Chapter 4
The syntactic status of sig

4.1 Introduction

In this chapter, the hotly debated question of the lexical and syntactic status of the simple reflexive sig ‘REFL’ (=Nor. seg, Dutch zich, etc.) is discussed. We argue that sig can be a locally-bound theta-marked reflexive pronoun (1a), (2a). Hence, it is not an anti-local anaphor as has sometimes been proposed. We furthermore argue that the lexicon only contains one entry for the element sig and that the difference between thematic and non-thematic uses of sig depends on where in the derivation this elements merges (1b).

(1) Proposal:
   a. sig is not anti-local. i.e. thematic sig can have both local and LD-antecedents.
   b. the lexicon contains only one entry for sig. This element can be either a thematic anaphor, when it occurs in argument position of an active transitive predicate (2a), or a non-thematic grammatical marker of unaccusativity, i.e. in middles or passive, when it occurs in the v of the voice-projection vP (2b).

(2) a.  Thematic sig: VP
      / \ 
     .... V'
     / \ 
     V sig

   b.  Non-thematic sig: vP
      / \ 
     .... v'
     / \ 
     / \ VP
     sig v / \ 
     .... V'
     / \ 
     V ....

The examples in (3) illustrate thematic uses of sig ‘REFL’.

(3) a. Peter vasker sig.
     Peter washes REFL
     ‘Peter washes (himself).’
b.  *Peter lagde bogen bag sig.*
   Peter put-PAST book-the behind REFL
   ‘Peter put the book behind him.’

Both instances of *sig* in (3) are thematic in that they receive thematic-roles from their predicates. In contrast, the examples in (4) illustrate non-thematic uses of *sig*.

(4)  
   a.  *Peter skynder sig.*
   Peter hurries REFL
   ‘Peter is in a hurry/Peter hurries.’

   b.  *Peter skammer sig.*
   Peter shames REFL
   ‘Peter is ashamed.’

In section 4.3 we show that the predicates *skynde sig* ‘hurry’ and *skamme sig* ‘be ashamed’ are not transitive predicates but rather lexically unaccusative intransitive predicates which only assign one theta-role to the internal argument *Peter* which later moves to the subject position for case reasons. Unlike the transitive verb *vaske* ‘wash’ in (3a), they do not denote events or actions involving two objects. Rather, they denote particular states of one individual, i.e. the referent of the theta-marked subject. Hence, since there is no theta-role left for the reflexive, the instances of *sig* in (4) are all non-thematic.

Some verbs, e.g. *åbne* ‘open’ and *lukke* ‘close’, have both agentive transitive uses (5) and deagentive unaccusative uses with *sig* (6). The examples in (4) and (6) thus illustrate lexical and derived unaccusative predicates respectively.

(5)  
   a.  *Peter åbner døren.*
   Peter opens door-the
   ‘Peter opens the door.’

   b.  *Peter lukker døren.*
   Peter closes door-the
   ‘Peter closes the door.’
As mentioned in (1), we propose to analyze the difference between thematic sig, see (3), and non-thematic sig, see (4,6), as a syntactic rather than as a lexical difference. Lexically there is only one element sig which can take on different functions depending on where it merges in the derivation. Thematic sig merges in a theta-position, e.g. internal argument of verbal predicate (3a) or argument of preposition (3b), while non-thematic sig merge with the v of the voice projection vP, see (2b), (4) and (6). It is the clitic properties of sig, i.e. its simultaneous X₀ and XP status, which enable it to behave differently depending on its position in the derivation.

Needless to say, only thematic sig falls under the binding theory, while non-thematic sig falls under a different module of the grammar (i.e. argument structure/voice). We argue that this approach to the analysis of all occurrences of sig in Danish is both more explanatory as well as more economical than previous accounts. According to a number of current accounts of Danish (and similar languages, e.g. Norwegian, Swedish, and Dutch) simple reflexives (e.g. Dan. sig) are anti-local. That is, it is assumed that local sig is never a true anaphor but rather a non-thematic grammatical marker of intransitivity which is part of the lexical make-up of deponent verbs and reanalyzed deagentive unaccusative verbs (cf. Holmberg (1984), Vikner (1985) among others). We argue that although this analysis does apply to some instances of local sig, e.g. (4) and (6), it does not extend to ALL verbs allowing local sig. As will be shown, the large group of verbs referred to here as “neutral” do allow local sig (even when bound by co-arguments) without showing any signs of reanalysis or
lexical ambiguity. The fact that the neutral predicate vaske ‘wash’ has the same meaning in (3a) as in (7) indicates that no reanalysis has taken place in (3a).

(7)  
Peter vasker døren.

Peter washes door-the
‘Peter washes the door.’

In both (3a) and (7) the predicate vaske ‘wash’ assigns the same two theta-roles (AGENT and THEME) and thus denotes a relation of washing between two entities (the only difference being that in (3a) the washer and washee happen to be the same). We argue that examples such as (3a) and (7) falsify the anti-locality accounts of sig which would have to claim that the sig in (3a) is non-thematic grammatical marker of intransitivity. Using a number of syntactic and semantic tests we show that there is no evidence for assuming the verb vaske ‘wash’ to have been reanalyzed as an unaccusative intransitive verb in (3a). In contrast, several tests show that vaske ‘wash’ is still a transitive verb assigning two theta-roles.

As already discussed in chapter 3, based on what kinds of nominal expressions they allow in object position, Danish verbal predicates can be divided into three main types: (i) “neutral” predicates which allow both simple and complex reflexives (i.e. sig and sig selv) and DPs, see (8), (ii) “anti-reflexive” predicates which allow the complex reflexive sig selv and DPs but not the simple reflexive sig, see (9), and (iii) “inherently reflexive” predicates which allow only the simple reflexive sig, see (10).

(8)  “Neutral” predicates:
  a.  
  Peter vasker sig / sig selv / bilen.  (thematic sig)
  Peter washes REFL / REFL-SELF / car-the
  ‘Peter washes himself / the car.’

  b.  
  Peter forsvarer sig / sig selv / Marie  (thematic sig).
  Peter defends REFL / REFL-SELF / Mary
  ‘Peter defends himself / Mary.’

(9)  “Anti-reflexive” predicates:
  a.  
  Peter mistænker *sig / sig selv / Marie.  (thematic sig selv)
  Peter suspects *REFL / REFL-SELF / Mary
  ‘Peter suspects himself / Mary.’
b. *Peter misunder *sig / sig selv / Marie.  (thematic sig selv)
   Peter envies *REFL / REFL-SELF / Mary
   ‘Peter envies himself / Mary.’

(10) “Inherently reflexive” predicates:
   a. *Peter skammer sig /*sig selv /*Maire.  (non-thematic sig)
      Peter shames RELF / *REFL-SELF / *Mary
      ‘Peter is ashamed of himself / Mary.’
   b. *Peter dukker sig / *sig selv / *Maire.  (thematic sig)
      Peter ducks REFL / *REFL-SELF / *Mary
      ‘Peter ducks *himself / *Mary.’

The distribution of different types of nominal expressions in object position with the different verb types is summarized in (11).

(11) Distribution of nominal expressions in object position:
   a. Anti-reflexive  *sig / sig selv / DP
   b. Neutral        sig / sig selv / DP
   c. Inherently reflexive sig / *sig selv / *DP

The relation between the semantic properties of predicates and adnominal intensification of simple reflexives has already been discussed in great length in chapter 3 and will not be repeated here. In the rest of this chapter the focus will be on the types of predicates which allow simple sig, i.e. neutral (8) and inherently reflexive predicates (10). We argue that “neutral” transitive verbs retain their transitivity even when they occur with the simple reflexive sig, see (8) as well as (3a) vs. (7). In contrast, other approaches (e.g. Reinhart and Reuland 1993, and others) assume that all the “neutral” verbs occur twice in the lexicon: once, as a true transitive verb which require the intensified reflexive sig selv, e.g. (7), and once as an inherently reflexive verb which does not need to be overtly reflexive-marked by the SELF element of the complex reflexive, e.g. (3a). We argue that such lexical ambiguity is both unwarranted and unnecessary. That is, neutral predicates can allow simple sig as direct object without being “inherently reflexive”. In section 4.2. a number of syntactic and semantic tests will be used to compare and evaluate these competing views of “neutral” predicates and it will be argued that the approach adopted here makes it possible to arrive at a simpler, more
economical, account of binding which does not need to stipulate double entries for neutral verbs.

The intensified form of the reflexive, i.e. sig selv, has been claimed always to be thematic. See section 3.3.6.2 in chapter 3 and section 4.3.3 in chapter 4 for discussion of instances of non-thematic sig selv, where the presence of selv is triggered by prosodic rather than semantic factors.

Section 4.3 contains a discussion of different types of “inherently reflexive” predicates, i.e. predicates which can only occur with sig, see (10). It will be argued that the large majority of inherently reflexive predicates are of a type of “deponent” unaccusative verbs where sig functions as a non-thematic marker of unaccusativity occurring in the v of the voice projection vP, cf. (2b), (10a). However, there are also a number of inherently reflexive predicates which fail to behave as unaccusatives with respect to different syntactic and semantic tests. These predicates thus appear to be semantically inherently reflexive but still fully transitive predicates which assign two theta-roles but which, due to strict semantic selection restrictions, only allow simple reflexives as internal arguments (2a), (10b). From a binding-theoretical point of view, one of the main interest of this chapter is that it addresses the issue of where to draw the dividing line between thematic and non-thematic uses of reflexives, e.g. while Reinhart and Reuland (1993) consider both instances of sig in (10a,b) to be thematic, we argue that sig in (10a) in non-thematic and that the sig in (10b) is thematic. We also disagree with Vikner (1985) who would consider both instances in (10a,b) as well all the instances of sig with neutral predicates, e.g. (3a,b) and (8a,b), to be non-thematic grammatical markers.

---

1 In these respects Jakubowicz (1994) analysis of Danish reflexives is very similar to the one defended here. That is, she also considers local sig with neutral predicates to be thematic without stipulating double entries for all neutral predicates.
The problem posed by the fact that there is no formal distinction between reflexives and pronouns in the 1st and 2nd person is taken up in section 4.4 where we present a late-insertion analysis which accounts for these facts without stipulating the existence of multiple lexical entries.

Like the adnominal intensifier selv ‘self’ discussed in chapter 2, the reflexive element sig can be found in a number of different uses with what seems to be widely different syntactic and semantic properties. In section 4.5 the full range of uses of reflexive elements (e.g. in reciprocal, middle, passive, etc. constructions) will be briefly discussed. This section is largely descriptive and its main function is to situate the uses of sig as thematic reflexive and non-thematic marker of unaccusativity in the context of the full range of uses of reflexive elements. As mentioned in chapter 1, a complete mapping of the full ranges of uses of both the intensifier selv and the reflexive sig is a necessary prerequisite to our understanding of the behavior of these elements independently as well as the instances where they combine to form the so-called complex reflexives. Our analysis of complex reflexives as intensified nominal expressions thus relies on carefully distinguishing between the contributions of different modules of the grammar, see (12).

(12)  

<table>
<thead>
<tr>
<th>Module:</th>
<th>Accounts for:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. intensification</td>
<td>distribution of selv</td>
</tr>
<tr>
<td>b. binding theory</td>
<td>distribution of thematic sig</td>
</tr>
<tr>
<td>c. argument structure, voice, etc.</td>
<td>distribution of non-thematic sig</td>
</tr>
</tbody>
</table>

Finally, section 4.6 summarizes the results of the previous sections and concludes the chapter.

4.2 Testing the lexical/syntactic status of sig with neutral verbs

In this section a number of syntactic and semantic tests will be used to show that simple sig occurring with neutral predicates is best analyzed as a theta-role receiving internal argument of a transitive predicate. As defined in chapter 3, neutral predicates are predicates which are
semantically compatible with both reflexive and non-reflexive scenarios, and which therefore are neutral with respect to what types of nominal expressions can occur as internal arguments.

The grooming activity predicates in (13), exemplify proto-typical neutral verbs.

(13) **Grooming verbs:**

a. *barbere* ‘shave’
b. *vaske* ‘wash’
c. *frisere* ‘dress one’s hair’
d. *bade* ‘bathe’
e. *rede* ‘comb one’s hair’
f. *tørre* ‘dry’
g. *pynte* ‘adorn’
h. *køler* ‘dress’
i. *kilde* ‘undress’
j. *afluse* ‘delouse’
k. *børste* ‘brush’
l. *sminke* ‘make up’
m. *frottere* ‘rub (with a towel)’

Verbs denoting non-translational movement and verbs denoting transformation also constitute core groups of neutral predicates, see (14) and (15).

(14) **Movement verbs:**

a. *strække* ‘stretch’
b. *bevæge* ‘move (non-translationally)’
c. *flytte* ‘move (translationally)’
d. *dreje* ‘turn’
e. *bøje* ‘bend’

(15) **Transformation verbs:**

a. *forvandle* ‘transform’
b. *udvikle* ‘develop’
c. *ændre* ‘change, alter; modify’
d. *forandre* ‘change, alter’

There are also a number of neutral verbs falling into neither of these categories, see (16).

---

Only DPs denoting inalienably possessed object can occur as internal arguments of *bevæge* ‘move’, see (i). In contrast, *flytte* ‘move allows both alienable and inalienable objects, see (ii).

(i)  
*Peter bevægede hånden/foden/stolen/glasset.*  
‘Peter moved his hand/his, foot/the chair/the glass.’

(ii)  
*Peter bevægede hånden/foden/*stolen/*glasset.*  
‘Peter, moved his hand/his, foot/the chair/the glass.’
Finally, the class of neutral predicates also include all the “hidden neutral predicates” which tend to pattern as “anti-reflexives” (i.e. disallowing simple sig) although they do not presuppose (representational) non-identity of their arguments, see discussion of koge ‘boil’ in chapter 3, section 3.3.2.3.

By using syntactic and semantic tests showing that neutral verbs allow locally bound thematic sig we argue against analyses which are – in one way or the other - based on the alleged anti-locality of sig (e.g. Vikner 1986, etc.), as well as analyses based on the assumption that all neutral verbs are lexically ambiguous (e.g. Reinhart & Reuland 1993).

4.2.1 Testing for agentivity

Testing for agentivity is one way to determine whether a given predicate is causative transitive or decausative inchoative/unaccusative. As observed by Waltereit (1999:269), the French transitive verb tuer ‘kill’ can be used with the reflexive se ‘REFL’ in two different ways, i.e. (i) as a causative transitive verb (17b,c), or as (ii) a deagentive inchoative (17a).

(17)3 a. Pierre s’est tué dans un accident. ([-agentive], unintentional death)
Pierre REFL is killed in an accident
‘Pierre has died in an accident.’

b. Pierre s’est tué. ([+agentive], intentional death)
Pierre REFL is killed
‘Pierre killed himself’/’Pierre committed suicide.’

c. Pierre a tué le juge. ([+agentive], intentional death)
Pierre has killed the judge
‘Pierre has killed the judge.’

In (17a) se tuer occurs in a context which excludes agentivity, i.e. the adverbial phrase dans un accident ‘in an accident’, and as consequence the verb tuer+se takes on the deagentive

---

3 These examples in and the following discussion thereof is closely inspired by Waltereit (1999).
inchoative interpretation ‘(accidentally, non-intentionally) die’. In the default out-of-the-blue context in (17b) the tuer+se is usually interpreted as an agenteive, causative transitive verb meaning ‘(intentionally) kill (somebody/oneself)’ just like the non-reflexive scenario tuer+DP in (17c). In French, the difference between the true thematic reflexive (17b) and the deagentive inchoative uses of verb non-thematic se (17a) can usually only be determined by the presence vs. absence of a linguistic context which excludes agentivity, e.g. dans un accident ‘in an accident’ in (17a).

The [+/-agentivity] distinction can also be used as a diagnostic for deagentive inchoative verbs in Danish (18a) which have causative transitive counterparts (18b,c).

(18) a. Peter slog sig (på bordkanten). ([-agentive], unintentional event)
   Peter hit REFL on table-edge
   ‘Peter (accidentally) hurt himself (on the edge of the table).’

b. Peter slog sig selv. ([+agentive], intentional event)
   Peter hit REFL self
   ‘Peter (intentionally) hit himself.’

c. Peter slog Hans. ([+agentive], intentional event)
   Peter hit Hans
   ‘Peter (intentionally) hit Hans.’

Notice that unlike French, which uses the same form of the reflexive, viz. se ‘REFL’, in both the deagentive inchoative sentence in (17a) and the causative transitive reflexive construction in (17b), Danish tend to use the simple form sig ‘REFL’ in the deagentive inchoative sentence in (18a) and the complex form sig selv ‘REFL self’ in the causative transitive reflexive construction in (18b). The preference for sig selv over simple sig in causative transitive reflexive constructions involving the predicate slå ‘hit’ is due to the fact that this particular predicate is a so-called “hidden neutral” predicate, i.e. a predicate which - although not semantically incompatible with reflexive scenarios – is most often used as an other-directed predicate and thus triggers the expectation that its arguments denote (representationally) different entities. The verbs slå ‘hit’ in (18) and brænde ‘burn’ in (19) thus belong to a subset
of verbal predicates which display the same meaning difference between verb+sig (=unintentional, [-agentive]), and verb+sig selv/DP (=intentional, [+agentive]) as the French examples in (17a-c) discussed above.

(19)  

(a) Peter brændte sig på ovnen.  ([{-agentive}], unintentional event)  
Peter burned REFL on oven-the  
‘Peter (accidentally) burned himself on the oven.’
(b) Peter brændte sig selv.  ([{+agentive}], intentional event)  
Peter burned REFL self  
‘Peter (intentionally) burned himself.’
(c) Peter brændte Hans.  ([{+agentive}], intentional event)  
Peter burned Hans  
‘Peter (intentionally) burned Hans.’

Notice furthermore that, although complex sig selv is preferred with the hidden neutral predicates slå ‘hit’ and brænde ‘burn’ in (18-19b), it is possible to find agentive, transitive uses of these predicates with simple sig. Adding an instrumental (and/or locative) phrase to the sentences in (18-19b) makes simple sig more acceptable even with the agentive reading, compare (18b) vs. (20a) and (19b) vs. (20b).

