Binding and co-reference

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1. Introduction

There is a fair amount of variation between and within the Scandinavian varieties with respect to binding, anaphors and co-reference restrictions on pronouns and noun phrases. The variation between the languages has been discussed and analyzed in e.g. Holmberg and Platzack (1995) and Thráinsson (2008), and more fine-grained variation within the languages has been discussed by e.g. Tania Strahan (see Strahan 2003, 2011), Helge Lødrup (2009) and Björn Lundquist (2012). In NALS, five chapters are dedicated to binding and co-reference, which all build on the results from the ScanDiaSyn-survey as they appear in the Nordic Syntax Database (Lindstad et al 2009):

- 1. Long-distance binding into finite complement clauses. (Lundquist 2014a).
- 2. Long-distance binding into relative clauses (Lundquist 2014b).
- 3. Binding into control infinitives (<u>Lundquist 2014c</u>).
- 4. Anaphors without a sentence internal antecedent (Lundquist 2014d).
- 5. Number-sensitive anaphors, and short-distance pronouns(<u>Lundquist 2014e</u>).

This introduction gives a brief overview of anaphors in the North Germanic varieties, and discusses some issues not covered in the five chapters. In all Scandinavian varieties you find three types of reflexives (Swedish forms given) [1]: simple reflexive (sig), complex reflexives (sig själv) and possessive reflexive (sin/sitt/sina). The simple reflexive is marked for case in Icelandic and Faroese, just like regular pronouns and noun phrases, though no nominative form exists. In the Mainland Scandinavian languages, there is only one form for the simplex reflexive, sig/seg, and this form cannot be used in subject position. The complex reflexive consists of the simple reflexive and the adjectival element själv (self). The self-element inflects for the same categories as predicative adjectives in Insular Scandinavian (case, number and gender), and in Swedish (number and gender). In Danish and most varieties of Norwegian, the self-element is not inflected. The possessive anaphor agrees with the head noun in number and gender (and case in Insular Scandinavian). The reflexive forms always take a third person antecedent. When the antecedent is a first or second person pronoun, a regular first or second person pronoun has to be used instead of the anaphoric sig/sin-form. Generally, reflexives are not sensitive to the number and gender value of the antecedent, with the exception of the complex reflexive (as noted above). However, as is discussed in the chapter on number sensitive anaphors, the possessive anaphor can only take a singular antecedent in standard Danish, and only a non-animate antecedent in Western Jutlandic (see Hagedorn and Jørgensen 2012 for discussion).

With respect to binding in the Scandinavian languages, the most notable differences can be found between the mainland and insular languages. In Insular Scandinavian, long-distance binding is fully available, at least as long as the binding relation is established between the subject of the matrix clause and an anaphor in a complement clause, and the finite verb in the complement clause is in subjunctive mood (at least in Icelandic), as illustrated in (1):

This type of long-distance binding is in general not accepted in Mainland Scandinavian, but as we will see in the two chapters on long-distance binding, binding relations of the type illustrated in (1), can be found in Western Norway, and other types of long-distance binding, including binding into relative clauses, can be found in other parts of Scandinavia (see <u>Lundquist 2014a</u> and <u>Lundquist 2014b</u>, and references therein).

In general, only the simple reflexive can be non-locally bound. Locally bound anaphors on the other hand, often have to surface in the complex form. The difference between locally and non-locally bound anaphor is shown in (2) and (3) below (from Thráinsson et al. 2004):

- (2) Maria; sigur að tú elskar seg; (*sjalva;). (Far.)

 Maria saypres.3rd that you love.pres.3rd rflx self.acc.3rd

 'Maria; says that Mary loves her;.'
- (3) Maria_i elskar seg_i *(sjalva_i). (Far.)

 *Maria love.pres.3rd rflx self.acc.3rd

 'Maria_i loves herself_i.'

Even though long-distance anaphors like (1-2) are not found in the standard Mainland Scandinavian languages, the difference between simple and complex anaphors can be seen in mid-distance binding, i.e. binding into infinitival clauses (control and ECM), where the complex form in general is impossible when the anaphor is not bound by the closest subject, as shown in (4-5) from Danish (example 4 from Vikner 1985). See also Hellan (1988) for a discussion on Norwegian reflexives, and Lødrup (2009) for examples of non-locally bound complex reflexives.

- (4) Peter_i hørte Anne omtale sig_i (*selv_i). (Dan.)

 **Peter hear.PAST Anne mention.INF RFLX. self

 'Peter_i heard Anne mention him_i.'
- (5) Peter_i omtalte seg_i *(selv_i). (Dan.)

 **Peter mention.PAST RFLX self.

 'Peter_i mentioned himself_i.'

