# Icelandic Verbal Agreement and Pronoun-Antecedent Relations<sup>1</sup>

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#### Abstract

The relation between a non-reflexive pronoun and its antecedent is often thought to be outside of syntax proper; restrictions on interpretation or economy of expression, in this view, derive Condition B effects, preventing a pronoun from being too close to its antecedent. Recent research on imposters—1st/2nd person use of 3rd person DPs—shows that the morphosyntactic properties of pronouns are more complex than previously thought, and suggests that pronouns do have a syntactic relation with their antecedent, even if the nature of that relation is not clear. Focusing on Icelandic, we argue that this line of thinking is on the right track, on the basis of a constraining effect of finite verb agreement on the  $\varphi$ -features of a pronoun in an subordinate clause. We propose that pronoun-antecedent relations are mediated by one or more silent functional heads, which act as probes and match  $\varphi$ -features on the pronoun with those of (some subpart of) its antecedent.

## **1** Introduction

Collins and Postal (2012), building on work originating in Collins et al. (2008), study a class of cases they refer to as 'person imposters', or simply 'imposters', which are defined as in (1):

(1) An imposter is a notionally X person DP that is grammatically Y person,  $X \neq Y$ .

This is illustrated with the Icelandic example, in which a father is talking to his son or daughter, and refers to himself as *pabbi* 'Daddy'.

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(2) Svona svona, elskan, pabbi er hér. there there dear Daddy is.1/3SG here 'There there, dear, Daddy is here.'

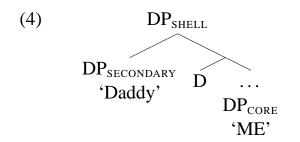
This is an example of a 1st person imposter. The DP *pabbi* 'Daddy' is notionally 1st person (referring to the speaker), but grammatically 3rd person. (3) is an example of a 2nd person imposter which has come into use in the colloquial language. Here, the speaker is referring to his addressee using a 3rd person DP *kallinn* 'the guy' instead of the 2nd person pronoun  $b\hat{u}$  'you'.

(3) Hvað segir kallinn? what says.2/3SG guy.the 'How are you?'

As we will show below, *kallinn* 'the guy' can also be a 1st person imposter. In this paper, we will mostly focus on 1st person imposters.

Collins and Postal (2012) show that the syntactic behavior of imposters presents some interesting puzzles for our understanding of personhood and pronounantecedent relations. As discussed further below, phenomena involving imposters strongly suggest a linguistic, most likely syntactic relation between a pronoun and its antecedent. In this paper we will address a number of issues relating to Icelandic imposters, with a focus on the effect of finite verb agreement on pronounantecedent relations. We will propose that the relationship between a pronoun and its antecedent is mediated by an intermediate functional head.

Before continuing, some terminological discussion is in order. Collins and Postal (2012) argue that imposter DPs are structurally complex, and contain a null pronoun corresponding to the intended referent. For example, a 1st person imposter would have a null 1st person pronoun. The visible DP is referred to as the 'secondary DP', and the null pronoun is referred to as the 'notional core'. These two DPs are argued to be embedded within a third DP, which is called the 'shell DP'. This is illustrated below.



The idea of the shell DP is that imposters are similar in structure to appositives, which involve two DPs in a predicative relation which distribute like one (complex) DP. We will assume in what follows that imposters do have complex structure, but will remain uncommitted as to the exact nature of that structure.<sup>4</sup>

# 2 Some imposters in Icelandic

There are numerous examples of and types of imposters in modern Icelandic. In this study, we will for the most part limit ourselves to only a few. However, before turning to a more detailed look at agreement and pronominal/reflexive antecedence, we first give a cursory overview of a variety of imposters in the language.

One type of 1st person imposter involves a proper name or kinship relation, such as *mamma* 'Mommy', *pabbi* 'Daddy', *Jón* 'John' or *Jón frændi* 'Uncle John'.<sup>5</sup>

(5) En pabbi er löngu búinn að segja þér það.
 but Daddy is.1/3sG long finished to tell you that
 'But Daddy already told you that a long time ago.'

<sup>5</sup>For imposter interpretations of *pabbi* 'Daddy', Gunnar Hrafn Hrafnbjargarson (p.c.) prefers an extra pronoun, known as a 'proprial article', as in (i). See Wood (2009) for further discussion.

(i) En hann pabbi er löngu búinn að segja þér það.
 but he Daddy is.1/3SG long finished to tell you that.
 'But Daddy already told you that a long time ago.'

<sup>&</sup>lt;sup>4</sup>For example, if pronouns are not syntactically atomic entities, but are rather built by various relations in the syntax, then this might affect the question of what the nature and location of 1st person features is within an imposter DP.

In this paper, we will discuss the imposter *pabbi* 'Daddy' in some detail, since its equivalent across languages has been studied in the past few years possibly more than any other type of imposter; this makes it useful for cross-linguistic comparison.

A second type of imposter, which we will also focus on here, is *undirritaður* '(the) undersigned (sg)'.<sup>6</sup>

(6) Undirritaður hafði ætlað að hætta í stjórnmálum.
 undersigned.M.SG had.1/3SG inteded to stop in politics
 'The undersigned had planned to quit politics.'

An analogous expression has been described in a number of languages, such as English, Bellinzonese, and Italian, and in the latter two exhibits a number of properties which distinguish it from other imposters. In Icelandic, this turns out to be the case as well. It has a number of other properties which make it an interesting imposter as well. First, like its English and Romance counterparts, it is formally an adjectival participle. Second, unlike English and Romance, it shows no overt sign of definiteness marking. Not only is there no article or determiner of any kind; adjectival participles in Icelandic are morphologically distinguished based on whether the noun they modify is definite. This will be discussed further below. Third, it can also be marked for number, and some differences between the behavior *undirritaður* 'undersigned (sg)' and *undirritaðir* 'undersigned (pl)' will be discussed below.

A third type of imposter is compositional and complex, and turns out to be rather common in parliament speeches. Icelandic has a kind of demonstrative,  $s\dot{a}$  'the one', which does not necessarily require a head noun, but does require either a relative clause or some other kind of modifier. In the present case, we find a relative clause which refers to the speaker, such as *sá sem hér talar* 'the one who is

<sup>&</sup>lt;sup>6</sup>As discussed below, this imposter changes inflects for gender and number depending on the person it refers to. When discussing the form in general, we will used the masculine singular form and in general, we will write '(sg)' or '(pl)' depending on whether it is singular or plural. All citations in conjoined phrases (e.g. *undirritaður og Jón*) are singular.

talking here' or *sá sem hér stendur* 'the one who is standing here'. The following is an attested example from a parliament discussion.

þingflokki Vinstri hreyfingarinnar – græns Þrír þingmenn úr (7)from party three MPs Left movement – green framboðs, hv. bm. Kolbrún Halldórsdóttir, hv. bm. candidate, honorable MP Kolbrún Halldórsdóttir, honorable MP Þuríður Backman og **[sá** sem hér stendur], höfum lagt fram Þuríður Backman and the.one who here stands.3SG have.1PL laid forth hljómar á bessa lund, með leyfi báltill. forseta. sem resolution which sounds on this way, with permission president 'Three MPs from the Left-Green Movement, the honorable MP Kolbrún Halldórsdóttir, the honorable MP Þuríður Backman, and the one who stands here, have submitted a parliamentary resolution which sounds like this – with the permission of the president.'

This example is an imposter *par excellence*. Notice that the verb inside the relative clause is 3rd person singular, showing that the relative head has the features or properties of a 3rd person DP. However, the overall DP refers to the speaker, and despite being 3rd singular, it is conjoined with another 3rd person DP and controls 1st person agreement on the main clause verb.

A fourth type of imposter appears to have arisen rather recently, and is common in very informal speech among certain speakers, especially younger ones. The first is *kallinn*, sometimes spelled *kjellinn* (reflecting pronunciation; IPA = [kat]m] and [kjɛt]m], respectively). It is formally a noun with a definite suffix.<sup>7</sup> The second is *gamli* 'old', also spelled *gjemli*. It is formally a 'weak' adjective, marked as though it were modifying a definite noun. The examples below come from Google searches and Icelandic television.<sup>8</sup>

<sup>&</sup>lt;sup>7</sup>The standard way of writing this is *karlinn*, though this is not how it is usually written. *Karlinn* means 'the man / the old man', which is pronounced either [kartlm], or the same way as *kallinn* (IPA = [katlm]). To our knowledge, *karlinn*, when written this way or pronounced [kartlm], never has the imposter reading.

<sup>&</sup>lt;sup>8</sup>The example in (8c) is spelled with  $\langle j e \rangle$  rather than  $\langle j e \rangle$ . This diacritic is basically redundant, since in Icelandic  $\langle e \rangle$  and  $\langle j e \rangle$  both correspond to IPA [j $\epsilon$ ].

- (8) a. en kjellinn ætlar samt að passa sig að vera ekkert but guy.the intends.2/3SG still to look.after REFL to be not of mikið í þessu too much in this
   'But I am still going to be careful not to be too involved in this.'
  - b. Fullt af monní á leiðinni. Og allir í vasann hjá kjellinum.
    full of money on way.the and all in pocket.the by guy.the.DAT
    'Lots of money on the way. And all of it into my pocket.'

(Næturvaktin, Ep. 10, 1:03)

c. Nóg að gera hjá gjémla.
enough to do by old.DAT
'I've got plenty to do.'

A fifth type of imposter, *yðar einlægur*, is analogous to English *yours truly*, in form and meaning. It is similar in that like *yours truly*, it can be used to end a letter. The following example comes from a Google search.

(9) Yðar einlægur hefur undanfarnar vikur verið að velta fyrir yours truly has.2/3SG past.few weeks been to roll before sér...
 REFL.3
 'Yours truly has for the past few weeks been wondering...'

It is different from English in that the form of the possessive pronoun, *yðar*, is an archaic honorific form (similar to German *Sie* 'you') and not normally used in colloquial speech except in certain fixed expressions. Note that this form also occurs in certain fixed camouflage forms, such as *yðar hágöfgi* 'your majesty' and *yðar hátign* 'your highness'.<sup>9</sup> Another camouflage construction, *þinn (lata) rass* 'your (lazy) ass', uses the modern pronoun *þinn* 'your'.

(10) Mættu klukkan 9, ef þú getur dregið **þinn lata rass** fram úr rúminu. meet clock 9, if you can drag your lazy ass out of bed.the

<sup>&</sup>lt;sup>9</sup>A camouflage construction is distinct from an imposter in that the referent of the whole DP is overtly expressed. For example,  $y\partial ar h \dot{a}g \ddot{o}fgi$  'your majesty' is used to refer to the addressee (i.e. it is 2nd person), and  $y\partial ar$  is a 2nd person pronoun. In contrast,  $y\partial ar einlægur$  'yours truly' is used to refer to the speaker, so the 2nd person pronoun  $y\partial ar$  is not the referent of the whole DP.