(20)  

(a) Peter slog sig (i hovedet) (med en hammer).  (agentive, intentional)  
Peter hit REFL (in head-the) with a hammer  
‘Peter (intentionally) hit himself (in the head) with a hammer.’
(b) Peter brændte sig (på armen) (med en cigaret).  (agentive, intentional)  
Peter burned REFL (on arm-the) with a cigarette  
‘Peter (intentionally) burned himself (on his arm) with a cigarette.’

Examples like (18-20) illustrate the difference between deagentive inchoative verbs denoting unintentional events and their causative transitive counterparts which denote activities involving two entities, usually an AGENT doing something to a PATIENT/THEME. Since the sig in (18-19a) occurs with the intransitive predicates slå/brænde ‘hit/burn’, it is non-thematic and should be analyzed as in (2b). In contrast, the occurrences sig selv\(^4\) (18-19b) and

\(^4\) It has been claimed that the XP status of intensified reflexives (e.g. sig selv) assures that they are always thematic, see chapter 3 (cf. also Jakubowicz 1994). See, however, section 4.3.3 where instances of non-thematic intensified reflexives are discussed.
sig in (20a-b) are thematic and receive a theta-roles from the transitive versions of the predicates slå/braende ‘hit/burn’.

As mentioned above, Holmberg (1984) and Vikner (1985) assume simple sig to be anti-local. That is, it can only be thematic when LD-bound. For them all instances of local sig thus have to be non-thematic. Consequently, in their system, only complex reflexive (e.g. sig selv) can be locally bound. They thus explain the difference between (18a,19a) and (18b,19b) by reference to a difference in thematic structure. In (19b,19b and (18c,19c) the subject DP Peter receives the AGENT theta-role and the internal arguments sig selv/Hans receive the THEME theta-role. In the (a) cases the verbs brænde/slå only have one theta-role to assign, i.e. the THEME theta-role assigned to the subject DP Peter. In other words, their analysis is based on the assumption that local sig is “some sort of detransitivizing element that somehow prevents the assignment of the theta-role that would otherwise have been assigned to the subject. In accordance with Burzio’s generalization (cf. e.g. Burzio (1981), Haegeman (1985)) this in turn prevents the deep structure object from getting object case, and it therefore has to move to subject position to be case-marked, taking along its object theta-role, in this case THEME, parallel to the analysis of passive in LGB: 124ff.” (Vikner (1985:50, footnote 8)).

While we agree that an analysis along these lines may account for the difference between (18/19a) vs. (18/19b,c) we strongly disagree with their claim that it may be extended to all cases of local sig. As shown in (20), agentive readings of the predicates slå/braende ‘hit/burn’ can be found even with locally bound sig. Additional counter-examples to their theory are provided by numerous cases of sig with neutral predicates, e.g. vaske ‘wash’ in (21).

(21) a. Peter vaskede sig. ([+agentive], intentional event, [-contrast])
   b. Peter vaskede sig selv. ([+agentive], intentional event, [+contrast])
   c. Peter vaskede Hans. ([+agentive], intentional event)
   Peter washed REFL/REFL self/Hans
   ‘Peter washed Ø/himself/Hans.’
The difference between (21a) and (21b) is not a difference of agentivity/intentionality - as would be predicted by Vikner’s (1985) approach - but rather one of [+/-contrastive focus] or [+/-doppelgänger-effect]. In other words, Holmberg’s and Vikner’s reanalysis account of slå sig and brænde sig cannot be extended to the neutral verb vaske ‘wash’ which has [+intentional, +agentive] readings with both the simple reflexive sig and the complex reflexive sig selv. The sentence in (21a) does not mean that Peter accidentally experienced a washing event that somehow ‘happened’ to him. Proof of this is provided by the fact that while the sentences in (21a-c) are all compatible with adverbials like med vilje ‘deliberately’ or purpose clauses like for at ‘in order to’ only the (b) and (c) examples in (18) and (19) combine felicitously with such expressions. Vikner (1985) acknowledges that such examples constitute a potential problem for his approach. In his analysis local sig is a non-thematic, detransitivizing element which reduces the number of theta-roles assigned by a predicate by one. While this analysis is justified for the examples in (18a) and (19a), there is no evidence supporting its extension to cases like (21) and (22).

(22)  
  a. … at [s Peter; AGR satte sig, ned]  
  b. sig selv  
  c. Michael z  

‘…that [s Peter AGR set ___ down]’

Vikner’s account of (22) is as follows:

“the difference in meaning is that where [(22a)] means straightforwardly “Peter sat down”, [(22b)] means something like “Peter sat himself down” (pragmatically a bit odd, as if he had set himself down by means of e.g. a crane). This difference would seem to be accounted for by assuming the following theta-roles: in [(22b)] Peter is AGENT, sig selv is THEME (parallel to [(22c)]), whereas in [(22a)] Peter is AGENT, and there is no THEME as such. If [(22a)] is compared to [(18/19a)], they have in common that sig ensures that only one theta-role is assigned, but they differ in which one it is. This difference is supported by my intuition that [(22a)] which has an AGENT may be followed by a purpose clause (e.g. “in order to impress everyone in the room”), which is not possible for the AGENT-less [(18/19a)]. Similarly [(21a)]

5 For discussion of adnominal intensification of reflexives used to express contrastiveness or doppelgänger-effects, see chapter 3, section 3.3.2.5 and 3.3.2.7 respectively.
but not [(18/19a)] may contain an adverbial like *med vilje* “deliberately”.” (Vikner (1985:50-51, footnote 9)

Vikner’s analysis seems rather ad hoc. While assuming that the reduction in arity and the absence of agent in (18a) and (19a) to be due to Burzio’s generalization seems well justified, Vikner does not provide any evidence supporting the assumption of a different arity reduction rule responsible for the alleged absence of the THEME rather than the AGENT role in (22a). Given what we now know about doppelgänger-effects, it seems quite obvious that the meaning difference between (22a) and (22b) is due to the doppelgänger reading triggered by the intensified reflexive *sig selv*, not ad hoc deletion of the THEME theta-role. This analysis thus eliminates the need for stipulating any additional ad hoc arity-reduction rule responsible for eliminating the THEME theta-role while preserving the AGENT theta-role. Just like with any other transitive neutral verb, e.g. *vaske* ‘wash’ in (21), the theta-grid of *sætte _ ned* ‘sit __ down’ remains the same (i.e. AGENT, PATIENT/ THEME) regardless of what kind of nominal expression occupies the position of direct object, i.e. in all the sentences in (22a-c), as well as in (21a-c), the predicate assigns an AGENT theta-role to the subject and a THEME theta-role to the direct object. In other words, there is no special arity reduction rule at work in (22a). The simple reflexive *sig* simply receives the theta-role THEME while the subject gets the AGENT theta-role. Similar arguments can be leveled against Lidz (1996) who assumes local simple *sig* to be a non-thematic, verbal reflexive. Like Vikner, Lidz runs into trouble with the neutral predicates which, as shown above, allow locally bound thematic *sig*.

On the basis of such examples we conclude that neutral predicates (e.g. *vaske* ‘wash’, etc.) remain agentive causative transitive predicates even when the simple reflexive *sig* ‘REFL’ occupies the position of direct object. In other words, in spite of what has been the accepted account for decades, simple *sig* CAN be an theta-role receiving argument even when it is locally bound by a co-argument.
4.2.2 Testing for compatibility with formation of agentive nouns in –er

Formation of agentive nouns from verbal roots has sometimes been used to test whether a verb is unaccusative, e.g. Evereart (1986). It has been claimed that verbs taking the simple reflexive, e.g. Danish sig, Dutch zich, etc., also do not allow –er affixation, thus indicating that they are unaccusative (cf. Lidz (1996:132) following Evereart (1986)) Lidz (1996) bases his argument on examples such as (23)-(26) which show that unaccusative verbs disallow –er suffixation, while transitive and unergative verbs allow it.

(23) Unaccusative:
   a. Han er faldet.  b. *En falder.
      he is fallen       a faller
      ‘He fell.’

(24) Transitive:
   a. Han spiser.
      he eats
   b. en (hvidløgs)spiser
      a (garlic)eater

(25) Unergative:
   a. Han danser
      he dances
   b. en danser
      a dancer

(26) a. Han forspiste sig (i salat).
      he over-ate REFL in salad
   b. *en forspiser
      ‘He overate on the salad.’

Lidz claims that verbs taking sig behave like unaccusatives by disallowing the formation of –er nouns. While this generalization turned out to be true for the particular verbs he tested, e.g. forspise sig ‘overeat’ in (26), it does not hold for the neutral verbs in (27), which allow formation of agentive nouns in –er in spite of the fact that they can all be found with locally bound simple sig, see (28).

(27) a. en vasker
     ‘a washer’
 b. (nøgen-)bader
     ‘a (naked-)bather, a skinny-dipper’
 c. en afluser
     ‘a delouser’
 d. en (falck-)redder
     ‘(lit.) a saver, i.e. a salvage-corps man’
 e. en befrier
     ‘a liberator’
 f. en forsvarer
     ‘defender, defense player (football) defense lawyer’
(28)  *Peter vasker/bader/afluser/etc. sig.
    Peter washes/bathes/delouses REFL
    ‘Peter washes/bathes/delouses/etc. (himself)’

Now, if one accepts the lexical ambiguity hypothesis (cf. Reinhart & Reuland (1993)), one
could object that the verbs in (27) all have transitive forms and that the –er nouns in (30) are
formed from the transitive form of the verb rather than the inherently reflexive form of the
verb, which is the one found in (28). The problem with this explanation (besides the obvious
problem of having recourse to unmotivated lexical ambiguity) is that it does not work for verbs
like (29), which do allow the formation of –er nouns, see (30), in spite of their inherently
reflexive nature, i.e. they allow nothing other than sig in object position, see (29).

(29)  *Peter bosatte *Ø/sig/*sig selv/*Hans i Afrika.
    Peter settled REFL/*REFL self/*Hans in Africa.
    ‘Peter settled Ø/*himself/*Hans in Africa.’

(30)  *Peter er en af de indiske bosættere i Afrika.
    Peter is one of the Indian settlers in Africa
    ‘Peter is one of the Indian settlers in Africa.’

In other words, the –er test does NOT allow us to conclude that all verbs taking local sig
behave like unaccusatives. While it appears to work for the verbs of the type illustrated in
(26), it does not work for (27-30). Furthermore, as discussed in section 4.3.2, the fact that a
given verb does not allow formation of agentive nouns in –er does not necessarily mean that it
is unaccusative. Many anti-reflexive transitive verbs do not allow formation of agentive nouns
in –er, e.g. mistænke ‘suspect’, *en mistænker ‘*a suspecter’. In other words, there is no
guarantee that the reason why a given verb cannot form agentive nouns in –er is because it is
unaccusative.

---

6 The question of how to analyze –er nominalizations is also discussed in chapter 7. Agentive nouns of anti-
reflexive verbs are always non-reflexive, e.g. morder ‘murderer’, unless the element selv is present to indicate a
reflexive scenario (e.g. selvmorder ‘self-murderer, a person who has committed suicide’). Agentive nouns of
transitive inherently reflexive nouns are rare. Those we have found are not compatible with the selv- prefix, e.g.
bosætter ‘settler’ vs. *selvbosætter ‘self-settler’. Notice that unlike –er nouns derived from anti-reflexive verbs,
e.g. morder ‘murderer’, bosætter ‘settler’ only has reflexive readings (i.e. refers to someone who settles (himself)
4.2.3 Non-compositional meaning change and the question test

Neutral verbs have the same meaning when they are used in reflexive constructions as when they are used in non-reflexive transitive contexts, compare (31a) and (31b).

\[(31)\]
\begin{align*}
\text{a. } & \text{Peter vasker/barberer Hans.} \quad \text{(neutral)} \\
& \quad \text{‘Peter washes/shaves Hans.’}
\text{b. } & \text{Peter vasker/barberer sig.} \quad \text{(neutral, thematic sig)} \\
& \quad \text{‘Peter washes/shaves (himself).’}
\end{align*}

That is, the meaning of the verb+reflexive in (31b) can be derived compositionally from the meaning of the verb and the meaning of the reflexive sig in the same way as the meaning of the verb+DP in (31a) can be derived compositionally from the meaning of the verb and the meaning of the DP in the object position. In contrast, the anti-reflexive predicate bære ‘carry’ does not have the same meaning in (32a) and (32b).

\[(32)\]
\begin{align*}
\text{a. } & \text{Peter bar kufferten.} \quad \text{(anti-reflexive)} \\
& \quad \text{‘Peter carried the suitcase.’}
\text{b. } & \text{Peter bar sig med stor værdighet.} \quad \text{(anti-refl. reanalyzed as inher. refl., non-thematic sig)} \\
& \quad \text{‘Peter carried REFL with great dignity’}
\quad \text{*(i) ‘Peter<real> carried himself<statue>.’}
\quad \text{*(ii) ‘Peter<real> carried himself<real>.’ (Münchhausen story)}
\quad \text{ok (iii) ‘Peter behaved carried himself/behaved with great dignity.’}
\text{c. } & \text{Peter bar sig selv.} \quad \text{(anti-reflexive, thematic sig)} \\
& \quad \text{‘Peter carried REFL self’}
\quad \text{ok (i) ‘Peter<real> carried himself<statue>.’}
\quad \text{ok (ii) ‘Peter<real> carried himself<real>.’ (Münchhausen story)}
\quad \text{*(iii) ‘Peter behaved carried himself/behaved with great dignity.’}
\end{align*}

In (32a) the predicate bære ‘carry’ occurs in its normal use as an anti-reflexive transitive verb meaning to ‘carry (something/somebody)’. In (32b) it is used together with the reflexive sig in the meaning ‘carry oneself; behave’. Unlike (31b) this meaning cannot be obtained compositionally from the basic meaning of the verb+reflexive pronoun. Such non-compositional meaning differences have often been used as argument in favor of assuming that the verb+sig combination has been reanalyzed as an inherently reflexive verb or, alternatively,
that *bære* is lexically ambiguous between a transitive verb with the meaning ‘carry’ and an inherently reflexive with the meaning ‘behave.’ An additional argument in favor of assuming *bære sig* ‘carry oneself; behave’ to be reanalyzed as a reflexive verb is that, unlike the reflexive pronoun *sig* in (31b), the *sig* in (32b), is not thematic. In both (32a) and (31a,b) Peter is actually washing an object. In (31b) this object being washed is identical to the washer himself; in (31a) it is different. In (32a) the direct object DP *kufferten* ‘the suitcase’ serving as direct object of *bære* ‘carry’ does refer to a particular entity in the universe of discourse, namely a particular suitcase being carried by Peter. In contrast, the reflexive pronoun *sig* in (32b) does not refer to any specific entity in the universe of discourse; in particular it clearly does not share the reference of its antecedent Peter. Had this been the case the sentence would have meant that Peter carried himself (on his back), as in a Münchhausen story, see (32c), which is clearly not the meaning of (32b).7

Waltereit (1999:260) proposed to use questions to test whether *sig* is thematic or non-thematic in a given verb+*sig* combination. When the referent of the reflexive can be questioned, as in (33), then the reflexive is thematic. Conversely, when replacement of the reflexive with a question word yields unacceptable sentences then the reflexive is non-thematic, see (34).

(33)  
Marie se regarde dans la glace. Elle regarde qui?  
Marie REFL looks in the mirror she looks whom?  
‘Marie looks at herself in the mirror. Whom does she look at?’

(34)  
Jean-Luc s’est rendu à la gare. #Il a rendu qui?  
Jean-Luc REFL returned to the station He has returned whom  
‘Jean-Luc went to the station. #He returned whom?’

inherently reflexive predicate *bosætte* ‘settle’ is also discussed in section 4.3.2.

7 For more discussion of the relationship between Münchhausen readings/doppelgänger-effects and intensified reflexives, see chapter 3 section 3.3.2.7.

8 These examples are adapted from Waltereit (1999:260), examples (2) and (4).
As shown by the examples in (35) and (36), the same question test can be used to test the thematic status of \textit{sig} in Danish.

\begin{align*}
\text{(35) } & \text{Marie vaskede sig i varmt vand. Hvem var det hun vaskede?} \\
& \text{Marie washed REFL in warm water who was it she washed?} \\
& \text{‘Marie washed (herself) in warm water. Who did she wash?’} \\
\text{(36) } & \text{Marie bar sig med stor værdighed. Hvem bar hun med stor værdighed?} \\
& \text{Marie carried REFL herself with great dignity who carried she with great dignity} \\
& \text{‘Marie carried herself with great dignity. Who did she carry with great dignity?’}
\end{align*}

An inherent weakness to this test lies in the fact that one can only ask questions about the parts of a sentence which can be focused. Since inherently reflexive verbs only allow expressions that are coreferential with the subject to occupy the position of direct object, it is in principle impossible to ask a meaningful question about the referents of the expression (which, due to the semantic selections of the predicate, will always be a reflexive pronoun) filling the object position of an inherently reflexive predicate.

4.2.4 Testing for compatibility with impersonal passivization

To further support the claim that verbs taking local simple \textit{sig} behave as unaccusatives Lidz (1996) adduces examples such as (37-39) to show that, just like uaccusatives (37-38), “verbs which take [\textit{sig}] also disallow impersonal passivization [, see (39)]” (p. 133). The observation that unaccusative verbs disallow impersonal passivization while unergatives allow it is due to Perlmutter (1978). Lidz’s Dutch examples have here been translated into Danish for ease of exposition.

\begin{align*}
\text{(37) a. } & \text{Han løber.} \\
& \text{he runs} \\
& \text{‘He runs.’} \\
\text{b. } & \text{Der bliver løbet.} \\
& \text{there becomes run} \\
& \text{‘People are running’} \\
\text{(38) a. } & \text{Han falder.} \\
& \text{he falls} \\
& \text{‘He falls.’} \\
\text{b. } & \text{*Der bliver faldet.} \\
& \text{there becomes fallen} \\
& \text{‘People are falling.’}
\end{align*}
On the basis of such data, Lidz concludes that the occurrences of sig in examples such as (39) are not anaphors but non-thematic, non-referential verbal reflexives. While we agree that this holds for the verbs in (39) it is certainly not the case for neutral verbs. Neutral predicates allow impersonal passivization, see (40), although they also allow locally bound thematic sig, see (41).

