Number sensitive anaphors and short distance pronouns

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1. Introduction

Reflexive pronouns do not in carry number information, as opposed to regular object pronouns and possessive pronouns, as shown below in the contrast between third person reflexive pronouns (1-2) and first person object/reflexive pronouns (3-4) (examples from Danish):

(1)	Han _i vaskede sig _i .	(Dan.)
	he wash.past RFLX	
	'He washed (himself).'	
(2)	De _i vaskede sig _i .	(Dan.)
	thet wash.past rflx	
	'They washed (themselves).'	
(3)	Jeg _i vaskede mig _i .	(Dan.)
	I wash.past me	
	`I washed (myself).'	
(4)	Vi _i vaskede os _i .	(Dan.)
	we wash.past us	
	'We washed (ourselves).'	

The pattern above holds for all the Nordic languages: reflexives are sensitive to person (i.e., they can only take a third person antcedent), but not to number.^[1] This pattern is cross-linguistically common (see Reuland 2001 on feature-impoverished reflexives), though many language have reflexives that are not sensitive to person features either, for example the Slavic languages.

However, within the Nordic languages, one can actually find number sensitive reflexives. The Danish possessive reflexive *sin* can only take a singular antecedent. When the antecedent is plural, the regular possessive pronoun *deres* ('their') has to be used, which makes the third person plural bound possesive anaphor look like a short distance pronoun, i.e. a principle B violation. The Danish number sensitivity is shown by the contrast between (5) and (6). (7) and (8) show that there is no number sensitivity in the Swedish possessive reflexive paradigm.^[2] The other Scandinavian varieties all behave like Swedish.

- (5) Faderen_i vaskede sin_i søn. father.DEF wash.PAST RFLX.POSS son 'The father_i washed his_i son.'
- (6) Forældrene_i vaskede deres_i søn.
 father.DEF wash.PAST their son 'The parents_i washed their_i son.'

(Dan.)

(Dan.)

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- (7) Pappan_i tvättade sin_i son.
 father.DEF wash.PAST RFLX.POSS son 'The father_i washed his_i son.'
- (6) Föräldrarna_i tvättade sin_i son.
 father.def wash.PAST RFLX.POSS son
 'The parents_i washed their_i son.'

Note that the non-reflexive possessive *deras* could not be used in the Swedish example (8), with the given interpretation, i.e. *deras* could not be locally bound.

In the ScanDiaSyn survey, two phenomena related to the topics discussed above were investigated: (i) the possibility of *sin* with a plural antecedent in different contexts in Danish, and (ii) the availability of short-distance pronouns in the rest of Scandinavia.

2. Results

2.1 Nordic Syntactic Database (NSD)

In the Danish part of the survey, three pairs of sentences with a plural antecedent of a possessive pronoun were tested:

- (i). Singular head noun in the noun phrase with the bound possessor (213-214):
- (9) Forældrene_i var kede af ikke have tid nok til deres_i barn. (#213) (Dan.) parent.DEF.PL. were sad of not haveINF. time enough to their child.sg.NEUT.
 'The parents_i were sad they did not have time enough for their_i child.'
- (10) Forældrene_i var kede af ikke have tid nok til sit_i barn. (#214) (Dan.) parent.DEF.PL. were sad of not haveINF. time enough to RFLX.POSS.SG.NEUT. child.SG.NEUT. 'The parents_i were sad they did not have time enough for their_i child.'
- (ii). Plural head noun in the noun phrase with the bound possessor:
- (11) Forældrene_i var kede af ikke have tid nok til deres_i børn. (#211) (Dan.) parent.DEF.PL. were sad of not haveINF. time enough to their child.PL
 'The parents_i were sad they did not have time enough for their_i children.'
- (12) Forældrene_i var kede af ikke have tid nok til sine_i børn. (#212) (Dan.) parent.DEF.PL. were sad of not haveINF. time enough to RFLX.POSS.PL. child.PL 'The parents_i were sad they did not have time enough for their_i children.'

(iii). Plural head noun in the noun phrase with the bound possessor, and a possibility for a distributive reading (i.e., player A talked about his own achievements and player B talked about his own achievements:

- (13) Spillernaisnakkede omderesi præstationer.(#1394) (Dan.)player.pl.def. talk.defabout theirachievment.pl.`The playersi talked about theiri achievements.'
- (14) Spillerna_i snakkede om sine_i præstationer. (#210) (Dan.)
 player.PL.DEF. talk.DEF about RFLX.POSS.PL achievment.PL. 'The players_i talked about their_i acheivements.'

