1. Introduction: Norwegian possessives

Norwegian possessives can be pre- or postnominal:

(1) Min bil / bil-en min
    my car / car.BET my
    ‘my car’

Interpretive difference:

• Prenominal possessive has contrastive interpretation and prosodic prominence on possessor (min bil).
• Postnominal possessive has a weak possessive interpretation and prosodic prominence on possessee (bil-en min).

1. Introduction: Neutral vs. contrastive possessives

MOT (Ann.05):

(2) Ja den derre jabba hennes den går i ett sett.
    yes that there mouth her it goes in one set
    ‘Yes, that mouth of hers it moves non-stop.’

Æ hørte hennes stemme over alle de andre når....
    I heard her voice over all the others when....
    ‘I heard HER voice above all the others when....’

2. Background: Theoretical assumptions

Scandinavian DPs:
- Two determiner positions, one above and one below adjectival projection (Taraldsen 1990).
- Suffixal article associated with low position (Vangsnes 1999; Julien 2005; Anderssen 2006).
- Possessive located above base-position of noun, but below suffixal article.

(3) (DET - ADJ) DET - POSS – NOUN

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- Suffixal article associated with low position (Vangsnes 1999; Julien 2005; Anderssen 2006).
- Possessive located above base-position of noun, but below suffixal article.

(3) DET - POSS – NOUN
2. Background: Syntax
• Prenominal possessive involves no movement.
  
  \[(4) \text{Min} \ bil \text{car}\]
  
  (DET) POSS – NOUN
• Postnominal possessive involves movement of N
  
  \[(5) \text{bil-}en \ min \ bil \text{car, DEF 'my car'}\]
  
  NOUN + DET – POSS – NOUN

2. Background: Input frequency
Table 2: Prenominal and postnominal possessors, adults.

<table>
<thead>
<tr>
<th></th>
<th>Poss-N (%)</th>
<th>N-Poss (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAT Ina 01-27</td>
<td>37 (92.5)</td>
<td>3 (7.5)</td>
</tr>
<tr>
<td>MOT Ina 01-27</td>
<td>61 (80.3)</td>
<td>15 (19.7)</td>
</tr>
<tr>
<td>INV Ina 01-27</td>
<td>276 (73.6)</td>
<td>99 (26.4)</td>
</tr>
<tr>
<td>MOT Ann 01-21</td>
<td>105 (80.8)</td>
<td>25 (19.2)</td>
</tr>
<tr>
<td>FAT Ann 01-21</td>
<td>0 (0)</td>
<td>1 (100)</td>
</tr>
<tr>
<td>MOT Ole 01-22</td>
<td>30 (76.9)</td>
<td>9 (23.1)</td>
</tr>
<tr>
<td>FAT Ole 01-22</td>
<td>18 (85.7)</td>
<td>3 (14.3)</td>
</tr>
<tr>
<td>INV Ole 13-22</td>
<td>96 (63)</td>
<td>52 (33)</td>
</tr>
<tr>
<td>INV Ole 01-13</td>
<td>86 (78.9)</td>
<td>23 (21.1)</td>
</tr>
<tr>
<td>INV Ann 01-21</td>
<td>142 (77)</td>
<td>54 (23)</td>
</tr>
<tr>
<td>Total</td>
<td>851 (75%)</td>
<td>284 (25%)</td>
</tr>
</tbody>
</table>

2. Background: Input frequency
Table 3. Possessive structures in NoTa.

<table>
<thead>
<tr>
<th>Construction</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poss-N</td>
<td>700</td>
<td>27.1%</td>
</tr>
<tr>
<td>N-Poss</td>
<td>1883</td>
<td>72.9%</td>
</tr>
<tr>
<td>Total</td>
<td>2583</td>
<td>100%</td>
</tr>
</tbody>
</table>

2. Background: Monolingual child data
Table 4: Percentage of N-Poss word orders (N-poss/total poss)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ina</td>
<td>0 (0/0)</td>
<td>67 (8/12)</td>
<td>86 (37/43)</td>
<td>62 (84/135)</td>
</tr>
<tr>
<td>Ann</td>
<td>0 (0/2)</td>
<td>53 (18/19)</td>
<td>79 (27/34)</td>
<td>67 (20/30)</td>
</tr>
<tr>
<td>Ole</td>
<td>0 (0/5)</td>
<td>43 (6/14)</td>
<td>74 (23/31)</td>
<td>41 (43/105)</td>
</tr>
<tr>
<td>Total</td>
<td>0 (0/7)</td>
<td>53 (24/45)</td>
<td>79 (87/108)</td>
<td>54 (147/270)</td>
</tr>
</tbody>
</table>

2. Background: Examples monolinguals
• Children start out with prenominal possessives - these remain predominant when postnominal possessives appear:
  
  \[(6) \text{min seng (Ann 1;11.0)} \text{my bed}\]
  
  The children use the POSS-N structures in non-contrastive contexts:

  \[(7) \text{Ole: her dætt av hjulan. here fall off wheel.pl.def 'the wheels are falling off here.'}\]
  
