The possessive suffix in Finnish

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- The possessive suffix occurs all over the place in Finnish
- There does not exist a unified analysis
- Most notable previous (recent) analyses:

- Goal: will attempt here to provide a unified analysis using generative grammar
- As we go along, we extend a tongue-in-cheek comparison to the classification of the Australian animal platypus (also known as the duckbill)

Step 1: The possessive suffix (Px) is a suffix, and it involves a paradigm. Therefore it may belong to morphology (Kanerva [1987] has shown that it is a suffix, not a clitic)

→[a platypus looks like a bird]

Table 1. The possessive suffix (Px) paradigm in Finnish.

<table>
<thead>
<tr>
<th>Person</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>-ni</td>
<td>-mme</td>
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<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>-si</td>
<td>-nne</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>-nsA/-Vn</td>
<td>-nsA/-Vn</td>
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**Step 2:** But the Px involves a connection with another element in the sentence...thus it may involve **syntax**...but perhaps the connection is equivalent to subject-verb agreement and might be local enough to be seen as part of **morphology**

\[
\text{[the platypus lays eggs like a bird – but it has fur like a mammal]}
\]

**Table 2. The subject-verb agreement paradigm in Finnish.**

<table>
<thead>
<tr>
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<th>Plural</th>
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<tr>
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<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>-t</td>
<td>-tte</td>
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<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>-V</td>
<td>-vat</td>
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1a) (meidän) katu-mme
we-GEN street-1pIPx ‘our street’ (lit. ‘our street-our’)

b) (Me) laskettele-mme.
we-NOM sled-1pl ‘We are sledding’ (lit. ‘we sled’)

**Table 3. The possessive suffix/subject verb agreement suffix (past tense) in North Saami (summarized from Nelson & Manninen 2003:19-21)**

<table>
<thead>
<tr>
<th>Person</th>
<th>Singular</th>
<th>Dual</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>-an/-en</td>
<td>-ame/-aime</td>
<td>-amet/-aimet</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>-at/-et</td>
<td>-ade/-aide</td>
<td>-adet/-aide</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>-is/-ai</td>
<td>-iska/-aiga</td>
<td>-iset/-e</td>
</tr>
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</table>

**Straw Man Analysis 1:** The Px involves agreement with the possessor that is equivalent to subject-verb agreement.

- Support for the hypothesis (in addition to the above): partial pro-drop in both domains (Vainikka & Levy 1999; Holmberg 2005) – 1<sup>st</sup> and 2<sup>nd</sup> can be omitted, but not 3<sup>rd</sup>

2a) * Laskettele-vat.
   sled-3pl

b) He laskettele-vat.
   They-NOM sled-3pl ‘They are sledding’

3a) Käytin (omaa) kelkkaa-ni.
   Use-PAST-1sg own-PAR sled-PAR-1sgPx ‘I used my own sled’

b) *Käytin (omaa) kelkkaa-nsa.
   sled-PAR-3Px (‘I used his/her sled’)

Problems with (Straw Man) Analysis 1

- Subject/verb agreement with all DPs – but Px agreement appears to only occur with human possessive pronouns

4a) Virtaset lähti-vät lomalle.  
   Virtanens leave-PAST-3pl vacation-ALL ‘The Virtanen’s left for vacation’

b) *Virtasten loma-nsa  
   Virtanens-GEN vacation-3Px

c) Virtasten loma  
   Virtanens-GEN vacation ‘the Virtanen’s vacation’

- Px agreement is a much more general phenomenon; it does not only occur in the possessive construction with a noun head – it also occurs with P (postposition), non-finite V (verb), and some A (adjective) heads

5a) Maijan takana  
   Maija-GEN behind ‘behind Maija’

b) hänen takana-nsa  
   he/she-GEN behind-3Px ‘behind him/her’

c) (minun) takana-ni  
   I-GEN behind-1sgPx ‘behind me’

