Chapter 21

Binding

The Morphology, Syntax, and Semantics of Reflexive and Nonreflexive Pronouns

Vera Lee-Schoenfeld

21.1 Introduction

This chapter discusses the occurrence of anaphoric elements, that is, reflexive and nonreflexive pronouns, in particular, their syntactic distribution, their morphological structure, and how they get their reference (their semantics). While the main goal is to give a descriptive overview, I will also mention and roughly explain two landmark theories proposed to account for the distribution of reflexive and nonreflexive pronouns: Chomsky's (1981, 1986) classic Binding Theory and Reinhart and Reuland's (1993) "Reflexivity" approach. Section 21.2 covers anaphoric elements in English and German, more specifically, the basic complementarity of reflexive and nonreflexive pronouns (21.2.1), how Chomsky (1981, 1986) accounts for the facts (21.2.2), and how certain instances of non-complementarity, including logophoric uses of reflexive pronouns, are best accounted for in Reinhart and Reuland's (1993) system (21.2.3). Section 21.3 covers anaphoric elements going beyond English and German, focusing on so-called SELF versus SE anaphors and, where applicable, also on possessive reflexives in Dutch (21.3.1), Norwegian, Danish, and Swedish (21.3.2), and in Icelandic (21.3.3). Section 21.4 concludes the chapter.

21.2 Anaphoric Elements in English and German

I start this overview with some basic observations about anaphoric elements in English and German because (i) I assume that English is the language that most readers have in common and (ii) the distribution of anaphoric elements in German is very similar to that in English. This latter point is noteworthy because, morphologically, the German reflexive pronoun *sich* looks much more like the Dutch reflexive *zich* than the English *self-*anaphors (*himself, herself, themselves*, etc.). Despite this superficial

Number	Person	Nonreflexive (NOM / ACC)	Reflexive (ACC / DAT)	Possessive
Singular	1.	I / me	myself	my
Ü	2.	you	yourself	your
	MASC	he / him	himself	ĥis
	FEM	she / her	herself	her
	NEUT	it	itself	its
Plural	1.	we / us	ourselves	our
	2.	you	yourselves	your
	3.	they / them	themselves	their

Table 21.1 Anaphoric elements of English¹

Table 21.2 Anaphoric elements of German

Number	Person	Nonreflexive (NOM / ACC / DAT)	Reflexive (ACC / DAT)	Possessive
Singular	1. 2. 3. MASC FEM NEUT	ich / mich / mir du / dich / dir er / ihn / ihm sie / sie / ihr es / es / ihm wir / uns / uns	mich / mir dich / dir sich uns / uns	mein dein sein ihr sein unser
- Iuiui	2. 3.	ihr / euch / euch sie / sie / ihnen	euch / euch sich	euer ihr

similarity between German and Dutch, we will see that German patterns more like English than Dutch when it comes to the kinds of anaphoric elements it has and the way they are distributed. The tables above list the reflexive and nonreflexive pronouns of English and German, respectively.²

Note that, in both languages, possessives can be used reflexively or nonreflexively. There are no special reflexive possessive pronoun forms. Furthermore, the German third person singular and plural reflexive is invariant – it is not inflected for case, number, or gender.

21.2.1 Basic Complementarity

As Safir (2004) explains in his introductory chapter of *The Syntax of Anaphora*, any theory of syntactically conditioned anaphora must capture the complementary distribution of reflexive and nonreflexive pronouns shown in (1) and (2).³

¹ I use the term "anaphoric elements" to include both reflexive and nonreflexive pronouns although the latter do not require an antecedent in the sentence.

^{2 &}quot;NOM / ACC / DAT" stands for nominative, accusative, and dative case, and "MASC / FEM / NEUT" for the grammatical genders masculine, feminine, and neuter. In Table 21.2, the German formal second person singular is not included, and the possessive pronouns are given without case inflection.

³ The examples in (1), (2), and (3) are adapted from Safir (2004: 9), his examples (3), (4), and (5).

- (1) a. The men_i praised themselves_i.
 - b. *The men; expected that themselves; would win.
- (2) a. *The men_i praised them_i.
 - b. The men_i expected that they_i would win.

Notice that the English reflexive pronouns in (1), the so-called "SELF anaphors" (Reinhart and Reuland 1993), must have an antecedent (coindexed nominal) "nearby", whereas the nonreflexive pronouns in (2) may not have an antecedent "nearby." What exactly is meant by "nearby" will be specified in Section 21.2.2. For now, let us say that it stands for "in their clause." Notice also that the SELF anaphor in (1b) has no way of being grammatical, but the pronoun in (2a) is grammatical as long as it does not refer to the subject of its clause *the men*, that is, as long as it is not coindexed with this nominal. This is shown in (3), where *them* refers to some plural entity not mentioned in the sentence.

(3) The men_i praised them_i.

In other words, while the SELF anaphors in the data thus far cannot be used grammatically **without** an antecedent in their clause, the pronouns cannot be used grammatically **with** an antecedent in their clause. And, unlike SELF anaphors, pronouns do not need an antecedent in the sentence at all.

These generalizations can also be made about German reflexive and non-reflexive pronouns. Though their morphology differs, their syntactic distribution in examples corresponding to (1), (2), and (3) is the same as in English. While English reflexive pronouns consist of pronoun + *self (myself, yourself, himself, herself, etc.)*, German reflexive pronouns are identical in form to non-reflexive pronouns (*mich/mir* 'me', *dich/dir* 'you', *uns* 'us', *euch* 'you') except in the third person singular and plural, where the reflexive is simply *sich*. Note that, while English SELF anaphors serve as both reflexive pronouns (as in (1)) and intensifiers (as in *The chancellor herself did it*), the German reflexive *sich* cannot be used as an intensifier (see, e.g., Bergeton 2004 and Gast 2006). The German equivalents to (1), (2), and (3) are given here as (4), (5), and (6).⁴

- (4) a. Die Männer_i lobten sich_i. (German) the men praised self 'The men praised themselves.'
 - b. *Die M\u00e4nneri erwarteten, dass sichi gewinnen w\u00fcrden. (German) the men expected that self win would '*The men expected that themselves would win.'
- (5) a. *Die Männer $_i$ lobten sie $_i$. (German) the men praised them '*The men $_i$ praised them $_i$.'

⁴ Unless otherwise noted, the German examples provided in this chapter are my own, based on my judgments as a native speaker and on my previous work on binding (see references in footnote 9).

- b. Die Männer_i erwarteten, dass sie_i gewinnen würden. (German) the men expected that they win would 'The men_i expected that they_i would win.'
- (6) Die Männer_i lobten sie_j. (German) the men praised them 'The men_i praised them_i.'

Unlike the other Germanic languages to be discussed in this chapter, English and German have no more than these two types of anaphoric elements. In English, there are only SELF anaphors normally needing a local antecedent and pronouns not allowing a local antecedent. And correspondingly in German, there are only the elements *sich*, needing a local antecedent, and nonreflexive pronouns, not allowing a local antecedent. Neither language has possessive reflexive pronouns or so-called "long-distance" reflexives that are morphologically distinct from the "normal" reflexive and nonreflexive pronouns. Instances of noncomplementarity, i.e., contexts in which either a reflexive or nonreflexive pronoun can be used grammatically, which complicate the picture presented thus far for English and German quite a bit, will be discussed in Section 21.2.3.