(40)  
\[ \text{Der blev vasket/badet/etc.} \]
\[ \text{there became washed/bathed/} \]
\[ \text{‘There was washed/bathed.’} \]

(41)  
\[ \text{Peter vasker/bader/afluser/etc. sig.} \]
\[ \text{Peter washes/bathes/delouses REFL} \]
\[ \text{‘Peter washes/bathes/delouses himself.’} \]

These examples clearly show that impersonal passivization cannot be used to prove that ALL verbs which allow local simple sig are unaccusative. The generalization that verbs taking simple sig also disallow impersonal passivization could, of course, be saved by assuming that neutral verbs like vaske ‘wash’ and bade ‘bathe’ have double-lexical entries, e.g. (i) transitive verbs, and (ii) unaccusative/intransitive verbs (cf. also Reinhart and Reuland (1993)). As already argued in sections 4.2.1-3, as will be argued in 4.2.5-10, there are a number of facts which go against this assumption and which are more readily explainable under the assumption that neutral verbs like vaske ‘wash’ and bade ‘bathe’ are entered only once into the lexicon, i.e. as causative transitive verbs consistently assigning the theta-role THEME to their internal objects (be they DPs, pronouns or the simple reflexive sig).

The example in (42), originally from Hellan (1988), which Lidz uses to argue that verbs which take simple sig are unaccusative, is rather curious.

(42)  
\[ *\text{Der blev vasket sig (af manden).} \]
\[ \text{there became washed REFL (by man-the)} \]
This example appears to be flawed. If the point is to show that *vaske* ‘wash’ is not a causative transitive verb which may allow *sig* as a true thematic anaphor in argument position, then one should not use a sentence like (42). Indeed if *vaske* ‘wash’ is truly a causative transitive verbs in all its uses (i.e. even with simple *sig*) then one would expect it to be ungrammatical in impersonal passive constructions WITH the reflexive pronoun, since all causative transitive verbs behave in the same way, see (43).

(43) a. *Der blev dolket sig (selv).*  
there was stabbed REFL self  
( *dolke* ‘stab’ = anti-reflexive)
b. *Der blev spist/vasket sig (selv).*  
there was eaten/washed REFL self  
( *vaske/spise* ‘wash/eat’ = neutral)

In other words, rather than showing that *vaske* ‘wash’ behaves as an unaccusative verb, (42) shows that it behaves just like any other transitive verbs, see also (44), which furthermore underlines the parallels between *vaske* ‘wash’ and the other transitive verbs.

(44) a. *Der blev spist/vasket.*  
there was eaten/washed
b. *Der blev spist/vasket kartofler.*  
there was eaten/washed potatoes

Furthermore, as discussed in section 4.3.2, the fact that a given verb does not allow impersonal passivization does not necessarily mean that it is unaccusative. Many anti-reflexive transitive verbs, e.g. (45a), cannot felicitously form impersonal passives, e.g. (45b)

(45) a. *Peter mistænkte *sig / sig selv /Marie.*  
Peter suspected REFL / REFL self / Marie  
‘Peter suspected himself / Marie.’
b. *Der blev mistænkt.*  
there was suspected

In other words, there is no guarantee that the only reason a given verb cannot undergo impersonal passivization is because it is unaccusative. So this test should be used with caution when applied to inherently reflexive verbs. That is, while it seems plausible to assume that the
inherently reflexive verb forspise ‘overeat’ is unaccusative, the mere fact that it cannot form the impersonal passive (39b) cannot be used as solid proof of its unaccusativity.

4.2.5 Auxiliary-selection

A further indication that sig-form verbs do not necessarily behave as unaccusatives comes from auxiliary selection in Danish. Unaccusative verbs take at være ‘to be’ as auxiliary, see (46), while unergatives and transitive verbs take at have ‘to have’, see (47) and (48)\(^9\).

(46) Unaccusative predicates:

*Han er ankommet.*
he is arrived
‘He has arrived.’

---

\(^9\) Alan et al. (1995) provide a conveniently concise description of the use of the verbs have ‘have’ and være ‘be’ as auxiliaries in the formation of the perfect tense in Danish:

“(i) Transitive verbs, and intransitive verbs not expressing motion, use have as their auxiliary:

<table>
<thead>
<tr>
<th>Verb</th>
<th>Danish</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeg har læst bogen.</td>
<td><em>I have read the book.</em></td>
<td></td>
</tr>
<tr>
<td>Vi har bragt pengene.</td>
<td><em>We have spent the money.</em></td>
<td></td>
</tr>
<tr>
<td>Hun har ventet på dig.</td>
<td><em>She has waited for you.</em></td>
<td></td>
</tr>
<tr>
<td>Vase har stået her.</td>
<td><em>The vase has stood here.</em></td>
<td></td>
</tr>
</tbody>
</table>

Notice that have and være both use have as their auxiliary.

<table>
<thead>
<tr>
<th>Verb</th>
<th>Danish</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vi har haft en dejlig ferie.</td>
<td><em>We have had a lovely holiday.</em></td>
<td></td>
</tr>
<tr>
<td>Vi har været i Italien.</td>
<td><em>We have been to Italy.</em></td>
<td></td>
</tr>
</tbody>
</table>

(ii) Intransitive verbs expressing some kind of motion use være as their auxiliary (but see (iii) below):

<table>
<thead>
<tr>
<th>Verb</th>
<th>Danish</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brevet er forsvundet.</td>
<td><em>The letter has disappeared.</em></td>
<td></td>
</tr>
<tr>
<td>De er kommet hjem.</td>
<td><em>They have come home.</em></td>
<td></td>
</tr>
<tr>
<td>Hun er allerede rejs.</td>
<td><em>She has already left.</em></td>
<td></td>
</tr>
<tr>
<td>Er han stukket af?</td>
<td><em>Has he run away?</em></td>
<td></td>
</tr>
</tbody>
</table>

Notice that blive ‘be, become’ uses være as its auxiliary:

<table>
<thead>
<tr>
<th>Verb</th>
<th>Danish</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Han er blevet professor.</td>
<td><em>He has become a professor.</em></td>
<td></td>
</tr>
<tr>
<td>Det er blevet gjort.</td>
<td><em>It has been done.</em></td>
<td></td>
</tr>
</tbody>
</table>

(iii) Sometimes the same verb can combine with both auxiliaries. This is, for example, the case when a verb can be used both transitively and intransitively of motion:

<table>
<thead>
<tr>
<th>Verb</th>
<th>Danish</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeg har flyttet bordet. (trans.)</td>
<td><em>I have moved the table.</em></td>
<td></td>
</tr>
<tr>
<td>De er flyttet til Århus. (intrans.)</td>
<td><em>They have moved to Århus.</em></td>
<td></td>
</tr>
<tr>
<td>Han har flyjet en helikopter. (trans.)</td>
<td><em>He has flown a helicopter.</em></td>
<td></td>
</tr>
<tr>
<td>Han er flyjet til Japan. (intrans.)</td>
<td><em>He has flown to Japan.</em></td>
<td></td>
</tr>
</tbody>
</table>

In other cases, intransitive verbs of motion may express either an activity in the past (and use have) or a present state (and use være):

<table>
<thead>
<tr>
<th>Verb</th>
<th>Danish</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Han er gået 10 kilometer.</td>
<td><em>He has walked 10 kilometers.</em></td>
<td></td>
</tr>
<tr>
<td>Nu er han gået.</td>
<td><em>Now he has gone/left.</em></td>
<td></td>
</tr>
<tr>
<td>Han har svømmet over Kanalen.</td>
<td><em>She has swum the Channel.</em></td>
<td></td>
</tr>
<tr>
<td>Han er svømmet væk.</td>
<td><em>She has swum away.</em></td>
<td></td>
</tr>
</tbody>
</table>

Note – The verb begynde [‘begin’] can be used with either have or være. Have is used when there is a direct object, e.g.:

<table>
<thead>
<tr>
<th>Verb</th>
<th>Danish</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeg har begyndt oversættelsen.</td>
<td><em>I have begun the translation.</em></td>
<td></td>
</tr>
<tr>
<td>Jeg er begyndt på oversættelsen.</td>
<td>(Alan et al. (1995:263-264))</td>
<td></td>
</tr>
</tbody>
</table>
(47) **Unergative predicates:**

*Han har talt.*

he has spoken
‘He has spoken.’

However, none of the *sig*-form verbs, regardless of whether *sig* is thematic (48) or non-
thematic (49), take *at være* ‘to be’ as auxiliary; they all take *at have* ‘to have’.

(48) **Causative transitive predicates:**

a. *Peter har vasket sin bil.*  
   Peter has washed POSSREFL car  
   ‘Peter has washed his car.’

b. *Peter har vasket sig.*  
   Peter has washed REFL  
   ‘Peter has washed himself.’

(49) **Inherently reflexive predicates:**

a. *Peter har forspist sig i æbler.*  
   (compare with (26b) and (39b))  
   Peter has over-eaten REFL in apples  
   ‘Peter overate in apples.’

b. *Peter har ofte skammet sig.*  
   Peter has often shamed REFL  
   ‘Peter has often been ashamed.’

As shown in (49), with respect to auxiliary selection inherently reflexive predicates, regardless of whether they have transitive counterparts (49a) or not (49b), all behave like unergative (47) and causative transitive predicates (48) which take *have* ‘have’, rather than like unaccusative predicates like *ankomme* ‘arrive’ in (46), which take *være* ‘be’.

The auxiliary selection test for unaccusativity was originally developed for Romance languages, e.g. French where unaccusative predicates, as well as all reflexive predicates, take the auxiliary *être* ‘be’, while causative transitive predicates form composite tense forms with the auxiliary *avoir* ‘have’. Clearly, the discrepancies between Germanic (e.g. Danish examples discussed above) and Romance languages show that auxiliary-selection cannot be used as a cross-linguistically reliable test for unaccusativity.\(^\text{10}\)
4.2.6 Lødrups tests

According to Lødrup (1999), there is clear evidence for the status of simple anaphors as theta-role receiving direct objects with neutral predicates. In Norwegian, for instance, a referential `seg` ‘REFL’ (cognate of Danish `sig` ‘REFL’) can be modified by the modifier `hele` ‘whole’, see (50a-b), just like full lexical DPs (50c).

(50) Norwegian:
   a. *Hun vasker sig.
      She washes REFL
      ‘She washed (herself).’
   b. Hun vasker hele sig.
      She washes whole REFL
      ‘She washed all of herself.’
   c. Hun vasker hele bilen.
      She washes whole car-the
      ‘She washed all of the car.’

Furthermore, sentences with thematic `seg` do not allow existential constructions, in contrast to sentences with inherently reflexive verbs which do, see (51a) vs. (51b,c).

(51) Norwegian:
      it washed REFL a lady in sea-the
      ‘There was a lady washing in the sea.’
   b. Det lukket seg en dør.
      it closed REFL a door
      ‘A door closed.’
   c. Det infannt seg en dame på kontoret.
      it appeared REFL a lady on office-the
      ‘A lady appeared in the office.’

Based on data such as (50) and (51) Lødrup concludes that local `seg` ‘REFL’ may function as a theta-role receiving internal argument.

Due to minor parametric variation the examples in (50)-(51) cannot be replicated in Danish. However, Danish and Norwegian (especially bokmål Norwegian) are very closely related languages. In almost all other respects, the distribution of the simple reflexive `seg/sig`

---

follow the same patterns in the two languages. Hence, the Norwegian data may be used as indirect evidence supporting the idea that local *sig can be thematic with neutral verbs.

4.2.7 German *sich is not anti-local

König & Siemund (1999:63) also argue strongly against the idea that simple reflexives are anti-local: “To group these referential uses of the simplex anaphors together with the inherently reflexive verbs and analyze them as cases of reanalysis and detransitivization is particularly absurd for a language like German, where *sich is practically the only reflexive marker and is only combined with the intensifier *selbst in the most extreme cases of other-directed11 predicates[, see (52)].”

(52) German:
   a. *Paul stolperte über *sich/sich selbst.
      Paul stumbled over REFL/REFL self
      ‘Peter stumbled over himself.’
   b. *Maria traf *sich/sich selbst.
      Maria met REFL/REFL self
      ‘Maria met herself.’

As illustrated in (53)-(54), verbs which are anti-reflexive or ‘hidden neutrals’ in Danish, may behave as neutral predicates in German.

(53) Danish:
    *Paul hader *sig / sig selv.  (Danish, ‘hidden neutral’)
    Paul hates REFL/REFL self
    ‘Paul hates himself.’

(54) German:
    *Paul hasst sich / sich selbst.  (German, neutral)
    Paul hates REFL/REFL self
    ‘Paul hates himself.’

It thus appears, as observed by König and Siemund (1999:64), languages may vary with respect to the kind and number of predicates they classify as anti-reflexives: “[…] There are languages like Dutch where simplex *zich is restricted to only a few verbs and there are
languages like German, where a reinforcing *selbst* is rarely needed” (König and Siemund, 1999:64). In other words, a certain amount of cross-linguistic variation with respect to which verbs are classified as anti-reflexive, neutral, and inherently reflexive will have to be assumed.

In order to account for German *sich*, Reinhart & Reuland (1993) would have to extend the lexical ambiguity analysis arbitrarily to include almost all predicates. In contrast, the analysis of anti-reflexivity in proposed in chapter 3 enables a more natural account of such cross-linguistic variation. At first glance the fact that a predicate like *hate* behaves differently in Danish and German seems to constitute problem for the account of intensifier-adjunction to reflexive pronouns given in chapter 3. If intensification of reflexives is triggered by the semantics of the predicate (i.e. the presupposition of non-representational identity of internal and external arguments) then one would expect a verb like *hate* to behave alike in different languages, and especially in the case of closely related languages like Danish and German. At closer look it may be possible to find a natural explanation for such cross-linguistic variation.

In chapter 3 a distinction was made between anti-reflexives and “hidden neutral predicates”, like *koge* ‘boil’, which appear to behave like anti-reflexives but which (unlike the true anti-reflexives) can be made acceptable with simple reflexives given the appropriate context. In the case of true anti-reflexive predicates, e.g. *stolpern über* ‘stumble over’ and *treffen* ‘meet’ in (52), the implicature of non-representational identity of the internal and external arguments is conventionalized (i.e. triggered by the lexical meaning of the predicate) and cannot be overridden by context. That is, it is impossible to imagine a person meeting himself or stumbling over himself without assuming some type of doppelgänger scenario (e.g. schizophrenia or wax museum contexts). Hence, all languages which distinguish between unintensified and intensified reflexives like Danish and German are predicated to require intensified reflexives with semantically anti-reflexive predicates like (52)-(53) and (55).

11 The original passage has “non-other-directed”. This is clearly a typo and has been emended as “other-directed”.

---

256
In the case of the “hidden neutral”, like *hassen* ‘hate’ in (54), the implicature of non-representational identity is triggered by pragmatically determined usage patterns (i.e. it is common/expected, but not logically necessary, for people to use a certain verb to express commonly other-directed actions) rather than lexical semantics. Hence it can be overridden in the right context, e.g. the science-fiction scenario discussed in chapter 3, section 3.3.2.3. The distinction between semantically vs. pragmatically triggered presupposition of non-representational identity makes it possible to explain why strongly anti-reflexive predicates require intensification of reflexives in both German and Danish while the “hidden neutral” predicates may vary cross-linguistically. This account is thus much less ad hoc than Reinhart and Reuland’s (1993) account which do not explain why a certain predicates classified as anti-reflexive rather than neutral or inherently reflexive.

Another source of cross-linguistic variation is due to the syntactic and prosodic properties of the reflexive pronouns themselves. Danish *sig* is a syntactically free but prosodically bound form which cannot carry stress on its own and which has to be adnominally intensified by *selv*-adjunction in order to be heavy enough to carry stress, see

---

12 Note that there are a number of problems for this account of the differences between Danish and German, notably examples like (i) and (ii) which appear to constitute counter-examples to the generalization that semantically anti-reflexive predicates never allow simple *sig*, even in languages like German, which are a lot less restrictive w.r.t. to verbs which allow simple unintensified reflexives.

(i)  
Paul mistænker *sig / sig selv.*  
Paul suspects REFL/REFL self  
‘Paul suspects himself.’

(ii)  
Paul verdächtigte sich / sich selbst.  
Paul suspects REFL/REFL self  
‘Paul suspects himself.’
chapter 3, section 3.3.6.1. In contrast, German *sich* ‘REFL’, is stressable, see section 3.3.6.3.2. See also discussion of stressability, focus, and intensification in chapter 3 section 3.3.6.3.4. The fact that German reflexives can be focused without adnominal intensification, may be one of the reasons why they may potentially obey anti-reflexivity and doppelgänger requirements without adnominal intensification. See section 3.3.6.3.1-4 where we discuss the hypothesis that focus (realized as stress) and adnominal intensification are functionally equivalent, i.e. may occur in the same contexts with more or less the same meaning contribution.

Of the two hypotheses concerning the differences between Danish an German the latter, i.e. the prosodic account also discussed in section 3.3.6.3.2-4 appear to be the most promising. However, due to space limitations we leave the elaboration of this topic for future research.

4.2.8 Constructions involving coordination of verbs

In this section we argue that data related to optional deletion of (all but the last) instance of simple *sig* with coordinated verbs can be used to support our claim that neutral verbs with simple *sig* are neither reanalyzed as inherently reflexive/unaccusative predicates, nor have double lexical entries.

While coordinated anti-reflexive and neutral verbs can optionally delete all but the last instance of simple *sig*, see (56), inherently reflexive verbs do not seem to be able to, see (57).

(56) a. *Peter både vaskede (sig) og barberede *(sig) på mindre end 5 minutter.*
   Peter both washed (REFL) and shaved REFL on less than 5 minutes

We have also found at least one native speaker who disagrees with König & Siemund’s judgment of (52a), finding the sentence perfectly acceptable even with simple unintensified *sich*. In other words, more works on German is needed in order to get to the bottom of these questions.

13 This section is inspired by Jakubowicz (1994:209, (12,14)).
‘Peter both washed (himself) and shaved *(himself) in less than 5 minutes’

b. Peter havde vasket (sig) og tørret *(sig) på mindre end 5 minutter.
   Peter had washed (REFL) and dried REFL on less than 5 minutes
   ‘Peter had washed (himself) and dried in less than 5 minutes.’

c. Peter bad mig barbere (sig) og sminke *(sig).
   Peter asked me shave and make-up REFL
   ‘Peter asked me to shave and put make-up on him.’