6a) [Maijan lasketellessa] tuli pimeää.  
   Maija-GEN sledding became dark ‘While Maija was sledding, it got dark’

b) [Hänen lasketellessa-an] tuli pimeää.  
   he/she-GEN sledding-3Px became dark ‘While he/she was sledding, it got dark’

c) [(Minun) lasketellessa-ni] tuli pimeää.  
   I-GEN sledding-1sgPx became dark ‘While I was sledding, it got dark’

7a) Maijan pituinen  
   Maija-GEN tall ‘as tall as Maija’ (lit. ‘(be) Maija’s height’)  

b) hänen pituise-nsa  
   he/she-GEN tall-3Px ‘as tall as he/she’

c) minun pituise-ni  
   I-GEN tall-1sgPx ‘as tall as me’
• No longer looks like morphology – but how to account for the 1st/2nd vs. 3rd split in omission, and how to correlate Px’s and subject-verb agreement?

• Could it involve syntax rather than just morphology?

→ [Could the platypus actually be a mammal, rather than a bird?]

**Straw Man Analysis 2:** The Px occurs with any head, associated with a genitive DP. (Subject-verb agreement is similar but it is associated with a nominative DP and only a verb head.)

**Problems with (Straw Man) Analysis 2:**

• We still need an analysis for the person split (1st/2nd vs. 3rd) in terms of omission

• There are various verb constructions in which the genitive occurs, but no Px (see Vainikka 2011 examples (20-23) for details) – note that these constructions are all possible with all three persons, but a Px is not possible. Compare these to the non-finite temporal construction above in (6) which allows the Px:

8a) Hänen teki mieli ulos hengittämään [ISK p.1185]
   ‘He/she felt like going outside to breathe’

   b) Minun kannattaa odottaa.
      I-GEN worth-3sg wait-INF ‘It is worth my waiting for’

   c) Annan [sinun lainata kirjaan]
      let-1sg you-GEN borrow-INF book-PAR ‘I (will) let you borrow the book’

• There is also one non-finite construction, the *rationale clause*, which must carry a Px but never allows a genitive DP:

9a) Lainasin kirjaan [tehdäkseni muistiinpanoja].
   Borrow-PAST-1sg book-PAR make-KSE-1sgPx notes-PAR ‘I borrowed the book in order to take notes’

   b) *…. [minun tehdäkseni muistiinpanoja]
      I-GEN
To further complicate matters, in addition to all the constructions discussed so far, at least the 3rd person Px is associated with the Binding Theory – the two binding theoretic anaphors itse- ‘self’ (reflexive) and toinen tois- ‘each other’ (reciprocal) require a Px (see Kanerva 1987, Vainikka 1989, van Steenbergen 1991, Trosterud 1993, Kaiser 2003) – and there is no genitive DP present:

10a) Maija naarmutti itse-nsä.
    Maija-NOM scratch-PAST-3sg self-3Px
    ‘Maija scratched herself’

b) Lapset naarmuttivat toinen toisiansa.
    Children-NOM scratch-PAST-3pl each other-PAR-3Px
    ‘The children scratched each other’

In addition to the clear anaphors, (at least) the 3rd person Px on a possessed noun has the same distribution as itsensä and has to be bound by a coindexxed (c-commanding) antecedent – and here it does not matter what type of DP (pronoun or full DP) the antecedent is, and what case it carries (GEN or NOM):

11a) Maijan avain
    Maija-GEN key ‘Maija’s key’

b) *Maijan avaime-nsa
    Maija-GEN key-3Px

12a) Maija, hukkasi avaime-nsi.
    Maija-NOM lost key-3Px
    ‘Maija lost her (own) key’

b) Maija, hukkasi hänen-ij avaime-nsa.
    Maija-NOM lost his/her key
    ‘Maija lost his/her key’ (someone else’s)

13a) [Maijan, sisko] hukkasi avaime-nsi.
    Maija-GEN sister-NOM lost key-3Px
    ‘Maija’s sister lost her key’ (=the sister’s key)

The possessive suffix is related to binding and structure of the sentence – it definitely involves syntax! (…known for about 25 years now…)

→ [the platypus has mammalian glands – it is definitely a mammal!]
**Straw Man Analysis 3:** The Px can either be an agreement marker on possessors, or an anaphor.

