

# Flavors of reflexive arguments in Icelandic impersonals

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## Abstract<sup>1</sup>

We argue that reflexive pronouns in Icelandic come in two flavors: with and without a D-layer, which we refer to as Weak Explicit Arguments (WEAs) and Strong Explicit Arguments (SEAs). The simplex reflexive pronoun *sig* of inherently and naturally reflexive verbs is a WEA whereas the complex reflexive pronoun *sjálfan sig* of naturally disjoint verbs is a SEA. SEAs are, nonetheless, in some cases realized simply as *sig*, without the intensifier *sjálfan*. These two types correspond directly to the distinction made in Landau (2010) between Weak Implicit Arguments, which are D-less  $\phi$ Ps, and Strong Implicit Arguments, which have a D-layer. We give arguments in favor of our analysis of WEAs vs. SEAs; one crucial difference is that only SEAs can license secondary predicates — under Landau’s (2010) account, this is expected if SEAs, but not WEAs, have a D-layer. Furthermore, we discuss the Reflexive Passive (ReflPass) in Icelandic and argue that it only licenses D-less  $\phi$ -bundles, that is, WEAs. On our approach, the ReflPass does not have a syntactically projected antecedent of the reflexive pronoun. That creates apparent problems for case and binding. However, we propose that WEA *sig* is not only a realization of accusative case but also of nominative case. We also argue that the binding facts are not a problem as WEA *sig* in the passive only requires semantic binding; adopting Legate’s (2014) analysis of the New Impersonal Passive in Icelandic, we argue that WEA *sig* only restricts an argument position but cannot saturate it. Once Existential Closure applies, the unsaturated internal and the external arguments are bound by the same operator, ensuring identity between the two.

## Key words

reflexive pronouns, reflexive passive, Weak Explicit Arguments, Strong Explicit Arguments, intensifiers

## 1 Introduction

An argument is a unit of syntax that expresses a participant in an event or a state. For example, the proper name Mary expresses the agent of an eating event in (1a) and the experiencer of a liking state in (1b).<sup>2</sup>

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<sup>2</sup> This paper updates and expands a previous proceedings paper by the authors on the topic (Eythórsson et al. 2016).

- (1) a. Mary ate the hummus.  
 b. Mary liked the tofu.

It is of interest that natural language exhibits some variation in the mechanisms that are used to express such arguments. For example, it seems as if there was an understood agent of eating in (2a) and an experiencer of liking in (2b), even if no such arguments are pronounced aloud. In other words, a certain type of syntactic environment can lead us to perceive silent, implicit, arguments.

- (2) a. Eating hummus is a good way to start the day.  
 b. Liking tofu is not uncommon on this university campus.

This means that there is an empirical dimension in the typology of syntactic arguments that distinguishes their explicit and implicit realization. Landau (2010) proposes that implicit arguments furthermore vary along a strength dimension, between so-called Strong Implicit Arguments (SIA) and Weak Implicit Arguments (WIA). SIAs are covert full DP pronouns with a D-feature and  $\phi$ -features, [+D,+ $\phi$ ], whereas WIAs are D-less  $\phi$ -bundles with reduced licensing abilities, e.g., they cannot license secondary predicates. For example, in the English examples in (3), PRO is a SIA in (3a) but the implicit object ( $\phi$ P) in (3b) is a WIA. Only in the former can a secondary predicate, *angry*, be predicated of an implicit argument. The secondary predicate *raw* cannot be predicated of the implicit object in the latter.

- (3) a. The guests expected [PRO to leave the room (angry)].  
 b. John ate  $\phi$ P (\*raw).

On Landau's analysis, DPs but not  $\phi$ Ps are able to license secondary predicates. The subject of the infinitival clause in (3a) is PRO. It licenses the secondary predicate *angry* under a reading where the guests are angry when they leave the room (but not at the time when they expect it); an implicit object, on the other hand, e.g., 'the meat', is a  $\phi$ -bundle (in the sense of this kind of a theory) and does not license a secondary predicate like *raw* (in 3b).

If full pronouns can be either overt or covert, it is natural to ask whether D-less  $\phi$ -bundles are ever overt, i.e., whether Landau's strength distinction has a parallel manifestation at the explicit end of the visibility dimension for syntactic arguments as it does in the context of covert arguments. We propose that Weak Explicit Arguments (WEA) do in fact exist and provide evidence for this view from an investigation of the Reflexive Passive (ReflPass) in Icelandic. An example of this construction is shown below.

- (4) Svo var drifið sig á ball.  
 then was hurried.DFLT REFL<sub>weak</sub> on dance  
 'Then there was hurrying off to a dance.'

The reflexive passive has a simplex reflexive pronoun argument *sig* and no overt antecedent. The construction requires an inherently or naturally reflexive verb. The main point of this paper is to argue that the reflexive element *sig* in the Icelandic Reflexive Passive is an overt counterpart of a WIA, a Weak Explicit Argument (WEA), in the sense that both are D-less  $\phi$ -bundles.<sup>3</sup> The hypotheses being pursued, then, in general and specifically for Icelandic, are the following.

(5) **General hypothesis**

Pronouns that are explicitly pronounced can be weak in the sense of Landau (2010).

(6) **Hypothesis about Icelandic**

The pronoun in the Icelandic Reflexive Passive is a Weak Explicit Argument.

The paper is organized as follows: Section 2 discusses reflexive pronouns and types of verbs that license them, whereas Section 3 discusses the intensifier *sjálfan* ‘self’ in Icelandic. Section 4 describes Icelandic reflexive passives and Section 5 presents the distinction between weak and strong explicit arguments which is at the core of our analysis. Our account of binding and case in the Reflexive Passive is presented in Section 6. Section 7 concludes the paper.

## 2 Reflexive pronouns and types of verbs that license them

Icelandic reflexive pronouns are usually divided into two: the simplex reflexive pronoun *sig* and the complex reflexive pronoun *sjálfan sig*. These are equivalent to SE and SELF reflexives in various other languages. Sigurjónsdóttir (1992), following Reinhart/Reuland’s (1993) binding theory, argues that *sig* is used with predicates with reflexive meaning (which is equivalent to inherently and naturally reflexive verbs in the discussion to follow) and subject to Reinhart/Reuland’s Binding Principle B whereas *sjálfan sig* is used with predicates that are not reflexively marked, such as *hata* ‘hate’, and therefore subject to Binding Principle A as outlined in Reinhart/Reuland (1993). *Sig* on that approach does not provide reflexive marking but since a verb like *hata* is not reflexive, *sjálfan* is needed for reflexive marking.

We, on the other hand, take *sjálfan* to be an intensifier that co-occurs with the anaphor *sig*. We argue that *sjálfan* is not an essential part of the reflexive pronoun that we interpret as a Strong Explicit Pronoun (SEA), even though its realization is usually *sjálfan sig* rather than *sig*. Furthermore, we argue for two different reflexive pronouns with the same realization, *sig*. One of them is a SEA, and can therefore co-occur with the intensifier, and the other is a Weak Explicit Argument (WEA).

<sup>3</sup> We may have to assume something extra for our reflexive WEA, such as a +REFL feature (see Eythórsson et al. 2016), as overt  $\phi$ Ps are in general not licensed in languages like English or Icelandic (such as in the object position in (3b) above).

Verbs that can take a reflexive object are often divided into different classes based on their relation with the reflexive object. On some approaches there is a distinction between self-directed (or non-other-directed) verbs and other-directed verbs or situations (e.g., Kemmer 1993: 58; König/Siemund 1999: 60–61) – cf. also Haiman’s (1983: 803) introverted vs. extroverted verbs. Self-directed or introverted verbs, such as *shave* and *wash*, describe actions that “are typically performed by a person on himself or herself” (König/Siemund 1999: 60) whereas other-directed or extroverted verbs “describe actions which the subject usually performs towards others” (Haiman 1983: 803). When verbs like *shave* are used reflexively in English, a reflexive pronoun does not need be expressed, although it can be. For the equivalent verb in Icelandic, *raka* ‘shave’, an anaphor must be expressed when it is used reflexively.

(7) John shaved (himself).

