouns. As the 3pl form in the relevant condition was produced in all 15 instances, this non-standard use of orsök seems not to have affected our results and thus our conclusion remains that number-only agreement is real (see Hartmann & Heycock 2016, 2017 for details).

Thus, the positions [3] and [4] cannot be distinguished on the basis of agreement. As DP1 in English moves higher up (so at least as high as TP) word order does not tell us whether or not DP1 moves to [3] and/or [4].

We did not include a negative condition corresponding to C as we wanted to keep the conditions, and with them the number of test sentences, to a minimum, so that participants would not drop out because of the length of the experiment.

There is a possible confound with respect to 2nd person singular agreement: in the southern dialect area in the Faroe Islands, the -t ending signalling 2nd person agreement is absent in the ‘inverted’ order where the subject follows the verb (as, for example, in interrogatives with a 2nd person subject). There is no similar issue with 1st person agreement, but as can be seen from the paradigms in (12), 1st person is syncretic with 3rd person in the past tense. In the production task we could not reliably set up a context that would guarantee that participants would choose present tense for the verb that they inserted. For this reason we chose to use a 2nd singular pronoun in Conditions B and E, rather than 1st singular. In section 3.2.3 we discuss how we eliminated data from speakers who might use the syncretic forms.

This package was developed by E. Onea at the Göttingen Courant Research Centre ‘Text Structures’ at Göttingen University, see <https://onexp.textstrukturen.uni-goettingen.de>.

The idea of the two sentences is to provide a range between good and bad, but at the same time, they are neither absolutely perfect nor absolutely bad so that ratings below and above are still possible.

In the rating task – in contrast to the production task – we were able to choose the tense of the copula and so could choose the present tense, in which all dialects have distinct person marking for 1st person singular.

There may be an additional factor playing into the apparent discrepancy between the production and rating data for morphologically marked person agreement with DP2, namely the availability in the southern dialect of a 2nd person singular form that is syncretic with 3rd person singular, mentioned in note 5 above. For the reasons discussed there, the conditions instantiating full, non-syncretic person agreement with DP2 involved 2nd person singular in the production task, but 1st person singular in the ratings task. We eliminated from the production results all data from speakers who had produced the dialectal syncretic forms elsewhere in the task, but it is nevertheless possible that participants who did not use these forms in other contexts were aware of them and chose them deliberately in the SCC construction as a way of avoiding the conflict between DP1 and DP2 agreement (the dialectal syncretic form could be construed as either in this case). Any such case would have been coded as DP1 agreement.
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Postverbal subjects and agreement: Specificational Copular Clauses in Faroese