(Swe.)

(Swe.)

In all three pairs above, the pronominal possessor (9, 11, 13) was found fully acceptable for all speakers. The anaphoric possessor was in general not accepted, though some dialectal variation can be found. The results for (10), (12) and (14) (i.e., the reflexive possessors) are shown below:



(#214: Forældrene var kede af ikke have tid nok til sit barn. 'The parents were sad they did not have time enough for their child.') (White = high score, grey = medium score, black = low score)



Map 2: Plural possessee

(#212: Forældrene var kede af ikke have tid nok til sine børn. 'The parents were sad they did not have time enough for their children.') (White = high score, grey = medium score, black = low score)



Map 3: Plural possessee, distributive context, reflexive possessor (#210: Spillerna snakkede om sine præstationer. 'The players talked about their achievements.') (White = high score, grey = medium score, black = low score)

Sentences (12) and (14) actually get some high scores. 8 out of 56 informants found (12) fully acceptable and 14 out of 56 informants found (14) fully acceptable (see map for info about where the high scores are obtained). It seems thus that distributivity is a relevant factor: at least some speakers accept plural antecedents of *sine*, but only in a distributive reading. Note that (12) can have a distributive reading as well (parent A felt sorry that he didn't have time for his child, parent B felt sorry that he didn't have time for his child etc.), while no distributive reading is available for (10), since the possessed noun phrase is singular. However, most speakers still reject plural antecedents of an anaphoric possessor, even in the distributive reading.

Anaphoric possessors with singular antecedents were also tested in the Danish part. The following pair was tested:

(15)	Jeg tror	at	Jon _i holder	af sin _i	katt.	(#243) (Dan.)	
	I believe.pres.	that	Jon cares	of RFLX.POSS	cat		
	`I belive that John _i likes his _i cat.'						

(16) Jeg troratJoni holder af hansi katt.(#210) (Dan.)Ibelieve.pres. that Jon cares of hiscat'I belive that Johni likes hisi cat.''I belive that Johni likes hisi cat.'

The results are given in map 4 and map 5 below:



Map 4: Local singular antecedent of sin. (#243: Jeg tror at Jon holder af sin katt. 'I believe that John likes his cat.') (White = high score, grey = medium score, black = low score)



Map 5: Local singular antecedent of hans/short distance pronoun. (#244: Jeg tror at Jon holder af hans katt. 'I believe that John likes his cat.') (White = high score, grey = medium score, black = low score)

Two things are worth noting about the maps above. First, as seen in map 4, *sin* is fully acceptable with a local singular antecedent at all measure point except for Western Jutland, where all five informants rejected the sentence (2 out of 5 informants in Northern Jutland rejected #243 as well). The contrast between map 4 (singular antecedent) and map 1 (plural antecedent) is striking. The relatively high acceptance of (#244) in mid/northern Jutland is also striking. Pronominal possessors with local antecedents were also tested in Sweden, Finland and Norway. The following sentence was tested:

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(#1200) (Swe.)

(17) Mannen_i gillade inte hans_i nya gardiner.
 man.def. like.past. not his new curtain.pl. 'The man_i didn't like his_i new curtains.'

As can be seen in the map below, a locally bound pronominal possessor is rejected by almost all speakers. We only get high scores from three measure points (and some medium scores as well), which should be compared with the results from Danish (#244, map 5), where almost half of the informants found a locally bound singular pronoun acceptable.



Map 6: Locally bound singular possessive pronoun. (#1200: Mannen gillade inte hans nya gardiner. 'The man didn't like his new curtains.')

(White = high score, grey = medium score, black = low score)

3. Discussion

As we have seen above, the anaphoric possessor sin cannot take a plural antecedent in Danish, and instead, a pronominal possessor has to be used in the relevant cases. As we also have seen above, the anaphoric possessor cannot take a singular masculine antecedent either in Western Jutlandic. However, *sin* is used in Western Jutlandic when the antecedent is non-human, or more specifically, lacking a semantic gender specification (masculine or feminine) (see Thagaad Hagedorn and Jørgensen 2012 for discussion). *Sin* can be either locally bound (18) or unbound (19) in Western Jutlandic, which makes it reasonable to assume that it simply is a neuter possessive pronoun.