(8) Jón rakar sig / ??sjálfan sig / SJÁLFAN SIG.  
 Jón shaves REFL.ACC / ??self.ACC REFL.ACC / self.ACC REFL.ACC  
 ‘Jón shaves himself.’ (Sigurjónsdóttir 1992: 70)

As shown here, the simplex reflexive pronoun *sig* is used unless there is an emphasis on *sjálfan sig*, written here with capitals as *SJÁLFAN SIG*, such as contrastive focus. *Shave* and *raka* and other similar verbs can also be used with a referential DP. In the following the object and the subject have a disjoint reference.

(9) John shaved Dave.

(10) Jón rakaði Guðmund.  
 Jón shaved Guðmundur.ACC  
 ‘Jón shaved Guðmundur.’

As shown above, self-directed verbs such as *shave* and *raka* — sometimes referred to as naturally reflexive verbs (e.g., Schäfer 2012; Árnadóttir et al. 2011; Jónsson 2011) — can be used reflexively and non-reflexively. This does not hold for all verbs that might count as self-directed:

(11) a. Annie misstepped (\*herself).

b. John boasted (\*himself).

c. Mary behaved (herself).

(12) a. Jón missteig sig / \*sjálfan sig.  
 Jón misstepped REFL.ACC / \*self.GEN REFL.GEN  
 ‘Jón misstepped.’ (Sigurjónsdóttir 1992: 75)

b. Jón montaði sig / \*sjálfan sig af þessu.  
 Jón boasted REFL.ACC / \*self.ACC REFL.ACC of this  
 ‘Jón boasted of/about this.’

- c. *María hegðaði sér / \*sjálfri sér vel.*  
*María behaved REFL.DAT / \*self.DAT REFL.DAT well*  
 ‘*María behaved well.*’

Verbs like *misstep/misstíga sig*, *boast/monta sig* and *behave/hegða sér* can only be used reflexively; an object DP with a disjoint reference cannot be used with these verbs as shown for Icelandic in (13) below. These are therefore sometimes referred to as inherently (e.g., Everaert 1991; Schäfer 2012) or intrinsically (e.g., Reinhart/Reuland 1993) reflexive verbs.

- (13) a. \**Jón missteig Erlu.*  
*Jón misstepped Erla*
- b. \**Sif montaði dóttur sína.*  
*Sif boasted daughter own.REFL.ACC*
- c. \**María hegðaði syni sínum vel.*  
*María behaved son own.REFL.DAT well*

The simplex reflexive pronoun is always used with inherently reflexive verbs in Icelandic but the complex one is never used in such a way, see (12) above. In English, inherently reflexive verbs can, but need not, co-occur with a reflexive pronoun, see (11c), but for various inherently reflexive verbs, the use of a reflexive pronoun is ungrammatical, see (11a–b).

Inherently reflexive and naturally reflexive verbs, which are both self-directed, take the simplex reflexive pronoun in Icelandic. The third type is sometimes referred to as naturally disjoint verbs (e.g., Schäfer 2012; Árnadóttir et al. 2011; Jónsson 2011) or other-directed verbs (as opposed to self-directed verbs). When they are used reflexively in Icelandic, they typically take the complex reflexive pronoun.

- (14) a. *Jón hatar ?\*sig / sjálfan sig.*  
*Jón hates ?\*REFL.ACC / self.ACC REFL.ACC*  
 ‘*Jón hates himself.*’
- b. *Jón gefur ?\*sér / sjálfum sér gjöf.*  
*Jón gives ?\*REFL.DAT / self.DAT REFL.DAT a.gift*  
 ‘*Jón gives himself a gift.*’ (Sigurjónsdóttir 1992: 70)

Sigurjónsdóttir (1992) and Sigurjónsdóttir/Hyams (1992) term these verbs *gefa* ‘give’-verbs as opposed to *raka* ‘shave’-verbs (naturally reflexive verbs), based on the different types of reflexive pronoun the verbs *gefa* (complex reflexive pronoun) and *raka* (simplex reflexive pronoun) take.

Naturally reflexive verbs behave like inherently reflexive verbs in that they are most naturally used with a simplex reflexive pronoun when self-directed. However, they also behave like naturally disjoint verbs in that they are not inherently reflexive and are also compatible with DPs that do not have a local antecedent. Furthermore, in some cases they are compatible with *sjálfan sig*. We might

want to take there to be three classes in this respect, that is, inherently reflexive, naturally reflexive and naturally disjoint verbs. What matters for our approach, however, is whether a verb that takes a reflexive pronoun object licenses a WEA or a SEA. Whether we need to identify two or three classes is not crucial; what is of importance for our account is the fact that inherently reflexive verbs and naturally reflexive verbs license WEAs whereas naturally disjoint verbs, as well as naturally reflexive verbs under certain circumstances, license SEAs.

It is also important, as will become clear when we discuss the structure of WEAs, to figure out whether the simplex reflexive pronoun of inherently and naturally reflexive verbs is an argument of the verb or not. Here we distinguish between syntactic arguments and semantic arguments (see Culicover/Jackendoff 2005; Árnadóttir et al. 2011): Even though *sig* is syntactically an object of verbs like *monta* ‘boast’ — it is projected in the object position of these verbs — it is not necessarily a semantic argument that bears a thematic role, such as patient or theme (for discussion on *sig* being a syntactic argument in Icelandic, see Árnadóttir et al. 2011; Jónsson 2011). Various approaches have, in fact, taken the reflexive objects of inherently reflexive verbs generally not to be semantic arguments but, rather, pleonastic pronouns (see, e.g., Bergeton 2004; Culicover/ Jackendoff 2005).<sup>4</sup>

Reinhart/Siloni (2004, 2005), on the other hand, argue for a bundling approach where the SE-element (be it a clitic, a phrase or not projected) does not bear the internal thematic role (such as a patient or a theme). Rather, a bundling operation applies where the external and the internal thematic role are bundled into one thematic role, such that the subject will bear one complex role, e.g., agent-theme or agent-patient. Jónsson (2011) and Schäfer (2012) also argue for an internal thematic role with reflexive verbs, although they argue, unlike Reinhart/Siloni, that *sig* bears the internal thematic role. We also argue that, at least in some cases, inherently reflexive verbs as well as naturally reflexive verbs are thematic, as we will now see. Somewhat similar to Reinhart/Siloni’s (2004, 2005) account, we argue in Section 6 that *sig* itself does not saturate the internal thematic role, it merely restricts it — we will, nevertheless, refer to *sig* as a semantic argument in the discussion to follow in cases where an internal argument, such as theme or patient, is introduced.

Starting with naturally reflexive verbs, such as *raka* ‘shave’, we take the simplex reflexive pronoun to be an argument of the verb: In (8) above, Jón is the agent as well as the patient; he is the initiator as well as the undergoer of the shaving event. We believe the same holds for other naturally reflexive verbs, such as *þvo* ‘wash’.

It is not as clear for various inherently reflexive verbs, such as *misstíga* ‘misstep’, *monta* ‘boast’ and *hegða* ‘behave’, see (12) above, whether *sig* is actually an argument of the verb. For some such verbs, it may be the case that *sig* is a pleonastic reflexive: it is unclear, for example, whether Jón is anything else than

<sup>4</sup> For Culicover/Jackendoff (2005) there are also examples of reflexive verbs that take a semantic argument that is not syntactically projected, namely verbs like *shave*, as in *John shaved* (meaning that he shaved himself).

simply an agent of a boasting event in (12b). We find it more plausible, on the other hand, that *María* is an undergoer, as well as the initiator, of a misstepping event in (12a) as she is affected by her own misstepping (she might be badly injured, for example); in that case she is both an agent and a patient of that event. This would mean that at least not all inherently reflexive verbs in Icelandic take a pleonastic reflexive pronoun. For an inherently reflexive verb like *misstíga*, then, the agent and the patient (or theme, etc.) are obligatorily coindexed. For a more radical approach, see Jónsson (2011) who argues that *sig* in Icelandic is always an argument.