'Meet at 9 o'clock, if you can drag your lazy ass out of bed.'

Certain relational expressions such as *þinn auðmjúki þjónn* 'your humble servant' also have (1st person, non-camouflage) imposter uses.

(11) **Pinn auðmjúki þjónn** bíður tilskipanar þinnar. your humble servant awaits.2/3SG command your 'Your humble servant awaits your command.'

Like English and other languages, imposters can also be formed with demonstratives such as *þessi* 'this' plus a noun naming some kind of role or job title, as in *þessi fréttamaður* 'this reporter'. The following is an example taken from Google of an imposter use of *þessi bloggari* 'this blogger'.<sup>10</sup>

(12) Hann fer tvímælalaust á lista yfir bestu tónleika sem þessi bloggari it.M goes undoubtedly on list over best concerts that this blogger hefur farið á.
has.2/3SG gone to 'It undoubtedly goes on the list of the best concerts that this blogger has ever gone to.'

It is unclear whether plural imposters with demonstratives of this sort can be formed. Speakers seem to vary in whether they accept imposter uses of *þessir fréttamenn* 'these reporters', in English as well as in Icelandic. We will not pursue this issue here. A further, similar case involves nouns like 'author'. Translations for 'the present authors' (*núverandi/viðstaddir höfundar*) do not have imposter readings in Icelandic. However, imposters of the sort *höfundar þessarar greinar* '(the) authors of this article' (with genitive case on 'this article') are possible. An

(i) Kannski að **þessi** geti hjálpað þér. Maybe that this can.1/3.SG.SBJV help you 'Maybe this one (=I) can help you.'

<sup>&</sup>lt;sup>10</sup>Strikingly, a singular demonstrative can occur without a noun and form an imposter. In the following example in (i), reportedly heard by Júlía Hermannsdóttir (p.c.), a father is speaking to his infant child:

example from the web is presented in (13).

(13) Í rúm tvö ár hafa höfundar þessarar greinar verið for around two years have.3PL authors this.GEN article.GEN been í hópi þeirra fjölmörgu sem nota samskiptavefinn Facebook. in group those many who use networking.site Facebook 'For a little more than two years, the authors of this article have been among the many who use the networking site Facebook.'

Before concluding this section, we thought it would be appropriate to mention the existence of a construction which seems to be a type of camouflage construction, characteristic of children's speech. This form is illustrated below in (14) with an example from an online discussion of it.

(14) Þinns má vera Barbie ef minns má vera Action Man.
 ÞINNS may.1/3SG be Barbie if MINNS may.1/3SG be Action Man.
 'You can be Barbie if I can be Action Man.'

Here, we have the expressions *minns* and *pinns*, apparently constructed from masculine, singular, nominative possessive pronouns in the first and second person (*minn/pinn*) respectively, and an *-s* that resembles the genitive *-s*. Outside of this usage, however, *minns* and *pinns* are not well-formed expressions in Icelandic.<sup>11</sup> This seems to be related to imposters and/or camouflage constructions in the sense that it is equally possible to use the ordinary 1st and 2nd person pronouns in these cases.<sup>12</sup> This expression has the flavor of child language which is used in informal speech. It is not used exclusively by children, but when a speaker uses it, s/he relies on the other speaker knowing that it comes from child language.

<sup>&</sup>lt;sup>11</sup>Hlíf Árnadóttir points out to us that the feminine form *míns* seems to exist in this use as well. Unlike *minns*, this morphological form does exist independently as the genitive forms of the masculine and neuter possessive pronouns. Presumably, in this use, it is structurally parallel to *minns*, being built on the nominative feminine form mín(mín+-s), its morphological relation to the masculine and neuter genitive forms being somewhat coincidental.

<sup>&</sup>lt;sup>12</sup>The imposter-like use of this construction can be illustrated also from a blog post titled *Minns* á Google 'Minns on Google'. The first line of the post says *Pað að gúggla sjálfan sig er göfug íþrótt og góð skemmtan* 'To google yourself is a noble activity and good fun.' It is thus clear that the author is using *minns* to refer to himself.

There are a number of potentially interesting properties of this construction, including the fact that they control 3rd person agreement and apparantly only occur in the 1st and 2nd person. However, when conjoined, with another 3rd person DP, they can control 1st person agreement, as in the following example found on Google:

- (15) Minns og lögfræðingurinn tilvonandi erum búnir að vera MINNS and lawyer.the future are.1PL finished.M.PL to be húkkt á á þessum geggjaða leik.
  hooked on on this crazy game
  'Me and my future lawyer have been hooked on this awesome game.'
- (16) Minns og Búbbó erum komnar í hóp sorglegra bloggara, MINNS and Búbbó are.1PL come.F.PL in group sad bloggers.GEN
  höngum hér heima, rífumst í druslum og bloggum um þá! hang.1PL here at.home fight.1PL in sluts and blog.1PL about them 'Me and Búbbó have joined the group of sad bloggers, hanging around here at home, picking on sluts and blogging about them!'

Note moreover that *minns* can control number and gender agreement on verbal participles, as shown in (15) with *búnir* 'finished' and (16) with *komnar* 'come'. This happens even in the singular, where finite verb agreement is 3rd person.

(17) En vildi bara láta vita að minns er komin heim.
 but wanted just let know that MINNS is.1/3SG come.SG.F home
 'But just wanted to let it be known that I have come home.'

There also seem to exist 1st and 2nd person plural forms, *okkas* and *ykkas*, respectively, apparently built on the stem of the genitive/possessive forms of the pronouns (*okka-r/ykka-r*) plus *-s*. These forms are less common, however, and not all speakers have heard of them. Examples of *okkas* 'we' can be found with 3rd person agreement in the singular and plural, as well as 1st person plural agreement. We have not conducted a full study of the agreement possibilities with these forms, but such a study would seem to be a worthwhile topic for future research.

In the following section, we discuss previous work on imposters, in Icelandic

and other languages. Then, we focus on the agreement and pronominal/reflexive antecedence properties of the following imposters: *undirritaður* 'undersigned (sg)', *undirritaðir* 'undersigned (pl)', *undirritaður og X* 'the undersigned and X', *pabbi* 'Daddy', and *mamma og pabbi* 'Mommy and Daddy'. We will discuss some other imposters along the way, and then turn to a closer look at some specific properties of *undirritaður* 'undersigned (sg)'.

## **3** Previous work

Previous work on imposters has addressed a number of issues cross-linguistically, including some preliminary work on verbal agreement. Wood (2009) studies the interaction of Icelandic imposters with an optional pronoun (known as the 'proprial article') that occurs with certain DPs in the language (see Sigurðsson 2006). This study also includes a first probe into Icelandic verbal agreement with imposters, which is pursued in more detail here. Vázquez Rojas (2007) studies a formally indefinite imposter in Mexican Spanish, which, when alone, agrees in the 3rd person with the verb, but when in coordinate phrases (CoPs), can trigger 1st person plural agreement. Das (2011) discusses imposters in Bengali, a language which is apparently quite strict in that 1st and 2nd person pronouns generally cannot take imposter antecedents. She proposes that this is related to the rich verbal agreement exhibited by Bengali, and provides some preliminary comparison with English, Italian and Albanian. While we will show that the strictest form of Das's proposal cannot be maintained, we think that her intuition is on the right track and is worth refining. We will show that verbal agreement does indeed play a surprisingly important role in pronominal antecedence relations in Icelandic. However, we will also show that the relevant facts are more complicated than her proposal would suggest. First, different imposters behave differently with respect to verbal agreement in Icelandic. Second, agreement effects can be shown, on the basis of syncretism and ECM contexts, to be only partially morphological. Third, in addition to agreement, a number of other properties are involved, including whether the pronoun is subject or object and whether the mood of the clause is subjunctive or indicative. For reflexives, the type of reflexive (inherent, natural or disjoint) is apparently relevant in some cases as well.

Our primary goal in this paper is to refine our understanding of the role of verbal agreement in pronoun/reflexive-antecedent relations. Icelandic verbal agreement is particularly interesting because it is clearly quite 'rich'. Many verbal paradigms have a distinct form for each person/number slot. Others have syncretism in the singular between 2nd and 3rd person or 1st and 3rd person.<sup>13</sup>

(18)	sjá 'see' (present ind.)		hafa 'have' (present ind.)						
		SG	PL		SG	PL		SG	PL
			sjáum	1st	hef	höfum			erum
	2nd	sérð	sjáið		hefur				eruð
	3rd	sér	sjá	3rd	hefur	hafa	3rd	er	eru

Despite having rich agreement morphology, Icelandic is not a referential *pro*-drop language (see Sigurðsson and Egerland 2009 and Sigurðsson 2010 for recent discussion). This property of Icelandic constrains the space of plausible analyses for the effects seen in this paper.

However, in order to study the effect of imposters on verbal agreement, a number of other issues must be addressed along the way. Work on imposters in the past few years has revealed several cross-linguistic tendencies, despite (often very fine-grained) differences among individual languages, dialects, and idiolects. Many of these tendencies are also evident in Icelandic. First, an imposter coordinated with a 3rd person DP is more likely to show 1st person effects than a non-coordinated plural imposter, which in turn is more likely to show 1st person effects than a singular imposter. By 'more likely' here, we are referring both to intraspeaker comparative judgments across constructions, as well as to variation across languages. Second, imposters corresponding to participial forms such as 'the undersigned' tend to be more likely to show 1st person effects than imposters

<sup>&</sup>lt;sup>13</sup>1st and 3rd person are syncretic in the past tense and subjunctive.

like 'Daddy'. This has been shown most clearly in Cattaneo (2007, 2009) for Bellinzonese (*al sotuscrit*), a Northern Italian Dialect, and similar facts have been demonstrated in Servidio (2010) for Italian (*il sottoscritto*), in Soare (2010) for Romanian (*subsemnatul*), in Kallulli (2010) for Albanian (*i nënshkruari*), and will be evident below in the Icelandic data on *undirritaður* as well.

# 4 Verbal agreement

In general, we will see that verbal agreement with imposters in Icelandic exhibits the following cross-linguistic tendency: plural and coordinated imposters are 'more 1st person' than singular imposters, and among singular imposters, 'the undersigned' is 'more 1st person' than 'Daddy' or 'this reporter'. To illustrate these points, consider first that singular imposters basically do not allow 1st person agreement.

(19)	a.	(Hann) pabbi { hefur / *hef } sagt þér það.
		(he) Daddy { has.3SG / *1SG } told you that
		'Daddy has told you that.'
	b.	Undirritaður { hefur / *hef } ákveðið að hætta.
		undersigned.M.SG { has.3SG / *1SG } decided to quit
		'The undersigned (sg) has decided to quit.'