As is discussed in the chapter on mid-distance binding (<u>Lundquist 2014c</u>), sentences like (4) above are rejected by many informants in Sweden (and Norway too), and most speakers prefer a regular personal pronoun in mid-distance context. In Modern Swedish, *sig* is thus fairly rarely used as a non-local anaphor, given that neither long-distance nor mid-distance anaphors are part of most speakers' grammars. There are even indications that *sig* has been, or is about to be, reanalyzed as a voice marker, with the function of turning transitive predicates into intransitive predicates (see Holmberg 1983 and Lundquist 2012). We see this in the fact that *sig* is often used as an anti-causative marker, and as an anti-causative

marker, *sig* does not behave like a true argument of the verb. As shown in (6) predicates marked with *sig* can even appear in existential constructions, whereas regular transitive predicates cannot as shown in (7):

- (6) Det la sig en man i sängen. (Swe.)

 It lay.PAST RFLX a man in bed.DEF

 'A man lay down in the bed.'
- (7) *Det la honom en man i sängen. (Swe.)

 It lay.PAST him a man in bed.DEF

 Int. 'A man laid him down in the bed.'

Reflexive predicates in existential constructions seem to be marginally possible in Danish, Bokmål and Nynorsk as well, which suggests that sig/seg is used as an anti-causative marker all across mainland Scandinavia. For insular North Germanic languages, it is harder to make the argument that sig/seg is a voice marker, since it is harder to find tests for transitivity, but see Jónsson (2011) for arguments that sig in Icelandic is always an argument.

One difference within the Mainland Scandinavian languages that was noticed by Hulthén (1947, 119) is that Swedish allows the reflexive to precede the subject when the verb and subject are inverted, while this is not possible in Danish and Norwegian (existential clauses being a potential exception). In Swedish, the reflexive can optionally be placed before also a very light subject, but not before a personal pronoun, as shown below:

- (8) Därefter tvättade sig mannen noggrant. (Swe.)
 thereafter wash. PAST RFLX mander carefully.

 'Thereafter, the man washed (himself) carefully.'
- (9) *Därefter tvättade sig han noggrant. (Swe.)

 thereafter wash.PAST RFLX he carefully.

 Int. `Thereafter, he washed (himself) carefully.'
- (10) Därefter tvättade han sig noggrant. (Swe.) thereafter wash.PAST he RFLX carefully. 'Thereafter, he washed (himself) carefully.'

In Icelandic and Faroese, the relfexive has to follow a definite subject (11-12), but it can precede an indefinite subject (13). A sentence like (13) is probably best analyzed as an existential construction, though as pointed out to me by Zakaris Hansen, p.c., even in (13), speakers prefer to put the reflexive after the subject (all Faroese examples from Zakaris Hansen, p.c.):

- (11) *Síðan vaskaði sær maðurin væl og virðiliga. (Far.) thereafter wash.past rflx.dat mander well and carefully.

 Int. `Thereafter, the man washed (himself) carefully.'
- (12) Síðan vaskaði maðurin sær væl og virðiliga. (Far.) thereafter wash.past man.def reflx.dat well and carefully.

 'Thereafter, the man washed (himself) carefully.'
- (13) Við hitt handvaskið vaskaði sær ein gamal maður við síðum hári. (Far.) at other sinkder wash.past relx.dat an old man.nom with long hair 'At the other sink, an old man with long hair washed (himself)'

The fact that Swedish allows for the inverted order between the reflexive and the subject,

could suggest that Swedish has gone one step further in the reanalysis of the pronominal anaphor *sig* as a voice marker (with a clitic-like distribution). The placement of reflexives with respect to subjects was not investigated in the ScanDiaSyn-survey, but in the Nordic Dialect Corpus (NDC, Johannessen et al. 2009), several instances of reflexives preceding subjects can be found in the Swedish part of the corpus, but none from the other languages. An example from NDC is given below:

(14) då brydde sig tyskarna inte om ett dugg.

then care.PAST RFLX Germanpl.DEF not about a thing.

'Then the Germans didn't care at all.' (Köla_OM)

(Swe.)

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Web sites:

Nordic Atlas of Language Structures (NALS) Journal: http://www.tekstlab.uio.no/nals

Nordic Dialect Corpus: http://www.tekstlab.uio.no/nota/scandiasyn/index.html
Nordic Syntax Database: http://www.tekstlab.uio.no/nota/scandiasyn/index.html

[1] I will only give the Swedish forms of the anaphors here in the introduction (unless explicitly marked). The form of the simple reflexive is sig in Swedish, Danish and Icelandic, and seg in Norwegian (Nynorsk and Bokmål) and Faroese. The self-element in complex reflexives is realized as selv/sjøl in Bokmål, sjølv in Nynorsk, sj"alv in Swedish, selv in Danish and sj'alvur in Icelandic and Faroese. The possessive anaphor is sin (Common gender/Masc./Fem, singular) all over Mainland Scandinavian and sin (Masc/Fem, singular) in Insular Scandinavian.