In the examples above, *sig* is always a direct object of a verb. Applied indirect objects, however, seem to be even clearer examples of obligatory reflexive pronouns that are actual arguments that take on a thematic role. Following Wood (2016), we refer to the structure in (15), with an applied indirect object, as Obligatory Reflexive Datives (see also Eythórsson 2008, Árnadóttir et al. 2011 and E.F. Sigurðsson 2017 for discussion).

- (15) *María keypti (sér / \*sjálfri sér / \*Jóni) hús.*  
*María bought (REFL.DAT / \*self.DAT REFL.DAT /\*Jón.DAT) house*  
 ‘*María bought (herself) a house.*’

The verb *kaupa* ‘buy’ obligatorily takes a direct object and optionally an indirect object. Even though *kaupa* is a naturally disjoint verb, an applied indirect object is obligatorily reflexive (we will not discuss this fact further, but see Wood 2016). It seems clear that the indirect object is a recipient. Without the indirect object, the sentence in (15) just means that *María* bought a house, presumably for herself, but it could easily be the case that she bought it for someone else. If an indirect object is applied to the structure, it can only be a simplex reflexive pronoun that is co-indexed with the subject; in that event it is necessarily the case that *María* bought the house for herself. We therefore argue that the simplex reflexive pronoun is an argument of the verb, in this case the recipient. In contrast to (15), the example in (16) contains a complex reflexive pronoun, on the one hand, and a DP which is disjoint in reference from *María*, on the other. In order for these phrases to become a recipient, a PP with the preposition *handa* ‘for’ can be used:

- (16) *María keypti hús handa sjálfri sér / handa Jóni.*  
*María bought house for self.DAT REFL.DAT / for Jón.DAT*  
 ‘*María bought a house for herself / for Jón.*’

There can, however, only be one recipient argument and it is therefore ungrammatical to have an indirect object *sér* in (17) below as well as a PP headed by *handa* as that would result in two recipients:

- (17) \**María keypti sér hús handa sjálfri sér / handa*  
*María bought REFL.DAT house for self.DAT REFL.DAT / for*  
*Jóni.*  
*Jón.DAT*

An additional observation on German is relevant in this context. Schäfer (2012: 234), discussing whether German *sich* with inherently reflexive verbs takes on a thematic role or not, points out that “German (like other Germanic languages) has a number of inherently reflexive constructions where the reflexive is embedded in and clearly  $\theta$ -marked by a non-subcategorized PP”. Schäfer gives the following example:

- (18) Hans hat auf der Konferenz viel Unsinn von sich /  
 Hans has at the conference much nonsense from REFL /  
 \*von Maria gegeben.  
 \*from Maria given

‘Hans uttered lots of nonsense at the conference.’ (Schäfer 2012: 235)

According to Schäfer (2012: 235), *etwas von sich geben* (literally ‘to give something from oneself’) is a semi-idiomatic string meaning ‘to utter something’. As the example indicates, it is inherently reflexive and as it seems clear that the preposition *von* ‘from’ assigns the thematic role source, it must be the case that the inherently reflexive pronoun *sich* bears a thematic role.

A very similar example of an inherently reflexive use is found in Icelandic:

- (19) Jón gaf frá sér / \*frá sjálfum sér /  
 Jón gave from REFL.DAT / \*from self.DAT REFL.DAT /  
 \*frá Maríu skrítn hljóð.  
 \*from María strange sounds

‘Jón made strange sounds.’

Even though *gefa* ‘give’ would normally be considered to be a naturally disjoint verb, the object of the preposition is obligatorily reflexive. As Schäfer (2012) points out, it is the preposition but not the verb that subcategorizes for a source argument in the German example in (18) (and in the Icelandic one in (19) for that matter) and therefore inherent reflexivity is not dependent on a verb being a reflexive predicate.

There are also other semi-idiomatic uses of *sig* as an inherently reflexive object of prepositions where it seems clear that it bears a thematic role.

- (20) Margeir pissaði í sig / \*í sjálfan sig /  
 Margeir peed in REFL.ACC / \*in self.ACC REFL.ACC /  
 \*í Jón.  
 \*in Jón

‘Margeir peed his pants.’

With *pissa* ‘pee’, the PP is not obligatory but the meaning is very different depending on whether or not the PP is included. A sentence like *Margeir pissaði*

‘Margeir peed’ just means that Margeir is the agent of a peeing event but it does not say anything about the goal of that event. When the PP is included, only the simplex reflexive pronoun can be used and that specifies the goal.<sup>5</sup> We therefore take *sig* in this example to bear a thematic role.

To summarize, we have discussed three types of verbs that license reflexive pronouns in this section: inherently reflexive, naturally reflexive and naturally disjoint verbs. We have, furthermore, argued that the simplex reflexive pronoun of naturally reflexive verbs is thematic and that in various cases an inherently reflexive pronoun can bear a thematic role as well. We discussed two other cases of inherently reflexive structures where the simplex reflexive pronoun takes on a thematic role: Obligatorily Reflexive Datives and PP structures.

In the next section, we take a closer look at the complex reflexive pronoun *sjálfan sig*, in particular the ‘self’ part of it, and we will look at special environments where *sig* is used with naturally disjoint verbs.

### 3 The intensifier *sjálfan* ‘self’

Naturally disjoint verbs are in general most natural with arguments that do not have a local antecedent, such as in an example like *I hate her*, where the subject and the object are disjoint in reference. Naturally reflexive verbs, on the other hand, are generally used reflexively with a simplex reflexive pronoun as these are self-directed. This can, however, change with context<sup>6</sup> as shown in (21) for the naturally reflexive verb *raka* ‘shave’. Even though a male barber may shave (himself) regularly, it will be more frequently the case that he shaves other people. When we emphasize the fact that he shaves himself and not others, the complex reflexive pronoun will be used rather than the simplex one (see the brief discussion above on contrastive emphasis). Compare (21a) to (21b):

- (21)a. Rakarinn rakaði SJÁLFAN SIG til tilbreytingar.  
 the.barber shaved self.ACC REFL.ACC for change  
 ‘The barber shaved himself for a change.’
- b. Jón rakaði sig til tilbreytingar.  
 Jón shaved REFL for change  
 ‘Jón shaved for a change.’

<sup>5</sup> It should be noted that it is, in fact, possible to use *pissa* ‘pee’ with a PP where the DP object is inanimate, such as ‘pants’ or ‘a bottle’:

- (i) Margeir pissaði í buxurnar / í flösku.  
 Margeir peed in the.pants / in bottle  
 ‘Margeir peed his pants / into a bottle.’

We take *sig* in (20) to be inherently reflexive, nonetheless, as an animate being disjoint in reference with the subject is impossible.

<sup>6</sup> We thank an anonymous reviewer for bringing this up.

While (21b) suggests that Jón seldom shaves, (21a), on the other hand, does not suggest that the barber seldom shaves but rather that it is most frequently the case that he shaves his customers rather than himself. The use of *sjálfan* ‘self’<sup>7</sup> suggests that there are other people that could undergo shaving by the barber. That is, *sjálfan* suggests that the set of potential patients of the shaving event is larger than just the barber himself. We take this to be a general property of the intensifier *sjálfan* ‘self’ in Icelandic, and therefore the use of the complex reflexive *sjálfan sig* is incompatible with inherently reflexive verbs as well as naturally reflexive verbs, except in special contexts which bring out, e.g., contrastive focus.

However, even though *sjálfan sig* implies that the subject and the object could be disjoint in reference, it is not the case that the simplex reflexive pronoun *sig* implies necessarily that the subject and the object of the respective verb obligatorily co-refer (despite the fact that *sig* is obligatorily used with inherently reflexive verbs, for example). We will now look at various environments where *sig* is used without the verb requiring in general obligatory coreference. Some of these are well known, whereas others are not.

First of all, *sig* is used in long-distance binding.

- (22) Jón segir að María hafi svikið sig.  
 Jón says that María has.SBJV betrayed REFL.ACC  
 ‘Jón says that María has betrayed him.’

It has often been pointed out that *sjálfan sig* and *sig* differ with respect to binding domains (e.g., Faltz 1985): *sjálfan sig* needs a local antecedent whereas *sig* can be used in long-distance binding, even with naturally disjoint verbs.