21.2.2 A Brief Overview of Chomsky's (1981, 1986) Binding Theory

The complementary distribution shown in the data thus far is captured by the classic Chomskyan Binding Theory, briefly summarized here. The occurrence of reflexive pronouns ("anaphors" in Chomsky's terminology) is restricted by Condition (or Principle) A, and the occurrence of nonreflexive pronouns ("pronominals" in Chomsky's terminology) is restricted by Condition (or Principle) B.⁵

(7) Condition A: An anaphor must be bound in Domain D. Condition B: A pronominal must be free in Domain D.

Domain D stands for some structurally local domain, for example, the clause containing the anaphoric element, as tentatively suggested in Section 21.2.1. Instead of saying that a reflexive must have an antecedent in this local domain, and a nonreflexive may not, Conditions A and B use the terms "bound" and "free", respectively. Being "bound" means being coindexed with and c-commanded by another nominal, and not being bound means being free. Let us walk through these definitions with the help of examples.⁶

- (8) a. John_i loves himself_i.
 - b. *John_i's mother loves himself_i.

 $^{^{5}\,}$ The wording of the binding conditions here is adapted from Safir (2004: 9), his (7) and (8).

⁶ Examples (8) and (9) are adapted from Zwart (2002: 270), his (4) and (5).

- (9) a. *John; loves him;.
 - b. John_i's mother loves him_i.

The reflexive in (8a) is used grammatically because it is coindexed with *John* and, crucially, it is c-commanded by *John*. Informally stated, a node in a syntactic tree structure c-commands its sister and everything its sister dominates. In other words, from the subject position of the sentence, the nominal *John* in the (a)-examples c-commands the predicate *loves himself / him*, which contains the anaphoric element. This causes the reflexive in (8a) to be bound in Domain D, satisfying Condition A. It also causes the nonreflexive in (9a) to be bound in Domain D, violating Condition B, because, if it is bound, it is not free. On the other hand, looking at the (b)-examples, from the possessor position within the subject *John's mother, John* is too deeply embedded to c-command the predicate. The subject as a whole does c-command the predicate, but the possessor phrase within the subject does not. This causes the reflexive in (8b) not to be bound in Domain D, violating Condition A. It also causes the nonreflexive in (9b) not to be bound, satisfying Condition B, because it is now free.

Since there are binding domains that are smaller than the full-blown clause containing the anaphoric element (e.g., reduced infinitive clauses, complex nominal expressions, and certain prepositional phrases, see, e.g., Lee-Schoenfeld 2004 and 2007), and the subject position of certain infinitive clauses counts as part of the higher clause, the definition of Domain D is complicated and has undergone many revisions in the Government and Binding phase of mainstream generative syntax. We will return to this issue when needed in the following sections.

21.2.3 Noncomplementarity: Reflexive Pronouns Exempt from the Binding Theory?

Notice that examples like those in (10), with English SELF anaphors that are used grammatically without an antecedent, seem to be a blatant violation of the need for reflexives to have a local antecedent (Condition A).

- (10) a. They nominated Dr. Miller, Dr. Smith, Dr. Jones, and myself.
 - b. There were five tourists in the room besides myself.

(Reinhart and Reuland 1993: 669)

c. Max boasted that the queen invited Lucie and himself for a drink. (Reinhart and Reuland 1993: 670)

In (10a) and (b), *myself* has no antecedent in the sentence at all, and in (c), *himself* has *Max* as its antecedent, but *Max* is in a higher clause than *himself* and therefore not a local binder. Reflexive pronouns in these contexts have been analyzed as exempt anaphors or logophors (see, e.g., Pollard and Sag 1992, Reinhart and Reuland 1993, and a very helpful overview in Büring 2005). Pollard and Sag (1992) suggest that first pronoun reflexives do not

need a linguistic antecedent because the speaker is necessarily a designated participant. Interestingly, the reflexive in all three of these examples can be replaced by the corresponding nonreflexive pronoun, me in (10a–10b) and him in (10c). The use of me instead of myself changes the utterances to sound less formal, so in these instances, it seems that the motivation for the use of the SELF anaphor could be the avoidance of the potentially impolite use of me. This is somewhat similar to people's use of the subject form of the first person singular pronoun, I, instead of the object form, me, to sound more polite or educated, even when the pronoun occurs in an object position (e.g., in utterances like That is between you and I). In (10c), however, the SELF anaphor is the third person singular himself and is therefore less likely to be an exception motivated by politeness or hypercorrection. In addition, as we will see in Section 21.3, the Dutch equivalent of (10b) also has a reflexive pronoun as the complement to the preposition besides. This suggests that there is a pattern here that needs to be accounted for by something other than hypercorrection, and this brings us back to the analysis of these unbound or nonlocally bound reflexives as logophors.

Unlike in Chomsky's Binding Theory, logophoric use of SELF anaphors is not a violation of the binding conditions in Reinhart and Reuland's (1993) system because their Condition A only applies to reflexives that are "direct" arguments of a predicate. Their abbreviated version of Conditions A and B and crucial definitions are given in (11).

(11) Condition A: A reflexive-marked predicate is reflexive. Condition B: A reflexive predicate is reflexive-marked.

A predicate is **reflexive** if two of its arguments are coindexed. A predicate is **reflexive-marked** if either it is lexically reflexive or one of its arguments is a SELF anaphor.

Reinhart and Reuland (1993: 670-671)

In (10a) and (10c), the anaphor is not an argument of the predicate (nominated and invited, respectively) – it is only one of the conjuncts of the coordinated argument (Dr. Miller, Dr. Smith, Dr. Jones, and myself in (12a) and Lucie and himself in (12b)) – and therefore does not reflexive-mark the predicate, which in turn means that Condition A does not apply to it or restrict its occurrence.

The fact that not only the reflexive but also the corresponding nonreflexive pronouns are grammatical in (10) means that we are dealing with instances of noncomplementarity. The examples are repeated here with both the reflexive and the nonreflexive pronoun options in (12).

- (12) a. They nominated Dr. Miller, Dr. Smith, Dr. Jones, and myself/me.
 - b. There were five tourists in the room besides myself/me.
 - c. Max_i boasted that the queen invited Lucie and himself_i/him_i for a drink.

Because the bound reflexive in (12c) behaves like a nonreflexive pronoun in that it does not have a local antecedent, it can also be thought of as a "long-distance" reflexive, especially when it comes to similar data from Germanic languages other than English.⁷ We will return to this point in Section 21.3.

Other instances of non-complementarity discussed in the literature involve so-called "picture NPs" (13a–13b) and prepositional phrases (PPs) that are thematically independent from the verb or noun they modify (13c).

- (13) a. Lucie_i saw a picture of herself_i/her_i.
 - b. Max_i likes jokes about himself_i/him_i.
 - c. Max_i saw a gun near himself_i/him_i.