By comparison, 1st person agreement on the plural *undirritaðir* 'the undersigned (pl)', while not perfect, is much better than on the singular *undirritaður* 'the undersigned (sg)'.

- (20) a. Undirritaður { hefur / \*hef } ákveðið að hætta. undersigned.M.SG { has.3SG / \*1SG } decided to quit 'The undersigned (sg) has decided to quit.'
  - b. Undirritaðir {hafa / ?höfum } haldið þessu fram.
    undersigned.M.PL {have.3PL / ?1PL } held this forth
    'The undersigned (pl) have claimed this.'

While the second author and several other speakers we have consulted find a difference between *undirritaður* 'undersigned (sg)' and *undirritaðir* 'undersigned (pl)', as indicated in (20) above, we should note that we do find attested examples of *undirritaður* 'undersigned (sg)' with 1st person agreement on the web, such as the following:<sup>14</sup>

kynnt (21)Undirritaður hef mér skilmála fyrir a. undersigned.M.SG have.1SG familiarized myself conditions for Dælulykil Atlantsolíu. discount.key Atlantsolía 'The undersigned (sg) has familiarized myself with the conditions for the Atlantsolía discount key.' Undirritaður b. hef verið ráðgjafi fjölda fyrirtækja undersigned.M.SG have.1SG been consultant many companies og fjárfesta. and investors

'The undersigned (sg) has been a consultant of many companies and investors.'

In (22), we provide some attested examples of *undirritaðir/undirritaðar* 'undersigned (pl.m/f)' taking 1st person plural agreement.<sup>15</sup>

(22) a. Undirritaðir erum að vinna að lokaritgerð til B.S gráðu undersigned.M.PL are.1PL to work to final.thesis for B.S. degree í íþróttafræðum. in athletic.studies
'The undersigned (pl) are working on their final thesis for a B.S. degree in athletic studies.'

<sup>&</sup>lt;sup>14</sup>(21a) was retrieved from https://secure.fib.is/daelulykill.php on 9/21/2011. Notice that the reflexive in (21a) 1st person, consistant with the generalizations discussed below. (21b) was retrieved from http://blog.eyjan.is/larahanna/2008/07/20/peningar-um-peninga-fra-peningum-til-hvers-2/#comment-15029 on 9/21/2011.

<sup>&</sup>lt;sup>15</sup>(22a) was retrieved from http://skemman.is/stream/get/1946/745/1956/2/ Fylgiskjal.pdf on 9/14/2011; (22b) from http://idjur.blogcentral.is/blog/ 2010/10/11/ferdin-2010/ on 9/21/2011.

b. Undirritaðar ætlum að taka það að okkur að versla í undersigned.F.PL intend.1PL to take it to ourselves to shop in sameiginlega máltíð fyrir laugardagskvöldið og kaupa smá joint meal for Saturday.evening and buy little snakk og nammi.
snack and candy
'The undersigned (pl) plan on taking it upon ourselves to shop together for Saturday evening's meal and buy some snacks and candy.'

Despite the fact that both are attested, we will continue to take seriously the native speaker judgments indicating that there is a difference, leaving open the possibility that some speakers might freely accept both variants. Note that we have found no examples of imposter *pabbi* 'Daddy' with first person singular agreement, which, if non-accidental, would further illustrate the point shown below that 'undersigned' shows 1st person effects more commonly/easily than 'Daddy'.

When we turn to coordinated DPs (CoPs), we find that certain imposters trigger 1st person agreement more easily than others. When *undirritaður* 'undersigned (sg)' is coordinated, either 1st or 3rd person agreement is possible. When *pabbi* 'Daddy' is coordinated, 1st person agreement is much less acceptable.

- (23) a. Undirritaður og Jón {hafa / höfum } haldið þessu undersigned.M.SG and John {have.3PL / 1PL } held this fram.
  forth
  'The undersigned and John have claimed this.'
  - b. Mamma og pabbi {hafa /??höfum } sagt þér þetta áður.
    Mamma og pabbi {have.3PL / ??1PL } told you this before 'Mommy and Daddy told you this before.'

Not all speakers would agree with these judgments exactly. However, in each case—for speakers who get a contrast at all—1st person is clearly better in the coordinated case than in the singular case, which is completely out. As far as we know, no speakers have the opposite judgment, preferring agreement in the singular case over the coordinated case.

Agreement with CoPs containing a 2nd person pronoun show interesting variation cross-linguistically. In Icelandic, as originally discussed in Wood (2009), such agreement is always either 3rd person (for the majority of speakers) or 1st person (for fewer speakers), but never 2nd person, as far as we know.

- (24) a. \* Þú og pabbi ætlið að fara saman í vinnuna í dag you and Daddy intend.2PL to go together to work today
  - b. % Þú og pabbi ætla að fara saman í vinnuna í dag you and Daddy intend.3PL to go together to work today
  - c. % Þú og pabbi ætlum að fara saman í vinnuna í dag You and Daddy intend.1PL to go together to work today 'You and Daddy are going to work together today.'

Even for speakers who accept (24b) rather than (24c), the effect of even the 'least 1st person' imposter *pabbi* 'Daddy' is evident the ungrammaticality of 2nd person agreement, which is what is found on the non-imposter reading. Given that verbal agreement is a syntactic process, this fact alone suggests that the interpretation of a 3rd person DP as 1st person has its roots in a syntactic process. When 1st and 2nd person imposters are coordinated, some speakers accept 1st person agreement, while most prefer 3rd person.

(25) Pabbi og uppáhalds sonur hans {%ætlum / ætla } að fara saman Daddy and favorite son his {%intend.1PL/3PL } to go together í vinnuna í dag.
to work today
'Daddy and his favorite son are going to work together today.'

# **5** Reflexive antecedence

As has long been known, Icelandic has a rather complicated reflexive system (Sigurjónsdóttir 1992). In the typology of Reuland's (2011) monograph, Icelandic is described as having the most complex system (a 'four-way' system), and is arguably even more complex than Reuland (2011) indicates. We will see below that

reflexive/antecedence forms are sometimes sensitive to the type of reflexive construction. We are not in a position to offer an account as to why this is, but include it for now as a control on the data. More research would be required to understand exactly what the facts are with respect to a more sophisticated set of properties of reflexive predicates. For now, we will focus our preliminary discussion on three types of reflexives: inherent reflexives, natural reflexives, and naturally disjoint reflexives. Inherent reflexives include *skemmta sér* 'enjoy oneself/have fun' and *skammast sín* 'be/feel ashamed of oneself'. They have the property that they can only take a reflexive object (not a non-reflexive object), and a simplex reflexive at that (i.e. without 'self').<sup>16</sup> The simplex reflexive can be accusative (*sig*), dative (*sér*) or genitive (*sín*). Natural reflexives include *auglýsa* 'advertise' and *raka* 'shave'; these verbs ordinarily take a simplex reflexive, but can take a non-reflexive DP object, and do allow a complex 'self' reflexive, if used with contrastive focus. Naturally disjoint reflexives such as *elska* 'love' do not normally allow a simplex reflexive, but rather require a complex 'self' reflexive. This is summarized below.

(26)		Simplex	'Self'	Disjoint obj.	Examples
	Naturally disjoint	No	Yes	Yes	elska 'love'
	Natural reflexives	Yes	Focus	Yes	<i>auglýsa</i> 'advertise' <i>raka</i> 'shave'
	Inherent reflexives	Yes	No	No	skemmta 'enjoy', skammast 'ashame'

This does not do full justice to the complexity of the reflexive system in Icelandic and the areas of grammar where it is relevent, but it is sufficient for present purposes. See Reuland (2011) for recent theoretical discussion and Árnadóttir et al. (2011) for a number of further subtypes of reflexive constructions.

As we will see in the examples below, verbal agreement plays a role in the acceptability of reflexive antecedence. This is perhaps a welcome and unsurprising result, given that a number of theories in recent years have proposed that the dependency between a reflexive and its antecedent is mediated by an agreement

<sup>&</sup>lt;sup>16</sup>As discussed by Árnadóttir et al. (2011), *skemmta* also has a non-reflexive use meaning 'entertain', but the readings are distinct enough for present purposes.

(or Agree) relation involving the verb, directly or indirectly (Reuland 2006, 2011; Heim 2008; Hicks 2009; Kratzer 2009). To illustrate with a clear case, when *undirritaður* 'undersigned (sg)' is conjoined and takes 1st person agreement, only a 1st person reflexive is possible. When the same CoP takes 3rd person agreement, only a 3rd person reflexive is possible.<sup>17</sup>

- (27) a. Undirritaður<sub>i</sub> og Jón<sub>j</sub> skammast {\*okkar<sub>i+j</sub> / sín<sub>i+j</sub> } undersigned.M.SG and John shame.3PL {\*ourselves / themselves } fyrir ummælin. for comments.the 'The undersigned and John feel ashamed for their comments.'
  - b. Undirritaður<sub>i</sub> og Jón<sub>j</sub> skömmumst {okkar<sub>i+j</sub> / \*sín<sub>i+j</sub> } undersigned.M.SG and John shame.1PL {ourselves / \*themselves } fyrir ummælin.
    for comments.the 'The undersigned and John feel ashamed for their comments.'

When the coordinated imposter is in an ECM subject position, and thus triggers no agreement, either is possible, though the 1st person reflexive is a bit odd in some cases.

- (28) a. Þeir töldu undirritaðan<sub>i</sub> og Jón<sub>j</sub> skammast they believed undersigned.M.SG.ACC and John shame {?okkar<sub>i+j</sub> / sín<sub>i+j</sub> } fyrir ummælin. {?ourselves / themselves } for comments.the 'They believed the undersigned and John to feel ashamed for our comments.'
  b. Þeir sáu undirritaðan<sub>i</sub> og Jón<sub>i</sub> auglýsa
  - b. Peir sáu undirritaðan<sub>i</sub> og Jón<sub>j</sub> auglýsa they saw undersigned.M.SG.ACC and John advertise  $\{(?)okkur_{i+j} / sig_{i+j} \}$ í sjónvarpinu.  $\{(?)ourselves / themselves \}$  in television.the 'They saw the undersigned and John advertise themselves on TV.'

<sup>&</sup>lt;sup>17</sup>In this and the following sections, subscripts will be used to indicate intended reference, with no commitment to any theoretical status of indices in grammar. Note also that in all of the following examples, 'undersigned' or 'Daddy' will be understood to be the speaker.

c. Peir töldu undirritaðan<sub>i</sub> og Jón<sub>j</sub> elska sjálfa they believe undersigned.M.SG.ACC and John love self  $\{?okkur_{i+j} / sig_{i+j}\}$  meira en allt annað.  $\{?our / their \}$  more than everything else 'They believed the undersigned and John to love themselves more than anything else.'