The complex reflexive *sjálfan sig* is compatible with naturally disjoint verbs when the subject and the object co-refer but a special emphasis is not required. As the simplex reflexive is often considered impossible with naturally disjoint verbs in local binding it is interesting that it is, in fact, found in examples like B’s response below, where A and B discuss who to choose as the best composer of all time in an online survey:

- (23) A: Verðum við ekki að kjósa Mozart?  
 have.to we not to vote Mozart  
 ‘Don’t we have to vote for Mozart?’  
 B: Ja, ekki kýs hann sig sjálfur!  
 well not votes he.NOM REFL.ACC self.M.SG.NOM  
 ‘Well, he himself is not going to vote for himself!’

Here, the response is fitting with respect to the use of the intensifier which shows agreement in gender, number and case with the masculine, singular, nominative subject *hann* ‘he’. Given that Mozart died in 1791 he is not going to be able to vote for himself — or anyone else — in the survey. The fact that the intensifier is

<sup>7</sup> We refer to Icelandic ‘self’ as *sjálfan*. We use the (masculine, singular) accusative form, *sjálfan*, rather than the nominative *sjálfur* as it co-occurs with the accusative form *sig*. The (masculine, singular) nominative, dative and genitive forms are, however, *sjálfur*, *sjálfum* and *sjálfs*, respectively.

not used with the reflexive pronoun in (23) is surprising as *kjósa* ‘vote’ is clearly a naturally disjoint verb. Rather, as noted above, the intensifier *sjálfur* ‘self.M.SG.NOM’ is used with the subject pronoun *hann*, which it agrees with in gender, number and case.

The use of the intensifier in (23) with *hann* ‘he’ highlights the fact that Mozart cannot vote at all (even though a response as in (23) would not exclude the possibility that a living person could vote for someone else). If the answer would be as in (24), where *sjálfan* ‘self.ACC’ agrees with the reflexive, the interpretation where Mozart is able to vote but he would not vote for himself is more salient.

- (24) B’: Ja, ekki kýs hann sjálfan sig.  
 well not votes he.NOM self.ACC REFL.ACC  
 ‘Well, he is not going to vote for himself.’

A somewhat similar use as in (23) is found in the following attested examples:

- (25) a. Fiskurinn selur sig ekki sjálfur  
 the.fish.NOM sells REFL.ACC not self.NOM  
 ‘The fish doesn’t sell itself.’  
 (<https://www.mbl.is/greinasafn/grein/728704/>)
- b. Þessi arfi reitir sig ekki sjálfur!  
 this chickweed.NOM picks REFL.ACC not self.NOM  
 ‘This chickweed doesn’t pick itself up!’  
 (<https://www.facebook.com/vinnuskolihfj/videos/269995906541149/>)
- c. Garðurinn slær sig ekki sjálfur [...]  
 the.garden.NOM mows REFL.ACC not self.NOM  
 ‘The garden doesn’t mow itself.’  
 (<http://www.visir.is/g/2017170629087/ad-laesa-og-henda-lyklinum->)

In these examples, the agents of the events involved are untypical: Fish are not sellers, chickweed does not pick anything up and gardens do not mow. In these examples, it is more natural to have the intensifier agree with the subject (nom. *fiskurinn ... sjálfur*, *þessi arfi ... sjálfur*, *garðurinn ... sjálfur*) rather than with the reflexive (acc. *sjálfan sig*) as such use would give rise to an interpretation where, e.g., the fish is selling something else than itself.

This use of the intensifier seems to bring out its emphasizing or contrastive function; it is not the garden that is going to do the mowing but someone else (for a useful discussion on SELF as an intensifier, see König/Siemund 1999 and Bergeton 2004). Note also that the nominative case intensifier cannot be used with the subject of inherently reflexive verbs but it is fine with naturally reflexive verbs:

- (26) a. \*Hann missteig sig sjálfur.  
 he misstepped REFL.ACC self.NOM  
 Intended: ‘He himself misstepped.’

b.Hann rakaði sig sjálfur.  
 he shaved REFL.ACC self.NOM  
 ‘He himself shaved himself.’

We have discussed one interpretation of the use of the bare reflexive pronoun alongside the intensifier agreeing with the subject, as in (23) and (25), but we leave further research of this issue for the future.

Finally, a different type of environment is shown below where the naturally disjoint verb *elska* ‘love’ takes a simplex reflexive pronoun object. Note that we analyze *mig* ‘me’ as a 1st person reflexive pronoun in the example in (27), even though it is syncretic with the personal pronoun *ég* ‘I’ (*mig* in the accusative).

(27) Ég held að hann sé ástfanginn af mér. Ég get svosem  
 I think that he is in.love with me I can in.a.way  
 alveg skilið það sko, ég elska mig líka.  
 completely understand that DISC.PRT I love me too  
 ‘I think that he is in love with me. I can understand that, I too love  
 me/myself.’  
 (<http://tryggvienator.blogspot.is/2006/03/>)

The simplex pronoun *mig* ‘me’, coreferent with the subject, is more natural here rather than *sjálfan mig* ‘myself’, as the meaning is supposed to catch the fact that even the speaker himself loves him(self). In this particular context, the simplex reflexive is more appropriate than the complex reflexive pronoun, possibly because the context brings out a strict identity reading whereas a sentence like *Ég elska sjálfan mig líka* ‘I too love myself’ would be more fitting with a sloppy identity reading, as in ‘I think that he is in love with himself. I can understand that, I too love myself’.

The key point of the discussion above is that even with naturally disjoint verbs one can get the simplex version of the reflexive pronoun. That is, the reflexive pronoun of naturally disjoint verbs is sometimes spelled out the same as the reflexive pronoun of inherently reflexive verbs.

However, even though the reflexive pronoun of naturally reflexive verbs is sometimes realized as *sig*, it is never the case that the reflexive pronoun of inherently reflexive verbs (and of naturally reflexive verbs to a large degree) is realized as the complex reflexive pronoun *sjálfan sig*, as discussed in Section 2. In Section 5 we will argue that *sjálfan sig* is always a Strong Explicit Argument (SEA) whereas *sig* is sometimes a Weak Explicit Argument and sometimes a SEA. In the next section, however, we will look at the Reflexive Passive in Icelandic.

#### 4 The Reflexive Passive

Different types of reflexive pronouns play an important role in the Reflexive Passive (ReflPass) in Icelandic, see (28) for examples; this type of passive has a close resemblance to the so-called New Impersonal Passive (NIP), see (29) for examples.

- (28) a. Svo var bara drifið sig á ball.  
 then was just hurried REFL to dance  
 ‘Then there was hurrying to a dance.’
- b. Það var haldið sig innan dyra út af óveðrinu.  
 EXPL was kept REFL in doors due to the.bad.weather  
 ‘People just stayed indoors because of the bad weather.’
- c. Það var skoðað sig um á svæðinu.  
 EXPL was looked REFL around in the.area  
 ‘There was looking around in the area.’  
 (Maling/Sigurjónsdóttir 2002: 121)
- (29) a. Það var beðið mig að vaska upp.  
 EXPL was asked me.ACC to wash up  
 ‘I was asked to do the dishes.’
- b. Það var lamið stúlkuna í klessu.  
 EXPL was hit the.girl.ACC in a.mess  
 ‘The girl was badly beaten.’ (Maling/Sigurjónsdóttir 2002: 98, 112)

Both of these constructions involve a past participle selected by the verb *vera* ‘be’ and in neither is there an overt agent argument. These properties are reminiscent of the Canonical Passive. The argument that originates as an object cannot, however, move to subject position and there is no accusative-to-nominative conversion on arguments that are assigned structural accusative case in the active (we will, however, argue that despite appearances *sig* in examples like (28) is, in fact, a realization of nominative). The difference between the two constructions lies in part in that the reflexive pronoun and the implicit agent co-refer in the ReflPass whereas the DP object in the NIP and the implicit agent are usually disjoint in reference. Also, we take the ReflPass not to have a syntactically projected implicit argument (in SpecVoiceP) whereas we take the NIP to have a Weak Implicit Argument, a  $\phi$ P, in SpecVoiceP. We furthermore argue that the ReflPass grammar generates passive structures with inherently reflexive and naturally reflexive verbs, see (28), whereas only the NIP grammar can generate a passive structure with a reflexive pronoun object of a naturally disjoint verb, typically the complex reflexive pronoun *sjálfan sig*. In Section 5 we will frame this discussion around Weak Explicit Arguments and Strong Explicit Arguments, such that the ReflPass can generate passive structures with WEAs but only the NIP can generate passive structures with SEAs (whatever their realization is, as *sig* (or, e.g., *mig*) or *sjálfan sig* (or, e.g., *sjálfan mig*)).