(57) a. Peter soledede *(sig) og boltrede *(sig) på stranden.
   Peter tanned REFL and frolicked REFL on beach-the
   ‘Peter tanned and frolicked on the beach.’

b. Peter havde solet *(sig) og boltret *(sig) på stranden.
   Peter had tanned REFL and frolicked REFL on beach-the
   ‘Peter had tanned and frolicked on the beach.’

Indeed, inherently reflexive verbs with non-thematic sig are expected to behave in this way since the include sig as part of their lexical formatives. In contrast, since the neutral verbs in (56) behave like transitives they are expected to be able to omit all but the last instance of identical object DPs with coordinated verbs, compare (56a) and (58a), which show that the simple unintensified sig behave just like the DP kartoflerne ‘the potatoes’ in such constructions.

(58) a. Peter både vaskede og skrællede kartoflerne på mindre end fem minutter.
   Peter both washed and pealed potatoes-the on less than five minutes
   ‘Peter both washed and pealed the potatoes in less than five minutes.’

The fact that optional deletion of all but the last instance of sig is not allowed in the examples in (57) indicate that these instances of sig with the inherently reflexive verbs sole sig ‘tan’ and boltre sig ‘frolic’ have a different status from the sig in the examples in (56). That is, the sig in (57) is not a true thematic anaphor filling the argument position of two-place predicates, but rather a verbal reflexive left-joined to little v of the vP projection. More examples of the

---

14 Note, however, that even with inherently reflexive verbs sig is left behind when the verbs raise to C, thereby resulting in constructions where sig is separated from the verb by the intervening subject, see (ia-b).

(i) a. Hvorfor boltrede Peter sig på stranden?
   ‘Why frolicked Peter REFL on beach-the
   ‘Why was Peter frolicking on the beach.’
impossibility of deleting simple *sig with coordinated inherently reflexive verbs are given in (59).

(59)  

Peter broke REFL and came REFL
‘Peter vomited and recovered.’

Peter have broken REFL and come REFL
‘Peter had vomited and recovered.’

The fact that neutral verbs taking simple *sig can be coordinated without repeating simple *sig constitutes a serious problem for reanalysis accounts (e.g., Vikner 1985) and lexical ambiguity accounts of local *sig (cf. Reinhart and Reuland 1993), which are both based on the assumption that neutral verbs taking simple *sig behave like unaccusative inherently reflexive predicates. However, as the above data clearly shows, neutral verbs continue to pattern with active causative transitive verbs even when they take simple *sig.

While optional deletion of *sig with coordinated predicates can be used to test whether a verb is inherently reflexive, it should be noted that there are cases where deletion of *sig with conjoined inherently reflexive predicates may be marginally acceptable, or even quite felicitous, see (61a).

(61)  

a. (??)*Peter havde tit både skammet og ærgret sig over sin mangel på takt.
Peter had often both shamed and annoyed REFL over his lack of tact
‘Peter had often been both ashamed and vexed over his lack of tact.’

b. *#Peter skammer og ærgrer sig.
Peter shamed and chagrins REFL
‘Peter is ashamed and vexed.’
Notice however, that even in such cases, coordination of the same predicates is much less acceptable in the present tense, see (61a), than in the composite tense in (60)\(^\text{15}\). See also section 4.3.2 for more discussion of the reliability of this test.

### 4.2.9 The status of sig as indirect object of ditransitive verbs

Di-transitive predicates can also be divided into the three main types, see (62)-(64).

\begin{itemize}
\item[(62)] **Anti-reflexive ditransitive:**
  \begin{itemize}
  \item a. Peter solgte *sig et hus.
  \item b. sig selv
  \item c. Mary
  \end{itemize}

  ‘Peter sold ____ a house.’

\item[(63)] **Neutral ditransitive:**
  \begin{itemize}
  \item a. Peter købte sig et hus.
  \item b. sig selv
  \item c. Mary
  \end{itemize}

  ‘Peter bought ____ a house.’

\item[(64)] **Inherently reflexive ditransitive:**
  \begin{itemize}
  \item a. Peter anskaffede sig et hus.
  \item b. *sig selv
  \item c. *Mary
  \end{itemize}

  ‘Peter acquired ____ a house.’
\end{itemize}

According to the reanalysis/lexical ambiguity approaches (cf. Vikner 1985, and Reinhart & Reuland 1993, Lidz 1996, etc.) one would have to argue that the verb in (63a) has somehow been reanalyzed as an inherently reflexive ditransitive predicate, while it remains a ‘regular’ di-transitive predicate in (63b-c). Notice, however, that there is no evidence supporting such claims. That is, there is no detectable difference in the meaning of the verb købe ‘buy’ in (63a) vs. (63b,c). Nor are there any other indications that any ‘reanalysis/lexical ambiguity’ might have taken place in (63a) but not in (63b,c). We therefore conclude that these examples constitute strong evidence against all varieties of the ‘reanalysis/lexical ambiguity’

\(^{\text{15}}\) Cf. the discussion of coordinated predicates and deletion of simple reflexives in French and Danish in chapter 3, section 3.2.3. In French the same generalization seem to apply, i.e. deletion of se improves when the conjoined
approaches. In contrast, the proposal defended here, namely that the distribution of intensified and unintensified forms of the reflexive follow directly from a combination of predicate meaning, pragmatics and world knowledge (see chapter 3), is strongly supported by the data in (62)-(64). That is, given what we know about selling transactions, namely that it is a prototypical anti-reflexive/other-directed activity, it is highly unexpected that anyone would sell anything to himself. Hence, the intensified form of the reflexive is necessary to license (either through contrastive focus or doppelgänger-effects (e.g. memory-loss or schizophrenia contexts)) the reflexive scenario, as shown in (62b). In contrast, buying is a neutral activity in that it is equally likely for someone to buy something for himself as it is for him to buy something for somebody else. Finally the impossibility of having non coreferential DPs in object position with inherently reflexive di-transitive predicates like anskaffe ‘acquire’, see (64c), explains why the adnominally intensified form of the reflexive, i.e. sig selv, is not possible either, see (64b).

4.2.10 Non-co-argument bound local sig

All the instances of locally bound thematic sig discussed above have co-argument antecedents. Depending on how the local domain relevant for binding is defined, locally bound simple reflexives, which are not bound by a co-argument, can be argued to be found in two contexts in Danish: (i) locational PPs, see (65), and (ii) possessive constructions, see (66).

(65) Max lagde bogen bag sig.

Max put book-the behind REFL
‘Max put the book behind him(self).’

In (65) relevant local domain for the anaphor is the tensed clause. The PP headed by bag ‘behind’ does not have a subject, so it does not qualify as binding domain. That local binding predicates are in the past participle, see example (13c) chapter 3, section 3.2.3.
is possible in sentences like (65) falsifies the claim that simple reflexive pronouns in Danish are anti-local\(^{16}\).

(66)  
\textit{Peter, vasker sin, hund.}  
Peter washes POSSREFL dog  
‘Peter washes his dog.’

According to the analysis of binding proposed in chapter 3, both \textit{sig} ‘RELF’ in (65) and \textit{sin} ‘POSSREFL’ in (66) are locally bound and thus constitute evidence supporting the claim that thematic simple reflexives can be locally bound. As argued in length in chapter 3, section 3.3.4 the existence of a morphologically specialized series of reflexive possessives (e.g. Dan. \textit{sin} ‘POSSREFL’) constitute a major problem for predicate-based approaches to binding like Reinhart and Reuland (1993).

4.2.11 Summary: Falsifying the standard analyses of \textit{sig} as anti-local

In this section we have shown that a number of the tests which have been claimed to show that predicates taking simple \textit{sig} are unaccusative do not hold up to scrutiny. In some cases, they turned up to be less reliable than previously assumed, in other cases they turned out to show the opposite of what they were originally intended to show. Furthermore, we have introduced new tests and phenomena which indicates that local \textit{sig} can be thematic anaphors (e.g. with neutral predicates, in certain PPs and in possessive constructions). Taken together, the data and tests discussed in sections 4.2.1-10 thus adds up to a strong refutation of the claim that the simple reflexives are anti-local.

4.3 The status of \textit{sig} with inherently reflexive verbs

In this section we take a closer look at the so-called inherently reflexive predicates. Distributionally, they can only be found with the simple reflexive \textit{sig}, see (67).

---

\(^{16}\) Cf. Lidz (1996:115-6) who uses similar arguments to argue against assuming Dutch \textit{zich} ‘REFL’ to be anti-local.
(67)  Peter skynder sig / *sig selv / *Hans.
Peter hurries REFL/REFL self/Hans
‘Peter hurries.’

The verbal predicates listed in (68-71) are all distributionally inherently reflexive in that they are only found in the sig-form\(^\text{17}\).

(68)  **Malefactive verbs denoting actions which involve hurting oneself by OVERDOING something:**

a.  forbygge sig  ‘overbuild, build beyond one’s means’
b.  fordriste sig  ‘venture to, make so bold as to’
c.  forhaste sig  ‘be in too great a hurry’
d.  forkøbe sig  ‘overbuy (oneself), overpay’
e.  forløfte sig  ‘overstrain’
f.  forregne sig  ‘miscalculate’
g.  forslide sig  ‘overwork (oneself)’
h.  forsluge sig  ‘overeat (lit. over-swallow)’
i.  forslæbe sig  ‘overstrain oneself’
j.  forsnakke sig  ‘give oneself away (by revealing too much)’
k.  forspise sig  ‘overeat’
l.  forsynde sig  ‘offend, sin (against)’
m.  fortale sig  ‘make a slip of the tongue, give oneself away’

(69)  **Verbs of thinking, feeling:**

a.  affinde sig med  ‘come to terms with, accept’
b.  bekvemme sig til  ‘strive to, endeavor’
c.  besinde sig  ‘collect oneself, regain one’s composure’
d.  bestrebe sig *(for/på)  ‘strive to, endeavor to’
e.  betakke sig (for)  ‘decline (with thanks)’
f.  bryste sig (af)  ‘(fig.) throw out one’s chest, strut, swagger’
g.  driste sig (til at)  ‘venture to’
h.  dumme sig  ‘make a fool of oneself, make a blunder’

\(^\text{17}\) That is, verbs which have transitive counterparts have not been included, e.g. (ia-b).

(i)  a.  *Det kan ikke betale sig at snyde.*
   it cannot pay REFL to cheat
   ‘Cheating doesn’t pay.’

   b.  *Han betalte 1000 dollars for bilen.*
   he paid 1000 dollars for car-the
   ‘He paid $1000 for the car.’

In many cases the existence/absence of transitive counterparts seems like an arbitrary criterion. The verb beløbe sig til ‘amount REFL to’ seems to be of the same type as betale sig ‘pay, be worthwhile’ in (ia) above, in spite of the fact that it has no transitive counterpart, e.g. *Det beløber $100 ‘it amount $100’. In this respect, the majority of all inherently reflexive verbs behave like the so-called deponent ($\text{-form}$) verbs discussed in section 4.4.5. In other words, verbs like beløbe sig til ‘amount to’ can be characterized as deponent sig-$\text{-form}$ verbs, which differ from $\text{s}$-form deponent verbs only in the overt realization of the reflexive element left-adjointed to the $\text{v}$ of the $\text{vP}$ projection.
i. *dy sig* (for at inf) ‘behave oneself, contain oneself’

j. *flotte sig* ‘spread oneself, do it in style’

k. *forsarme sig* ‘take pity over’

l. *forsøge sig* *(i)* ‘fall in love with’

m. *forsætte sig* *(at)* ‘decide, resolve’

n. *forsætte sig* *(i)* ‘fall in love with’

o. *opføre sig* *(godt/årligt)* ‘behave well/misbehave’

p. *skamme sig* ‘be ashamed’

Verbs of movement, location:

(70) Verbs of movement, location:

a. *albue sig frem* ‘elbow one’s way’ (= resultative, see sect. 3.3.3)

b. *alliere sig med* ‘ally oneself with’

c. *befinde sig* ‘be; feel’

d. *begive sig* ‘go, travel to’

e. *boltre sig* ‘frolic, gambol’

f. *bosætte sig* ‘settle, set up house’

g. *skynde sig* ‘be in a hurry’

(71) “Middles” (with not tr. counterpart, opp. lukke ‘close’) only [-animate] subjects:

a. *forgrene sig* ‘branch of, ramify’

b. *ansamle sig* ‘gather’

c. *fortone sig* ‘loom; fade out of sight’

d. *beløbe sig* *(til)* ‘amount to’ (comp. betale sig vs. betale (tr.))

The division of the above inherently reflexive verbs in to four groups is impressionistic rather than based on rigorously defined semantic criteria. Furthermore, the lists in (68)-(71) are not exhaustive. Indeed, they were established simply by looking through all the verbs from A to F in a comprehensive Danish-English dictionary18 (+a few additional verbs discussed above).

The verbs in (68-71) all take [+animate] subjects while the verbs in (71) stand apart by only allowing [-animate subjects]. The verbs in (68) stand out both morphologically and semantically. Morphologically, they are all compounds composed of a prefix (either *for-*(=Ger. ver-) or *over-* (=Ger, über-))19 + a verbal stem. Semantically, they constitute a type of negative benefactives or malefactives, i.e. they denote actions/events which result in a negative experience on behalf of the subject. The semantic difference between (69) and (70) can be

---

defined, admittedly in rather vague/impressionistic terms, as a difference between verbs involving cognitive activity on behalf of the subject (69) and verbs involving physical movement/location of the individual denoted by the subject (70). Rather than pursuing in any more depth the project of discovering semantically defined groups of inherently reflexive predicates, let us instead return to the more important question of the thematic status of sig with inherently reflexive predicates. That is, is it a thematic anaphor which occurs in argument position of an active transitive predicate (72a), or a non-thematic grammatical marker of unaccusativity occurring in the v of the voice-projection vP (72b).

(72)  
   a.  Thematic sig:  
        VP  
           / \  
          .... V'  
           / \  
          V sig
   
   b.  Non-thematic sig:  
        vP  
           / \  
          .... v'  
           / \  
          / \  
         VP sig  v  
            / \  
           .... V'  
          / \  
         V ....

In the following, we argue that the vast majority of inherently reflexive predicates have non-thematic sig (72b). In a sense, it would be more precise to refer to these verbs, e.g. *skynde sig* ‘hurry’, as deponent sig-form verbs, see section 4.4.5 for discussion of deponent s-form verbs.

In contrast, the small number of inherently reflexive predicates which may be argued to have thematic sig (72a), e.g. *bosætte sig* ‘settle’, are simply transitive predicates whose selection restrictions only allow reflexive anaphors to occur in object position.

---

19 Which indicates that they probably are loan words from Lower German dialects which entered the language during the Hansa-era.
4.3.1 Inherently reflexive predicates with non-thematic sig

Most of the predicates in (68)-(71) have non-thematic simple reflexives rather than locally bound thematic sig. As shown in (73-74), in many cases, the inherently reflexive predicate (73-74b) is derived from either agentive (transitive or unergative) verbs by productive morphological operations, e.g. in these cases by adding the prefix for- ‘over’.

(73)  
- a. *Han spiste (salat).* (causative transitive)  
  he ate salad  
  ‘He ate salad.’
- b. *Han forspiste sig (i salat).* (inherently reflexive)  
  he over-ate REFL in salad  
  ‘He overate on the salad.’

(74)  
- a. *Han talte.* (unergative)  
  he talked  
  ‘He talked.’
- b. *Han fortalte sig.* (inherently reflexive)  
  he over-talked REFL  
  ‘He made a slip of the tongue/gave himself away.’

Lidz adopts Everaert’s (1986) account of these examples, arguing that there “is a semantic effect corresponding to the morphological change [between (73-74a) and (73-74b)]. The (b) cases have an interpretation in which “an involuntary effect … has taken hold of the agentive subject” (Everaert 1986:52)). This […] suggest[s] that [sig] may actually be a verbal reflexive […] and] that these verbs only have one semantic argument. […] In (73b), for example [sig] is not the object of overeating. That is, the sentence does not mean that the subject ingested himself. Typically, the original verb undergoing such morphological operations is intransitive [e.g. (74a)]. If, however, the original is transitive [e.g. (73a)], the direct object is turned into a prepositional object, similar to […] anti-passives [ e.g. (73b) …].” (Lidz 1996:130). Overall, we adopt this account for the predicates in (68-71).

As mentioned above, and discussed at length in section 4.2.1, a number of anti-reflexive verbs have inherently reflexive/deagentive inchoative counterparts, e.g. *Peter slår*
Hans ‘Peter hits Hans’ vs. Peter slår sig ‘Peter gets hurt’. Interestingly, there are also a few inherently reflexive verbs which are derived from unaccusative verbs, see (75a) which is derived from (75b) and (76a, b). The fact that inherently reflexive verbs can be derived from unaccusative verbs is another indication of the non-thematic status of these occurrences of simple sig.

(75) a. Peter kom sig
   Peter came REFL
   ‘Peter recovered (from a disease).’
   (inherently reflexive)

   b. Peter kom.
   Peter came
   ‘Peter came.’
   (unaccusative)

(76) a. Peter blærer sig.
   Peter blister REFL
   ‘Peter brags, shows off’
   (inherently reflexive)

   b. Peter’s finger blærer.
   Peter’s finger blisters
   ‘Peter’s finger blisters.’
   (unaccusative)

Unlike the inherently reflexive predicates derived by prefixation of for- ‘over-’ in (73-74b), the meaning of the derived predicates in (75-76) do not appear to be related to the verbs from which they are derived in any systematic way. This indicates, that blære sig ‘brag’ and komme sig ‘recover’ are lexicalized as inherently reflexive verbs.

4.3.2 “Inherently reflexive verbs” with thematic sig

While it may be tempting to conclude that all predicates labeled here as “inherently reflexive” take non-thematic sig, such a conclusion may be premature. First of all, as discussed in chapter 3, there are a number of constructions involving possessive reflexives which classify as inherently reflexive on semantic criteria, see (77).

---

20 Cf. Everaert (1986) for a similar analysis of Dutch.
“Inherently reflexive” constructions
a. *Han var ved at gaa ud af sit / *sit eget / *Peters gode skind af glæde.
   he was about to go out of POSREF / *POSREF own / Peter’s good skin of happiness
   ‘He nearly jumped out of his good skin of sheer happiness.’
b. *Han hyttede sit / *sit eget / *Peters skin.
   he saved POSREF / *POSREF own / Peter’s skin
   ‘He saved his own life.’