(Reinhart and Reuland 1993: 661)

The nominal in (13a), which is literally a "picture NP", has the potential to describe a situation including participants like agent (external argument, e.g., the person having taken the picture) and patient (internal argument, e.g., the person being depicted), so that they can resemble a whole clause consisting of subject and predicate. Similarly, the noun *jokes* in (13b) potentially describes a situation involving someone who is telling jokes about someone else, as in *people's jokes about Max*, which has the same core lexical meaning as the clause *People tell jokes about Max*. Finally, the PP *near himself / him* in (13c) is selected by neither the verb *see* nor the noun *gun*, which means that the object of the preposition is not thematically dependent on the verb or noun preceding it. The P *near* assigns its own thematic role to its complement regardless of the head it modifies. Though inherently subject-less (i.e., necessarily lacking an external argument), this kind of PP is similar to the nominals in (12a) and (12b), then, in that it has fully fleshed-out argument structure (see Hestvik 1991).⁸

Chomsky's (1986) solution to the apparent violations of Condition B in (13a–13c) – the nonreflexive pronouns seem to be in the same local domain as their binder – was to propose that nominals with a potential possessor

In the case of (13b), it can be argued more straightforwardly that *jokes* allows for a null possessor, i.e., an implicit external argument, because there is no overt D indicating indefiniteness (the jokes could be somebody's, meaning they could be told by somebody).

⁷ See Büring 2005 for an overview of how the terms "exempt anaphor", "logophor", and "long-distant reflexive" are used in the literature. In the Germanic languages that distinguish between complex SELF and simplex SE anaphors, only the latter can be used as long-distance reflexives.

⁸ Notice that the argument structure of *picture* and *jokes* in (13a) and (13b) is not overtly fully fleshed out because there is no syntactically expressed possessor. In fact, in (13a), the indefinite D a can be argued (contra Chomsky 1986) to express that not even an implicit external argument is possible (it is just some picture, not one taken by someone). The picture NP in (13a) not having its full argument structure realized and therefore not constituting its own binding domain goes with Büring's (2005) grammaticality judgments given in (i). The judgments here indicate that, contra Reinhart and Reuland 1993, a nonreflexive pronoun embedded in a nominal without a possessor cannot refer to the subject of the clause.

⁽i) John₅ saw [NP a picture of himself₅/*him₅]. (Büring 2005: 50)

(agent / external argument) as well as thematically independent PPs constitute their own binding domains (i.e., their own Domain D - see (7)), so that a nonreflexive pronoun can be free in this domain. In order to account for the use of a reflexive pronoun also being a possibility, the proposal was an extension of the reflexive binding domain if it did not include a potential binder, that is, if there was no coindexation possibility with a c-commanding nominal. This is justifiable via an appeal to the nature of reflexive pronouns, which is very different from that of nonreflexive pronouns. While reflexives come with the restriction that they must find a binder in the sentence, nonreflexive pronouns only come with the restriction of not being bound locally – otherwise they are free to occur as either bound or not. In a scenario like (13a), for example, the nominal, a picture of herself/her, constitutes a binding domain separate from the bigger, clausal domain. The nonreflexive pronoun is free within the smaller domain of the nominal, and, at the same time, the reflexive pronoun can be properly bound because its binding domain gets extended to the bigger clausal domain, which includes Lucie. This is because the domain of the nominal does not include a potential antecedent for the reflexive. The non-complementarity in (13b) can be explained in the same way. In a scenario like (13c), it is the thematically independent PP near himself/him that constitutes a binding domain separate from the clause as a whole, so that, again, the nonreflexive pronoun is free inside the smaller domain. For the reflexive, which does not have a potential antecedent within the PP, the binding domain gets extended to the clause, so that Max can properly bind the reflexive.

As mentioned above, Reinhart and Reuland's (1993) solution to instances of noncomplementarity like (13) is to treat the reflexives in these scenarios as exempt anaphors, i.e., as logophors, according to their terminology. Roughly speaking, since the reflexive pronouns in (13) are not arguments of reflexive predicates (neither the verbs of the sentences nor the nouns or prepositions have an external argument that the reflexive pronoun in the respective sentence is coindexed with), Reinhart and Reuland's Condition A does not apply to these reflexive pronouns. Interestingly, German is unlike English and Dutch in that it does not have exempt anaphors like those in (10) and (12) but does resemble English and Dutch in having instances of noncomplementarity like (13). This seems to suggest that the English reflexives in (13) should not be treated as exempt from the binding conditions either. The following are the German equivalents of (12) and (13),9 showing that, unlike English SELF anaphors, German sich cannot occur without a local binder but that, like in English, both German reflexive and nonreflexive pronouns are grammatical in potentially complex nominals and thematically independent PPs.

⁹ Examples (12a–12b) do not have an equivalent in German because the first person singular reflexive has the same form as the corresponding nonreflexive pronoun (see Table 21.2).

- Max_i prahlte, dass die Königin Lucie und *sich_i/ihn_i (14)the Queen self/him Max boasted that Lucie and einen Drink eingeladen hatte. (German) drink invited had on 'Max_i boasted that the queen invited Lucie and himself_i/him_i for a drink.'
- (15) a. Lucie_i sah ein Bild von sich_i/ihr_{?i}.

 Lucie saw a picture of self/her
 - b. Max_i mag Witze über sich_i/ihn_i.
 Max likes jokes about self/him
 - c. Max_i sah eine Waffe neben sich_i/ihm_i. Max saw a weapon next-to self/him

Given that German does not allow exempt/logophoric use of the reflexive *sich*, Chomsky's reflexive domain extension account captures the parallel between the English and German facts in (13) and (15) better than Reinhart and Reuland's system.¹⁰

Looking a little bit further, however (e.g., in Büring's (2005) chapter 3), examples like (16) and (17)¹¹ tell us that the reflexive domain extension approach is not sufficient to explain the facts.

- (16) John_i believes that pictures of himself_i/him_i are on sale.
- (17)Martell_i hofft, dass eine Reportage über ihn_i/*sich_i about him/self Martell hopes that report gespielt wird. im Radio (German) in-the radio played is.PASS

'Martell is hoping that a report about himself is going to be aired.'

While both reflexive and nonreflexive are grammatical in English, even when the picture NP is the subject of a finite clause, as in (16), the reflexive is completely impossible in this context in German, as shown in (17). If we want to account for the English non-complementarity in (16) with a reflexive domain extension, we would need to allow this extension to cross a finite clause boundary. If we did this, however, we would not be able to explain the ungrammaticality of the German reflexive in (17). Following Reinhart and

¹⁰ In Lee-Schoenfeld 2004, 2007, and 2008, I argue for a formal account of Chomsky's domain extension based on Safir's (2004) treatment of sich as a Romance reflexive clitic and Chomsky's (2001) "Derivation by phase", arguing that reflexives can gain access to the higher phase (i.e., reach an antecedent outside their coargument domain by covertly moving to the phase-edge). This is how reflexives embedded in theta-complete DPs and PPs, as well as Accusativus cum Infinitivo (AcI) complement clauses (see (i)) can be bound by the matrix clause subject without violating Chomsky's classic Condition A, as stated in (7).