Since singular imposters do not easily take 1st person agreement, it might be expected independently of anything else that 1st person anaphors are not possible in finite contexts. This is so, even when the verb in question is morphologically syncretic for 1st and 3rd person, as in the examples below.<sup>18</sup>

- (29)Undirritaður<sub>i</sub> skammast  $\{*mín_i\}$  $/ sín_i$ a. } fvrir undersigned.M.SG shame.1/2/3SG {\*myself / himself } for ummælin. comments.the 'The undersigned (sg) feels ashamed due to his comments.' b. Pabbi<sub>i</sub> skemmti  $\{*m\acute{e}r_i$  $/ sér_i$ } vel í gær.
  - Daddy enjoyed.1/3SG {\*myself / himself } well yesterday 'Daddy enjoyed himself yesterday.'

However, the asymmetry between singular and plural imposters goes further than this. Recall that when agreement is controlled for with an ECM predicate, the plural cases allow both 1st and 3rd person reflexives, though the latter are preferable. Even when agreement is controlled for with an ECM predicate, where there is never any overt agreement, there is a clear contrast between the plural cases in (28) and the singular ones shown in (30) and (31) below.

(30) a. Þeir töldu undirritaðan<sub>i</sub> skammast {\*mín<sub>i</sub> / they believed undersigned.M.SG.ACC shame {\*myself /  $sín_i$  } fyrir ummælin. himself } for comments.the 'They believed the undersigned (sg) to feel ashamed for his comments.'

<sup>&</sup>lt;sup>18</sup>As indicated, *skammast* 'shame' is in fact syncretic for all persons in the singular, though it does make person distinctions in the plural.

- Þeir sáu undirritaðan<sub>i</sub> auglýsa { $??mig_i$  / sig\_i b. } they saw undersigned.M.SG.ACC advertise {??myself / himself } í sjónvarpinu. in television.the 'They saw the undersigned (sg) advertise himself on TV.' Þeir töldu undirritaðan elska sjálfan {\*mig<sub>i</sub> / sig<sub>i</sub> } c. they believed undersigned.M.SG.ACC love self {\*my / his } meira en allt annað. more than everything else 'They believed the undersigned (sg) to love himself more than any
  - thing else.'
- (31) a. Þeir sáu pabba<sub>i</sub> skemmta {\*mér<sub>i</sub> / sér<sub>i</sub> } vel í gær. they saw Daddy enjoy {\*myself / himself } well yestarday 'They saw Daddy enjoying himself yesterday.'
  - b. Þeir sáu pabba<sub>i</sub> raka {\*mig<sub>i</sub> / sig<sub>i</sub> } í gær.
    they saw Daddy shave {\*myself / himself } yesterday
    'They saw Daddy shaving himself yesterday.'
  - c. Þeir töldu pabba<sub>i</sub> elska sjálfan {\*mig<sub>i</sub> / sig<sub>i</sub> } meira en they believed Daddy love self {\*my / him } more than allt annað.
    eveything else 'They believed Daddy to love himself more than anything else.'

Just as morphological syncretism on the finite verb does not help singular imposters antecede 1st person reflexives, putting a singular imposter in a non-agreeing ECM subject position does not help either. This singular/plural asymmetry cannot, then, be attributed directly to the independent asymmetry with morphological agreement. When imposter *pabbi* 'Daddy' is coordinated, the effect is somewhere in between these two cases—while inherent reflexives exclude a 1st person anaphor, for natural reflexives and naturally disjoint predicates, 1st person is not as bad as the singular case, but worse than coordinated *undirritaður*.

(32) a. Þeir sáu mömmu<sub>i</sub> og pabba<sub>j</sub> skemmta {\*okkur<sub>i+j</sub> / sér<sub>i+j</sub> } they saw Mommy and Daddy enjoy {\*ourselves / themselves } vel í gær. well yesterday
'They saw Mommy and Daddy enjoy themselves yesterday.'
b. Lögreglan sá mömmu<sub>i</sub> og pabba<sub>j</sub> raka {??okkur<sub>i+j</sub>/sig<sub>i+j</sub> } police.the saw Mommy and Daddy shave {??ourselves/themselves }

á ströndinni í gær.

on beach.the yesterday

'The police saw Mommy and Daddy shaving themselves on the beach yesterday.'

c. Þeir töldu mömmu<sub>i</sub> og pabba<sub>j</sub> elska sjálf {??okkur<sub> $i+j</sub> / sig<sub>i+j</sub>} they believed Mommy and Daddy love self {??our / their } meira en allt annað.$ more than everything else 'They believed Mommy and Daddy to love themselves more than any-thing else.'</sub>

Again, the difference between (31b-c) on the one hand and (32b-c) on the other cannot be attributed to morphological agreement.

*Undirritaðir* 'the undersigned (pl)' is slightly worse with a 1st person reflexive than *undirritaður og Jón* 'the undersigned and John', but not as bad as *mamma og pabbi* 'Mommy and Daddy'.

(33)Þeir töldu undirritaða<sub>i+i</sub></sub> skammast {?okkar<sub>i+i</sub> /</sub>a. they believed undersigned.M.PL.ACC shame {?ourselves / } fyrir ummælin.  $sin_{i+i}$ themselves } for comments.the 'They believed the undersigned (pl) to feel ashamed of ourselves for our comments.' Þeir sáu undirritað $a_{i+i}$ auglýsa {?okkur<sub>i+i</sub> /</sub>b. they saw undersigned.M.PL.ACC advertize {?ourselves / } í sjónvarpinu.  $sig_{i+j}$ themselves } in television.the

'They saw the undersigned (pl) advertize ourselves on TV.'

c. Peir töldu undirritaða<sub>i+j</sub> elska sjálfa {??okkur<sub> $i+j</sub> / they believed undersigned.M.PL.ACC love self {??our / sig<sub><math>i+j$ </sub> } meira en allt annað. their } more than everything else 'They believed the undersigned (pl) to love ourselves more than anything else.'</sub></sub>

The data discussed so far are summarized in the table below.

	1st inherent	1st natural	1st disjoint
Daddy	*	*	*
Undersigned	*	??	*
Mommy and Daddy	*	??	??
Undersigned (plural)	?	?	??
Undersigned and John	?	(?)	?

(34) Reflexive predicates

Here, we see that plurals with 1st person reflexives are generally better than singulars with 1st person reflexives. We also see some effects of the type of reflexives. Natural reflexives are slightly better than the others in the 1st person, and inherent reflexives are slightly better in the 1st person than disjoint reflexives are.

Given the above, it might be suggested that *mamma og pabbi* 'Mommy and Daddy' does not show an asymmetry with respect to singular *pabbi* 'Daddy' and *undirritaður* 'the undersigned (sg)', since the reported difference between them is so slight ('??' versus '\*'). However, turning to more complex constructions reveals a much stronger asymmetry between singular *pabbi* 'Daddy' and coordinated *mamma og pabbi* 'Mommy and Daddy'. Like in English, a preposed purpose clause improves the 1st person reflexive in the plural even more, to the point where 3rd person is actually quite odd, as illustrated in (35a).<sup>19</sup> Note, however, that 1st

<sup>&</sup>lt;sup>19</sup>Control into purpose clauses can in general improve the 1st person reflexive with a plural imposter, and is better than control into a complement clause.

person is still quite bad here, as illustrated in (35b).<sup>20</sup>

- (35) a. Til þess að læra að raka {okkur<sub> $i+j</sub> / *sig_{i+j}$  } betur, sagði for it to learn to shave {ourselves / \*themselves } better, told Jón frændi mömmu<sub>i</sub> og pabba<sub>j</sub> að fara á námskeið. John Uncle Mommy and Daddy to go to class 'In order to learn to shave better, Uncle John told Mommy and Daddy to take a class.'</sub>
  - b. Til þess að læra að raka {??mig<sub>i</sub> / sig<sub>i</sub> } betur, sagði for it to learn to shave {??myself / himself } better, told mamma pabba<sub>i</sub> að fara á námskeið. Mommy Daddy to go to class 'In order to learn to shave better, Mommy told Daddy to take a class.'

Thus, even with the imposter use of *pabbi* 'Daddy', the coordinated case is 'more 1st person' than the singular case. We thus see the following hierarchy of '1st person-ness':

(i)	Þeir létu mömmu <sub>i</sub> og pabba <sub>j</sub> byggja sérstakt herbergi til að raka {?okkur <sub><math>i+j / they made Mommy and Daddy build special room for to shave {?ourselves / for to shave }?</math></sub>
	sig <sub><math>i+j</math></sub> } í. themselves } in 'They made Mommy and Daddy build a special room to shave in.'
(ii)	Þeir telja mömmu <sub>i</sub> og pabba <sub>j</sub> vonast til að raka {*okkur <sub><math>i+j / sig_{i+j}</math>} they believe Mommy and Daddy hope for to shave {*ourselves / themselves } einhvern tímann. some time 'They believe Mommy and Daddy to hope to shave someday.'</sub>

<sup>20</sup>Note that we find homogeneity effects as well, so that there can be a 1st person reflexive in the preposed clause and a 3rd person reflexive in the lower clause.

(i) Til þess að læra að raka {okkur<sub> $i+j</sub> / *sig<sub>i+j</sub>} } betur, sagði Jón frændi mömmu<sub>i</sub> for it to learn to shave {ourselves / *themselves } better told John Uncle Mommy og pabba<sub>j</sub> að hvíla sig<sub>i+j</sub> áður en námskeiðið byrjar. and Daddy to relax themselves before class.the begins 'In order to learn to shave better, Uncle John told Mommy and Daddy to relax before the class begins.'</sub>$ 

Since this effect seems to be the same as in English, we do not discuss it further here.

(36) Coordinated undersigned > plural undersigned > coordinated 'Daddy'
 > singular undersigned > singular 'Daddy'

This combines the tendencies that CoPs are more 1st person than plurals, which are more 1st person than singulars, as well as that 'the undersigned' is more 1st person than 'Daddy'.