As discussed in chapter 5, similar inherently reflexive possessive constructions can be found in English, see (78).

(78)   a. *He was out of his / *his own / *Mary’s mind of happiness.
   b. *He said ahem several times to clear his / *his own / *Mary’s throat.

Clearly the possessive reflexive sin ‘POSREF’ in (77) and the possessive pronoun his in (78) cannot be analyzed as non-thematic grammatical marker of unaccusativity occurring in the v of the voice-projection vP, see (72b). Hence, as argued in chapter 3 section 3.3.5, the semantic definition of inherently reflexive predicates/constructions is still needed, see (80).

(80)   Definition of inherent reflexivity:    (=65 chap. 3, sect. 3.3.2.4)
       A given predicate is inherently reflexive if it evokes a presupposition of identity that is not cancelable by context.

That is, for the so-called inherently reflexive possessive construction in (78)-(79), (80) is needed to explain why intensification of the possessives sin/his is infelicitous. Due to the meaning of these predicates/constructions no contrast set of alternatives can be generated. Hence, the contrastiveness condition blocks intensification in these cases.

In addition to the possessive constructions discussed above, there are a few verbs which distributionally behave like inherently reflexive predicates (by only allowing the simple unintensified reflexive sig/sin) but which, nevertheless, appear to have thematic sig, e.g. (81a,b).

      Peter ducked REFL / REFL self / Marie
      ‘Peter ducked Ø / *himself / *Marie.’
   ‘Peter settled Ø / *himself / *Marie in Africa.’

The examples in (82)-(86) are designed to test the thematic status of sig with the verbs dukke ‘duck’ and bosætte ‘settle’ using the tests discussed in sections 4.2.1-8 above.

(82) Testing for agentivity (section 4.2.1):
   a.  *Han dukkede sig for at undgå at blive slået i hovedet.
       he ducked REFL for to avoid to become hit in head-the
       ‘He ducked to avoid being hit in the head.’
   b.  *Han bosatte sig i Argentina for at undgå retsforfølgelse i USA.
       he settled REFL in Mexico for to avoid prosecution in the US
       ‘He settled in Argentina to avoid prosecution in the US.’

(83) Testing for compatibility with formation of agentive nouns in –er (section 4.2.2):
   a.  *en dukker
       *a ducker
   b.  en bosætter
       a settler

(84) Thematic vs. non-thematic sig (section 4.2.3):
   a.  *Hvem dukkede Peter?
       Who ducked Peter
       ‘Who did Peter duck?’
   b.  */#Hvem bosatte Peter?
       Who settled Peter
       ‘Who did Peter settle?’

(85) Impersonal passivization (section 4.2.4):
   a.  *Der blev dukket.
       there became ducked
       ‘There was ducked
   b.  *Der blev bosat.
       there became settled
       ‘There was settled.’

(86) Deletion of sig with coordinated predicates (section 4.2.8):
   a.  (*)Peter dukkede og drejede sig rundt.
       Peter ducked and turned REFL around
       ‘Peter ducked and turned around.’
   b.  (?/ok)Peter bosatte og integrerede sig i det fremmede.
       Peter settled and integrated REFL in the foreign
       ‘Peter settled and integrated himself abroad.’
The results of the tests in (82)-(86) are summarized in (88) which also includes the results of the same tests run on different inherently reflexive predicates.

(87) **Tests:**

(i) Agentivity (section 4.2.1)
(ii) Agentive –er (section 4.2.2)
(iii) Referentiality (section 4.2.3)
(iv) Impersonal passive (section 4.2.4)
(v) Coordination (section 4.2.8)

(88) **Inherently reflexive:**

<table>
<thead>
<tr>
<th></th>
<th>(i)</th>
<th>(ii)</th>
<th>(iii)</th>
<th>(iv)</th>
<th>(v)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>forspise ‘overeat’</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>b.</td>
<td>skamme ‘be ashamed’</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>* (?)</td>
</tr>
<tr>
<td>c.</td>
<td>skynde ‘be in a hurry’</td>
<td>ok</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>d.</td>
<td>dukke ‘duck’</td>
<td>ok</td>
<td>*</td>
<td><em>(</em>)</td>
<td><em>(</em>)</td>
</tr>
<tr>
<td>e.</td>
<td>bosætte ‘settle’</td>
<td>ok</td>
<td>ok</td>
<td>*</td>
<td>* (?/ok)</td>
</tr>
</tbody>
</table>

As shown in (88) the verbs classified as inherently reflexive (based on the fact that they allow only sig as internal argument) do not behave uniformly with respect to the five tests. Compatibility with agentive phrases, test (i), and the agentive suffix –er (ii) vary considerably. Only test (iii) and (iv) seem to apply uniformly to all inherently reflexive verbs.

The fact that some inherently reflexive predicates are compatible with agentive subjects (test (i)), and even allow formation of agentive nouns in –er (test (ii)), may (but need not) be an indication that some occurrences of simple sig with inherently reflexive predicates are in fact true reflexive pronouns receiving an object theta-role from their predicates. In other word, we suggest that some inherently reflexive verbs are really transitive neutral predicates whose selection restrictions exclude anything but thematic reflexive pronouns from occurring in object position. Based on these tests it may be argued that dukke ‘duck’ and bosætte ‘settle’ have thematic sig and should be analyzed as in (72a) rather than as non-thematic sig in (72b).

However, before any final conclusion is drawn let us first return to the issue of the reliability of these tests (already briefly discussed in sections 4.2.1-4.8). The tables in (89) and

21 In addition to the simple reflexive sig the verb dukke ‘duck’ can take one other DP as internal argument, viz. the inalienably possessed DP hovedet ‘the head’, see (i).
(90) listed the result of applying the same five tests in (87) to different anti-reflexive and neutral verbs.

\[
\begin{array}{llllll}
(89) & \text{Anti-reflexive:} & (i) & (ii) & (iii) & (iv) & (v) \\
\hline
\text{a. } & \text{hade} & \text{‘hate’} & \text{ok} & \text{ok} & \text{ok} & \text{ok} \\
\text{b. } & \text{efterfølge} & \text{‘succeed’} & \text{ok} & \text{ok} & \text{*} & (?) \\
\text{e. } & \text{bønflade} & \text{‘implore’} & \text{ok} & \text{*} & \text{ok} & (*) (ok) \\
\text{b. } & \text{mistænke} & \text{‘suspect’} & \text{*} & \text{*} & \text{ok} & (*) (ok) \\
\text{c. } & \text{misunde} & \text{‘envy’} & \text{*} & \text{*} & \text{ok} & (*) (ok) \\
\end{array}
\]

\[
\begin{array}{llllll}
(90) & \text{Neutral:} & (i) & (ii) & (iii) & (iv) & (v) \\
\hline
\text{a. } & \text{vaske} & \text{‘wash’} & \text{ok} & \text{ok} & \text{ok} & \text{ok} \\
\text{b. } & \text{klæde} & \text{‘dressed’} & \text{ok} & \text{*} & \text{ok} & (*) \\
\text{c. } & \text{hænge} & \text{‘(kill by) hang(ing)’} & \text{ok} & \text{*} & \text{ok} & (*) \\
\text{d. } & \text{forvandle} & \text{‘transform’} & \text{ok} & \text{*} & \text{ok} & (*) \\
\end{array}
\]

As shown in (89-90), the neutral and anti-reflexive predicates do not form a homogenous group with respect to the five tests. Some verbs, are incompatible with agentive phrases or formation of agentive nouns in –er, e.g. mistænke ‘suspect’ and misunde ‘envy’. Others cannot form impersonal passives, e.g. forvandle ‘transform’ and misunde ‘envy’. In other words, if even transitive anti-reflexive and neutral verbs do not necessarily pass these tests, then the failure to do so on the part of a given inherently reflexive verb does not necessarily mean that they have non-thematic sig.

Though the question of whether sig with inherently reflexive verbs is thematic and referential or non-thematic and non-referential, is highly interesting in itself it is not crucial to the topic discussed in the present dissertation. Since our disagreement with the standard accounts (i.e. the reanalysis/lexical ambiguity accounts) of local sig can be settled simply by looking at the behavior of sig with neutral predicates we do not need to answer this question.

\[\text{22 Note that even neutral verbs which can undergo optional sig-deletion in some contexts, e.g. barbere ‘shave’ in (i), cannot in other contexts, e.g. (ii).}\]

(i) \textit{Peter vaskede, barberede og tørrede sig.}
Peter washed shaved and dried REFL
‘Peter washed, sheaved and dried himself.’

(ii) \textit{Peter barberede *(sig) og klædte sig på.}
Peter shaved and dressed REFL on
‘Peter shaved and dressed.’
here and will simply leave it for further research. For simplicity we will use the term “inherently reflexive” to refer to predicates/constructions which only allow the simple unintensified forms of the reflexive, i.e. 

\[ \text{sig ‘REFL’ and sin ‘POSS REFL’}, \]

regardless of the thematic status of the reflexive.

4.3.3 Grammatical uses of inherently reflexive verbs with \textit{sig selv}

In the literature on binding in Danish it is often claimed that the complex reflexive \textit{sig selv} ‘REFL self’ is always thematic. While it is certainly true that \textit{sig selv} is thematic in the vast majority of instances, there do in fact appear to exist contexts in which non-thematic complex reflexives are required. As observed by Veraart (1996), complex reflexives, e.g. \textit{sig selv}, can be used with unaccusative inherently reflexive verbs like \textit{skamme sig} in meta-linguistic or didactic contexts like (64).

\begin{enumerate}
\item[(91) a.] Learner: \textit{*Peter skammer Marie.}
\text{Peter shames Marie}
\text{‘Peter shames Marie.’}
\item[(91) b.] Teacher: \textit{Nej, Peter kan ikke skamme andre. Han kan kun skamme sig selv.}
\text{No Peter can not shame others he can only shame REFL self}
\text{‘No, Peter cannot shame others he can only be ashamed.’}
\end{enumerate}

As shown in the previous section, \textit{skamme sig} ‘be ashamed’ is one of the clearer cases of non-thematic \textit{sig}. So if, \textit{skamme} does in fact take non-thematic \textit{sig}, then how come it is intensified in (91b)? We suggest that the answer lies in the prosodic properties of \textit{sig}, i.e. the fact that \textit{sig} is a clitic which cannot carry stress on its own. In (91b) \textit{sig selv} seems to be licensed by the explicitly contrastive context. Since, no doppelgänger-readings are available (due to the non-thematic status of \textit{sig with skamme}), and since the inherently reflexive meaning of \textit{skamme sig} does not allow for the generation of a focus-triggered contrast set, one has to argue that in (64b) it is simply the stress on \textit{sig} that motivates the presence of \textit{selv}. As discussed in chapter
3, section 3.3.6 the simple reflexive sig is prosodically/syntactically too weak to receive stress on its own, consequently selv is adjoined to make the reflexive strong/heavy enough to carry stress. In other words, the sig selv in (91b) has all the characteristics of being a prosodically motivated instance of the intensified reflexive sig selv. Notice that the existence of complex reflexives with inherently reflexive verbs cannot be explained within the frameworks of Vikner (1985) and Reinhart and Reuland (1993), but receives a straightforward explanation in the present focus-based account of adnominal intensification.

4.3.4 Conclusion

Based on the discussion of inherently reflexive predicates in the preceding sections, we conclude that predicates which classify distributionally as “inherently reflexive” should be divided into two groups:

- unaccusative/deponent predicates with non-thematic sig in v of vP
- transitive predicates with thematic sig as internal argument.

Many “inherently reflexives” are lexically unaccusative, e.g. skamme sig, as opposed to derived unaccusative sig-form predicates, e.g. åbne sig ‘open’. Furthermore, there is probably only a few true, transitive, “inherently reflexive” predicates, e.g. bosætte sig ‘settle’. In addition to the two types of inherently reflexive predicates distinguished above, we also have inherently reflexive possessive constructions. The semantic definition of inherent reflexivity (80) thus only applies to verbs with thematic sig and possessive constructions which only allow the simple/unintensified possessive reflexive sin as possessor argument. Furthermore, only thematic sig and the possessive reflexive sin ‘POSREF’ both fall under the binding principle A discussed in chapter 3. The non-thematic sig found with most inherently reflexive
verbs is not a reflexive anaphors but rather a grammatical marker of voice/unaccusativity which fall under a different module of the grammar.

As mentioned above, the question of whether sig with inherently reflexive verbs is thematic and referential or non-thematic and non-referential, is highly interesting in itself. However, it is not of vital importance to the topic discussed in the present dissertation, since, as shown in section 4.2, the argument that local sig can be thematic can be made on the basis of neutral verbs alone. We therefore simply leave the question of the exact status of sig with different types of “inherently reflexive” predicates for future research.

4.4 Late-insertion analysis of reflexives and pronouns in Danish

In this section a late-insertion analysis of Danish reflexives and pronouns is proposed (section 4.4.1), which has the advantage of being able to account for 1st and 2nd person pronouns and reflexives (section 4.4.2). The late-insertion analysis thus provides the morphological component of the syntactic LF-movement (Cf. Pica 1984) analysis of reflexives presented in chapter 3.

4.4.1 Lexical and syntactic properties of pronouns and reflexives

Personal pronouns and both thematic and non-thematic reflexives all start out as the same unspecified determiner, D° {α person, α number, etc.}, see (92a-c(i)). Personal pronouns differ from reflexives in that their phi-features are specified before merge, see (92a(ii)), which explains why they are able to refer on their own and as well as why they are subject to principle B. Both thematic and non-thematic reflexives have their phi-features specified after merge, see (92b-c(ii)). Thematic and non-thematic reflexives get their features valued in different ways. For thematic reflexives, which merge into argument position where they
receive their theta-roles (92b(iii)), it happens via binding relations, i.e. an A-chain created by movement of reflexive from theta-position to T° (92b(v)). As argued in chapter 3, the subject-orientation of Danish reflexives supports the assumption that they move to T°. Non-thematic reflexives merge directly into v° (92c(iii)). While their features also ultimately get valued by movement to T° they are not interpretable (92c(iv)) and are thus not bound by the subject but rather enter into a clitic-doubling chain with it (92c(v)).

(92) Third person pronouns/reflexives:
   a. Pronominal ham ‘him’, (93a), (95c):
      (i) starts out as unspecified determiner D° \{α person, α number, etc.\}
      (ii) phi-features are specified before merge
      (iii) inserted into argument position at merge, assigned theta-role
      (iv) phi-features are interpretable
      (v) no chain is formed (principle B effects)
      (vi) morpho-/phonological realization spelled out from valued features by phonological rule.

   b. Thematic sig ‘REFL’, (93b):
      (i) starts out as unspecified determiner D° \{α person, α number, etc.\}
      (ii) phi-features are specified after merge
      (iii) inserted into argument position at merge, assigned theta-role
      (iv) phi-features are interpretable
      (v) phi-features are valued via movement to T°, i.e. via A-chain.
      (vi) morpho-/phonological realization spelled out from valued features by phonological rule.

   c. Non-thematic sig ‘REFL’, (94a), (95a):
      (i) starts out as unspecified determiner D° \{α person, α number, etc.\}
      (ii) phi-features are specified after merge
      (iii) adjoined to v at merge, not assigned theta-role
      (iv) phi-features are non-interpretable but still need to be valued
      (v) phi-features are valued by subject (i.e. T°) via clitic-doubling chain
      (vi) morpho-/phonological realization spelled out from valued features by phonological rule.

The sentences in (93-5) illustrate the pronominal and reflexive elements in (92a-c).

(93) a. Peter, vaskede sig._
     Peter washed REFL
     ‘Peter washed himself.’

---

23 Cf. Clitic-doubling in Spanish:       (i)  Lo, vimos a Juan._
      him, see-1PL-PRES to Juan, ‘We see Juan.’
As the examples in (93b-c), (94b) and (95b-c) show, the verbs *vaske* ‘wash’, *åbne* ‘open’ and *slå* ‘hit’ are all causative transitive verbs which assign theta-roles to DP and personal pronouns occurring as internal arguments and take agentive readings when occurring in active sentences.

The most interesting aspect of (93-5) is the thematic status of *sig*. As already shown in 4.2.1 the verbs *vaske* ‘wash’ and *slå* ‘hit’ in (93) and (95) are both neutral but differ in how they interact with simple *sig*. While the predicate *vaske* ‘wash’ always takes thematic *sig* and thus always gives rise to agentive readings, *slå* ‘hit’ can take either thematic or non-thematic *sig*, compare (20a) and (18a) in section 4.2.1.

In the above late-insertion analysis the overt realization of pronouns and reflexives is determined by where in the derivation (i.e. before or after merge) the {3rd person, singular} features are specified, see (96).
(96) Third person forms:
   a. $D^\circ \{3^{rd} \text{person, sg., }-\text{specified before merge}\} \Rightarrow /\text{sig}/$
   b. $D^\circ \{3^{rd} \text{person, sg., }+\text{specified before merge}\} \Rightarrow /\text{ham}/$

Features which are specified in the lexicon (i.e. before merge) are per definition interpretable (e.g. pronominals, and DPs). Features which are valued in syntax (via A-chain binding, or clitic-doubling chains) may or may not be interpretable depending on whether or not they are features of a thematic element. Thematic reflexives are always interpretable, and vice versa.

Note, however, that being interpretable is not necessarily the same as being referential. All referential reflexives are interpretable, not all interpretable reflexives are referential, e.g. (97).

(97) Enhver ægtemand, elsker sin, kone.
     every married-man loves POSS-REFL wife
     ‘Every married man loves his wife.’

Since simple $\text{sig}$ is a clitic (i.e. simultaneously $X^0$ and XP) it may be ambiguous between thematic (in argument position) and non-thematic in $\nu^\circ$ of $\nu$P. The $\nu$P is a voice/diathesis projection which determines whether the predicate is an (active) agentive, causative transitive predicate (assigning two (or more) theta-roles, or a (passive), deagentive/non-agentive, intransitive predicate (only assigning one theta role, e.g. THEME to the internal object).

(98) In Danish $\nu^\circ$ has an EPP feature requiring the presence of a $D^\circ$ element. This $D^\circ$ element may be realized in one of the following two ways:
   a. as a (thematic) DP in [Spec, $\nu$P], or
   b. as non-thematic $\text{sig}$ merging with $\nu^\circ$.

As shown in (99), (98a) gives rise to agentive, transitive predicates.