Maling/Sigurjónsdóttir (2002) showed that the ReflPass is much more widely accepted than the NIP. Árnadóttir et al. (2011) also point out, using a database called Tímarit.is (<http://timarit.is/>), that the ReflPass is found in newspapers and journals at least as far back as the mid-19th century, which is earlier than the earliest reports of the NIP (see, e.g., Maling/Sigurjónsdóttir 2002 and E.F. Sigurðsson 2012 for discussion on the earliest attested examples of the NIP). We take these facts to corroborate our analysis described above, i.e., that there is an important structural difference between the NIP (with a  $\phi$ P in SpecVoiceP) and the ReflPass (without a projected implicit argument in SpecVoiceP).

In addition, Árnadóttir et al. (2011) report on results from a questionnaire (N = 772) in the Variation in Syntax project (PI Höskuldur Thráinsson) where the ReflPass was much more widely accepted across different age groups than the NIP. They contrast the following two examples:

- (30) a. Svo var drifið sig á ball.  
           then was hurried REFL to a.dance  
           ‘Then there was hurrying off to a dance.’
- b. Það var skammað mig fyrir letina.  
           EXPL was scolded me.ACC for the.laziness  
           ‘I was scolded for the laziness.’

As many as 46% of the speakers who were presented with these examples in the Variation in Syntax project accepted the ReflPass sentence in (30a), 15% found it questionable and 39% rejected it. On the other hand, only 14% accepted the NIP sentence in (30b), 10% found it questionable and 76% rejected it. Árnadóttir et al. do a further comparison of the two sentences which reveals that 375 speakers found the two sentences equally good/bad, based on the three choices speakers were given, *yes*, *?*, *no*. A total of 360 speakers seemed to find the ReflPass better whereas only 30 speakers found the NIP sentence to be better.

However, the complex reflexive pronoun is seldom found in a reflexive passive in Icelandic. Árnadóttir et al. (2011) report on the attested example in (31), and in addition the example in (32) was included in a questionnaire in the project Real Time Change in Icelandic Phonology and Syntax (REAL, PI Höskuldur Thráinsson), see also E.F. Sigurðsson (2017); the context sentence for (32) was *Á þingi er alltaf verið að gagnrýna aðra* ‘At the parliament, people are always criticizing others’:

- (31) [...] það er drepið sjálfan sig [...]  
           EXPL is killed self.ACC REFL  
           ‘There is taking of one’s life.’  
           (attested example, Árnadóttir et al. 2011: 48)
- (32) Þar er aldrei gagnrýnt sjálfan sig.  
           there is never criticized self.ACC REFL  
           ‘There is never criticizing of oneself there.’

In the REAL project, 26–28-year-old speakers filled out a questionnaire (N = 197); they had also participated about ten years earlier in Maling/Sigurjónsdóttir’s survey in 1999–2000. A substantial portion of the speakers who were presented with the sentence in (32), 35%, accepted it, a somewhat similar percentage as accepted NIP sentences in the same questionnaire in REAL (18% found (32) questionable and 47% rejected it). This was, however, a much lower percentage than accepted the ReflPass sentence (33) in the same survey, which contains an inherently reflexive structure.

- (33) Þá var bara haldið sig innandyrna.  
 then was just kept REFL indoors  
 ‘Then people just stayed indoors.’

70% of the speakers in the REAL questionnaire accepted the sentence in (33), 15% found it questionable and only 15% rejected it.

We take the difference in acceptability judgments between the passive of inherently or naturally reflexive verbs, on the one hand, and naturally disjoint verbs, on the other, to reflect a fundamental difference between the two types of verbs. In order to generate examples like (31) – (32), with *sjálfan sig*, a NIP grammar is needed whereas a ReflPass grammar can only generate examples like (28) and (30a). That is, only speakers who have the NIP grammar should accept the reflexive structures in (31) – (32) whereas a much larger percentage of speakers accept the ReflPass (that is, both NIP and ReflPass speakers).

In the next section, it becomes clear why we need to distinguish between the passive of inherently reflexive and naturally reflexive verbs (i.e., the ReflPass), on the one hand, and the passive of naturally disjoint verbs with a reflexive argument, on the other. The former, generated by a ReflPass grammar, licenses Weak Explicit Arguments, realized as *sig*. The latter, however, generated by a NIP grammar, licenses a Strong Explicit Argument, either realized as *sjálfan sig* or *sig*.

## 5 Weak and Strong Explicit Arguments

### 5.1 When *sig* is a Weak Explicit Argument

We argue that the simplex reflexive pronoun *sig* of inherently reflexive verbs, as well as the simplex reflexive pronoun of naturally reflexive verbs, is a Weak Explicit Argument (WEA) which has less structure than the *sig*-part of the complex reflexive pronoun *sjálfan sig*, a pronoun that is a Strong Explicit Argument (SEA). In particular, we argue that WEAs lack a D-layer, which is not lacking in the structure of SEAs. In the following, we will focus on the defective status of the WEA but in order to do that a comparison with the SEA is needed.

The first argument in favor of our analysis of certain instances of *sig* as WEAs (as opposed to SEAs) comes from secondary predication: A secondary predicate

cannot be predicated of inherently reflexive or naturally reflexive pronouns, i.e., WEAs, but only of reflexive pronouns that are SEAs.

We can draw the conclusion from the discussion in Sections 2 and 3 above that *sjálfan* ‘self’ creates a contrast of some sort and for that reason it is not surprising that it cannot be used with inherently reflexive verbs, as in *\*monta sjálfan sig* ‘boast’. There is, however, another potential reason for *sjálfan* being incompatible with *sig* of, e.g., inherently reflexive verbs: *Sig* is defective, lacking a D-feature, and for *sjálfan* to agree with it, a D-feature on *sig* is needed. We will not discuss the internal structure of *sjálfan sig* any further here, but it might be the case that *sjálfan* is predicated of *sig* as a secondary predicate; as Landau (2010) argues, a secondary predicate must be predicated of a DP.<sup>8</sup>

Since there are two potential reasons for the ungrammaticality that results in using the complex reflexive pronoun with inherently and naturally reflexive verbs, we need to take a look at (other) secondary predicates. As shown for the ReflPass below in (34) and (35), the simplex reflexive pronoun of inherently and naturally reflexive verbs, respectively, does not license secondary predicates.<sup>9</sup>

(34) Það var misstigið sig<sub>i</sub> (\*fullur<sub>i</sub> / \*fullan<sub>i</sub>).  
EXPL was misstepped REFL (\*drunk.NOM / \*drunk.ACC)  
‘Somebody boasted about something.’

(35) Það var rakað sig<sub>i</sub> (\*þreyttur<sub>i</sub> / \*þreyttan<sub>i</sub>).  
EXPL was shaved REFL (\*tired.NOM / \*tired.ACC)  
‘Somebody shaved.’

The same goes for the passive of Obligatory Reflexive Datives, see (36), and the simplex reflexive object pronouns of prepositions as in *pissa í sig* ‘pee one’s pants’, see (37).

<sup>8</sup> As an anonymous reviewer brings to our attention, Landau (2010: 379–380) argues that the SELF-part of English *himself* adjoins covertly to the main predicate, resulting in SELF functioning as a secondary predicate. Even though he does not discuss Icelandic specifically, taking *sjálfan* ‘self’ in Icelandic to be a secondary predicate might not be what Landau himself would propose; rather, for him, Icelandic might be somewhat like Dutch *zichzelf* (even though Dutch has SE before SELF, unlike Icelandic *sjálfan sig*) where *zich*, for Landau, is located in the specifier position of the complex reflexive pronoun.