What we have shown in this section is that different imposters react differently to different reflexive types—even when overt morphology is controlled for by using non-finite contexts. However, this does not mean that a syntactic Agree relation is not responsible. Most theories within the Minimalist Program assume there is an Agree relation between a light verb and a direct object, and this dependency is not necessarily reflected in overt morphology on verb. Nevertheless, Kratzer (2009) has shown that morphological syncretism of verbal agreement forms makes a difference in reflexive binding in German. We find that in Icelandic, this does not make a difference for reflexives taking imposter antecedents, as seen most clearly in the singular cases. We also saw a number of constraints that cannot be attributed directly to verbal agreement, such as the difference between singulars from plurals in terms of the availablity of an imposter-antecedent of a 1st person reflexive. Still, we see here that overt agreement morphology does make a difference in constraining reflexive-antecedent relations. When agreement is unambiguously 1st person, the reflexive must be 1st person. When agreement is 3rd person, the reflexive must be 3rd person.<sup>21</sup>

## 6 Pronominal antecedence

# 6.1 Direct objects

Many theories of reflexive antecedence might welcome the result that verbal agreement can make a difference in constraining the forms of reflexives, and that this can be ameliorated to some extant when agreement is controlled for. Most of them

<sup>&</sup>lt;sup>21</sup>The effect is weaker when agreement is 3rd person, however.

would probably be hard pressed to find an explanation for the strong singular/plural asymmetry, let alone the differences between different imposters. Still, number is an important category in the verbal domain; it has been proposed that events are inherently plural, for example, and number certainly plays a role in reciprocal constructions. So let's suppose that the reflexive facts above could be understood in terms of theories relating to constraints on agreement, given a vP-internal dependency between the verb and its object. What is surprising, on this view, is that just as verbal agreement seems to make a difference in the acceptability of 1st person reflexives with imposter antecedents. To present a clear case, we illustrate with the 'most 1st person' imposter, coordinated 'undersigned'.<sup>22</sup>

(37) a. Undirritaður<sub>i</sub> og Jón<sub>j</sub> hafa áður sagt að yfirvöld undersigned.M.SG and John have.3PL before said that authorities vilji bara móðga {okkur<sub>i+j</sub> / ?þá<sub>i+j</sub> }. want.SBJV just insult {us / ?them }
'The undersigned and John have said before that the authorities just want to insult us.'
b. Undirritaður, og Jón, höfum áður sagt að vfirvöld

b. Undirritaður<sub>i</sub> og Jón<sub>j</sub> höfum áður sagt að yfirvöld undersigned.M.SG and John have. 1PL before said that authorities vilji bara móðga {okkur<sub>i+j</sub> / \*þá<sub>i+j</sub> }. want.SBJV just insult {us / \*them } 'The undersigned and John have said before that the authorities just want to insult us.'

Here, the 3rd person pronoun is not perfect in either case. But whereas it is only slightly odd when the antecedent controls 3rd person agreement, it is much worse or completely out when the antecedent controls 1st person agreement. Note that the mood of the complement clause makes no difference in this case, as shown in the following examples which are indicative rather than subjunctive.

<sup>&</sup>lt;sup>22</sup>In the following examples, some verbs glossed as subjunctive are morphologically syncretic with indicative forms (e.g. 1st/2nd plural forms); the glosses are based on syntactic distribution, and are in many cases morphologically distinct.

- (38) a. Undirritaður<sub>i</sub> og Jón<sub>j</sub> uppgötvuðu í fyrra að undersigned.M.SG and John discovered.1PL last year that stjórnin vill reka {okkur<sub>i+j</sub> / ?þá<sub>i+j</sub> }. management wants.IND fire {us / ?them } 'The undersigned and John discovered last year that management wants to fire us.'
  - b. Undirritaður<sub>i</sub> og Jón<sub>j</sub> uppgötvuðum í fyrra að undersigned.M.SG and John discovered.1PL last year that stjórnin vill reka {okkur<sub>i+j</sub> / \*þá<sub>i+j</sub> }. management wants.IND fire {us / \*them } 'The undersigned and John discovered last year that management wants to fire us.'

The same effect obtains when plural 'undersigned' takes 1st person agreement and antecedes a pronoun in the complement clause; the pronoun must be 1st person, and 3rd person is unacceptable. The mood of the complement clause makes no difference here either.

(39) höfum áður sagt að yfirvöld vilii Undirritaðir<sub>i+i</sub></sub> a. undersigned.M.PL have.1PL before said that authorities want.SBJV bara móðga {okkur<sub> $i+i</sub> / *þá<sub>i+i</sub> }.</sub>$ just insult {us / \*them } 'The undersigned (pl) have said before that the authorities just want to insult us.' uppgötvuðum í fyrra Undirritaðir<sub>*i*+*i*</sub> að stjórnin b. undersigned.M.PL discovered.1PL last year that management reka {okkur<sub> $i+i</sub> / *þá<sub>i+i</sub> }.</sub>$ vill / \*them } wants.IND fire {us

'The undersigned (pl) discovered last year that management wants to fire us.'

When plural 'undersigned' takes 3rd person agreement and antecedes a pronoun in a complement clause, the 1st person pronoun is generally preferred and the 3rd person pronoun is at least dispreferred, in some cases odd. The contrast is a bit stronger in the indicative than in the subjunctive.<sup>23</sup>

Undirritaðir<sub>*i*+*i*</sub> (40)hafa áður sagt að yfirvöld vilii a. undersigned.M.PL have.3PL before said that authorities want.SBJV bara móðga {okkur<sub>i+i</sub> / (?)þá<sub> $i+i</sub> }.</sub></sub>$ just insult {us /(?)them } 'The undersigned (pl) have said before that the authorities just want to insult us.' í fyrra b. Undirritaðir<sub>i+i</sub> uppgötvuðu að stjórnin undersigned.M.PL discovered.3PL last year that management reka {okkur<sub> $i+j</sub> / ?þá<sub>i+j</sub> }.</sub>$ vill / ?them } wants.IND fire {us

'The undersigned (pl) discovered last year that management wants to fire us.'

With the imposter *mamma og pabbi* 'Mommy and Daddy', the situation is reversed. The same contrast is evident, but here in the subjunctive rather than the indicative.

 $Mamma_i$  og pabbi<sub>i</sub> hafa (41)aldrei sagt að þú megir a. Mommy and Daddy have.3PL never said that you may.SBJV trufla {okkur<sub>i+i</sub> / ?þau<sub><math>i+i</sub> }.</sub></sub> disturb {us / ?them } 'Mommy and Daddy never said that you were allowed to disturb us.' Mamma<sub>i</sub> og pabbi<sub>i</sub> uppgötvuðu í b. morgun að skrímslið Mommy and Daddy discovered.3PL this morning that monster.the að borða {okkur $_{i+j}$  / þau $_{i+j}$  }. ætlar intends.IND to eat / them } {us 'Mommy and Daddy discovered this morning that the monster is planning to eat us.'

<sup>&</sup>lt;sup>23</sup>Like the classes of reflexives discussed in the previous section, we will not attempt in this paper an explanation of the effect of mood on antecedence relations, but rather include this data to control for a potentially relevant grammatical property of the sentences we are looking at. Note that the morphological expression of mood makes a difference in the acceptability of long-distance reflexives for many (but not all) speakers (Sigurðsson 1986).

The mood of the complement clause seems to make a difference in the singular as well. When the embedded clause is subjunctive, 'the undersigned' preferably antecedes a 1st person object pronoun, more so than 'Daddy'.

hefur (42)Undirritaður, áður sagt að þeir vilji bara a. undersigned.M.SG has.2/3SG before said that they want.SBJV just móðga { mig<sub>i</sub> / (?)hann<sub>i</sub> }. insult { me / (?)him } 'The undersigned (sg) has said before that they just want to insult me.' Pabbi<sub>i</sub> hefur aldrei sagt að þú megir b. trufla {  $mig_i$  / Daddy has.2/3SG never said that you may.SBJV disturb { me / hann<sub>i</sub> }. him }

'Daddy never said that you were allowed to disturb him.'

When the embedded clause is indicative, 3rd person is preferred for both.

að þeir vilja (43) Undirritaður<sub>i</sub> uppgötvaði í fyrra a. undersigned.M.SG discovered.1/3SG last year that they want.IND reka { $?mig_i / hann_i$  }. fire {?me / him } 'The undersigned discovered last year that they want to fire me.' Pabbi<sub>i</sub> uppgötvaði í morgun að skrímslið b. Daddy discovered.1/3sG this morning that monster.the að borða { (?)mig<sub>i</sub> / hann<sub>i</sub> }. ætlar { (?)me / him } intends.IND to eat 'Daddy discovered this morning that the monster plans to eat me.'

These results are summarized in the table below.

#### (44) Object pronouns

	Indicative		Subju	nctive
	1st obj	3rd obj	1st obj	3rd obj
Daddy (3rd agr)	(?)	$\checkmark$	$\checkmark$	$\checkmark$
Undersigned (3rd agr)	?	$\checkmark$	$\checkmark$	(?)
Mommy and Daddy (3rd agr)	$\checkmark$	$\checkmark$	$\checkmark$	?
Undersigned (plural) (3rd agr)	$\checkmark$	?	$\checkmark$	(?)
Undersigned and John (3rd agr)	$\checkmark$	?	$\checkmark$	?
Undersigned (plural) (1st agr)	$\checkmark$	*	$\checkmark$	*
Undersigned and John (1st agr)	$\checkmark$	*	$\checkmark$	*

What we see here is that whenever the agreement triggered in the superordinate clause is 1st person, the DP triggering that agreement cannot antecede a 3rd person object pronoun. We also see a difference between singular and plural. For example, while *undirritaður* 'undersigned (sg)' makes a slightly odd antecedent of a 1st person pronoun, 3rd person being preferred, plural and coordinated 'undersigned', even with 3rd person agreement, preferably antecede a 1st person pronoun.

# 6.2 Subjects

Subject pronouns show a paradigm similar to object pronouns in some respects, but distinct in others. If the verbal agreement is 3rd person, either a 1st or 3rd person subject pronoun is possible.

- (45) a. Undirritaður<sub>i</sub> og Jón<sub>j</sub> hafa áður sagt að { við<sub>i+j</sub> undersigned.M.SG and John have.3PL before said that { we munum /  $\text{peir}_{i+j}$  muni } ekki styðja skattahækkanir. will.SBJV / they will.SBJV } not support tax.hikes 'The undersigned and John have said before that we will not support tax hikes.'
  - b. Undirritaður<sub>i</sub> og Jón<sub>j</sub> uppgötvuðu í fyrra að {við<sub>i+j</sub> undersigned.M.SG and John discovered.3PL last year that {we erum / þeir<sub>i+j</sub> eru } með krabbamein. are.IND / they are.IND } with cancer

'The undersigned and John discovered last year that we have cancer.'

If the verbal agreement is 1st person, however, the 3rd person pronoun is unacceptable.

- (46) a. Undirritaður<sub>i</sub> og Jón<sub>j</sub> höfum áður sagt að { við<sub>i+j</sub> undersigned.M.SG and John have. 1 PL before said that { we munum / \*þeir<sub>i+j</sub> muni } ekki styðja skattahækkanir. will.SBJV / \*they will.SBJV } not support tax.hikes 'The undersigned and John have said before that we will not support tax hikes.'
  - b. Undirritaður<sub>i</sub> og Jón<sub>j</sub> uppgötvuðum í fyrra að {við<sub>i+j</sub> undersigned.M.SG and John discovered.1PL last year that {we erum / \*þeir<sub>i+j</sub> eru } með krabbamein. are.IND / \*they are.IND } with cancer 'The undersigned and John discovered last year that we have cancer.'