⁽i) Die Mutter, lässt [Act die Kleine] sich_{i/j}/ihr_{i/*} die Schokolade in den Mund stecken]. (German) the mother lets the little-girl self / her the chocolate in the mouth stick 'The mother_i lets the little one_j stick the chocolate in her_{i/j} mouth.' (Lee-Schoenfeld 2007: 118)

Examples (16) and (17) are adapted from Büring (2005: 52–53). They are his (3.20) and (i) in footnote 7, respectively.

Reuland in treating English reflexive pronouns that do not have a coindexed coargument as exempt from the binding conditions and admitting that the binding facts in English and German are no longer parallel at this point seems to be the best solution then.

Reinhart and Reuland's (1993) approach is also attractive when it comes to Dutch, Norwegian, and Danish to be discussed in Section 21.3 because, in addition to locally bound reflexive pronouns and nonreflexive pronouns, these languages have a third type of anaphoric element, namely reflexive pronouns that must be bound non-locally. Conditions A and B of the classic Binding Theory (see (7) above) are not designed to deal with an anaphoric element like this. Obviously, a reflexive that cannot be bound locally violates Condition A, and it is also not fully captured by Condition B because in addition to being free in its local domain, it is unlike a nonreflexive pronoun in that it must be bound within the sentence.

21.3 Anaphoric Elements Beyond English and German: SELF Versus SE and Possessive Anaphors

When it comes to the inventory of anaphoric elements in the Germanic languages, we can group together Dutch, Norwegian, Danish, Swedish, and Icelandic because they all have in common that, besides the one reflexive and the one nonreflexive pronoun type found in English and German, they each have an additional anaphoric element. Dutch, Norwegian, and Danish have not just **either** a SELF anaphor like that found in English **or** a so-called "SE anaphor" with the shape of the reflexive *sich* in German, but **both** a complex SELF **and** a simplex SE anaphor. The following table nicely shows the "inbetween" status of SE anaphors, having in common with nonreflexive pronouns that they are not reflexivizers (i.e., do not reflexive-mark a predicate) and having in common with SELF anaphors that they are not referentially independent (i.e., cannot refer to an entity in the world without being bound).

The extra type of anaphoric element in Icelandic and Swedish is a reflexive possessive pronoun, distinct in form from the nonreflexive possessive pronoun. Norwegian and Danish distinguish between reflexive and nonreflexive possessives as well, in addition to having both SELF and SE anaphors, which makes them the Germanic languages with the biggest inventory of anaphoric elements. This section looks at each of these

Table 21.3 Typology of anaphoric expressions (Reinhart and Reuland 1993: 659)

	SELF	SE	Pronoun
Reflexivizing function	+	_	_
Referential independence	_	_	+

languages and their binding facts individually, often in comparison to English and/or German.

21.3.1 Dutch

The following lays out the inventory of anaphoric elements in Dutch.^{12,13} The anaphoric elements in parts of Table 21.4 line up perfectly with those of German (see Table 21.2). Dutch and German both have a simplex third person anaphor – *zich* in Dutch and *sich* in German – and both have nonreflexive pronouns which are also used as reflexives in the first and second person. Furthermore, given Büring's (2005) overview of Germanic pronoun systems, the Dutch and German parts of which are shown here in Table 21.5, even the Dutch complex SELF anaphors, *zichzelf* (third person) and pronoun + *zelf* (first and second person) seem to have a counterpart in German, namely the combination of *sich* or pronoun plus *selbst.* "P-form" stands for "pronominal", i.e., nonreflexive.

Taking a look at Dutch binding data, however, we see that things do not match up as neatly as Table 21.5 seems to suggest. The Dutch SELF anaphor, which must be bound in its coargument domain (18a) or can be used logophorically, i.e., as exempt from the binding conditions (19a), corresponds more closely to the English SELF anaphor than to any element in German. This is because, in German, the addition of the intensifier *selbst* to

Number	Perso	n	Nonreflexive pronoun (full, reduced; NOM/ACC)	Reflexive SE anaphor	Reflexive SELF anaphor	Possessive (full, reduced)
Singular	1. 2. 3.	MASC FEM NEUT	ik/mij, 'k/me jij/jou, je/je hij/hem, ie/'m zij/haar, ze/d'r het/het, 't/'t	me je zich	mezelf jezelf zichzelf	mijn, m'n jouw, je zijn, z'n haar, d'r zijn, z'n
Plural	1. 2. 3.	MASC	wij/ons jullie/jullie zij/hen, ze	ons je zich	onszelf jezelf zichzelf	ons jullie, je hun

Table 21.4 Anaphoric elements of Dutch

FFM

zij/die, ze zij/hen, ze

¹² This table was assembled with the help of Shetter and Van der Cruysse-Van Antwerpen (2004: 35, 66, 79) and Oosterhoff (2015: 30–31). Like in Table 21.2 (for German), the formal second person singular is left out.

Jan-Wouter Zwart (2011 and p.c.) explains that some dialects of Dutch still use the regular third person pronoun instead of the special reflexive zich, as was common in Dutch before the seventeenth century standardization of the language. Also, since possessive pronouns (such as the reduced form z'n 'his') are not marked for anaphoricity, the element eigen 'own' can be added to them for disambiguation. In fact, in certain dialects as well as spoken Dutch more generally, z'n eigen is used instead of the reflexive zich(zelf). Furthermore, the reduced (or weak) pronouns (e.g., hem 'him') can combine with zelf and occur in picture NP constructions like (16) in Section 21.2, where neither zichzelf nor zich can be used, but judgments on the distribution of weak pronoun + SELF are murky. Notice that weak hemzelf is included in Table 21.5 (taken from Büring 2005) but will not be discussed further in this chapter.

		SE-form	P-form
bare	Dutch	zich	hem
	German	sich	ihn
+ 'self'	Dutch	zich zelf	hem zelf
	German	sich selbst	ihn selbst

Table 21.5 Dutch and German pronoun systems (Büring 2005: 75)

sich or a nonreflexive pronoun is merely emphatic, see the b-examples of (18) and (19),¹⁴ and, as established in Section 21.2, German reflexives cannot be used logophorically at all.

- (18) a. *Vijf touristen praatten met mezelf. (Dutch)
 - b. Fünf Touristen sprachen mit mir selbst (die anderen five tourists spoke with myself (the others mit meinem Vertreter). (German) with my representative)
- a. Er waren vijf toeristen in de kamer behalve mezelf. (Dutch)b. Es waren fünf Touristen im Zimmer außer mir (selbst).(German)

Also, unlike Dutch *zich*, which cannot be bound in its coargument domain and therefore functions as a long-distance reflexive, German *sich* must be bound locally. The Dutch examples in (20)¹⁵ showing *zich* bound in its coargument domain and thus used ungrammatically are contrasted with their German equivalents, which show *sich* used grammatically.

- (20) a. *Max haat zich / ✓ Max hasst sich. (Dutch / German)
 Max hates self
 - b. *Max praat met zich / ✓ Max spricht mit sich. (Dutch / German)
 Max speaks with self

The Dutch version of these examples can only be made grammatical by replacing *zich* with *zichzelf*. In contrast, the German version is grammatical with *sich*, and the addition of *selbst* is optional. This is shown in (21).