<sup>9</sup> In the ReflPass examples in this section we show both a secondary predicate in the nominative and the accusative — the reason for showing that the nominative case is ungrammatical is twofold: First, if there is no syntactically projected external argument in the ReflPass, as we argue, a nominative case adjective cannot be predicated of an implicit subject. Second, we argue in Section 6 that the WEA *sig* in the ReflPass is in fact a realization of nominative case (even though it is normally, such as in the active, a realization of accusative case). It is therefore important to show that a nominative adjective cannot be predicated of a WEA in the ReflPass.

It should be noted, however, that we generally find the nominative on the secondary predicate, such as *fullur* ‘drunk’ or *þreyttur* ‘tired’ in (34) and (35), respectively, better than the accusative, such as *fullan* or *þreyttan*. We will not discuss potential reasons for this. It is important to note, however, that in corresponding active sentences, where *sig* is without a doubt in the accusative, a secondary predicate cannot be predicated of the WEA:

- (i) \*Jón rakaði sig þreyttan.  
Jón shaved REFL.ACC tired.ACC

- (36) Það var keypt sér<sub>i</sub> nýjan bíl (\*þreyttum<sub>i</sub>).  
 EXPL was bought REFL.DAT new.ACC car.ACC (\*tired.DAT)  
 ‘Somebody bought a new car for himself/herself.’
- (37) Það var pissað í sig<sub>i</sub> (\*fullan<sub>i</sub>).  
 EXPL was peed in REFL.ACC (\*drunk.ACC)  
 ‘Somebody peed his/her pants.’

This shows that the WEA *sig* does not license a secondary predicate. On the other hand, the SEA is compatible with a secondary predicate with naturally disjoint verbs, as shown in the following examples.<sup>10</sup>

- (38) Jón skammaði sjálfan sig<sub>i</sub> ?glaðan<sub>i</sub>.  
 Jón scolded self.ACC REFL.ACC ?glad.ACC  
 ‘Jón scolded himself and he was glad.’

This can also be shown for, e.g., the indirect object of the naturally disjoint verb *gefa* ‘give’. In (39), Heimir is a “playing coach” of a football team, that is, he is the coach and also a player of that team.

- (39) Heimir gaf sjálfum sér<sub>i</sub> tækifæri meiddum<sub>i</sub>.  
 Heimir gave self.DAT REFL.DAT chance injured.DAT  
 ‘Heimir, being injured, gave himself a chance to play.’

In this example, even though Heimir is injured (as a player), as the coach, he gives himself a chance to play the game. A secondary predicate is fine here, predicated of the indirect object, the SEA *sjálfum sér*. This can be contrasted with (36) above, where the indirect object, the WEA *sér*, does not license a secondary predicate.

Our analysis, following Landau (2010), is that a D-feature is required for licensing secondary predicates: It is found in the structure of SEA *sig* but not in the structure of WEA *sig*. In addition, the SEA *sig* can of course license the intensifier *sjálfan*, showing that *sig* does not lack the needed ingredient, which we argue is the D-layer.

Second, WEA *sig* is not subject to the Definiteness Effect (DE, Milsark 1977) unlike other pronouns. We argue that the Canonical Passive, just like the ReflPass, does not have any kind of a projected external argument (see also E.F. Sigurðsson 2017). As the DE applies to the highest argument in Icelandic (e.g., Preminger 2014: 221; E.F. Sigurðsson 2017: 395–396), the personal pronoun cannot stay in situ in the Canonical Passive, as shown in (40c) and cannot either move to a low subject position, see (40b); rather it must move to the subject position as shown in (40a):

<sup>10</sup> Even though we test secondary predicates predicated of WEAs using the ReflPass, we test secondary predicates predicated of SEAs using the active as the complex reflexive pronoun *sjálfan sig* does not frequently occur in passivization and should, according to our analysis, only be grammatical to NIP speakers.

- (40) a. **Hann** var rakaður.  
 he.NOM was shaved  
 ‘He was shaved (by someone else).’
- b. \*Það var **hann** rakaður.  
 EXPL was he.NOM shaved
- c. \*Það var rakaður **hann**.  
 EXPL was shaved he.NOM

The reflexive pronoun *sig* is different from other pronouns as it stays in situ in (41) and cannot move to a subject position. That is, even though *sig* is the highest phrase, (41c) does not result in DE violation.<sup>11</sup>

- (41) a. \***Sig** var rakað.  
 REFL was shaved
- b. \*Það var **sig** rakað.  
 EXPL was REFL shaved
- c. Það var rakað **sig**.  
 EXPL was shaved REFL  
 ‘Somebody shaved.’

We argue that the DE applies to phrases with a D-layer but not to D-less  $\phi$ Ps.

The third argument for *sig* being a WEA has to do with Binding Principle A: An anaphor must be bound in its governing category (Chomsky 1981). That is, an anaphor must have a syntactic antecedent. On our analysis, however, there is no syntactic antecedent of the reflexive pronoun in the ReflPass. We take this to show that Binding Principle A applies to DPs whereas reflexive  $\phi$ Ps can, but need not, have syntactic antecedents. When Existential Closure applies in the ReflPass, both the internal argument and the unprojected external argument are bound by the same operator, ensuring identity between the two. In such a case, the two co-refer even though there is no syntactic antecedent of the reflexive pronoun.

Fourth and finally, we consider the features associated with the defective *sig* in search for a missing feature. When the anaphor has a 3rd person antecedent, the anaphor is always spelled out *sig/sér/sín*, regardless of the number or gender of the antecedent.

<sup>11</sup> It is not the case, however, that *sig* cannot A-move at all — it must move in object shift environments, see (i) below. We take object shift to be an instance of A-movement (see Broekhuis 2007 and references cited there):

- (i) a. Jón rakaði sig ekki.  
 Jón shaved REFL.ACC not  
 ‘Jón did not shave.’
- b. \*Jón rakaði ekki sig.  
 Jón shaved not REFL.ACC  
 Intended: ‘Jón did not shave.’

For further discussion, see Jónsson (2011: 107).

- (42) a. Hann      montaði sig.  
           he.NOM   boasted   REFL.ACC  
           ‘He boasted (about something).’
- b. Þær            montuðu sig.  
           they.F.NOM   boasted   REFL.ACC  
           ‘They boasted (about something).’

In contrast, if the antecedent is, e.g., 1st person singular, then the anaphor is spelled out with 1st person singular features. Similarly, if the antecedent is 2nd person plural, then the features on the anaphor are 2nd person plural.

- (43) a. Ég            montaði mig.  
           I.NOM      boasted   me.ACC  
           ‘I boasted (about something).’
- b. Þið            montuðuð ykkur.  
           you.NOM.PL   boasted   you.ACC.PL  
           ‘You (pl.) boasted (about something).’

This shows that whatever feature is missing in the structure of WEAs, it is neither person nor number. We argue that what is missing is D, even though it could also be gender. What is important is that WEAs are deficient and the feature that is missing is responsible for various differences between WEAs and SEAs (as SEAs are not deficient). Following Landau (2010), who has argued that D is needed for secondary predication, we propose that the D-feature is only found on SEAs and not WEAs.

## 5.2 *Sig* is sometimes a Strong Explicit Argument

In the previous subsection, we provided evidence that *sig* is a Weak Explicit Argument (WEA). Importantly, however, this applies only to the reflexive pronoun of inherently reflexive and naturally reflexive verbs. As already shown in Section 3, there are instances of *sig* occurring without the intensifier, even when it is the object of naturally disjoint verbs. In this subsection, we examine the evidence for *sig* being a Strong Explicit Argument (SEA).

First, in long-distance binding, the intensifier can generally not show agreement with the reflexive pronoun *sig*. The following example is therefore ambiguous between the local Reflexive Passive (RefIPass) and long-distance binding which presumably can only be generated by a New Impersonal Passive (NIP) grammar (example (44) is repeated in Section 6 as (56); see discussion there as well).