  Inv: \text{dætt hjulan demmes av? falls wheel.pl.def their off 'are their wheels falling off?'}
  
  Ole: \text{ja. demmes hjula dætt av. yes their wheel.pl fall off 'yes, their wheels are falling off.'} (Ole 2:2:12)
3. Hypotheses

We have seen:
- POSS-N (my car) less complex than N-POSS (car my)
- POSS-N (20%) less frequent than N-POSS (75%)
- POSS-N preferred by monolingual children
- What do we expect in the two English/Norwegian bilingual situations?
  ➞ Expect POSS-N to be even more strongly preferred (overused) by English/Norwegian bilingual children.
  ➞ Expect N-POSS vulnerable to attrition in English/Norwegian heritage speakers.

4. Bilingual Acquisition: Subjects

- Data from two English/Norwegian bilingual children; 7 Norwegian files each:
  - Sunniva (1;8.8 – 2;7.24), Norwegian mother, English father.
  - Emma (2;7.10 – 2;10.9), American mother, Norwegian father.
- Both children in nursery from one and use English as home language.

4. Bilingual Acquisition: POSS-N orders

Table 4: Percentage of N-Poss word order (N-Poss/Total Poss)

<table>
<thead>
<tr>
<th>Child</th>
<th>Period 1</th>
<th>Period 2</th>
<th>Period 3</th>
<th>Period 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1;6-2;0)</td>
<td>(2;0-2;4)</td>
<td>(2;4-2;8)</td>
<td>(2;8-3;0)</td>
</tr>
<tr>
<td>Sunniva</td>
<td>27 (4/15)</td>
<td>100 (2/2)</td>
<td>33 (1/3)</td>
<td></td>
</tr>
<tr>
<td>Emma</td>
<td></td>
<td></td>
<td>30 (3/10)</td>
<td>84 (21/25)</td>
</tr>
<tr>
<td>Total</td>
<td>27 (4/15)</td>
<td>100 (2/2)</td>
<td>31 (4/13)</td>
<td>84 (21/25)</td>
</tr>
</tbody>
</table>

4. Bilingual Acquisition: Early pre- and postnominal possessives

- Unlike the monolinguals, Sunniva uses pre- and postnominal possessives in first files:
  - (8) Nei, ikke min kjole (Sun, 1;8.8) 
    no not my dress 
    'No it isn't my dress.'
  - (9) Baby min (TARGET: Baby-en min)
    baby my baby-the my
    'My baby.'

4. Bilingual Acquisition: Non-target use of prenominal possessives

- Both the bilingual children use the POSS-N structures in non-contrastive contexts:
  - (10) Den er ikke min veska. (Sun, 1;10.16)
    it is not in my handbag 'It isn’t in my handbag.'
  - (11) Den tog har av fatt min mamma. (Emm, 2;7.10)
    that train have I got my mummy 'That train I got from my mummy.'

4. Bilingual Acquisition: Conclusion

- Both Sunniva and Emma use a high proportion of prenominal possessives.
- Like monolingual Norwegian speakers, both use prenominal possessives in non-contrastive context.
- This preference for prenominal possessives seems to persist for longer in the bilinguals: hypothesis confirmed.
- Caution: Too little data...
5. Heritage speakers

- 3rd generation Norwegian-Americans, age approx. 70-90
- Norwegian from birth, English typically from age 5-6
- Learned Norwegian from parents/grandparents (only to limited extent from the community)
- Have not passed on the language to the next generation
- English dominant – Norwegian used only for special occasions and with few other speakers
- Minimal reading or writing skills in Norwegian
- Mainly speakers of rural East Norwegian dialects

5. Heritage speakers: Rural Norwegian Dialects

- Postnominal possessor construction may lack definiteness with some kinship terms, e.g.
  - far min, mor mi, sønn min, bestemor mi
- But: "kjerring mi, "kone mi, "barnen mitt
  - woman my.F, wife my.F, cousin my.N

Kinship terms very frequent in these conversations.

5. Heritage speakers: Main findings

37 informants (27 M, 10 F) – 33 produce possessives

<table>
<thead>
<tr>
<th>CONSTRUCTION</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>N_{bare}-POSS</td>
<td>153</td>
<td>33.8%</td>
</tr>
<tr>
<td>N_{bare}-POSS</td>
<td>209</td>
<td>46.1%</td>
</tr>
<tr>
<td>POSS-N</td>
<td>90</td>
<td>19.9%</td>
</tr>
<tr>
<td>POSS-N-POSS</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>463</td>
<td>100%</td>
</tr>
</tbody>
</table>

5. Heritage speakers: N-POSS vulnerable?

N-POSS very robust 33.8% + 46.1% = 79.9%
(gender & number generally ok):

(13) farmen min
    farm.DEF my.M
(14) kjerringa mi
    woman.DEF my.F
(15) maskinearbet mitt
    machinery.DEF my.N
(16) unga mine
    kids.PL, my.PL