- (i) Das schmeckt mir selbst am besten. (German) that tastes me INT the best
- 'I'm the one who likes this the most.'

 (ii) Mich selbst hat noch keiner erwischt. (German)

 me INT has yet nobody caught

 'As for me personally, nobody has caught me yet.'

¹⁴ The Dutch data in (18) and (19) are adapted from Reinhart and Reuland (1993: 669), their (22c–22d). The German use of *mir selbst* in (18b) needs the context added in parentheses to sound acceptable. However, the point that *mir selbst*, unlike Dutch *mezelf*, is not a SELF anaphor and is therefore acceptable without a coindexed coargument can easily be made with the help of examples built around other two-place predicates. This is shown in (i) and (ii), where *selbst* is glossed as "INT" for 'intensifier':

¹⁵ The Dutch data in (18) and (19) are adapted from Reinhart and Reuland (1993: 661, 665), their (17a–17b), and (10).

```
(21) a. ✓ Max haat zichzelf / (Dutch / German)

✓ Max hasst sich (selbst).

Max hates himself

b. ✓ Max praat met zichzelf / (Dutch / German)

✓ Max spricht mit sich (selbst).

Max speaks with himself
```

Similarly, as shown in (22) and (23),¹⁶ while the use of Dutch *zich* versus *zichzelf* is strictly complementary with inherently (or intrinsically) reflexive verbs like *zich schamen* 'be ashamed', this is not the case in German. In Reinhart and Reuland's (1993) terms, intrinsically reflexive verbs come from the lexicon as reflexive-marked and therefore do not need a SELF anaphor to satisfy their Condition B. In the German equivalent of (23), *selbst* is glossed as "INT" for 'intensifier'.

- (22) ✓ Max schaamt zich / ✓ Max schämt sich. (Dutch / German)
 Max shames self
- (23) *Max schaamt zichzelf / ✓ Max schämt sich selbst

 Max shames himself / Max shames self

 (am meisten). (Dutch / German)

 (the most)

Thus, while Dutch strictly disallows the use of *zichzelf* with inherently reflexive verbs (which cannot also be used as normal transitives), German allows the use of *sich selbst* with such verbs given the right context. This further confirms that Dutch has two distinct reflexive pronouns – the SE anaphor *zich* and the SELF anaphor *zichzelf* – while German only has one reflexive pronoun, namely *sich*, which can be combined with *selbst* for emphasis (see also Bergeton 2004 and Gast 2006).

Reinhart and Reuland (1993), citing Truckenbrodt 1992, claim that German does resemble Dutch in exhibiting complementary distribution of *sich* and *sich selbst* at least in the dative case. They provide the following data set arguing that German *sich*, like Dutch *zich*, cannot grammatically refer to a coargument in the context of a ditransitive verb that is not intrinsically reflexive ("– intr. refl.").

```
(24) a. *Peter<sub>1</sub> vertraute
                                                    seine Tochter
                                                                                 (German)
                                    sich₁
                                                                        an.
          *Peter<sub>1</sub> vertrouwde zich<sub>1</sub>
                                                    zijn dochter toe.
                                                                                 (Dutch)
          Peter<sub>1</sub> entrusted
                                    to-himself<sub>1</sub> his
                                                            daughter PRT
          NOM
                    (-intr.refl.) DAT
                                                    ACC
       b. Peter<sub>1</sub> vertraute
                                  seine Tochternur
                                                           sichselbst<sub>1</sub>
                                                                          an. (German)
          Peter<sub>1</sub> vertrouwde zijn dochterslechts zichzelf<sub>1</sub>
          Peter<sub>1</sub> entrusted
                                         daughter only to-himself, PRT
                                  his
                 (– intr. refl.) ACC
                                         DAT
                                                   (Reinhart and Reuland 1993: 667)
```

The Dutch example in (20) is again adapted from Reinhart and Reuland (1993: 666), their (19b). Example (21) is based on Reinhart and Reuland's (1993: 666) observation that intrinsically reflexive verbs "allow or even require" zich, from which I conclude that zichzelf would be ungrammatical in their examples of intrinsically reflexive verbs.

Notice that, in (24b), the use of German *sich selbst* (which, unlike in Dutch, consists of two separate words – Reinhart and Reuland misrepresented the spelling here) goes with the noncanonical word order of ACC > DAT and the word nur 'only', which provides a context of focus. Given a context of contrastive focus, where both the indirect (DAT) and the direct (ACC) object are being contrasted, as in (25), the use of dative *sich* sounds much better than in (24a).

(25)Peter vertraut seiner Ex-Frau seinen Sohn an, aber eri ex-wife his Peter entrusts his son PRT but he vertraut nur sich_i seine Tochter an self his daughter PRT entrusts only

This version of the use of the ditransitive predicate <code>jemandem(DAT)</code> <code>jemandem(ACC)</code> <code>anvertrauen</code> 'entrust somebody to someone' with a dative reflexive is still a bit awkward and needs emphatic stress on <code>sich</code>, which usually comes with the addition of <code>selbst</code>, but it is not ungrammatical. More importantly, as shown in (26), there are plenty of other noninherently reflexive ditranstive verbs that sound perfectly fine with a dative reflexive. The predicate in (26a) is <code>jemandem(DAT)</code> <code>etwas zu Essen oder Trinken(ACC)</code> <code>machen</code> 'make somebody something to eat or drink'; in (26b) it is <code>jemandem(DAT)</code> <code>etwas(ACC)</code> <code>geben</code> 'give somebody something'; and in (26c) it is <code>jemandem(DAT)</code> <code>etwas(ACC)</code> <code>schicken</code> 'send somebody something'.

(26) a. Peter_i machte sichi einen Kaffee. (German) made self Peter a coffee b. Peter_i Kuss auf gab sich_i einen die Hand. (German) Peter gave self a kiss on the hand schickte c. Peter: sich_i eine Postkarte. (German) Peter sent self postcard a

We can conclude, then, that the distinction in Dutch between the SELF anaphor *zichzelf*, which must be bound by a coargument if it is not used logophorically, and the SE anaphor *zich*, which must not be bound by a coargument unless it is an argument of an inherently reflexive verb, does not exist in German. Given the data we have seen thus far, German only has the reflexive *sich*, which must be locally bound and cannot be used logophorically, i.e., is never exempt from the binding conditions.

The next part of the Dutch inventory of anaphoric elements to be tackled is the distinction between SE anaphors and nonreflexive pronouns. If SE anaphors cannot be bound in their coargument domain, then how are they different from nonreflexive pronouns? Crucially, SE anaphors lack number and gender features so that they can never refer to an entity in the world without being bound (i.e., having a c-commanding antecedent in the sentence). In contrast, as was established for English and German in Section 21.2, nonreflexive pronouns can have a referent not mentioned in the sentence.