- (44) Jón   segir   að   það   hafí   verið   rakað   sig.  
       Jón   says   that   EXPL   has   been   shaved   REFL  
       ‘Jón says somebody shaved him.’      (NIP)  
       ‘Jón says somebody shaved.’           (RefIPass)

That is, for a NIP speaker this sentence can mean that someone shaved Jón, where *Jón* is the antecedent of *sig* (long-distance binding), whereas a non-NIP speaker who has the ReflPass grammar can only interpret this sentence as Jón reporting on someone shaving (himself/herself), i.e., some *x* shaving *x* (but not anyone else). Here we take *sig* in the ReflPass reading to be a WEA but a SEA on the NIP reading; the reason why a non-NIP speaker would not be able to generate (44) on the NIP reading is that *sig* is a DP (SEA) rather than a  $\phi$ P (WEA), exactly like *mig* is a DP in the following sentence:

- (45) Það var rakað mig.  
EXPL was shaved me.ACC  
'I was shaved.'

Second, *sig* is a SEA in an Exceptional Case Marking (ECM) environment, such as in (46):

- (46) Jón telur sig vera skemmtilegan.  
Jón considers REFL.ACC be funny.ACC  
'Jón considers himself to be funny.'

Here it is much more natural to use the reflexive pronoun without the intensifier *sjálfan* although it is possible to use *sjálfan sig* in a contrastive environment, as in (47):

- (47) Jón telur sjálfan sig vera skemmtilegan en  
Jón considers self.ACC REFL.ACC be funny.ACC but  
bróður sinn ekki.  
brother.ACC his.REFL.ACC not  
'Jón considers himself to be funny but he does not consider his brother to be funny.'

The fact that *skemmtilegan* 'funny' (accusative of *skemmtilegur*) in (46) can be predicated of the reflexive pronoun shows that *sig* is a SEA but not a WEA; that is, *sig* licenses the (primary) predicate in (46) which results in the predicate agreeing with *sig* in number, gender and case. This is possible only because the reflexive, even though it is lacking the intensifier, has a D-layer.

The third instance of bare *sig* being a SEA rather than a WEA is found in resultatives.

- (48) Jón hló sig / \*sjálfan sig / \*Egil  
Jón laughed REFL.ACC / \*self.ACC REFL.ACC / \*Egill.ACC  
máttlausan.  
senseless.ACC  
'Jón laughed himself senseless.'

Here it is ungrammatical to use the intensifier *sjálfan*, as well as a referential DP object that does not co-refer with the subject.<sup>12</sup> Importantly, even though this is an inherently reflexive structure in some sense, the predicate can agree in number, gender and case with the reflexive, suggesting that *sig* in (48) has more structure than *sig* of inherently and naturally reflexive verbs.

Fourth, SEA *sig* is found in structures like the following, both with adjectives as in (49a) and floating quantifiers as in (49b):

- (49) a. *María gerði sig klára.*  
 María made REFL.ACC ready.ACC  
 ‘María made herself ready.’
- b. *Jón lagði sig alltaf allan fram.*  
 Jón laid REFL.ACC always all.ACC forward  
 ‘Jón always did his best.’

Unlike the resultative construction in (48), (49a) is not obligatorily reflexive. Nevertheless, *sig* is used, although *sjálfa sig*, with contrastive focus, would be possible in (49a). (49b) is, on the other hand, obligatorily reflexive but the quantifier can, nonetheless, agree with the reflexive. We leave further research on the syntax of these structures for the future.

As already evident, various examples in this subsection, as well as in Section 3, of *sig* without the intensifier *sjálfan* are SEAs. In Section 5.1, on other hand, we gave evidence for *sig* being a WEA. This means that what looks like the same reflexive pronoun on the surface can have two different structures: with and without a D-layer. Note, however, that the reflexive has a D-layer whenever the intensifier *sjálfan* modifies *sig*.

## 6 Analysis: Binding and case in the ReflPass

In this section, we give an analysis of binding and case in the Reflexive Passive (ReflPass). The distinction between WEAs and SEAs is crucial for the analysis. We argue for the ReflPass, where the reflexive pronoun is a WEA *sig*, that there is no syntactically projected antecedent. This does not violate Binding Principle A, as discussed above, if it applies only to DPs but not D-less  $\phi$ -bundles.

The analysis of the ReflPass crucially has to differ from the analysis of the NIP: as we have already mentioned, a ReflPass grammar does not generate NIP sentences. We follow Legate (2014) who argues for a Weak Implicit Argument (WIA) projected in SpecVoiceP in the NIP — our WEA is the explicit counterpart of a WIA: both are D-less  $\phi$ -bundles. In the ReflPass, however, there is no implicit  $\phi$ P in SpecVoiceP. By contrast, there is an explicit D-less  $\phi$ P in the ReflPass, namely *sig*.

<sup>12</sup> We will not go into any speculation why there is a difference between Icelandic and English in this respect; in English, unlike Icelandic, it is possible to say *John laughed Bill senseless* as a reviewer reminds us.

6.1 Semantic binding in the ReflPass

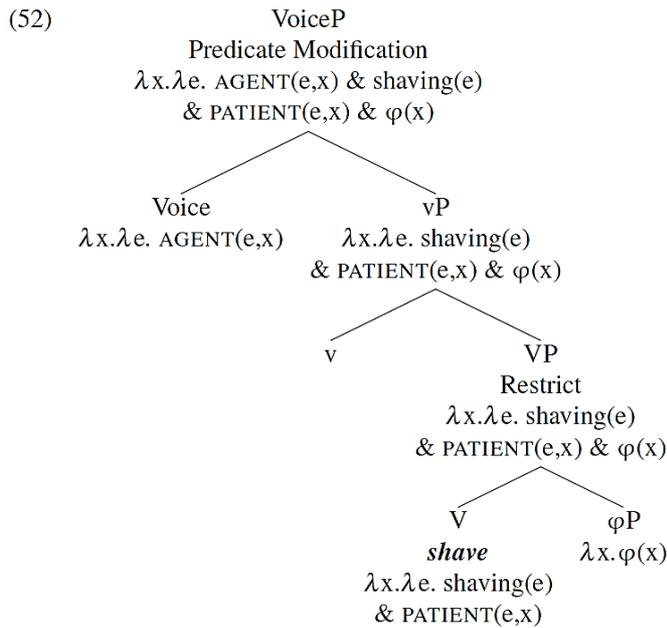
The ReflPass has semantically an understood agent which is not syntactically projected. The reflexive pronoun in the ReflPass therefore does not have a syntactic antecedent. We propose, however, that reflexivity of WEA *sig* in the passive only requires semantic binding, as we will now see.<sup>13</sup>

We follow Legate (2014), who proposes for the New Impersonal Passive (NIP) that a Weak Implicit Argument (WIA;  $\varphi$ P) of the type  $\langle e, t \rangle$  can restrict an argument position but cannot saturate it (cf. Chung/Ladusaw 2004).

- (50) Restrict  
 If a is of type  $\langle e, st \rangle$  and b is of type  $\langle e, t \rangle$ ,  
 $[[a\ b]] = \lambda x. \lambda e. [[a]](e, x) \ \& \ [[b]](x)$ . (Legate 2014: 39)

As WEAs are explicit counterparts of WIAs, we apply this to WEA *sig*, as in (51); the derivation is shown in (52).

- (51) Það var rakað sig.  
 EXPL was shaved REFL  
 ‘Somebody shaved.’



<sup>13</sup> For an alternative account of the binding and case facts in the ReflPass, see Schäfer (2012).

We assume for (52) that a  $\phi$ P object (of type  $\langle e, t \rangle$ ) combines with the naturally reflexive verb *raka* ‘shave’ (of type  $\langle e, st \rangle$ ) via Restrict, resulting in a VP of type  $\langle e, st \rangle$ .<sup>14</sup> Existential Closure at VoiceP, see (53), closes over not only the agent but also the patient variable. That is, there is some  $x$  such that both the agent and the patient apply to  $x$ .

(53)  $[[\text{VoiceP}]] = \lambda e. \exists x [\text{AGENT}(e, x) \ \& \ \text{shaving}(e) \ \& \ \text{PATIENT}(e, x) \ \& \ \phi(x)]$

When the agent is existentially closed over, the existential also quantifies over the reflexive pronoun which occupies the object position (and restricts it to human (or animate) participants). Because the reflexive does not saturate the object position, Existential Closure will ensure identity between the agent and the patient (*sig*).