- Not straightforward – only appears to work in 3rd person
- Toivonen’s (2000) Lexical-Functional Grammar analysis is an attempt to account for all three persons, and can be summarized as follows: in the 1st and 2nd person, each Px has two lexical entries, either an agreement marker or an incorporated possessive pronoun; in the 3rd person, the two lexical entries have an additional binding (anaphoric) feature. For the six Px forms, we end up with 12 lexical entries.
- Hakulinen et.al. (2004) treat the possessive construction as one phenomenon (the non-reflexive Px) and the anaphoric 3rd person Px as a separate (reflexive) phenomenon
- Thus, both Toivonen (2000) and Hakulinen et.al. (2004) represent Analysis 3
- Neither approach explains the connection to null subjects
- Is there a way to unify all the data under one analysis?

**Analysis 4 (the one I will settle on):** All Px’s are anaphors, but they involve two binding cycles.

- Assumes deriving structure from the bottom up, as in Minimalism (Chomsky 1995, 2001, 2008)
- Most related to van Steenbergen’s (1991) proposal where she posits an empty anaphoric pro for Finnish -- but only a piece of the solution proposed here

**Cycle 1: binding within the XP**

A. a theta-role is assigned by any argument-taking head to (i) a Px, or (ii) the pronouns se ‘it’ and ne ‘they’, or (iii) to a full non-pronominal DP

- nothing further happens with se/ne or full DPs, except for BT(B) and (C)
B. a $Px$ is bound by the most local binder (only possible binders: minä/sinä/hän/me/me/te/he/pro)

- if an overt pronoun occurs as the local binder, nothing further happens – but the pronoun itself is subject to BT(B)

- if the null element pro carries the features [+SPEAKER] or [+HEARER], it can be interpreted without further binding – that is, the local binder can be a 1st/2nd person null element and anaphoric binding of the equivalent $Px$ is satisfied

**Cycle 2: regular binding (binding within clause)**

If pro does not carry the [+SP/+HE] feature (i.e. 3rd person), it is treated as an anaphor.

- This takes care of all the instances where the 3rd person $Px$ is bound by (any type of) DP that c-commands it and occurs within the tensed clause: possessive DPs, non-finite verbs with $Px$ but no overt subject, PPs with a $Px$ but no overt argument, APs with a $Px$ but no overt argument, the reflexive *itse* ‘self’, and the reciprocal *toinen tois* ‘each other’

**Stipulations**

- For local binding we have to stipulate that the binder agrees in all features (even phonologically?) – this stipulation is critical for uniting Hakulinen et.al.’s (2004) reflexive and non-reflexive $Px$, or for not needing two lexical entries for each $Px$ as proposed by Toivonen (2000)

**Less-than-standard assumptions**

- pro without [+SP/+HE] features is anaphoric (standard: pronominal)

- two binding cycles (standard: one)

- to include them in the unified analysis, the regular anaphors *itse* ‘self’ and *toinen tois* ‘each other’ must also contain a null 3rd person pronominal that binds the $Px$ within the DP – just like the null possessor cases
Remaining questions

- are the overt pronouns minä/sinä ‘I/you’ pronouns in terms of the Binding Theory (in Finnish or any other language?)
- is the null 1st/2nd pro (in a null subject situation in Finnish or any other language) a pronoun in terms of the Binding Theory?

Ramifications

- The similarity in person split with null subjects and null possessors can be derived from the properties of the null subject/possessor
- Connection to subject-verb agreement
- There are several non-finite constructions in Finnish:
  1. the MA-infinitive allows neither a genitive subject nor a Px
  2. the A-infinitive allows a genitive subject but no Px [example (8c)] -- no Px related binding takes place
  3. the rationale construction allows only a Px [example (9a)] – the construction does not have a position in which a local (genitive) binder could be posited, and only Cycle 2 binding applies
  4. the temporal construction behaves the same way as possessive DPs; both binding cycles apply [example (6)]
  5. the VA-construction?
Selected references