(99) Peter åbner døren.
     Peter opens door-the
     ‘Peter opens the door.’

As shown in (100), (98b) gives rise to non-agentive, unaccusative predicates.

(100) Døren åbnede sig.
     door-the opened REFL
     ‘The door opened.’
All predicates start out as mono-thematic (unaccusative) predicates assigning only one theta-role (THEME) to the internal object. When sig merges in argument position it is assigned the internal theta-role by the predicate. In this case, the only way to satisfy the EPP feature specified in (98), is by letting a DP merge in [Spec, vP], see (98a). This DP will then get the be assigned the AGENT theta-role of the vP projection and the resulting predicate will be an agentive (causative) transitive predicate, see (93b). When sig merges directly with v the EPP feature (98) is already satisfied. Hence, the DP which merges in argument position of the predicate is assigned the THEME theta-role and no other DP is allowed to merge in [Spec, vP]. The resulting predicate is therefore a non-agentive, unaccusative predicate, see (94a), (95a), and (100).

4.4.2 Binding theory in 1st and 2nd person: the implications of person asymmetries

The late-insertion account presented above is particularly good for analyzing 1st and 2nd person forms which otherwise would necessitate the postulation of forms which are ambiguous between reflexives and pronouns (e.g. (102a) vs. (102b)). Languages like English which seem to distinguish between reflexives and object pronouns in the 1st and 2nd person forms, see (101), are fairly rare.

(101)

a. I wash myselfi / *mei/ / Øi.
b. Peteri washes *myselfi / mei.

Danish, like most other languages in the world, does not distinguish between pronominal and reflexive forms in the 1st and 2nd persons26. That is the distinction between the ham ‘him’ and sig ‘REFL’ is only found in the 3rd person, see (102-3).

24 Tel features are the number and person endings found (amalgamated) with tense endings in inflectional languages). Unlike D features, Tel phi-features are never interpreted.
(102)  

a.  \(\text{Peter, vaskede mig.}\)  
    \(\text{Peter washed me}\)  
    \(\text{‘Peter washed me.’}\)  

b.  \(\text{Jeg, vaskede mig.}\)  
    \(\text{I washed me}\)  
    \(\text{‘I washed me.’}\)  

(103)  

a.  \(\text{Jeg, slog mig.}\)  
    \(\text{I hit-PAST me}\)  
    \(\text{‘I got hurt.’}\)  

b.  \(\text{Peter, slog mig.} (+\text{th mig, phi-feat spec before merge, no chain})\)  
    \(\text{Peter hit-PAST me}\)  
    \(\text{‘Peter hit me.’}\)  

Syntactically the first and second person forms can be divided into the same three types as the third person forms in (92). Pronominal \(\text{mig} \ ‘\text{me}’\), which can refer independently and which is subject to principle B in the same way as \(\text{ham} \ ‘\text{him}’\), is illustrated in (102a) and (103b). The sentences in (102b) and (103a) illustrate thematic reflexive \(\text{mig} \ ‘\text{me}’\) and non-thematic \(\text{mig}\) respectively. Since the overt distinction between pronominal and reflexive first and second person forms is neutralized, the relevant phonological rules do not have to be sensitive to the point at which features are values - which was necessary in the rules for the third person forms, see (104).

(104)  

\begin{align*}  
\text{Phonological spell-out of first and second person reflexives/pronouns:} \\
\text{a.} & \quad \{1^{\text{st}} \text{person, sg.}\} \quad => \quad \text{mig} \\
\text{b.} & \quad \{2^{\text{nd}} \text{person, sg.}\} \quad => \quad \text{dig} \\
\text{c.} & \quad \{1^{\text{st}} \text{person, pl.}\} \quad => \quad \text{os} \\
\text{d.} & \quad \{2^{\text{nd}} \text{person, pl.}\} \quad => \quad \text{jer} \\
\end{align*}
4.5 Reflexive and non-reflexive uses of reflexive elements: How many sig’s do we have?

The purpose of this section is two-fold. First, it contains a survey of all the so-called non-reflexive uses of reflexive elements in Danish. This survey will show that the simple reflexive sig (and its counterparts in other languages, e.g. Ger. sich, Fr. se, etc.) has a number of uses outside its use as reflexive anaphor. In contrast, English x-self and Chinese ziji ‘self-self’ have only reflexive uses in addition to their uses as intensifiers. This difference will be used, in chapter 5-6, to bolster the argument that while Danish sig is a true reflexive, English x-self and Chinese ziji are always intensifiers. Second, we show that the reflexive element –s in Danish, is functionally equivalent to non-thematic sig in certain contexts, e.g. deponent verbs.

In many languages which have reflexive elements these may have many different uses, e.g. reflexives, reciprocals, middles, passives, and lexical formatives of deponent verbs. The French and Spanish examples in (105) illustrate some of the different uses of the reflexive element se in Romance. Likewise the examples in (106) illustrate a similarly wide range of the simple reflexive sich ‘REFL’ in German.

(105) French (105a,b,c,e), Spanish (105d):
   a. Pierre se rase.     (reflexive)
      Pierre REFL shaves
      ‘Pierre shaves (himself).’
   b. Pierre et Paul se rasent (l’un l’autre).   (reciprocal)
      Pierre and Paul REFL shave the one the other
      ‘Pierre and Paul shave each other.’

27 The term “reflexive element” is used here as a cover term referring to simple reflexive pronouns (e.g. Dan. sig, Ger. sich), reflexive clitics (e.g. Fr. se), as well as reflexive suffixes (e.g. Dan. –s, Russian –sja, etc.). Some languages have no overtly realized reflexive elements, e.g. Old English and Frisian. Cf. also the analysis of Modern English proposed here which is based on the assumption that Modern English only has phonologically unrealized Ø-reflexives.

28 The term “deponent verb” is used to refer to verbs which cannot occur without a reflexive element. In the deponent verbs the reflexive element is always non-thematic. In contrast, when using the term “inherently reflexive” we remain agnostic as to the status of the reflexive which may either be a thematic/referential reflexive anaphor or non-thematic reflexive element. The set of “deponent” verbs is therefore always a sub-set of the set of “inherently reflexive” verbs.
c. *Ces lunettes se nettoient facilement.* (middle)
   These glasses REFL clean easily
   ‘This pair of eyeglasses cleans easily.’

d. *Aquí se habla español.* (impersonal passive)
   here REFL speaks Spanish
   ‘Spanish is spoken here.’

e. *Pierre s’évanouit.* (deponent/inherently reflex.)
   Pierre REFL faints
   ‘Pierre faints.’

(106) **German:**

a. *Peter rasiert sich.* (reflexive)
   Peter shaves REFL
   ‘Peter shaves (himself).’

b. *Peter und Hans rasiern sich.* (reciprocal/reflexive)
   Peter and Hans shave REFL
   ‘Peter and Hans shave eachother/themselves.’

c. *Die Tür öffnet sich ohne Mühe auch ohne Brechstange.* (middle)
   the door open REFL without trouble also without crowbar
   ‘The door opens without trouble even without a crowbar.’

d. *Die Kiste bricht sich leicht mit einer Brechstange auf.* (passive)
   the coffer breaks REFL easily with a crowbar open
   ‘The coffer can easily be broken open with a crowbar.’

e. *Peter erholt sich.* (deponent/inherently reflex.)
   Peter relax REFL
   ‘Peter relaxed

Given the fact that reflexive elements are frequently used in non-reflexive constructions, it is
clear that in order to arrive at an account of the binding behavior of reflexive elements in a
given language one must first determine which instances of these elements count as true
thematic/referential reflexive anaphors and which do not. While in the Romance languages
and German the same reflexive element may be used in all of the five interpretations in (105-
106a-e), in Danish the labor is divided between the reflexive pronoun *sig* and the verbal suffix

---

29 Cf. W. Abraham (1995:14) “[T]he middle refers to what is denoted by the adjectival, or statal, passive [...], not, however, the procedent, eventive, passive.” According to Abraham (106d) can be paraphrased as:

(i) a. *Die Kiste kann leicht aufgebrochen werden.*
   the coffer can easily open-broken become
   ‘The coffer can easily be broken open.’

   b. *Die Kiste ist leicht aufzubrechen.*
   the coffer is easy to break open
   ‘The coffer is easy to break open.’

   but not (ii) *Die Kiste wird leicht aufgebrochen.* ONGOING, EVENT
   the coffer becomes easily open-broken PASSIVE
–s, which is historically derived from encliticized versions of the reflexives pronoun sig, i.e.
Old Icelandic sik ‘REFL’, in earlier stages of the language, see (107a-e).

(107) a  reflexive sig:  

Peter barberer sig/sig selv.  
Peter shaves REFL self  
‘Peter shaves (himself).’

b.  reciprocal -s:  

(i) Peter og Marie kysse.  
Peter and Marie kiss-S  
‘Peter and Marie are kissing (each other).

(ii) Peter og Marie kysser hinanden.  
Peter and Marie kiss-PRES each other  
‘Peter and Marie are kissing (each other).

c.  “middle” sig/-s:  

(i) Læberne løsnede sig, munden blev større.  
Lips-the loosen REFL/-S mouth-the became bigger  
‘The lips parted, the mouth grew bigger.’

(ii) Læberne løsnedes, munden blev større.  
‘The lips parted, the mouth grew bigger.’

(iii) lige i det samme skilte Elverhøj ad  
right in the same split-S Elfin-Hillock apart  
‘at the same time Elfin-Hillock split open.’

d.  passive –s:  

(i) Maskinen skiltes ad for at blive renset.  
machine-the split-S apart for to become cleaned  
‘The machine was taken apart to be cleaned.’

(ii) Maskinen blev skilt ad for at blive renset.  
machine-the became split apart for to become cleaned  
‘The machine was taken apart to be cleaned.’

(iii) Her tales spansk.  
here speak-S Spanish  
‘Spanish is spoken here.’

e.  sig/-s in deponent vb:  

(i) Peter skammer sig.  
Peter shame REFL  
‘Peter is ashamed.’

(ii) Peter væmmer blot ved tanken om mad.  
Peter disgust-S merely by thought-the about food  
‘Peter is disgusted by the mere thought of food.’

The sentences in (107a) illustrate the by now familiar use of *sig* and *sig selv* as thematic/referential reflexive pronouns. See section 4.5.1 for a brief discussion of reflexive use of reflexive pronouns.

The sentences in (107b) illustrate the two ways to form reciprocals in Danish: (i) the non-productive morphological reciprocal formed by adding the –s morpheme to a small, lexically determined, group of verbs, and (ii) the productive syntactic reciprocal which is formed by letting the reciprocal pronoun *hinanden* ‘each other’ occupy the object position of any transitive verb. In contrast, to reflexive pronouns in the Romance languages as well as German *sich*, the Danish reflexive pronoun *sig* is not used reciprocally. Instead, as shown in (107b(i)), the reflexive/reciprocal/passive suffix –s (historically derived from an encliticized reflexive) is used. The reciprocal constructions will be discussed in more detail in section 4.5.2.

The sentences in (107c) may be dubbed “middles” or “reflexive middles”. Actually, Danish cannot use the reflexive elements to form true middle constructions of the Romance type illustrated by the French sentence in (105c). In order to render the meaning of (105c) in Danish one would have to resort to a paraphrase of the type *Disse briller er lette at vaske* ‘These glasses are easy to wash/These glasses wash easily.’ That is, unlike English, Danish does not have Ø-middles of the type *These glasses wash easily*. In this respect, Danish is like Dutch. Note that if one adopts the presence of an implicit agent as criterion for middle constructions (as opposed to inherently reflexive/deponent verbs) (cf. Zubizarreta, 1982) then the sentences in (107c) are clearly not true middles. In section 4.5.3 we argue that the sentences in (107c(i-iii)) should be classified as inherently reflexive verbs or, more precisely,

---

31 The traditional French term for this group of verbs is “verbes pronominaux neutres” (cf. Ruwet, 1972, p. 107). Instead of using potentially misleading terms like “deponent” and “inherently reflexive verbs” which are also used in other meanings, one could decide to call these constructions “neutre”. The only problem with this term is that it may be confused with the term neutral (i.e. used to refer to neutral verbs of the *vaske*-type).
inherently reflexive verbs derived from their transitive counterparts by lexical rules. Notice that in examples like (107c(i-ii)) sig and –s may be used with no difference in meaning. In many cases whether sig or –s is used is a matter of dialectal variation. Diachronically determined variation (i.e. in some cases one form is preferred by the older generations while younger speakers prefer the other) may also play a role. See also section 4.5.5 for more discussion of such case of apparently free variation between –s and sig-forms.

The sentences in (107d) illustrate the use of the –s suffix to form the so-called s-passive also sometimes referred to as ‘impersonal passive’ due to the lack of overtly expressed agents, see (107d(iii)). Note that in certain cases the s-form of the same verb (e.g. skille ‘part, divide, take apart’) may be interpreted either as an inherently reflexive/middle in one context, see (107c(iii)), or as an s-passive in another, see (94d(i)). The sentence in (107d(ii)) illustrates the periphrastic passive formed by the auxiliary blive ‘be, become’ + the past participle of the main verb. Note that the meaning of what is called passive constructions in (107d) overlaps considerable with the meaning of the Romance middle, i.e. “se moyen”, constructions in (105d). Both the s-passive and the periphrastic passive are very productive constructions in Modern Danish, see section 4.5.4 for more detailed discussion of the s-passive.

Finally, the sentences in (107e) illustrate the use of both sig and –s as part of the lexical formatives of deponent verbs. The verbs of this group form a closed set. As in the case of the examples in (107c), there appear to be no meaning difference between the –s-forms and the sig-forms. In fact, as will be argued in section 4.5.5, one of the main difference between, on the one hand verbs of the type illustrated by løsne ‘loosen’ (107c(i-ii)) and verbs of the type
*skamme sig* ‘be ashamed’/*væmmes* ‘be disgusted’ (107e) on the other, is that the former have transitive counterparts while the latter does not\(^{32}\).

The remainder of this chapter will be devoted to a comparison of the semantic, syntactic and morphological characteristics of reflexive constructions, reciprocal constructions, middle constructions, passive constructions and deponent verbs. Anticipating somewhat table 1 summarizes some of the result of this comparison.

<table>
<thead>
<tr>
<th>Table 1.</th>
<th>Reflexive</th>
<th>Reciprocal</th>
<th>Middle</th>
<th>Passive</th>
<th>Depon/”Inher.Refl.”</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) non-thematic sig: sig</td>
<td>-</td>
<td>sig</td>
<td>-</td>
<td>sig</td>
<td></td>
</tr>
<tr>
<td>(b) thematic sig: sig</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(sig)(^{33})</td>
</tr>
<tr>
<td>(c) -s</td>
<td>-</td>
<td>-s</td>
<td>-s</td>
<td>-s</td>
<td>-s</td>
</tr>
<tr>
<td>(d) sig selv</td>
<td>sig selv</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(sig selv)(^{34})</td>
</tr>
<tr>
<td>(e) DP object</td>
<td>DP</td>
<td>(DP)/hinanden</td>
<td>(DP)</td>
<td>DP</td>
<td>-</td>
</tr>
<tr>
<td>(f) examples</td>
<td>(2a)</td>
<td>(2b)</td>
<td>(2c)</td>
<td>(2d)</td>
<td>(2e)</td>
</tr>
<tr>
<td>(g) Romance</td>
<td>se</td>
<td>se</td>
<td>se</td>
<td>se</td>
<td>se</td>
</tr>
<tr>
<td>(h) German</td>
<td>sich</td>
<td>sich</td>
<td>sich</td>
<td>sich</td>
<td>sich</td>
</tr>
</tbody>
</table>

Row (a) and (c) in table 1 indicates the type(s) of morphological realization the different ‘diathetic’ categories\(^{35}\), listed in the five columns, may take. Row (b) shows that only reflexive constructions may have thematic sig, i.e. sig as a true theta-role receiving anaphor occupying the direct object position of the a neutral transitive verb. As discussed in chapter 3,

\(^{32}\) Note that the inherently reflexive/deponent verb *skamme sig* ‘be ashamed’ (which does not have an alternative –s form) is an –s deponent verb in certain forms of Norwegian (a Mainland Scandinavian language closely related to Danish), e.g. *skjemmes* ‘be ashamed’, see also section 4.5.5.

\(^{33}\) The existence of inherently reflexive verbs taking thematic sig is discussed in section 4.3.2.

\(^{34}\) The existence of non-thematic intensified reflexives is discussed in section 4.3.3.

\(^{35}\) Traditionally diathesis is assumed to include two or three categories: active voice, middle voice and passive voice (cf. traditional grammars of Sanskrit and Classical Greek). Recently, it has been suggested that grammatical dimension of diathesis might be more fine-grained than previously assumed and that reflexive constructions/reflexive forms of the verb may be considered a ‘fourth voice’ situated between the active and the
the intensified reflexive sig selv can only be thematic, see row (d) in table 1 above. The close affinity between deponent verbs and the co-called middles is illustrated by the fact that they have the same values in all but row (e). The row in (e) in table 1 above shows that, except for the deponent/inherently reflexive verbs, the verbs which may enter the other ‘diathetic’ categories in table 1 also have transitive uses in with full lexical DPs occurring in object position. Row (g) refers to examples illustrating the different constructions and rows (g-h) show that in German and the simple reflexives (se/sich) can be used in all the five columns in table 1.

4.5.1 Use of reflexive elements in reflexive constructions

From a semantic point of view, the event denoted by a verb is said to be reflexive if it is the case the individual referred to by the subject DP engages in an activity that is directed at him-/herself, see (108b).

(108) a. Peter hit James. (A -> B)  
b. Peter, hit Ø, himself. (A -> A)

The sentence in (108a) denotes a non-reflexive event in which the direction of the hitting action goes from Peter (as the AGENT) to James (as the PATIENT). The sentence in (108b) above denotes a reflexive event in that the action of hitting both originates from Peter (as the AGENT) and ends with Peter/himself (as the PATIENT).