## 6.2 Case

If *sig* in the ReflPass does not have a syntactic antecedent, an obvious question that arises relates to case: How is accusative case assigned to the reflexive pronoun in the absence of a subject that is assigned a thematic role (Burzio 1986: 178) or nominative case (e.g., Yip et al. 1987; Marantz 1991; Sigurðsson 2003)?

It is generally assumed that the reflexive pronoun *sig* does not have any nominative form. We propose, however, that the accusative reflexive morphology has been extended to the nominative for Weak Explicit Arguments. Despite appearances, WEA *sig* (which we will refer to as *sig*<sub>weak</sub> or REFL<sub>weak</sub>, as opposed to *sig*<sub>strong</sub> or REFL<sub>strong</sub> which is the realization of a SEA) really is a nominative reflexive. That is, *sig*<sub>weak</sub> is extended from ACC to fill the NOM gap in the morphology.<sup>15</sup> This is shown in Table 1.

<sup>14</sup> As a reviewer points out, the interpretation of  $\phi$ -features is much more nuanced than our semantics spells out. For example,  $\phi$ -features are commonly thought to yield presuppositions rather than assertions and there must be some mechanism that allows some gender features to be interpreted while others only seem to affect PF realization of inflectional morphology. In our case, the  $\phi$ P denotation can be thought of as a shorthand for a more elaborate implementation; this could be expanded along the lines of a conjunct whose assertive component yields vacuous interpretation, whereas the actual meaning contribution of the node is presuppositional. We are not deeply committed to a particular set of implementation details to achieve this result. See, for example, Heim/Kratzer (1998) for the idea that gender is presuppositional and Percus (2011) for a more detailed pursuit of such an analysis. See Kramer (2009, 2014, 2015) for a thorough examination of the distribution of interpreted vs. uninterpreted gender on nouns.

<sup>15</sup> An anonymous reviewer asks why *sig*<sub>weak</sub> is ungrammatical on nominative objects of dative-nominative verbs such as *lika* ‘like’, as in (i) below, if it is really a realization of nominative case.

- (i) Henni<sub>i</sub> líkaði hún<sub>i</sub> (sjálf) / \*sig<sub>i</sub> í þessum kjól.  
 her.DAT liked she.NOM (self.NOM) / \*REFL in this dress  
 ‘She liked herself in this dress.’

We believe that the reason for this is that *lika* ‘like’ is a naturally disjoint verb; the nominative object *hún* (*sjálf*) in (i) above is not *sig*<sub>weak</sub> but rather *sig*<sub>strong</sub>. It should also be noted in this regard that Jónsson

	REFLstrong	REFLweak
nom	hann ← from [+D] pronoun ‘he’ hún ← from [+D] pronoun ‘she’ það ← from [+D] pronoun ‘it’ þeir ← from [+D] pronoun ‘they (M)’ þær ← from [+D] pronoun ‘they (F)’ þau ← from [+D] pronoun ‘they (N)’	sig ← from ACC
acc	sig	sig
dat	sér	sér
gen	sín	sín

Table 1: Strong and weak reflexive forms in Icelandic

Note that in the nominative, REFL<sub>strong</sub> contrasts with REFL<sub>weak</sub>, as seen in long-distance binding where the nominative REFL<sub>strong</sub> is realized with the form of a personal pronoun (which is *hann* ‘he’ in the masculine singular, *hún* ‘she’ in the feminine singular, *það* ‘it’ in the neuter singular, *þeir* ‘they’ in the masculine plural, *þær* ‘they’ in the feminine plural and *þau* ‘they’ in the neuter plural), as shown in (54). As indicated in Table 1, we assume that the nominative pronoun, which also contains a D-feature, has been adopted to fill a gap in the strong reflexive paradigm.

- (54) María<sub>i</sub> segir að hún<sub>i</sub> fari.  
 María says that she.NOM/REFL.NOM<sub>strong</sub> leave.SBJV  
 ‘María says that she will leave.’

As shown in the glosses of (54), *hún* is ambiguous between the personal pronoun *hún* and REFL<sub>strong</sub>. In the accusative, however, the personal pronoun ‘she’ and REFL<sub>strong</sub> have different realizations, *hana* and *sig*, respectively, as shown in (55) (note that *kitla* ‘tickle’ takes a subject in the accusative case).

- (55) María<sub>i</sub> segir að hana<sub>i</sub>/sig<sub>i</sub> kitli.  
 María says that her.ACC/REFL.ACC<sub>strong</sub> tickle.SBJV  
 ‘María says that she tickles.’

There is a lot of intra-speaker and inter-speaker variation in environments where long-distance binding can apply, such that both *hana* and *sig* are grammatical for many speakers. We only take the use of the reflexive *sig* in (55) to be an instance of long-distance binding, however. We noted above that *hún* in (54) is ambiguous between a personal pronoun and a reflexive pronoun. However, for speakers who can only use the reflexive pronoun *sig* in (55), *hún* should necessarily be a realization of REFL<sub>strong</sub> in (54).

(2011: 101) points out that reflexive verbs (i.e., inherently and naturally reflexive verbs) never take oblique subjects in Icelandic.

We show another example of long-distance binding in (56) (repeated from (44) above), that is, when *Jón* and *sig* are co-indexed. This is a case of the New Impersonal Passive (NIP) as only NIP speakers accept this — here *sig* is strong and in the accusative. When *Jón* and *sig* are not co-indexed, we have an example of ReflPass — *sig* is weak ( $\phi$ P) and in the nominative.

- (56) *Jón*<sub>i</sub> segir að það hafi verið rakað *sig*<sub>i</sub> /  
*Jón* says that EXPL has been shaved REFL.ACC<sub>strong</sub> /  
*sig*<sub>i</sub>.  
 REFL.NOM<sub>weak</sub>  
 ‘*Jón* says somebody shaved him.’ (NIP)  
 ‘*Jón* says somebody shaved.’ (ReflPass)

Note that in the NIP reading of (56) (long-distance binding), accusative case is licensed on the patient. In analyses like Maling/Sigurjónsdóttir (2002) and subsequent work which we follow (e.g., Legate 2014), it is assumed that a silent pronoun of some kind is present in the subject position in the NIP. If the silent pronoun is assigned nominative case (as suggested in E.F. Sigurðsson 2017), accusative case on the object in the NIP is expected.

## 7 Conclusion

If the analysis of reflexive pronouns in Icelandic is on the right track, there should be a difference between simplex and complex reflexive pronouns of naturally reflexive verbs. For our analysis, it is crucial that the structure of WEAs is more restricted than the structure of SEAs. We have argued that it is the D-layer that is missing in the structure of WEAs. However, this needs further inspection; as mentioned in Section 5.1 above and discussed in E.F. Sigurðsson (2017), it might be that what WEA *sig* is missing is not D but rather gender. In our formal account, however, the WEA consists of a  $\phi$ P but is lacking D.

This line of investigation may have cross-linguistic consequences because reflexive passives are for example found in German (e.g., Schäfer 2012; Alexiadou et al. 2015). Our account predicts that inherently and naturally reflexive *sich* in German are WEAs, whereas *sich* would be a SEA when it is the object of a naturally disjoint verb. Cardinaletti/Starke (1996) actually argue that inherently reflexive *sich* is a deficient/weak pronoun, which may translate into our account as a WEA.

Reflexive passives are only found in a subset of languages that have impersonal passives. While reflexive passives appear in German and Icelandic, they are not attested in, e.g., Dutch and Norwegian.<sup>16</sup> Our account opens up the possibility that the typological difference is explained if reflexive pronouns always have a

<sup>16</sup> Schäfer (2012) uses Default Agreement to derive reflexive passives. He proposes that this mechanism is only available in some languages, such as German and Icelandic, but not Dutch and Norwegian.

D-feature in Dutch and Norwegian. Future work should include a comparison of how our proposal relates to the weak/strong distinction in Cardinaletti/Starke's work and also Déchaine/Wiltschko's (2002, 2012) three-way distinction of pronouns (DPs, NPs,  $\phi$ Ps) and their five distinct types of reflexive forms.

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