This is shown in example (27). Furthermore, unlike nonreflexive pronouns, SE anaphors are subject-oriented in that they need to refer to the closest subject outside of their coargument domain (Büring 2005: 59, 70), unless this coargument domain has an inherently reflexive verb as its predicate. Example (28) illustrates that, **like** an SE anaphor, a nonreflexive pronoun is ungrammatical when bound in its coargument domain, and (29) shows that, **unlike** an SE anaphor, a nonreflexive pronoun is also ungrammatical when bound within the coargument domain of an inherently reflexive predicate. In the former kind of example, a SELF anaphor is the only grammatical option, while the latter kind of example only allows an SE anaphor.

- (27) Jan_i haat $*zich_j/hem_j$. (Dutch) Jan_i hates $*SE_i/him_i$
- (28) Jan₁ haat zichzelf₁/*zich₁/*hem₁. (Dutch) Jan₁ hates himself₁/*SE₁ /*him₁ (Reinhart and Reuland 1993: 661, 665)
- (29) Willem₁ schaamt zich₁/*hem₁. (Dutch)
 Willem₁ shames SE₁/*him₁
 (Reinhart and Reuland 1993: 691)

As for the subject orientation of SE anaphors, it is a characteristic we should add to the list of distinctions between Dutch *zich* and German *sich*. Although the latter has the shape of an SE anaphor, it is not subject-oriented. As shown in (30), German *sich*, just like English SELF anaphors, can be bound by a coargument that is an object.

(30) Die Friseurin zeigt den Kunden_i sich_i im Spiegel. (German) the hair-stylist.fem shows the client self in-the mirror 'The hair sylist showed the client_i himself_i in the mirror.'

Getting back to Dutch *zich* versus nonreflexive pronouns, another context in which these two types of anaphoric elements are in noncomplementary distribution is given in (31), where the anaphoric element is embedded in a PP, complementing a theta-independent preposition, i.e., in a PP that is not dependent on the verb for theta-assignment and therefore constitutes its own predicate and coargument domain.

(31) Klaas₁ duwde de kar voor $zich_1/hem_1$ uit. (Dutch) Klaas₁ pushed the cart before SE_1/him_1 out (Reinhart and Reuland 1993: 690)

In Reinhart and Reuland's system, this noncomplementarity is accounted for because, as explained in Section 21.2, their Conditions A and B only restrict the occurrence of anaphoric elements that are SELF anaphors and therefore reflexive markers (see Condition A in (11a)) or have a coindexed coargument and are therefore in the domain of a reflexive predicate (see Condition B in (11b)). Since the anaphoric element in (31) is

not a SELF anaphor, Condition A cannot apply. And since the coindexed nominals (anaphoric element and antecedent) are arguments of different predicates, there is no reflexive predicate in this sentence and therefore no chance for Condition B to apply either.

There are other types of Dutch binding facts (e.g., involving so-called Exceptional Case Marking [ECM] constructions, see Reinhart and Reuland 1993: 680, 691) that give an edge to Reinhart and Reuland's (1993) "Reflexivity" approach over Chomsky's (1981, 1986) classic Binding Theory, but for the purposes of this broad overview, the provided data shall suffice.

21.3.2 Norwegian, Danish, and Swedish

According to Reinhart and Reuland's (1993) references to Norwegian, the Norwegian SELF and SE anaphors seg selv and seg pattern just like Dutch zichzelf and zich. In my discussion here, I will group Norwegian and Danish together because, according to Büring (2005), who cites Vikner's (1985) work, Danish also has distinct SELF and SE anaphors that pattern as in Dutch, but see Bergeton (2004) for a different view. That Swedish has in common with Norwegian and Danish that sets these three languages apart from Dutch, German, and English is that they have possessive reflexives. And what sets Norwegian and Danish even further apart is that their nonreflexive pronouns (e.g., ham 'him'), when combined with selv 'self' (e.g., ham selv), have to be locally bound by a nonsubject and therefore exhibit anti-subject orientation. We will start with Norwegian and Danish and then take a brief look at Swedish.

The following is an overview of the nonpossessive anaphoric elements in Norwegian and Danish taken from Büring 2005.

The best way to explain and illustrate the content of this table is probably to follow Büring and immediately provide examples of the distribution of

	SE-form (bound to subject in tense domain)	P-form (free from subject in coargu- ment domain)
Bare	Danish: sig	Danish: ham (MASC),
(free in coargument	Norwegian: seg	hende (fем)
domain)		Norwegian: ham
+ SELF	Danish: sig selv	Danish: ham selv (MASC),
(bound in subject domain)	Norwegian: seg selv	hende selv (FEM)
		Norwegian: ham selv

Table 21.6 Danish and Norwegian pronoun system (Büring 2005: 76)

¹⁷ Bergeton (2004) convincingly argues for an account of Danish sig and the intensifier selv in a system that treats binding and intensification as two independent modules of the grammar. My thanks to Line Mikkelsen (p.c.) for this reference.

the four types of anaphoric elements. The a-examples in (32)–(33)¹⁸ show Danish, and the b-examples Norwegian. Note that the only difference between the ways that the anaphoric elements in Danish and Norwegian pattern is that Danish has both a masculine and a feminine third person pronominal form (*ham* and *hende*) and Norwegian only has one form (*ham*).

- (32) a. Susan₁ fortalte Anne₂ om *hende₁/*hende selv₁/*sig₁/sig selv₁.

 Susan told Anne about *hende₂/*hende selv₂/*sig₂/sig selv₂.

 'Susan told Anne about her/herself.' (Danish)
 - b. Harald₁ fortalde Jon₂ om *ham₁/*ham selv₁/*seg₁/seg selv₁.

 Harald told Jon about *ham₂/ham selv₂/*seg₂/*seg selv₂.

 'Harald told Jon about him/himself.' (Norwegian)

In this first set of examples, the coargument, subject, and tense domains are the same. There is only one coargument domain in this sentence because the only predicate with argument structure is the verb (fortalte/fortalde) which has an external argument (Susan/Harald) and two internal arguments (the object Anne/Jon and the theta-dependent om-phrase). Since there is only one predicate with argument structure, there can also only be one subject, namely the external argument of the verb. Finally, because there is only one clause, there can also only be one tense domain. For our four anaphoric elements, this means that only the SE-form + SELF (sig selv / seg selv) can be used when referring to the subject, and only the P-form + SELF (hende selv / ham selv) can be used when referring to the object. The bare SE and P-forms (sig/seg and hende/ham) cannot be used because they must be free in their coargument domain. The bare SE-form can only be used with a binder in its coargument domain when the predicate is an inherently reflexive verb. This parallels the Dutch facts discussed in Section 21.3.1, see examples (22) and (23).

In the next set of examples, the coargument and subject domain of the anaphoric elements is distinct from their tense domain. We have two clauses, a main clause, and an embedded infinitive clause. The main clause verb *bad* 'asked' is an object control verb, which means that the unpronounced subject of the infinitive clause is the same as the object of the main clause.