5. Heritage speakers: Productivity of N-POSS

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<tr>
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<tr>
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<tr>
<td>TOTAL</td>
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</tr>
</tbody>
</table>

5. Heritage speakers: N_{bare}-POSS

N_{bare}-POSS most frequent construction (46.1%)

(21) far og mor mi
    father and mother my.F
(22) mor og far mi
    mother and father my.M
(23) dotter mi, sønn hass, mor vik, bestemor min
    daughter my.F, son my.M, mother my.m, grandmother my.F
5. Heritage speakers: Definiteness vulnerable

14.4% (30/209) N\textsuperscript{mod} POSS are ungrammatical

(24) *søskenbarn vårt, *onkel våres cousin our N, uncle our (4M Coon V)

(25) *foreldre dems parent(s) their (1M Decorah)

(26) *kone mitt, *begge to gutter min wife my N, both two boys my M SG

5. Heritage speakers: Examples POSS-N

(27) Når jeg var liten min far og mor snakket god norsk, when I was little my father and mother spoke good Norwegian, but they didn’t speak to me, you know

(28) Min bestmor, je kan tå husse at jeg hånde henne si ett English word

my grandmother, I cannot remember that I heard her say one

5. Heritage speakers: Overuse of N-POSS?

Pragmatic distinction (contrast) lost?

• Not many clearly contrastive contexts
• Always possible to use prosody to express contrast in the N-POSS construction (bliten MIN ‘MY car’)

Geographical, historical, individual and/or stylistic

differences? (need to be investigated further)

5. Heritage speakers: Overuse of POSS-N?

No – only 19.9% (90/453) – less than in Norwegian corpora.

Furthermore – 73.3% (66/90) POSS-N produced by only 3 speakers:

<table>
<thead>
<tr>
<th>SPEAKER</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1F Harmony</td>
<td>17/28</td>
<td>60.7%</td>
</tr>
<tr>
<td>3M Westby</td>
<td>28/29</td>
<td>96.6%</td>
</tr>
<tr>
<td>6M Spring Grove</td>
<td>21/21</td>
<td>100%</td>
</tr>
</tbody>
</table>

5. Heritage speakers: Examples POSS-N

(29) Han levde med oss somme året for fire år og så da reiste han bakers til sin far (1F Harmony)

he lived with us sometimes for 4 years and then he went back to his father

Remaining examples (24/90) produced by 16 speakers, mainly fixed expressions:

(30) *alt mitt liv, mi tid all my life, my time

5. Heritage speakers: Why loss of N-POSS in three speakers?

• Different nouns used (more challenging topics)? No.
• Active RE-learners of Norwegian – similar to 2\textsuperscript{nd} lg learners?

Some evidence:

• (31) Så jeg lærte det til mine studentene når jeg var en lærer ... so I taught it to my students when I was a teacher ...

(6M Spring Grove)

POSS-N overuse is an acquisition feature, not a feature of attrition.
5. Heritage speakers: Summary

- N-POSS word order is robust (79.9%) and productive (Caution: Different results possible with more challenging task)
- Definiteness vulnerable
- 3 speakers produce predominantly POSS-N,
- Loss of N-POSS related to RE-learning of the language?

6. Discussion

- Why is N-POSS vulnerable in Acquisition but not in Attrition?
- What role does the pragmatics of the possessive constructions play?
- Why is definiteness vulnerable in bilingual acquisition and attrition (not in 1LA)?

6. Discussion: Frequency vs. complexity

(N-POSS is complex but frequent)

- Complexity is a crucial factor in the acquisition process, not in attrition
- Frequency is a crucial factor in the attrition process: Once acquired, complex features are not vulnerable if frequent in the input

6. Discussion: Syntax vs. pragmatics

- Phenomena involving syntax/pragmatic interface especially vulnerable (Interface Hypothesis, Sorace 2011) – in both acquisition and attrition?
- Mono- and bilingual children seem not to know pragmatic distinction between POSS-N and N-POSS (overuse of POSS-N in non-contrastive contexts).
- Heritage speakers: Not enough production of both word orders to distinguish the two pragmatically.

6. Discussion: Syntax vs. morphology

- Definiteness morphology missing, e.g. baby min ‘baby my’, soksenbarn vårt ‘cousin our’, alle barn hans ‘all children his’.
- N-POSS word order is robust and productive (e.g. schoolhouse’n din ‘schoolhouse your’, familien her
- Overgeneralization from frequent kinship terms to other nouns?
- Transfer from English?
- Morphology especially vulnerable in both L2 acquisition and attrition (cf. e.g. Gürel 2008).

6. Summary/Conclusion

- Prediction: N-POSS vulnerable (complexity, transfer from English)
- Findings
  - Bilingual children: High proportion of POSS-N, also in non-contrastive contexts. Persists longer than in monolinguals?
  - Heritage speakers: N-POSS robust and productive. No gradual loss of N-POSS - but (more or less) complete loss in 3 speakers (RE-learners?)
- Hypothesis partly confirmed.
- Main argument: Complexity is important in acquisition process - frequency prevents attrition.