In English the intensified Ø-reflexive, Ø himself is always thematic. That is, it is always assigned a theta-role from its governing predicate. Likewise the Danish intensified middle voices. It is in this loose sense we use the term “diathetic categories” to refer to the different columns in table 1.
reflexive sig selv ‘REFL self’ is also always thematic\(^{36}\). In contrast, their simple counterparts (i.e. Eng. \(\emptyset\) and Dan. sig) have both thematic, see (108b), and non-thematic uses, see (109a).

\[(109)\]

\[\text{a. } \begin{array}{l}
\text{Peter } \text{slog sig.} \\
\text{Peter hit REFL} \\
\text{‘Peter got hurt.’}
\end{array} \quad \text{(deagentive inchoative)}
\]

\[\text{b. } \begin{array}{l}
\text{Peter, } \text{slog sig, selv (med en hammer).} \\
\text{Peter hit REFL self with a hammer} \\
\text{‘Peter hit himself (with a hammer).’}
\end{array} \quad \text{(agentive causative transitive)}
\]

Semantically, the sentence in (109b) denotes a reflexive event involving a hitter (AGENT), i.e. Peter, and a hittee (PATIENT). In contrast, the sentence in (109a) describes a non-reflexive scenario only involving one participant, viz. Peter (THEME). Hence, we characterize the use of the simple reflexive sig ‘REFL’ in (109a) as an “non-reflexive”/non-thematic use of sig.

The examples in (110) show that simple sig ‘REFL’ may also be a true thematic reflexive.

\[(110)\]

\[\text{a. } \begin{array}{l}
\text{Peter, vasker James.} \\
\text{Peter washes James} \\
\text{‘Peter, washes James.’}
\end{array} \quad \text{(A -> B)}
\]

\[\text{b. } \begin{array}{l}
\text{Peter, vasker sig.} \\
\text{Peter washes REFL} \\
\text{‘Peter, washes \(\emptyset\).’}
\end{array} \quad \text{(A -> A)}
\]

In Danish, both the simple/unintensified reflexive sig ‘REFL’ and the complex/intensified reflexive sig selv ‘REFL self’ may be used as true thematic, reflexive anaphors\(^{37}\). While historically derived from an encliticized reflexive pronoun, the verbal suffix \(-s\) can nevertheless not be used as a thematic reflexive in Danish. That is, the \(s\)-forms of verbs all represent non-reflexive uses of this reflexive element.

4.5.2 Use of reflexive elements in reciprocal constructions

In some languages the reflexive elements can be used in reciprocal constructions. Unlike its French and German counterparts, the Danish reflexive pronoun sig cannot be used with

\(^{36}\) Exceptions to this generalization appear to be prosodically motivated, see discussion of in intensified non-thematic sig selv with the inherently reflexive verb skamme ‘shame’ in section 4.3.3.
reciprocal meaning. Only the s-form, which is historically derived from a phonologically reduced encliticized reflexive, of a small lexically defined set of verbs can receive a reciprocal interpretation, see (111).

(111) **Reciprocal s-forms:**

| a.  | mødes  | ‘meet’ | møde  | ‘meet’ |
| b.  | treffes | ‘meet’ | treffe | ‘meet, encounter’ |
| c.  | ses    | ‘see each other, meet’ | se     | ‘see’ |
| d.  | slås   | ‘fight’ | slå    | ‘hit, strike’ |
| e.  | skændes | ‘quarrel’ | (skænde på _) | ‘scold’ |
| f.  | mødes   | ‘meet’ | møde   | ‘meet’ |
| g.  | trættes | ‘quarrel’ | (trætte) | ‘tire, exhaust’) |
| h.  | brydes  | ‘clash, wrestle’ | bryder | ‘break’ |
| i.  | kyses   | ‘kiss’ | kysse  | ‘kiss’ |
| j.  | skiftes (til at ..) | ‘take turns ..–ing.’ | skifte (_ud) | ‘exchange;change sby’s diapers’ |
| k.  | følges (ad) | ‘accompany (each other)’ | følge  | ‘follow’ |
| l.  | hjælpes (ad) | ‘help (each other)’ | hjælpe | ‘help’ |
| m.  | tales ved | ‘talk’ | tale   | ‘talk’ |
| n.  | snakkes ved | ‘talk, chat’ | snakke | ‘talk, chat’ |

An small number of the s-reciprocals do not have transitive counterparts. The verbs in (112) exemplify this group of deponent reciprocal verbs.

(112) **Reciprocal s-forms:**

| a.  | enes   | ‘agree, get on’ | *ene  | - |
| b.  | forliges | ‘become reconciled’ | *forlige- | - |
| c.  | kannes | ‘compete’ | *kappe | - |
| d.  | kives   | ‘bicker’ | *kive  | - |

While the reciprocal s-forms may have been productive in an earlier stage of the language (probably when the s- was still formally identical to the reflexive pronoun), it certainly isn’t productive anymore. Only in a few cases do the reciprocal s-form and the ordinary transitive use of the verb have the same meaning, see (111a,b) and (113a,b).

(113)   a.  *Peter møder ofte Hans på gaden.*  
    (meet accidentally ‘run into’)
    Peter meet-PRES often Hans on street-the
    ‘Peter often meets Hans in the street.’

   b.  *Peter og Hans mødes ofte på gaden.*
    ((i) ‘run into’, (ii) ‘meet with’, (iii) passive ‘are encountered’)
    Peter and Hans meet-S often on street-the
    ‘Peter and Hans often meet in the street.’

37 See also discussion of semantic and syntactic properties of sig in chapter 3.
In most cases, the meanings of the reciprocal s-forms are different, to a greater or lesser extent, from meanings of the transitive counterparts, see (114) and (115).

(114) a.  
Peter slår Hans.  
Peter hits Hans.  
‘Peter is hitting Hans.’

b.  
Peter og Hans slås.  
Peter and Hans hit-S  
‘Peter and Hans are fighting.’

(115) a.  
Peter skifter luftfilter (på sin nye bil).  
Peter exchanges air filter on POSS-REFL new car  
Peter changes the air filter in his new car.

b.  
Peter og Marie skiftes til at vaske op.  
Peter and Marie exchange-S to to wash up  
‘Peter and Marie take turns doing the dishes.’

Such non-compositional meaning differences between the ordinary transitive uses, e.g. (a) examples in (114)-(115), and the derived reciprocal forms, e.g. (b) examples, is an strong indication that the reciprocal s-forms are lexicalized as such. Further evidence of lexicalization comes from the fact that certain verbs are particle verbs in their reciprocal uses but not in their transitive forms, see (111k,l), or vice versa, see (111e).

Formally the s-reciprocals appear to be identical to the s-passive forms, see (116a) and (116b).

(116)38 a  
Peter og Marie mødes ofte på gaden.  
Peter and Marie meet-S reciprocal often on street-the  
‘Peter and Marie often meet each other in the street.’

b  
Peter og Marie mødes ofte på gaden.  
Peter and Marie meet-S passive often on street-the  
‘Peter and Marie are often met (by others) in the street.’

However, in at least one case the two forms differ in pronunciation39, see (117a) vs. (117b).

38 The superscripts “reciprocal” and “passive” qualifying the different occurrences of the suffix –s in the examples does not mean that we assume the existence of two different –s morphemes. At this point we leave open the question of whether the lexicon contains one entry –s which assumes different meanings when used in different contexts or whether it contains several different suffixes with the same overt realization, e.g. a reciprocal –s, a passive –s, etc.
(117) a. Børnene slås i skolen. (slå [slå³s] + reciprocal –s = [slå³s])
children-the hit-S + reciprocal in school-the
‘The children are fighting at school.’

b. Børnene slås i skolen. (slå [slå³s] + passive –s = [slå³s])
children-the hit-S + passive in school-the
‘The children are being beaten (by the teachers) at school.’

The difference in pronunciation between the reciprocal s-form slås [slå³s] and the passive s-form slås [slå³s] thus indicates a difference in morphological structure. The long vowel in the infinitival form slå [slå³s] is preserved in the s-passive form slås [slå³s] due to the presence of a strong inflectional morpheme border between the verb stem and the suffix which prevents the formation of a closed syllable and the accompanying shortening of the vowel. Notice that blå also changes its pronunciation from [blå³s] to [bl⁰] in other derivational processes such as the formation of compound nouns40. All this indicates that the s-reciprocals are lexicalized in the same way as compound nouns, i.e. the phonological rules operating on the reciprocal s-forms are the same as the ones which operates on the output of lexical formation processes such as compounding41.

The fact that some s-reciprocals are derived from intransitive verbs, see (111m) above, and that yet others have no transitive counterparts, see (112a-d), further illustrates the

---


40 The difference in vowel length and quality between the infinitival form slå [slå³s], pronounced with long vowel and stød (i.e. pitch accent realized as creaky voice), and the reciprocal form slås [slå³s], which is pronounced with a slightly higher (=more closed) short version of the long vowel [åå], is also found elsewhere in the language, see the examples in (i) and (ii). The examples in (i)-(ii) illustrate the fact that the vowel [⁰] is the regular shortened form of the long vowel [åå] which is generally assumed to occur only in open syllables.

(i) a. en blå bil (blå [blå³s], common gender form)
   ‘a blue car’

b. et blåt hus (blå [blå³s] + –t (neuter) = [bl⁰t])
   ‘a blue house’

(ii) a. en blå musling (blå [blå³s], common gender form)
   a blue mussel

b. en blåmusling (blå- [bl⁰], compound noun)
   a common mussel (Mytilus edulis)

41 The above argumentation is based on the assumption that the deponent s-form verb omgås [³mgå³s] ‘handle, mix with’ should be analyzed as an s-passive rather than as an s-reciprocal form.
idiosyncratic nature of s-reciprocals and can thus be added to the list of arguments in favor of assuming s-reciprocal to be lexicalized as such.

Some s-reciprocals, e.g. kysses ‘kiss (each other)’ in (111i) have already become obsolete among younger speakers who now only use the pronominal reciprocal with this verb, e.g. de kysser hinanden ‘they kiss each other’. This kind of idiosyncratic diachronic variation further underscores the lexicalization hypothesis.

Some of the s-reciprocals have alternative forms with the reciprocal pronoun hinanden ‘each other’, see (118).

(118) a. Peter og Hans møder ofte hinanden på gaden. (compare w. (116a))
   Peter and Hans meet-PRES often each-other on street-the
   ‘Peter and Hans often meet each other in the street.’

b. Børnene slår hinanden i skolen. (compare w. (117a))
   children hit-PRES each-other in school-the
   ‘The children often hit each other at school.’

While in the case of (116a) and (118a) the s-reciprocal and the pronominal reciprocal have the same meaning, this is by no means always the case. Indeed, most of the s-reciprocals which have alternative pronominal reciprocals exhibit some meaning differences between the two forms. As the examples in (117a) and (118b) illustrates, when there is a meaning difference, then the verb forming the reciprocal with hinanden ‘each other’ always have the same meaning as it has in its transitive use. While the s-reciprocal slås, see (117a), refers to any kind of physical fighting activity (i.e. wrestling could qualify) involving more than one person, the transitive and reciprocal uses in (114a) and (118b) necessarily involves a hitting activity (i.e. boxing or fighting with clubs/sticks could qualify but wrestling could not). The examples in (119) exemplify the kind of meaning differences often found between transitive forms of a verb and its reciprocal and inherently reflexive forms.
Meaning differences between lexicalized and productive forms:

<table>
<thead>
<tr>
<th>Reciprocal</th>
<th>Lexicalized</th>
<th>Meaning</th>
<th>Transitive productive use:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Reciprocal:</td>
<td><em>De slås.</em></td>
<td>≠</td>
<td><em>De slår hinanden.</em></td>
</tr>
<tr>
<td>they hit-S</td>
<td>‘They fight.’</td>
<td>they hit each other</td>
<td>‘They hit each other.’</td>
</tr>
<tr>
<td>b. Reflexive:</td>
<td><em>Han slår sig.</em></td>
<td>≠</td>
<td><em>Han slår sig selv/hunden</em></td>
</tr>
<tr>
<td>he hits REFL</td>
<td>‘He gets hurt.’</td>
<td>he hits REFL self/dog-the</td>
<td>‘He hits himself/the dog.’</td>
</tr>
</tbody>
</table>

On the basis of the above discussion of reciprocals we conclude that, unlike French and German, Danish cannot use the simple reflexive pronoun, i.e. *sig*, to form reciprocal constructions. We furthermore conclude that the only presently productive way to form the reciprocal in Modern Danish is by using the reciprocal pronoun *hinanden* ‘each other’. That is, in Modern Danish reciprocals formed with the reflexive element –*s* are limited to a small (closed) set of lexically reciprocal verbs.

4.5.3 The use of reflexive elements in middle constructions

English can productively form Ø-middles, see (120a), from most transitive verbs. This kind Ø-middles are not possible in Danish, see (121a). Even the finite forms of the s-passive cannot felicitously be used in this way, see (121b). The most productive way to form the middle is the DP *subject is/are easy to verb-INFNITE construction exemplified by the sentence in (121c).

(120) a. *The LAPD officers bribed easily.*
| b. | *Peter easily bribed the LAPD officers.* |

(121) a. *LAPD betjente bestikker let.*
LAPD officers bribe-PRES-ACT easily
‘LAPD officers bribe easily.’
| b. | *??LAPD betjente bestikkes let.* |
| LAPD officers bribe-PRES-S*passive* easily | ‘LAPD officers bribe easily.’ |

42 Interestingly, Russian is like Danish in that reciprocals are formed using the suffix –*sja*, but cannot be formed using the free reflexive *sebja*, cf. Israeli (1997:74-78).
c.  
*LAPD betjente er lette at bestikke.*

LAPD officers be-PRES easy to bribe
‘LAPD officers are easy to bribe.’

d.  
*LAPD betjente kan let bestikktes.*

LAPD officers can easily bribe- S\textsuperscript{passive}
‘LAPD officers can easily be bribed.’

The modal verb+s-passive construction of the type exemplified by the sentence in (121d) is another frequently used, and fully productive, way to translate the meaning of English Ø-middles into Danish. The use of the s-passive in (121d) is in certain respects similar to the so-called *se*-moyen in French, see (122).

(122)  
\begin{enumerate}  
\item \textit{Ce veston se lave facilement.}
This west REFL washes easily
‘This west washes easily.’
\item \textit{Ces livres se vendent rapidement.}
These books REFL sell fast
‘These books sell fast.’
\end{enumerate}

Notice, however, that in this kind of construction the *s*-form has to be an infinite form following a modal verb. This is not the case in French where the verb usually occurs in the finite *se*-moyen form, compare (122) and (123).

(123)  
\begin{enumerate}  
\item \textit{Ce veston peut se laver facilement.}
This west can REFL wash easily
‘This west washes easily.’
\item \textit{Ces livres pouvait se vendre rapidement.}
These books can REFL sell rapidly
‘These books sell rapidly.’
\end{enumerate}

Based on the above examples we therefore conclude that the sentences of the type illustrated in (121d) has more in common with passive *s*-forms than with the French middle constructions in (122).

While Danish does not use the *sig*-forms to form middle constructions of the English and French types illustrates in (120a) and (122a,b), it does use *sig*-forms to form deagentive inchoatives, see \textit{åbne sig} ‘(unintentionally) open’ (124b) which is derived from the original
causative form of the verb åbne ‘(intentionally) open something’ in (124a). The sentences in (125)-(126) illustrate similar causative-inchoative pairs in English and French.

(124)  
| a. Peter åbner døren. | (agentive causative transitive) |
| Peter opens door-the |
| ‘Peter opens the door.’ |
| b. Døren åbner sig. | (deagentive inchoative / “middle” or pseudo-middle) |
| door-the opens REFL |
| ‘The door opens.’ |

(125)  
| a. Peter opens the door. |
| b. The door opens. |

(126)  
| a. Pierre ouvre la porte. |
| Peter opens the door |
| ‘Peter opens the door.’ |
| b. La porte s’ouvre. |
| the door REFL opens |
| ‘The door REFL opens.’ |

Such deagentive inchoatives involving sig-forms (se-forms in French) which we have referred to here as “middles” or pseudo-middles, will be shown to have a great deal in common with the inherently reflexive verbs discussed in section 4.3.

4.5.4 Use of reflexive elements in passive constructions.

The sentences in (127-8) illustrate the use of the –s suffix to form the so-called s-passive, also sometimes referred to as the impersonal passive due to the lack of an overtly expressed agent.

(127)  
| a. Maskinen skiltes ad for at blive renset. |
| machine-the split-S apart for to become cleaned |
| ‘The machine was taken apart to be cleaned.’ |
| b. Maskinen blev skilt ad for at blive renset. |
| machine-the became split apart for to become cleaned |
| ‘The machine was taken apart to be cleaned.’ |

(128)  
| a. Se habla español. |
| REFL speaks Spanish |
| ‘Spanish is spoken here.’ |
| b. Her tales spansk. |
| here speak-S Spanish |
| ‘Spanish is spoken here.’ |
In certain cases the \textit{s}-form of the same verb (e.g. \textit{skille} ‘part, divide, take apart’) may be interpreted as a “middle”/pseudo-middles in one context, see (129a), and as an \textit{s}-passive in another, see (127a). The sentence in (127b) illustrates the periphrastic passive formed by the auxiliary \textit{blive} ‘be, become’ + the past participle of the main verb. Note that the meaning of what is called passive constructions in (128b) overlaps considerably with the meaning of the Romance middle constructions in (128a). Both the \textit{s}-passive and the periphrastic passive are productive in Modern Danish.