(18) A skyndt mæ aa brend den_i næst skaaj aa, aa den_i gjor si_i virkning (W. Jut.)

I hurried me to fire the next shot off, and it make.pres poss effect. 'I hurried in firing the next shot, and it made its effect'

(19) Bilen_i vil ikke starte. Det er sin_i karburator det er galt med. (#1366) (W. Jut.) car.DEF want not start.INF. It is POSS.RFLX carburator it is wrong with 'The car_i won't start. There is something wrong with its_i carburetor.'

The possessive system in Western Jutlandic is thus similar to the system in e.g. German, English and the Romance languages, where no specific paradigm for locally bound possessives exist. The Western Jutlandic three third person singular possessive forms *hans* (masc), *hendes* (fem.) and *sin* (neuter, non-gender) could thus be seen as equivalent to *his*, *hers* and *its* in English.

As we see Map 5, singular pronominal possessors can be locally bound in other parts of Jutland, and even Fyn, as well, both in Western Jutlandic and in other parts of Jutland and even Fyn. One could thus suspect that the special anaphoric possessor *sin* is about to disappear in parts of Denmark. The number restriction on possessive anaphors that we see in Standard Danish could thus be a first step towards a complete loss of the special possessive anaphoric form. Jensen (2009) also shows that the non-reflexive forms is more frequently used in reflexive contexts by younger speakers compared to older speakers, indicating that the change is going in that direction (contra claims in e.g. Hansen 1988 and Christensen and Christensen 2005:92). The low accpetance of reflexive possessors bound by a plural subject, especially in a non-distributive interpretation (10 above), supports Jensen's findings.

Whether there is any number sensitivity in the possessive paradigm in Bokmål and Southern Swedish dialects, i.e. in Scandinavian variants that share many other traits with Danish, was not tested in the ScanDiaSyn survey.

Concerning the rest of Scandinavia, there might be some dialectal variation with respect to short distance pronouns, for example, short distance pronouns seem to be fully acceptable in Särna, in Dalarna (Sweden), and there are other high scores around that area, both in Norway and Sweden. In Icelandic and Faroese, short distance pronouns are in general not accepted, but as carefully investigated by Harðarson (2011), subtle syntactic, semantic and pragmatic factors can fascilitate the licensing of short-distance pronouns in Icelandic. The same is presumably true for the other Scandinavian variants as well.

References

Christensen, Robert Z. & Lisa Christensen 2005: *Dansk grammatik*. Odense: Syddansk Universitetsforlag.

Hansen, Erik 1988: Rigtigt dansk. København: Hans Reitzels Forlag.

Harðarson, Gísli Rúnar. 2011. 'Short-distance pronominals,' Nordlyd 37 5-38.

Jensen, Torben Juel. 2009. 'Refleksivt anvendte pronominer i moderne dansk.' *Ny forskning i grammatik*, vol 16, s. 131-151.

Lundquist, Björn. 2014e. 'Number sensitive anaphors, and short distance pronouns'. Nordic Atlas of Linguistic Structures (NALS). <u>http://www.tekstlab.uio.no/nals#/chapter/51</u>.

Reuland, Eric. 2001. 'Primitives of binding'. *Linguistic Inquiry* 23 3:439-492.

Thagaad Hagedorn, Karen and Henrik Jørgensen 2012. 'The status of the pronoun sin in Western Jutland'. Ms. University of Aarhus, Denmark

Web sites:

Nordic Atlas of Language Structures (NALS) Journal: <u>http://www.tekstlab.uio.no/nals</u> Nordic Dialect Corpus: <u>http://www.tekstlab.uio.no/nota/scandiasyn/index.html</u> Nordic Syntax Database: <u>http://www.tekstlab.uio.no/nota/scandiasyn/index.html</u>

[1] Unless you count locally bound first and second person object pronouns as reflexive pronoun. If you do, reflexives are still person-sensitive, in that they agree in person, but they are also number sensitive.

[2] uPossessive pronouns agree with the head of the nominal phrase in number and gender. This is true for first and second person possessive pronouns as well, but not for third person non-reflexive possessive pronouns, which show no agreement.