(33) a. Susan₁ bad Anne om at ringe til hende₁/*hende selv₁/sig₁/*sig selv₁. Susan asked Anne for to ring to 'Susan asked Anne to call her.' (Danish)
b. Jon₁ bad oss snakke om ham₁/*ham selv₁/seg₁/*seg selv₁. Jon asked us to-talk about 'Jon asked us to talk about him.' (Norwegian)

In (33), the coargument domain of the listed anaphoric elements is the embedded infinitive clause, and this is also their subject domain because

Examples (32) and (33) are adapted from Büring (2005: 76), his (3.74) and (3.75). Büring in turn cites Dalrymple (1993) in his discussion of Norwegian and attributes his Danish examples to Vikner (1985).

this infinitive clause has an unpronounced (PRO)-subject. Now, since the binder (Susan/Jon) is the main clause subject and therefore not included in the smaller subject domain of the anaphoric elements, the SE-form + SELF (sig selv/seg selv) cannot be used – it needs to be bound by the subject of the smallest clause containing it. The P-form + SELF (hende selv/ham selv) cannot be used either because it also needs to be bound within its subject domain (albeit by an argument other than the subject). So, we are left with the bare forms, the SE-form (sig/seg) and the P-form (hende/ham). Why are they both marked as grammatical, i.e., why do they occur in noncomplementary distribution here? Because the SE-form is properly bound by the subject of the smallest tensed domain containing it, namely the main clause, and the P-form is free from the subject of its coargument domain, i.e., it is not bound by the unpronounced (object-controlled PRO) subject of the infinitive clause. As looking back at Table 21.6 will confirm, this is exactly how SE and P-forms are supposed to be distributed. Like the Dutch data featuring zich in Section 21.3.1, example (33) serves as an illustration of the longdistance binding characteristic of SE anaphors. While they must be bound by a subject, they can be bound across a clause boundary, as long as this clause boundary is a nonfinite one.

Still following Büring's sequence of examples, let us compare the binding facts in the object-control construction in (33) with those in the subject control construction in (34).¹⁹ The main clause verb in (34) is *lovede* 'promised', and the unpronounced subject of the infinitive clause is the same as the subject of the main the clause.

```
(34) Susan<sub>1</sub> lovede Anne<sub>2</sub> at ringe til hende<sub>2</sub>/*hende selv<sub>2</sub>/ *sig_2/*sig selv<sub>2</sub>. Susan promised Anne to ring to 'Susan promised Anne to call her.' (Danish)
```

Here, the binder of the listed anaphoric elements, *Anne*, which is the object of the main clause, is not also the unpronounced subject of the infinitive clause. This means that, like in (33), the anaphoric elements do not have their binder in their coargument/subject domain, but, unlike in (33), their binder is an object. The use of an SE-form, whether combined with SELF or not, is therefore ruled out. Both the SE-form + SELF (*sig selv*) and the bare SE-form (*sig*) are subject-oriented and thus need to be bound by a subject. The P-form + SELF (*hende selv*) is also ruled out because it needs its binder to be in its subject domain, which corresponds to the embedded infinitive clause here. The bare P-form (*hende*) is the one grammatical option in (34) because, as long as it is not bound by the subject of its coargument domain, is it free to occur.

On to possessive reflexive pronouns, the type of anaphoric element that the Scandinavian languages (and, as we will see in Section 21.3.3, also

¹⁹ Example (34) is again adapted from Büring (2005: 77), his (3.76).

Icelandic) have, but English, German, and Dutch lack. According to Dalrymple (1993), the Norwegian reflexive possessive *sin* 'self's', unlike the nonreflexive possessive *hans* 'his', must be bound by a subject. This is shown in (35).

```
(35) Jon beundrer sin /*hans mor. (Norwegian)
Jon admires self's/ his mother
'Jon admires his mother.'
(Dalrymple 1993: 32)
```

As Büring (2005) points out, the possessive *sin* behaves like the bare SE anaphor *seg* in that it must be bound in its tense domain. Often, of course, the tense domain coincides with the subject domain, but when *sin* and *seg* are embedded in complex nominals or infinitive clauses (as shown for *seg* in (33b) above), they can be bound across a closer subject by the subject of the tensed verb. The nonreflexive possessive can be used with a binder in the same domain as the reflexive possessive, as long as this binder is not a subject. This is shown in (36) and indicates that, like the P-form + SELF, the Norwegian nonreflexive possessive exhibits antisubject orientation.

```
(36) Vi fant Jon<sub>i</sub> under sengen hans<sub>i</sub>. (Norwegian) we found Jon under bed his 'We found Jon under his bed.'
(Dalrymple 1993: 33)
```

The Swedish repertoire of anaphoric elements also includes the SE anaphor *sig* and the possessive reflexive *sin*, and Swedish is often discussed as patterning like Norwegian and Danish when it comes to the distribution of SE versus SELF anaphors (see, e.g., Gast 2006: 184, who cites Kiparski 2002). Holmes and Hinchliffe (1994), however, argue that the addition of the SELF morpheme *själv* / *självt* (neuter) / *själva* (plural) to *sig* is used only for emphasis. This would make nonpossessive reflexive pronouns in Swedish pattern more like in German. Reflexive pronouns have the typical shape of a SE anaphor, with the special uninflected reflexive form (*sig*) only showing up in the third person and the other forms being identical to the nonreflexive ones, but they are claimed by Holmes and Hinchliffe not to be distinct from SELF anaphors. In (37), there is no need for the addition of the SELF morpheme *själv* to the reflexively used pronoun *mig* despite the fact that the anaphoric element is bound by its coargument.

```
(37) Jag skar mig. (Swedish)
I cut me
'I cut myself.'
(Holmes and Hinchliffe 1994: 146)
```

21.3.3 Icelandic

Icelandic has in common with the Mainland Scandinavian languages that is has possessive reflexive pronouns in its repertoire of anaphoric elements, and it has in common with English and German that, for the majority of predicates, there is only one type of reflexive pronoun, not both an SE and a SELF anaphor. As is typical of SE anaphors, the Icelandic reflexive pronoun *sig* has a special reflexive form for the third person, but its first and second person forms are identical to the corresponding non-reflexive pronouns. Unlike Danish and Swedish *sig*, Icelandic *sig* is inflected for case, and the Icelandic reflexive possessive is additionally inflected for person, number, and gender. Table 21.7 shows the third person forms of both the nonpossessive and possessive reflexive pronouns of Icelandic.

For most predicates, the SELF morpheme *sjálfur* (which needs to be inflected to agree with its antecedent) is added optionally for emphasis. An example of this in the context of a typically reflexive verb (what Hyams and Sigurjónsdóttir [1990] call a *shave*-class verb) is given in (38).²⁰

(38) Hann_i rakaði (sjálfan) sig_i. (Icelandic) he_i shaved emph himself_i 'He shaved himself.'