The morphology of the so-called \textit{s}-form/\textit{s}-passive is illustrated in (130).

\begin{center}
\textbf{(130)} \textbf{The formation of the the \textit{s}-form/\textit{s}-passive\textsuperscript{43}:}
\begin{tabular}{lllll}
 & Infinitive & Present & Past & Past Part & Meaning \\
\hline
\textbf{a.} & \textit{møde} & \textit{møde-r} & \textit{mød-te} & \textit{mød-t} & ‘meet’  \\
Act. & & & & &  \\
Pass. & \textit{møde-s} & \textit{møde-s} & \textit{mød-te-s} & \textit{mød-te-s} &  \\
\textbf{b.} & \textit{lægge} & \textit{lægger} & \textit{lægde} & \textit{lagt} & ‘lay, place’  \\
Act. & & & & &  \\
Pass. & \textit{lægges} & \textit{lægges} & \textit{lægde-s} & \textit{lagde-s} &  \\
\textbf{c.} & \textit{slå} & \textit{slå-r} & \textit{slog} & \textit{slået} & ‘hit’  \\
Act. & & & & &  \\
Pass. & \textit{slå-s} & \textit{slå-s} & \textit{slog-es} & \textit{slog-es} &  \\
\textbf{d.} & \textit{væmmes} & \textit{væmmes} & \textit{væmmedes} & \textit{væmmedes} & ‘feel disgusted’  \\
Dep. & & & & &
\end{tabular}
\end{center}

A clear distinction between a passive reading and an intransitive “middle”/pseudo-middle reading can be found with the verb *skilles ad* ‘be taken apart; burst, go to pieces’, see (131a) vs. (131b).

\[(131)\]
\[\begin{align*}
\text{a.} & \quad \text{maskinen skiltes ad for at blive renset} \\
& \quad \text{machine-the separate-S apart for to become cleaned} \\
& \quad \text{‘the machine was taken apart in order to clean it.’}
\end{align*}\]
\[\begin{align*}
\text{b.} & \quad \text{lige i det samme skiltes Elverhøj ad} \\
& \quad \text{right in the same separated-S Elfin-Hillock apart} \\
& \quad \text{‘at the same moment Elfin-Hillock (a famous hill/mound) split open.’}
\end{align*}\]

The *s*-passive is productive and can thus be formed on the basis of any transitive verb. Needless to say, when occurring with a full lexical object DP, such verbs never have a passive meaning. Notice also that the *s*-passive can even be formed from intransitive verbs, e.g. (132).

\[(132)\]
\[\begin{align*}
\text{a.} & \quad \text{Der dansedes til langt ud på natten} \\
& \quad \text{there dance-S to long out on night-the} \\
& \quad \text{‘Dancing was going on until late at night’}
\end{align*}\]
\[\begin{align*}
\text{b.} & \quad \text{Skulle der døes så døde man uden at klage} \\
& \quad \text{(Cf. Hansen 1966)} \\
& \quad \text{should there die-S then died one without to complain} \\
& \quad \text{‘If one had to die, then one died without complaining’).}
\end{align*}\]

### 4.5.5 Deponent verbs.

Allan, *et al.* (1995:311) define deponent verbs as follows: ‘Deponent verbs are verbs that have a passive form (-s form) but active meaning. They may be transitive or intransitive’, see the examples in (133).

\[(133)\]
\[\begin{align*}
\text{a.} & \quad \text{Der findes mange dyrearter.} \\
& \quad \text{there find-S many animal-species} \\
& \quad \text{‘There exist many species of animals.’}
\end{align*}\]
\[\begin{align*}
\text{b.} & \quad \text{Hun mindedes sin ungdom.} \\
& \quad \text{she recall-S POSS-REFL youth} \\
& \quad \text{(how should the deponents be glossed?)} \\
& \quad \text{‘She recalled her past.’}
\end{align*}\]
\[\begin{align*}
\text{c.} & \quad \text{Jeg synes, at det er en god ide.} \\
& \quad \text{I think-S that it is a good idea} \\
& \quad \text{‘I think that it’s a good idea.’}
\end{align*}\]

The deponent verbs constitutes a small closed list of forms, most of which are given in (134).
(134) **Examples of deponent verbs:**

a. *dages* 'dawn'
b. *fattes* 'lack'
c. *findes* ‘be, exist’
d. *færdes* ‘move, travel’
e. *grønnes* ‘become green’ (inchoative)\(^{44}\)
f. *kendes ved* ‘acknowledge’
g. *længes* ‘long’
h. *lykkes* ‘succeed’\(^{45}\)
i. *mindes* ‘remember’
j. *mislykkes* ‘fail’
k. *omgåes* ‘handle, mix with’\(^{46}\)
l. *rygtes* ‘be rumored’
m. *synes* ‘think, seem’
n. *trives* ‘thrive’ (=Eng.)
o. *væmmes* ‘feel disgusted’
p. *ældes* ‘become older’ (inchoative)

Per definition deponent verbs do not possess a form without –s. Where a verb with such a form exists e.g. *finde/findes, minde/mindes*, see examples in (135), there will usually be a marked difference in meaning from the deponent verb, and they must be regarded as two separate verbs, see (135-6).

(135)  a. *Han mindede mig om mødet.*
he reminded me about meeting-the
‘He reminded me of the meeting.’

b. *Jeg mindes ikke hans tale.*
I remind-S not his speech
I can’t remember his speech.

\(^{44}\) Inchoative verbs can be subsumed under passives by assuming that they represent a passivized forms of originally causative transitive predicates.

\(^{45}\) In contrast to its English equivalent ‘succeed’, *lykkes* cannot have an inanimate subject in Danish (cf. Allan, *et al.* (1995:311):

(i) a. *Forsøget er lykkedes.*
‘The attempt was successful.’

b. *Det lykkedes ham at bestå eksamen.*
‘He succeeded in passing the exam.’

c. *Det er lykkedes hende at få et job.*
‘She has succeeded in getting a job.’

\(^{46}\) Phonology: Even though the deponent verbs are most likely lexicalized no vowel shortening takes place, in this respect they differ from the s-reciprocals which do trigger vowel shortening, compare (i) and (ii)

(i) **Active**

<table>
<thead>
<tr>
<th>a.</th>
<th>*slå ([slå(^{6})]‘hit’)</th>
<th><em>slå-s</em> ([slå(^{6})]s)</th>
<th>‘be hit’</th>
<th>(productive s-pass.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>b.</td>
<td>*ro ([ro(^{5}])]‘row’)</td>
<td><em>ro-s</em> ([ro(^{5})]s) <em>[r(^{5})]s</em></td>
<td>‘rowing is going on’</td>
<td>(productive s-pass.)</td>
</tr>
<tr>
<td>c.</td>
<td>DNA</td>
<td><em>omgås</em> ([slå(^{6})]s)</td>
<td>‘handle, mix with’</td>
<td>(lexicalized depon. verb)</td>
</tr>
</tbody>
</table>

(ii) **Active tr.**

| a.  | *slå ([slå\(^{6}\)]‘hit’) | *slå-s* ([slå\(^{6}\)]s) | ‘[they] fight’ | (lexicalized s-reciprocal) |

---
a. Jeg kan ikke finde mine briller.
   I can not find my glasses
   ‘I can not find my glasses.’

b. Der kan ikke findes dyreliv på Mars.
   there can not find-S animal life on Mars
   ‘There cannot exist animal live on Mars.’

(137) **Examples of deponent verbs with transitive counterparts:**

<table>
<thead>
<tr>
<th>Transitive form</th>
<th>sig-form</th>
<th>s-form</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. fattes  ‘lack’</td>
<td>fatte ‘understand, comprehend’</td>
<td></td>
</tr>
<tr>
<td>b. findes  ‘be, exist’</td>
<td>finde ‘find’</td>
<td></td>
</tr>
<tr>
<td>c. kendes ved  ‘acknowledge’</td>
<td>vedkende sig ‘acknowledge’</td>
<td></td>
</tr>
<tr>
<td>d. mindes  ‘remember’</td>
<td>minder _ om ‘remind sby about sth.’</td>
<td></td>
</tr>
<tr>
<td>e. synes  ‘think, seem’</td>
<td>syne ‘inspect’</td>
<td></td>
</tr>
</tbody>
</table>

The verbs in (138) are interesting in that in addition to the regular s-forms they also have sig-forms. Furthermore the s-form and the sig-form have the same meaning and can be used interchangeably. These alternate sig-forms thus bear witness to the fact that the –s in the s-forms originated from an encliticized reflexive, e.g. (Old Norse) -sik > (Iceland.) –st > (Dan.) –s.

(138) s-form: sig-form: transitive form:

| a. kendes ved  ‘acknowledge’ | vedkende sig ‘acknowledge’ | (ved)kende ‘know, recognize’ |
| b. det forstås  ‘understand’ | det forstår sig ‘understand’ | forstå ‘understand’ |
| c. det hænds at  ‘it happens that’ | det hænder sig ‘it happens that’ | det hænder ‘it happens that’ |

In substandard varieties of Danish certain verbs (which are not found in the –s form in the standard language) can occur in the –s form with the intransitive/middle meaning, see (139a,b). In some cases a sig-form is also found with the same meaning as both the active form and the (deponent) passive s-form, compare (139a,b and c) and (140).

(139) a. Det hænder at,…. (Standard Danish) (active)
   it happens(active) that ..
   ‘It happens that ....’

47 Notice that the same idiomatic use of reflexives with verbs of understanding is found in French:
Dan. **Det forstås/Det forstår sig** ≈ Fr. Ça se comprends.

48 Notice that the same idiomatic use of reflexives with verbs of ‘happening’ is found in French:
Dan. **Det hænds at/ det hænder sig at** ≈ Fr. **il se passe** ‘it happens....’.

49 These examples are from Hansen, 1967.
b. *Det hænd(e)s at,...* (Substandard Danish)  (s-passive)
   "It happened-S that ...."
   ‘It happens-S (s-passive) that ...

c. *Det hændte sig at,...* (Substandard Danish)  (sig-form)
   "It happened REFL that ...
   ‘It happened that ...’

(140) a. *Det forstås / Det forstår sig.* (Danish)
   "it understand-S it understand REFL
   ‘It goes without saying.’

b. *Ça se comprend.*    (French)
   "it REFL understands
   ‘It goes without saying.’

Notice also that the inherently reflexive verb par excellence (i.e. the example most often mentioned in the literature, e.g. Reinhart & Reuland (1993)), viz. *skamme sig* ‘be ashamed’ has two variants in Norwegian dialects, see (141).

(141) a. *skamme seg*  (Bokmål Norwegian)
    "shame REFL
    ‘be ashamed’

b. *skjemme-s*  (Ny-norsk Norwegian)
   "shame-S
   ‘be ashamed’

b. *skamme sig*  (Modern Standard Danish)
   "shame REFL
   ‘be ashamed’

As discussed in section 4.3, many inherently reflexive verbs are in fact simply deponent verbs with *sig* form rather than *s*-form. That is, the *sig* in *skamme sig* –be ashamed’ (141c) fulfills the same grammatical function as the –*s* in *væmmes* ‘feel disgusted’ (134o), both merge in *v* with unaccusative verbs. Superficially, there are three morphological classes of deponent verbs: (i) those which take only –*s*, see (134), (ii) those which are found with both –*s* and *sig* (138-141), and those which take only *sig*, e.g. *skynde sig* ‘hurry’, (68-71). However, semantically/grammatically there is only one class of deponents (i.e. –*s* and *sig* have the same function in *v*), see (2b).

---

4.6 Conclusion

The different reflexive and non-reflexive uses of reflexive elements in Danish and English have been summarized in the table in (142), to which has been added a similar survey of the uses of reflexive elements in French, German and Chinese.

(142) Typological survey of reflexive and non-reflexive (and non-thematic) uses of reflexive elements:

<table>
<thead>
<tr>
<th></th>
<th>Danish</th>
<th>English</th>
<th>French</th>
<th>German</th>
<th>Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. refl.</td>
<td>sig</td>
<td>himself</td>
<td>se/soi</td>
<td>sich</td>
<td>(ta)ziji</td>
</tr>
<tr>
<td>b. recp.</td>
<td>-s</td>
<td>-</td>
<td>se</td>
<td>sich</td>
<td>-</td>
</tr>
<tr>
<td>c. p-mid</td>
<td>sig</td>
<td>-</td>
<td>se</td>
<td>sich</td>
<td>-</td>
</tr>
<tr>
<td>d. mid</td>
<td>-</td>
<td>-</td>
<td>se</td>
<td>sich</td>
<td>-</td>
</tr>
<tr>
<td>d. pass.</td>
<td>-s</td>
<td>-</td>
<td>se</td>
<td>sich</td>
<td>-</td>
</tr>
<tr>
<td>e. dep.</td>
<td>-s/sig</td>
<td>-</td>
<td>se</td>
<td>sich</td>
<td>-</td>
</tr>
<tr>
<td>f. int.</td>
<td>-</td>
<td>himself</td>
<td>-</td>
<td>-</td>
<td>(ta) ziji</td>
</tr>
</tbody>
</table>

Interestingly, neither English nor Chinese have any non-reflexive uses of their so-called reflexives, viz. *himself* and *ziji* respectively, see (142b-e). While French *se*, Danish *sig* and German *sich* all classify as true reflexives, *himself* does not since it is not featureless. Chinese *ziji*, however, is (like the Danish intensifier *selv*) unmarked for person, number, and gender, etc. and could thus be a featureless “true” reflexive. Notice, however, that it behaves just like English *himself* in that it cannot be used in any of the non-reflexive constructions. Furthermore, both English *himself* and Chinese *ziji* behave like intensifiers, something the reflexives in Danish, French, German and Russian are unable to do, see (142f). So except for the reflexive uses, English *himself* is basically in complementary distribution with the Danish reflexive *sig* (as well as with Ger. *sich*, Fr. *se*, Russian *-sja*). On the other hand, as discussed in chapter 2, English *himself* and Chinese *ziji* display most of the uses of the Danish intensifier *selv*, see (143).

---

51 Needless to say, the logophoric uses of *himself* in English (also referred to as “locally free reflexives” or LFRs, cf. Baker (1995)) are also in a sense non-reflexive. However, there are still in argument position, i.e. thematic. As will be discussed in more detail in chapter 5 such non-locally bound instances of *himself* are best analyzed as reduced form of underlying intensified pronouns *himself < him himself* (Cf. Siemund 2002:81).
Typological survey of different uses of adnominal intensifiers:

<table>
<thead>
<tr>
<th></th>
<th>Danish</th>
<th>English</th>
<th>French</th>
<th>German</th>
<th>Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>kongen selv</td>
<td>the king</td>
<td>le roi</td>
<td>sa lui-même</td>
<td>guo-wang (ta) ziji</td>
</tr>
<tr>
<td>b.</td>
<td>sig selv</td>
<td>[Ø himself]</td>
<td>soi-même</td>
<td>[SOL soi-même]</td>
<td>[ta ziji]</td>
</tr>
<tr>
<td>c.</td>
<td>sig selv</td>
<td>[HIMSELF/Ø himself]</td>
<td>[soi-même]</td>
<td>[Ø ziji]</td>
<td></td>
</tr>
<tr>
<td>d.</td>
<td>sig selv</td>
<td>[Ø himself]</td>
<td>[soi-même]</td>
<td>[Ø ziji]</td>
<td></td>
</tr>
<tr>
<td>e.</td>
<td>ham selv</td>
<td>[(him) himself]</td>
<td>[(lui) lui-même]</td>
<td>[(ta ziji)]</td>
<td></td>
</tr>
<tr>
<td>f.</td>
<td>selv</td>
<td>himself</td>
<td>lui-même</td>
<td>ziji</td>
<td></td>
</tr>
<tr>
<td>g.</td>
<td>selv</td>
<td>himself</td>
<td>[lui-même]</td>
<td>ye</td>
<td></td>
</tr>
<tr>
<td>h.</td>
<td>selv</td>
<td>even</td>
<td>même</td>
<td>lian ___ ye</td>
<td></td>
</tr>
<tr>
<td>j.</td>
<td>selv/jeg</td>
<td>self*1</td>
<td>*même/moi</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>k.</td>
<td>selv</td>
<td>*himself/self</td>
<td>*même/-auto/-sui/-etc..</td>
<td>*ziji/zi/-ji</td>
<td></td>
</tr>
<tr>
<td>l.</td>
<td>selve</td>
<td>very/actual[même]</td>
<td>'same (kind of)'</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>m.</td>
<td>selveste</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

We take the complementary distribution of *himself* and *sig*, see (142), as well as the similar distribution of *himself* and *selv*, see (143), as evidence that *himself* is always an intensifier. The apparent reflexive use of *himself* in (142a) can be explained if we assume the English have *Ø*-reflexives which can be intensified by the adnominal intensifier *himself*. These assumptions makes it possible to arrive at the following revised version of the typological survey in (142), see (144).

Typological survey of reflexive and non-reflexive (and non-thematic) uses of reflexive elements:

<table>
<thead>
<tr>
<th></th>
<th>Danish</th>
<th>English</th>
<th>French</th>
<th>German</th>
<th>Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. refl.</td>
<td>sig</td>
<td>Ø</td>
<td>se/sot</td>
<td>sich</td>
<td>-/Ø</td>
</tr>
<tr>
<td>b. recp.</td>
<td>-s</td>
<td>Ø</td>
<td>se</td>
<td>sich</td>
<td>-</td>
</tr>
<tr>
<td>c. p-mid</td>
<td>sig</td>
<td>Ø</td>
<td>se</td>
<td>sich</td>
<td>-</td>
</tr>
<tr>
<td>d. mid</td>
<td>-</td>
<td>Ø</td>
<td>se</td>
<td>sich</td>
<td>-</td>
</tr>
<tr>
<td>d. pass.</td>
<td>-s</td>
<td>(Ø)</td>
<td>se</td>
<td>sich</td>
<td>-</td>
</tr>
<tr>
<td>e. dep</td>
<td>-s/sig</td>
<td>Ø</td>
<td>se</td>
<td>sich</td>
<td>-</td>
</tr>
</tbody>
</table>

Combined, (143) and (144) draw a picture of Modern English in which *himself* is consistently analyzed as an intensifier which may adnominally intensify all types of nominal expressions, i.e. *Ø*-reflexives, pronouns, and DPs. In other words, the absence of non-reflexive/non-thematic uses of *himself* plus its consistent behavior as an intensifier provide strong support for
the analysis of intensified and unintensified nominal expressions in Danish and English proposed in chapter 2, see (145).

(145) Systems of intensified and unintensified nominal expressions in Danish and English.

<table>
<thead>
<tr>
<th></th>
<th>Simple/unintensified</th>
<th>Complex/intensified</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Reflexives</td>
<td>sig Ø sig selv Ø</td>
<td>sig selv Ø himself</td>
</tr>
<tr>
<td>b. Pronouns</td>
<td>ham him ham selv</td>
<td>himself (&lt;him himself)</td>
</tr>
<tr>
<td>c. DPs</td>
<td>kongen the king kongen selv</td>
<td>the king himself</td>
</tr>
</tbody>
</table>

In this chapter the hotly debated question of the lexical/syntactic status the simple reflexive sig (=Nor. seg, Dutch zich, etc.) has also been discussed. The myth that sig is an anti-local anaphor was dispelled. We have also shown that local sig can be a true theta-marked reflexive pronoun even when bound by a co-argument since. That is, the large group of verbs defined here as neutral do allow local sig (even when bound by co-arguments) without showing any signs of reanalysis/lexical ambiguity.