With *undirritaðir* 'undersigned (pl)' and 3rd person agreement, either a 1st or a 3rd person pronoun is possible.

- (47) a. Undirritaðir<sub>i+j</sub> hafa áður sagt að {við<sub>i+j</sub> munum / undersigned.M.PL have.3PL before said that {we will.SBJV / þeir<sub>i+j</sub> muni } ekki styðja skattahækkanir. they will.SBJV } not support tax.hikes
  'The undersigned have said before that we/they will not support tax hikes.'
  b. Undirritaðir. uppgötvuðu í fyrra að {við. erum /
  - b. Undirritaðir<sub>i+j</sub> uppgötvuðu í fyrra að {við<sub> $i+j</sub> erum / undersigned.M.PL discovered.3PL last year that {we are.IND / beir<sub><math>i+j$ </sub> eru } með krabbamein. they are.IND } with cancer 'The undersigned (pl) discovered last year that we have cancer.'</sub></sub>

When *undirritaðir* 'undersigned (pl)' occurs with 1st person agreement, the 3rd person pronoun is unacceptable, and only a 1st person pronoun can take *undirritaðir* 

as an antecedent.

- (48) a. Undirritaðir<sub>i+j</sub> höfum áður sagt að {við<sub>i+j</sub> munum / undersigned.M.PL have.1PL before said that {we will.SBJV / \*þeir<sub>i+j</sub> muni} ekki styðja skattahækkanir.
  \*they will.SBJV} not support tax.hikes
  'The undersigned (pl) have said before that we/they will not support tax hikes.'
  b. Undirritaðir uppgötyuðum í fyrra að {viður erum /
  - b. Undirritaðir<sub>i+j</sub> uppgötvuðum í fyrra að {við<sub>i+j</sub> erum / undersigned.M.PL discovered.1PL last year that {we are.IND / \*þeir<sub>i+j</sub> eru } með krabbamein.
    \*they are.IND } with cancer
    'The undersigned (pl) discovered last year that we have cancer.'

Coordinated *mamma og pabbi* 'Mommy and Daddy' behaves differently. To the extent that there is a contrast, it is the 1st person pronoun that is a bit marked. The 3rd person pronoun is preferred. Notice that this cannot be tied to verbal agreement in these cases, since *undirritaðir* 'the undersigned (pl)' in the example above and *mamma og pabbi* 'Mommy and Daddy' in the example below are controlling 3rd person plural agreement.

- (49) a. Mamma<sub>i</sub> og pabbi<sub>j</sub> hafa aldrei sagt að {(?)við<sub>i+j</sub> Mommy and Daddy have.3PL never said that {(?)we ætlum /  $pau_{i+j}$  ætli } að kaupa nammi handa þér. intend.SBJV / they intend.SBJV } to buy candy for you 'Mommy and Daddy never said that we planned on buying candy for you.'
  - b. Mamma<sub>i</sub> og pabbi<sub>j</sub> uppgötvuðu í morgun að {(?)við<sub>i+j</sub> Mommy and Daddy discovered.3PL this morning that {(?)we burfum / bau<sub>i+j</sub> burfa } ekki að vinna í dag. need.IND / they need.IND } not to work today 'Mommy and Daddy discovered this morning that we don't have to work today.'

Turning to singular imposters, there is again a contrast between 'undersigned' and 'Daddy'. For embedded subject pronouns, both prefer 3rd person. However, the 1st person pronoun is considerably better for 'the undersigned' than for 'Daddy'.

(50)Undirritaður<sub>i</sub> hefur áður sagt að {?é $g_i$  / han $n_i$  } a. undersigned.M.SG has.2/3SG before said that {?I / he } ekki styðja skattahækkanir. muni will.SBJV not support tax.hikes 'The undersigned (sg) has said before that he will not support tax hikes.' Pabbi<sub>i</sub> hefur aldrei sagt að  $\{??\acute{e}g_i / hann_i\}$ ætli að b. Daddy has.2/3SG never said that {??I / he } intends.SBJV to kaupa nammi handa bér. candy for buy vou

'Daddy never said that he was going to buy candy for you.'

There is no apparent difference depending on the mood of the embedded clause.

að {?ég<sub>i</sub> / hann<sub>i</sub> } uppgötvaði (51)Undirritaður<sub>i</sub> í fyrra a. undersigned.M.SG discovered.1/3SG last year that {?I / he } er með krabbamein. be.1/3SG.IND with cancer 'The undersigned (sg) discovered last year that he has cancer.' í morgun Pabbi<sub>i</sub> uppgötvaði b. að {??ég<sub>i</sub> / hann<sub>i</sub> } Daddy discovered.1/3SG this morning that {??I / he } barf ekki að vinna í dag. need.1/3SG.IND not to work today 'Daddy discovered this morning that he doesn't need to work today.'

We summarize the results in the table below, and repeat the object-pronoun table for convenience.

#### (52) Subject pronouns

	Indicative		Subju	nctive
	1st sub	3rd sub	1st sub	3rd sub
Daddy (3rd agr)	??	$\checkmark$	??	$\checkmark$
Undersigned (3rd agr)	?	$\checkmark$	?	$\checkmark$
Mommy and Daddy (3rd agr)	(?)	$\checkmark$	(?)	$\checkmark$
Undersigned (plural) (3rd agr)	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Undersigned and John (3rd agr)	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Undersigned (plural) (1st agr)	$\checkmark$	*	$\checkmark$	*
Undersigned and John (1st agr)	$\checkmark$	*	$\checkmark$	*

#### (53) Object pronouns

	Indicative		Subju	inctive
	1st obj	3rd obj	1st obj	3rd obj
Daddy (3rd agr)	(?)	$\checkmark$	$\checkmark$	$\checkmark$
Undersigned (3rd agr)	?	$\checkmark$	$\checkmark$	(?)
Mommy and Daddy (3rd agr)	$\checkmark$	$\checkmark$	$\checkmark$	?
Undersigned (plural) (3rd agr)	$\checkmark$	?	$\checkmark$	(?)
Undersigned and John (3rd agr)	$\checkmark$	?	$\checkmark$	?
Undersigned (plural) (1st agr)	$\checkmark$	*	$\checkmark$	*
Undersigned and John (1st agr)	$\checkmark$	*	$\checkmark$	*

Several tendencies can be gleaned from these results. We see that 3rd person pronouns are bad with antecedents controlling 1st person agreement, irrespective of the subject/object distinction, and irrespective of mood. 1st person pronouns are better as objects than subjects, and better with plurals than with singulars. 1st person is (slightly) better in the subjunctive than in the indicative. 3rd person is a bit worse on objects than on subjects, and on plural 'undersigned'. 3rd person is a bit worse in the subjunctive than in the indicative. We are not in a position to account for all of these facts, and it is in fact not clear how robust they are. We state them here to facilitate cross-linguistic comparison and as a stepping stone to future work. What we will discuss below is the relationship between pronouns and their antecedents more generally, the singular/plural asymmetry, and the behavior of 'undersigned'.

# 7 Pronoun-antecedent relations and agreement

In the early stages of the minimalist program, there was an attempt to relegate phenomena associated with Binding Theory (BT) to the LF interface. The idea was that there are interpretive restrictions on different kinds of DPs. The binding conditions proposed in Chomsky (1995:211), for example, were the following:

- (54) (For a DP  $\alpha$  in local domain D...)
  - A. If  $\alpha$  is an anaphor, interpret it as coreferential with a c-commanding phrase in D.
  - B. If  $\alpha$  is a pronominal, interpret it as disjoint from every c-commanding phrase in D.
  - C. If  $\alpha$  is an r-expression, interpret it as disjoint from every c-commanding phrase.

Imposter phenomena pose very serious challenges to this kind of binding theory. For one thing, this Condition B will clearly not suffice to rule out a sentence such as (55).

(55) ?\* Undirritaður<sub>i</sub> og Jón<sub>j</sub> höfum áður sagt [<sub>CP</sub> að þeir<sub>i+j</sub> undersigned.M.SG and John have.1PL before said that they muni ekki styðja skattahækkanir].
will.SBJV not support tax.hikes
'The undersigned and John have said before that we will not support tax hikes.'

Here the embedded 3rd person pronoun *beir* 'they' could easily refer to the same individuals as those referred to by *undirritaður og Jón* 'undersigned and John'; it need only be interpreted as disjoint from every c-commanding phrase in the local domain, which in this case is the embedded CP (bracketed above). Neither the interpretation of the matrix imposter nor the verbal agreement would be expected to have an effect.

There are many other problems with this kind of binding theory, as emphasized in Collins and Postal (2012). This has led to a number of proposals attempting to derive BT phenomena from properties of the syntactic derivation (Kayne 2002; Zwart 2002; Reuland 2006, 2011; Boeckx et al. 2007; Hicks 2008, 2009). Among these (and other) theories, some assume a syntactic relation between a non-reflexive pronoun and its antecedent, and others do not. Collins and Postal (2012) argue that a primitive relation 'antecede' encodes referential dependencies among linguistic objects, and that this relation will hold between a pronoun and its antecedent. Kayne (2002) has proposed that movement underlies this dependency, such that the antecedent will form a constituent with the pronoun and move subsequently out of that constituent. Sigurðsson (2010, 2011) has argued that pronouns undergo matching relations with functional heads in the left-perpiphery, and that in subordinate cases, these functional heads relate to the antecedent. Note that in all of these accounts, the 'antecedent' of a pronoun is necessarily not always pronounced. At the very least, 'context linkers' in the left periphery of an utterance (or alternatively, unpronounced antecedent DPs) will be present to antecede 'discourse free' pronouns and pronouns used deictically.

Imposter phenomena strongly suggest that pronouns do enter into syntactic dependencies with antecedents, either directly or indirectly. This has been argued extensively in Collins and Postal (2012), so we will not repeat all the arguments here. We will, however, briefly present one argument in favor of this conclusion relating to verbal agreement, the phenomenon of interest here. Consider the view that pronouns refer freely, perhaps constrained by  $\varphi$ -features which add presuppositions that the referent meets some criterion (such as being female/feminine, for a pronoun like *she*). Such a view would have to be constrained so as to keep an ordinary 3rd person pronoun from including the speaker in situations such as the following.

(56) María: Hvað gerðist? 'What happened?' Bjartur<sub>i</sub>: Jón sagði að þeir $_{\{*i+j\}/\{k+l\}}$  væru heimskir. John said that they were stupid 'John said that they were stupid.' As indicated with the indices, the speaker, Bjartur, cannot in this dialogue be understood as a member of the set of individuals referred to by the pronoun *peir* 'they'. With a minor modification to the matrix clause, however, this is possible:

(57) María: Hvað gerðist? 'What happened?'
Bjartur<sub>i</sub>: Jón sagði undirrituðum<sub>{i+j}</sub> að þeir<sub>{i+j}/{k+l}</sub> væru John said undersigned.PL.DAT that they were heimskir. stupid
'John told the undersigned (pl) that they were stupid.'