Interestingly, like in the languages that distinguish between SE and SELF anaphors, the use of the SELF morpheme *sjálfur* is ungrammatical with an inherently reflexive verb. This makes Icelandic different from German, which allows the SELF morpheme *selbst* for emphasis, even with an inherently reflexive verb, see example (23) in Section 21.3.1 on Dutch. It seems that the use of *sjálfur* in Icelandic falls somewhere in between that of *selbst* in German and that of the SELF morpheme in languages that distinguish between SE and SELF anaphors, like *-zelf* in Dutch, because, according to Thráinsson (2007),

Table 21.7	Third persor	n reflexive pro	nouns in Icel	andic (Thráinsson
2007: 463))			

		Possessive Reflexive					
	SE Anaphor	Singular		Plural			
		MASC	FEM	NEUT	MASC	FEM	NEUT
NOM	_	sinn	sín	sitt	sínir	sínar	sín
ACC	sig	sinn	sína	sitt	sína	sínar	sín
DAT	sér	sínum	sinni	sínu	sínum	sínum	sínum
GEN	sín	síns	sinnar	síns	sinna	sinna	sinna

²⁰ Example (38) is adapted from Thráinsson (2014: 21), his (40).

there is, in fact, a certain class of predicates in Icelandic that requires the addition of *sjálfur* to the reflexive pronoun. This class consists of verbs that would not normally have a coreferential argument, like 'help' or 'talk to'. An example of 'help' used reflexively is given in (39), where the simplex reflexive pronoun is glossed as "REFL" and the SELF morpheme as "SELF".

(39) María_i getur ekki hjálpað *sér_i / sjálfri sér_i. (Icelandic)
Maria can not help REFL / SELF REFL

'Maria cannot help herself.'

(Thráinsson 2007: 264)

Another characteristic that Icelandic *sig* shares with the Dutch SE anaphor *zich*, but not with German *sich*, is that it is subject-oriented, i.e., must be bound by a subject.

Perhaps the most noteworthy property of the Icelandic simplex reflexive pronoun is that, unlike SE or SELF anaphors in any other language discussed thus far, it can be bound across a finite clause boundary. However, as shown in (40), the verb in this finite clause may not be in the indicative mood (glossed as "IND"), at least not if the main clause verb introducing the embedded finite clause is a factual one, like 'know'.

(40)*Ión veit hef ſað ég logið sér]. (Icelandic) Jon knows that I have.IND lied REFL Intended: John_i knows that I lied to him_i. (Thráinsson 2007: 467)

It is with nonfactual attitude verbs, like 'believe', that the longdistance, cross-clausal use of the reflexive is grammatical and in noncomplementary distribution with the corresponding nonreflexive pronoun. This is shown in (41).

(41) Jón heldur [ad þú hatir sig/hann]. (Icelandic) Jon_i believes that you hate $_{REFL_i}$ /him_i 'John believes you hate him.' (Thráinsson 2007: 467)

The optionality between the reflexive and the nonreflexive may be attributed to the perception and attitude of the referent of the main clause subject. Since the reflexive must refer to the main clause subject, while the nonreflexive could refer to an entity not mentioned in the sentence, the version of (41) with the reflexive can be paraphrased as *John believes "you hate me."* If only subjunctive verbs intervene between the subject antecedent and the reflexive pronoun, there is a possibility for even longer distance binding. As shown in (42), the antecedent can be several sentences away from the reflexive. The subjunctive mood is glossed as "SBJ".

(42)Jón_i sagði að hann hélidi margar ræður. Sumar væru Jon said that he held.s_B| many speeches some were.sbj efnahafmalin, about economics fjölluðu um trúmál eða fjölskyldumäl. Samt kæmi aðrar others dealt with religion or family-values yet came.s_B_I ég aldei að hlusta á sig_i. never for listen to Ī to REFL 'Jon said he held many speeches. Some were about economics, others dealt with religion or family values. Yet, I would never come to listen to them.' (Thráinsson 2007: 472) (Icelandic)

21.4 Conclusion

Wrapping up this overview of anaphoric elements and binding facts in (many of) the Germanic languages, we have seen that the only observation holding for all of them is that there are at least two types of anaphoric elements, a reflexive and a nonreflexive pronoun. Beyond this, there is a perhaps surprising amount of variation. Some have both a complex SELF and a simplex SE anaphor (e.g., Dutch, Norwegian, and Danish), some have possessive reflexives (e.g., Norwegian, Danish, Swedish, and Icelandic), and some include exempt anaphors, "logophors" (e.g., English, Dutch, and Icelandic). It turns out that German has the most basic inventory of anaphoric elements, with only one type of reflexive, which cannot be used logophorically.

References

Bergeton, U. 2004. The Independence of Binding and Intensification. Ph.D. thesis, University of Southern California.

Büring, D. 2005. Binding Theory. Cambridge University Press.

Chomsky, N. 1981. Lectures on Government and Binding. Dordrecht: Foris.

Chomsky, N. 1986. Knowledge of Language. New York: Praeger.

Dalrymple, M. 1993. *The Syntax of Anaphoric Binding*. Stanford: Center for the Studies of Language and Information.

Gast, V. 2006. The Grammar of Identity: Intensifiers and Reflexives in Germanic Languages. London: Routledge.

Hestvik, A. 1991. "Subjectless binding domains," *Natural Language and Linguistic Theory* 9.3: 455–496.

Holmes, P. and I. Hinchliffe 1994. Swedish: A Comprehensive Grammar. London: Routledge.

- Hyams, N. and S. Sigurjónsdóttir 1990. "The development of 'long-distance anaphora': A cross-linguistic comparison with special reference to Icelandic," *Language Acquisition* 1.1: 57–93.
- Kiparski, P. 2002. "Disjoint reference and the typology of pronouns." In I. Kaufmann and B. Stiebels (eds.), *More than Words: A Festschrift for Dieter Wunderlich*. Berlin: Akademie Verlag: 179–226.
- Lee-Schoenfeld, V. 2004. "Binding by phase: (Non-)complementarity in German," *Journal of Germanic Linguistics* 16.2: 111–171.
- Lee-Schoenfeld, V. 2007. Beyond Coherence: The Syntax of Opacity in German. Amsterdam: John Benjamins.
- Lee-Schoenfeld, V. 2008. "Binding, phases, and locality," *Syntax* 11.3: 281–298.
- Oosterhoff, J. 2015. Modern Dutch Grammar: A Practical Guide. London: Routledge.
- Reinhart, T. and E. Reuland 1993. "Reflexivity," *Linguistic Inquiry* 24.4: 657–720.
- Safir, K. 2004. The Syntax of Anaphora. Oxford University Press.
- Shetter, W. Z. and I. Van der Cruysse-Van Antwerpen 2004. *Dutch: An Essential Grammar*. London: Routledge.
- Thráinsson, H. 2007. The Syntax of Icelandic. Cambridge University Press
- Thráinsson, H. 2014. *On Complementation in Icelandic*. London: Routledge. Reprint of 1979 dissertation originally published by Garland.
- Truckenbrodt, H. 1992. Clitics and the Chain Condition. Ms., Cambridge, MA: MIT.
- Vikner, S. 1985. "Parameters of binder and of binding category in Danish," Working Papers in Scandinavian Syntax 23: 1–61.
- Zwart, J.-W. 2002. "Issues relating to a derivational theory of binding." In S. D. Epstein and T. D. Seely (eds.), Derivation and Explanation in the Minimalist Program. Malden: Blackwell: 269–304.
- Zwart, J.-W. 2011. The Syntax of Dutch. Cambridge University Press.