The presence of an imposter antecedent, then, makes it possible for a 3rd person pronoun to include the speaker. If pronouns were interpreted basically freely, this dependency on an antecedent would be a mystery. For the sake of argument, we might constrain the denotation of pronouns by invoking 'definite descriptions'. We might say that a 3rd person pronoun can include the speaker if it can independently refer to some description of an individual which happens to be the speaker. The appearance of *undirritaðir* 'undersigned (pl)' might then make such a description salient enough that the pronoun can pick out this description, which happens to point to the speaker.

However, recall the effect of agreement on the embedded pronoun. Simplifying greatly, we have the following schema:

(58) a. Imposter ... Agr-3 [ pronoun-1/3 ]
b. Imposter ... Agr-1 [ pronoun-1/\*3 ]

Concentrating on the 3rd person pronoun, consider the contrast in (59), repeated from above.

(59) a. Undirritaðir<sub>i+j</sub> hafa áður sagt að þeir<sub>i+j</sub> muni ekki undersigned.M.PL have.3PL before said that they will not styðja skattahækkanir. support tax.hikes 'The undersigned (pl) have said before that they will not support tax hikes.'</sub>

b. \* Undirritaðir<sub>i+j</sub> höfum áður sagt að þeir<sub>i+j</sub> muni ekki undersigned.M.PL have.1PL before said that they will not styðja skattahækkanir.
support tax.hikes
'The undersigned (pl) have said before that they will not support tax hikes.'

According to the account under consideration, the pronoun in (59a) can include the speaker because the matrix clause makes available/salient a description that the pronoun can refer to, and that description happens to pick out the speaker. However, (59b) clearly makes such a description available as well. We would be forced to say that a 3rd person pronoun can include the speaker iff the linguistic element making the appropriate description available is 3rd person, has 3rd person  $\varphi$ -features, shows 3rd person behavior, etc. But note that invoking 'person' features is a linguistic notion, not a referential notion. That is, in saving the idea that pronouns have no linguistic relation with their antecedent, we are forced to invoke linguistic properties of that very antecedent. This moves away from the very intuition of the assumption that pronouns refer freely, modulo the presuppostions induced by the  $\varphi$ -features that they are comprised of. It asserts a relation between a linguistic element, the pronoun, and another linguistic element, the antecedent, and constrains the former with reference to linguistic properties of the latter. It would be far beyond the scope of the present article to argue against every imaginable form of the assumption that pronouns do not have a syntactic relation with their antecedent. However, the basic form of the argument should be clear—the linguistic properties of pronouns seem to depend on the linguistic properties of their antecedents, and this is expected if there is a syntactic relation between the two.

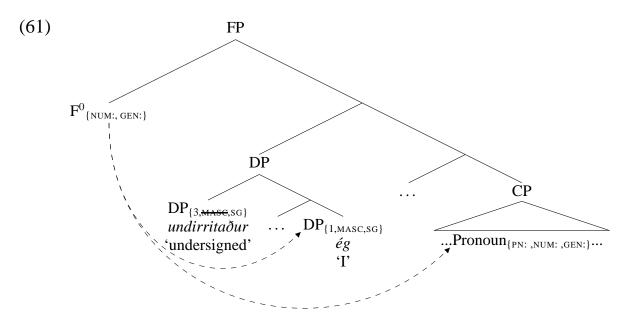
We would like to propose that the relation between a pronoun embedded in a finite complement clause and its antecedent is not direct, but rather mediated by a functional head. This functional head is in turn matched by the antecedent. The antecedent, if in a finite clause, matches the appropriate functional structure and triggers agreement. We will argue that the effect of verbal agreement is better understood if an intermediate functional head is involved, as in (60a), than if a pronoun enters into a relation with the antecedent DP directly, as in (60b).

(60) a. [... 
$$T_{fin}$$
 ...  $DP_{antecedent}$  ...  $F_{\lambda}^{0}$  ... [...  $DP_{pronoun}$  ... ]]  
b. [...  $T_{fin}$  ...  $DP_{antecedent}$  ... [...  $DP_{pronoun}$  ... ]]

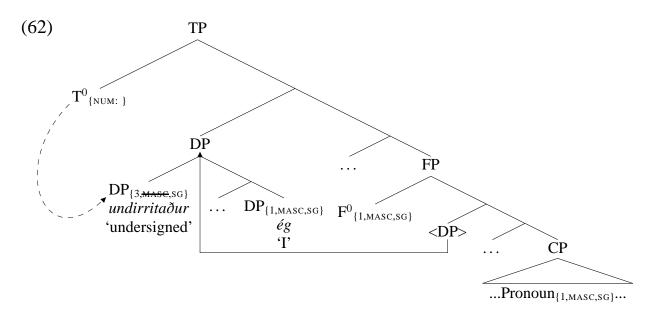
In addition to having the empirical advantages outlined below, the proposal in (60a) has the advantage that it has the potential to reconcile the position that pronouns take antecedents syntactically with the hypothesis that Transfer of syntactic structure to the interfaces takes place in chunks known as phases (Chomsky 2001, 2007, 2008; Marantz 2007). As a pronoun gets further from its antecedent structurally, more intermediate  $F^0$ s would be involved in mediating a relation between a pronoun and its antecedent. One possibility is that such heads are present in the left-periphery of phases (e.g. vP and CP). We will not, however, be able to flesh out the details of this here.

An intermediate functional head  $F^0$  would be employed as follows.  $F^0$  enters into an Agree relation with both the imposter and the embedded pronoun. Different imposters have different structural properties which make their 1st person features more or less visible. When  $F^0$  and the imposter Agree, whatever features allow  $F^0$ to be a probe will interact with the structure of the imposter to determine whether  $F^0$  can get 1st person features. If it can, the embedded pronoun will match those 1st person features. The imposter then enters into an Agree relation with, say, finite  $T^0$ . When  $T^0$  and the imposter Agree, whatever features allow  $T^0$  to be a probe will interact with the structure of the imposter to determine whether  $T^0$  can get 1st person features. Since  $T^0$  and  $F^0$  are distinct heads, they can be sensitive to distinct properties of the imposter;  $F^0$  might be able to pick up 1st person features (yielding a 1st person pronoun) while  $T^0$  cannot. The asymmetry above can be accounted for if  $F^0$  is, informally speaking, a 'better' 1st person probe than  $T^0$ ; whenever  $T^0$ is able to find a 1st person feature in an imposter DP, so will  $F^0$ , but not vice-versa.

To illustrate with a concrete example, suppose that  $F^0$  probes for gender and number and  $T^0$  probes for number. Now suppose that we assume a condition on  $\varphi$ -Agree that when a  $\varphi$  bundle enters into a successful Agree relation with another  $\varphi$  bundle, they share their entire  $\varphi$ -feature set, not just the features that were involved in establishing the Agree relation (Béjar 2003; see also Myler 2011). Now, suppose that in the complex DP leading to *undirritaður* 'undersigned (sg)', the gender feature is inactive; this is independently plausible given that the gender of *undirritaður* 'undersigned (sg)' is determined by the notional core, so that a female speaker would be able to use the feminine form *undirrituð*. If *undirritaður* 'undersigned (sg)' gets its gender feature through valuation, then it would be expected to be inactive the way unvalued features normally are upon valuation. Given these assumptions consider the following structure:



 $F^0$  probes and enters into an Agree relation with both the imposter DP and the pronoun embedded in CP.<sup>24</sup> Since the gender feature on *undirritaður* 'undersigned (sg)' is inactive, it agrees with the 1st person pronoun and picks up its entire  $\varphi$  bundle. These features are simultaneously shared with the pronoun.<sup>25</sup> When the DP moves and Agrees with T<sup>0</sup>, the latter probes only for a number feature. It then Agrees with *undirritaður* 'undersigned (sg)' and picks up 3rd person features of the latter.



This account is in need of immediate refinement, but before turning to that, consider what work the  $F^0$  head does. By invoking two separate probes, their features can be relativized such that the same imposter DP can share different sets of features with different functional heads. However, it can still capture the asymmetry

 $<sup>^{24}</sup>$ In this structure, we show F<sup>0</sup> c-commanding the antecedent DP, but this is not strictly necessary. In the system of Řezáč (2003), for example, F<sup>0</sup> could be lower than the antecedent, Agree with the embedded pronoun, and then probe upward to Agree with the antecedent. On upward probing, see also Baker and Willie (2010) and references therein.

<sup>&</sup>lt;sup>25</sup>There are a number of technical alternatives to the account presented here, and differences among them will ultimately make a difference. To remain consistent, it would be more accurate to assume that neither the silent core pronoun nor the pronoun embedded in CP have valued  $\varphi$ features at the point in the derivation described above. Rather, the Agree relation would lead to a sharing a  $\varphi$  index, along the lines of Pesetsky and Torrego (2007), and both pronouns would have their features filled in when valued by Agreeing with 1st person features elsewhere, such as in the left periphery as in Sigurðsson (2010, 2011). Spelling this out would complicate the discussion needlessly, however.

above. In order to get 1st person agreement on  $T^0$ ,  $T^0$ 's number feature would have to be able to successfully Agree with the pronominal core. As long as  $F^0$  has a number feature as well,  $F^0$  will be able to pick up 1st person features whenever  $T^0$  will be able to. But since  $T^0$  lacks a gender feature, it will not necessarily be able to do what  $F^0$  does.

As mentioned above, there are a few aspects of the account as presented above that are in need of refinement. First, within the imposter DP itself, if the gender feature on the secondary DP is inactive, reasoning that it has to be valued by the notional core DP, then the number feature would also be inactive. If nothing more were said, the above account would allow  $T^0$  to probe the notional core as well and Agree in 1st person.

However, suppose that this is exactly what happens in the plural cases, leading to 1st person plural agreement. Then the question is why this does not happen as easily with singulars.<sup>26</sup> In fact, there are a number of phenomena crosslinguistically to suggest that plural features control agreement in a much more aggressive way than singular features do (Den Dikken 2001; Nevins 2011; Myler 2011). Nevins (2011) has recently proposed that 'singular' is actually the absence of a privative [PLURAL] feature rather than the presence of a [SG] feature or a [-PLURAL] feature (though see Harbour (2011) for a different theory based on other facts). What is important here is that regardless of the correct theory of number features themselves, number agreement seems to involve plurals only, or at least in a much more robust way. From this perspective, singular agreement is a kind of 'default' agreement.

Returning to the account above, the number feature of  $T^0$  would not be able to Agree in number with a singular core. However, a plural core would be able to trigger agreement on  $T^0$ , and pass on the full  $\varphi$ -feature set, leading to 1st person plural agreement. This accounts for the contrast between *undirritaður* 'un-

 $<sup>^{26}</sup>$ Recall that we do find attested cases of *undirritaður* 'undersigned (sg)', though native speakers tend to judge them as worse than the plural cases.

dersigned (sg)' and *undirritaðir* 'undersigned (pl)' with 1st person agreement, repeated in (63) from (20) above.

- (63) a. Undirritaður { hefur / \*hef } ákveðið að hætta. undersigned.M.SG { has.3SG / \*1SG } decided to quit 'The undersigned (sg) has decided to quit.'
  - b. Undirritaðir {hafa / ?höfum } haldið þessu fram. undersigned.M.PL {have.3PL / ?1PL } held this forth 'The undersigned (pl) have claimed this.'

This account predicts that if a language has imposters whose gender features are valued by the notional core, like *undirritaður*, and also has finite verbs which agree in gender as well as person, such imposters should trigger verbal person agreement as well, perhaps more agressively with certain gender values than others. We do not know at the present time if this prediction is borne out.<sup>27</sup>

Another question involves person features, which we have left out of the probes above for illustrative purposes. The presence and values of person features within complex DPs no doubt plays a role in the variation we see across different imposter types. At least  $T^0$  (or the related functional complex in the T-domain) probes for person features, and possibly  $F^0$  does as well. We have assumed that the secondary DP has 3rd person features, and that to access the 1st person features of the notional core, the outside probe has to be able to skip the intervening secondary DP (and/or the shell DP), for example by probing for gender features which are inactive on the secondary DP. However, most imposters do show some 3rd person behavior, such as the ability to control 3rd person features on different kinds of imposters might play a role in constraining this.

By relativizing different features to probes, we have an account of why 1st person agreement in the matrix clauses forces a 1st person pronoun in the embedded clause, but 3rd person agreement does not necessarily force a 3rd person

<sup>&</sup>lt;sup>27</sup>Thanks to Christer Platzack for raising this question.

pronoun. We also have the beginnings of an understanding for why plurals are 'more 1st person' than singulars. We do not yet have an account for several other asymmetries, such as the mild effects of subjunctive versus indicative mood and the subject/object pronoun asymmetry. The cross-linguistic facts are not very well understood here either, so we hope that future research will provide a clearer picture and allow for an understanding of how these areas interact with pronominal antecedence in a more robust way. For now, we hope to have shown that the relation between a pronoun and its antecedent is better understood as being mediated by a functional head than a direct dependency. But certainly, there is some syntactic relationship between a pronoun and its antecedent, or else the effect of agreement in the superordinate clause would seem to be a complete mystery.

## 8 Undersigned

The present analysis also has the potential to explain why 'undersigned' behaves differently from other imposters. The idea was already broached above, where we suggested that the ability of the probe  $F^0$  to agree with the notional core derived from the fact that the gender feature on *undirritaður* 'undersigned (sg)' comes from the notional core. For such elements, the feature valuation assigning gender (and number) would make those features inactive, allowing outside probes to Agree with the notional core past the secondary DP. Given this, the difficulty of an outside probe agreeing with the notional core in an imposter such as *pabbi* 'Daddy' stems from the fact that the secondary DP—*pabbi*—has inherent gender features. Here, we offer the following tentative hypothesis:

(64) The more features of a secondary DP that are valued by the notional core, the more likely the person features of the notional core are to be visible to outside probes.

An example which seems to support this comes from the formally indefinite Mexican Spanish imposter *un servidor* 'a servant', discussed by Vázquez Rojas (2007). (65a) and (65b) show that the notional core determines the choice between *un servidor* 'a servant (masculine)' and *una servidora* 'a servant (feminine)'. (65a) shows that *un*(*a*) *servidor*(*a*) can antecede a 1st person pronoun. In (65b), where *un servidor* is not a subject and does not control agreement, it can antecede a 1st person reflexive in the infinitive. In (65c), *un servidor* is the subject and controls 3rd person singular agreement, much like *undirritaður* 'undersigned (sg)' (and singular imposters in general). In (65d), *una servidora* is coordinated with another DP and the resulting CoP triggers 1st person plural agreement, much like *undirritaður* og Jón 'undersigned and John'.

- (65) Mexican Spanish
  - a. Es una pena que una servidora, por razones ajenas a mi voluntad, is a shame that a servant.F for reasons allien to my will, no pueda asistir.
    not can attend.INF
    'It is a shame that a servant, for reasons beyond my will, cannot attend.'
  - b. Es la especialidad de un servidor, testificar por mi mismo en is the specialty of a servant.M testify.INF for my self in qué condiciones están esos lugares.
    which conditions are those places
    'It is the specialty of a servant, to testify for myself in which conditions those places are.'
  - c. Un servidor está intentando engañarse a sí mismo.
    a servant be.3s trying fool.INF.REFL ACC him self.
    'A servant is trying to fool himself.'
  - d. El miércoles, Fernando y una servidora acompañamos the Wednesday, Fernando and a servant.F accompanied.1PL a mi padre al hospital. ACC my father to.the hospital 'On Wednesday, Fernando and a servant accompanied my father to the hospital.'

These facts are only suggestive, and further research is required to know what the full range of agreement/antecedence possibilities are for this imposter. (Vázquez Ro-

jas (2007) was not specifically focusing on agreement.) However, the facts known so far are intriguing—an imposter which shares with *undirritaður* 'undersigned (sg)' the property that gender is determined by the core behaves like it in several respects: agreement seems to matter for reflexive antecedence, and coordination allows 1st person verb agreement.

Undirritaður 'undersigned (sg)' and un(a) servidor(a) 'a servant', however, share another property: both are formally indefinite. Despite this, both can be shown to distribute like definites.<sup>28</sup> In Icelandic, indefinite participles are allowed in a low position in various expletive constructions, as exemplified in (66a). Undirritaður 'undersigned (sg)' is not possible in this position, as shown in (66b).

- (66) a. Það hafði víst verið vopnaður lögreglumaður í EXPL had apparently been armed.M.SG policeman in húsinu.
  house.the
  'There had apparently been an armed policeman in the house.'
  b. \* Það hafði verið undirritaður í húsinu.
  - EXPL had been undersigned.M.SG in house.the

It is possible, however, that the indefinite form of *undirritaður* is misleading. It does strongly suggest that there is not an understood definite head noun such as *maðurinn* 'the man.DEF'. If so, we would expect the weak form, *undirritaði* rather than *undirritaður*, as in *undirritaði maðurinn* 'the undersigned man'. However, given the rarity of indefinite imposters cross-linguistically, and the definite behavior of *undirritaður* 'undersigned (sg)', it would be odd to suppose that the head noun is indefinite, as in *undirritaður maður* 'an undersigned man'. However, another possibility exists. In Icelandic, the strong form of participles shows up not only in the attributive position of indefinite nouns, but also in the predicative position, as illustrated for *undirritaður* 'undersigned (sg)' in the following example:

<sup>&</sup>lt;sup>28</sup>See Vázquez Rojas (2007) for illustration of this claim for Mexican Spanish.

(67) Þannig á neytandinn rétt á að hætta við samninginn innan tíu thus has consumer.the right on to stop with contract.the within ten daga frá því hann er undirritaður.
days from that it.M is undersigned.M.SG
'Thus, the consumer has the right to terminate the contract within ten days from when it is undersigned.'

Thus, one possibility is that *undirritaður* 'undersigned (sg)' in its imposter use is a reduced relative clause. Then, it can be collapsed with the complex imposters seen earlier in (7), partially repeated here.

(68) ... Þuríður Backman og [sá sem hér stendur ], höfum lagt
 ... Þuríður Backman and [the.one who here stands.3SG ] have.1PL put
 fram ...
 forth ...

In sum, the present approach has the potential to understand the different behavior of different imposters on the basis of their grammatical properties. We have several working hypotheses, and not enough cross-linguistic data to tease them apart fully. One possibility is that imposters with gender, number, or other features controlled by the notional core rather than by inherent specification are more likely to show 1st person effects. Another possibility is that formally indefinite, or perhaps predicative, imposters are more likely to show 1st person effects.<sup>29</sup> A third possibility is that imposters built on relative clauses are more likely to show 1st person effects than imposters built on other structures (such as appositives, as proposed in Collins and Postal (2012)). The present approach would make sense of the first possibility more straightforwardly than the other two, but more crosslinguistic and analytical work needs to be done before it can be determined whether this is on the right track.

<sup>&</sup>lt;sup>29</sup>One might object that crosslinguistically, 'undersigned' actually is definite, accompanied by the definite article. However, if 'undersigned' really is the predicate of a reduced relative clause, the article would plausibly be related to the relative clause rather 'undersigned' itself. There are many cases like this; consider English *He made* (\**the*) *headway* versus <u>*The headway he made*</u>. Note that Icelandic uses a special demonstrative *sá* for these kinds of functions.

## **9** Conclusion

In this paper, we have shown that verbal agreement can have a constraining effect on pronoun-antecedent relations. This is unexpected from the perspective of theories which take pronouns to be basically freely interpreted (modulo Condition B, however formulated), but is understandable if there is a syntactic relation between a pronoun and its antecedent. However, we have also shown, in at least two ways, that agreement is not the only constraining factor. First, while 1st person agreement controlled by an DP prevents that DP from anteceding a 3rd person pronoun, 3rd person agreement controlled by an DP does not necessarily prevent that DP from anteceding a 1st person pronoun. The ability to antecede a 1st person pronoun, then, cannot be *contingent* on agreement. Second, when agreement is controlled for with contexts where the antecedent DP is not in a position that controls agreement, such as in the embedded subject position of ECM constructions, there are still constraints on antecedence. So while agreement is a factor in pronoun-antecedent relations, it is not the only factor.

We have proposed that this can be understood if pronoun-antecedent relations are mediated by a silent functional head. This also has the potential to shed light on why the 1st person features of certain imposters are more accessible than others, assuming that probes can be relativized to different features. This idea is not entirely novel. An intermediary has been proposed in other accounts assuming a syntactic relation between a pronoun and its antecedent. Kayne (2002), who argues that the syntactic relation in question is a movement relation, argues that there must be an intermediate movement between the base generated position of the antecedent and its landing site.<sup>30</sup> In H. Sigurðsson's work (e.g. 2010; 2011), pronouns match various intermediate functional heads, which in turn match context linkers (topic features, etc.) and/or antecedent DPs. We take the agreement

<sup>&</sup>lt;sup>30</sup>This accounts for Condition B, if such a position is not available in very local contexts. The structure associated with the *self* morpheme of English reflexives is argued to provide such an intermediate landing site.

facts to be further evidence in favor of one or more silent, intermediate positions mediating between a pronoun and its antecedent.

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