

Reflexive possessives and ambiguity avoidance in Estonian

Suzanne Lesage and Olivier Bonami (Université de Paris, LLF, CNRS)
slesage@linguist.univ-paris-diderot.fr

Why do speakers choose to use a particular type of referring expression? Multiple experimental studies document factors that influence the choice of e.g. a pronoun or a full NP. The present abstract focuses on the role of contextual ambiguity. Most studies address cross-sentential anaphora [1] and therefore focus on antireflexive forms. But there's a paucity of research on the role of reflexives in clausemate ambiguity avoidance (a notable exception is [3]), as researchers assume that reflexive and antireflexive forms are in complementary distribution.

Estonian distinguishes two kinds of possessives: reflexives (*oma*) tend to be bound by the local subject, antireflexives (genitive personal pronouns) have the opposite tendency. These binding constraints are categorical in some syntactic contexts but looser in others, such as clauses with an oblique experiencer. In this construction type, reflexive and antireflexive possessives are not in complementary distribution: both forms can be bound by both the subject and the allative experiencer (see example (1)) [4]. Moreover, when embedded within the subject or allative argument, reflexive possessives are comparatively more frequently used than antireflexives for 3rd person antecedent [5]. Arguably this is a consequence of Grice's maxim of manner [2]: in the 3rd person only, using a reflexive avoids a possible ambiguity between a local and an extraclausal antecedent.

We focus on ambiguity avoidance in sentences where both the subject and the allative argument are possible antecedents of a possessive, a situation that the corpus study in [5] was unable to address for lack of sufficient data. We ask whether local ambiguity, ambiguity with an extraclausal antecedent, or both, play a role. Table 2 lays out the ambiguities triggered by different configurations of person. If only local ambiguity matters, then reflexive possessives should be comparatively disfavored when both antecedent and competitor are 3rd person. If only nonlocal ambiguity matters, then reflexives should be favoured when the antecedent is 3rd person. If both matter, different scenarios are possible depending on the relative importance of the two types of ambiguities.

Participants (N=40) recruited on Prolific had to choose in a dropdown list between reflexive and antireflexive possessives referring to a preverbal allative experiencer. The task involved reformulating a sentence that had been presented to them, to ensure that the participants targeted the intended referent. More precisely, the sentence that they read was formulated by a third party and they have to rephrase it as they were speaking. In each sentence the target referent in allative case is either a third or a non-third person and the competitor in the nominative case is either a third or a non-third person. Each sentence contains a third animate referent (Tõnu) in an embedding clause. Table 1 contains English equivalents of sample items, while example (2) shows the fully glossed Estonian sentences. In addition to these 20 experimental items, participants were exposed to 20 fillers that allow us to check whether the participant actually read the sentences, as only one answer was correct for most of them.

We ran a generalised linear mixed-effects regression with centered predictors to analyse the results. Neither the person of the antecedent nor that of the competitor have statistically significant main effects, but the interaction between the two is significant (estimate = -1.1542 , z value = -2.556 , $p < 0.05$): when the antecedent and competitor are both 3rd person, the antireflexive is used less frequently. This provides evidence for avoidance of local ambiguity, but not of nonlocal ambiguity, in choosing which possessive form to use.

In conclusion, this experiment highlighted the role of ambiguity avoidance in the choice of possessive in Estonian. According to the results, only local ambiguity matters. We can speculate that the lower salience of the nonlocal competitor causes it to matter less than the local competitor.

Condition	Context sentence	Sentence to fill
ant. non-3rd comp. non-3rd	Liisa told you: “ <i>I</i> used to live in Paris. From the moment <i>I</i> came back, <i>I</i> have liked you . This saddens Tõnu .”	You are talking to Liisa. You say: “ Tõnu is sad because you have liked me since POSS return from France.”
ant. non-3rd comp. 3rd	Liisa told you: “ <i>I</i> used to live in Paris. From the moment <i>I</i> came back, <i>I</i> have liked Peeter . This saddens Tõnu .”	You are talking to Liisa. You say: “ Tõnu is sad because you have liked Peeter since POSS return from France.”
ant. 3rd comp. non-3rd	Liisa told you: “ Paul used to live in Paris. From the moment he came back, he has liked you . This saddens Tõnu .”	You are talking to Liisa. You say: “ Tõnu is sad because Paul has liked me since POSS return from France.”
ant. 3rd comp. 3rd	Liisa told you: “ Paul used to live in Paris. From the moment he came back, he has liked Peeter . This saddens Tõnu .”	You are talking to Liisa. You say: “ Tõnu is sad because Paul has liked Peeter since POSS return from France.”

Table 1: English equivalents of one item in the four conditions. POSS is either a nonreflexive marked for person or a reflexive unmarked for person.

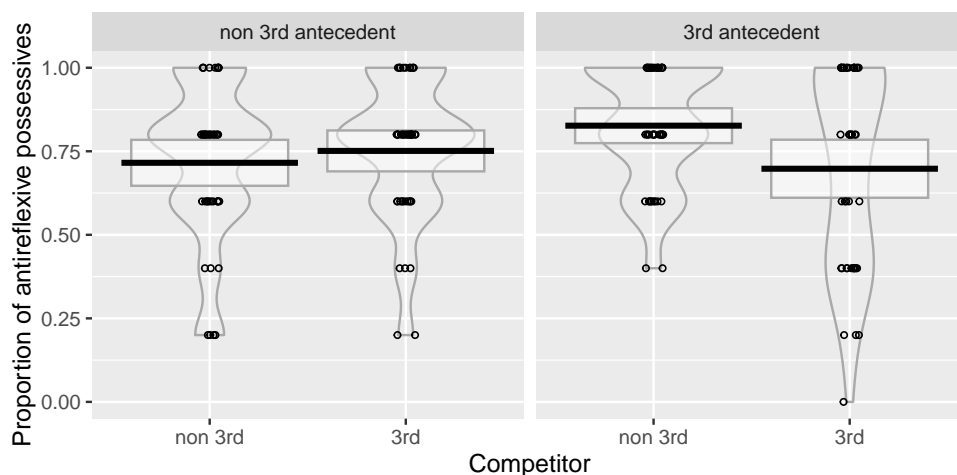


Figure 1: Main results of the experiment. The horizontal line is the global mean, with the box around it specifying the 95% confidence intervals assuming a normal sampling distribution. Individual points indicate by-participant averages.

References

- [1] Kumiko Fukumura, Roger PG Van Gompel, Trevor Harley, and Martin J Pickering. How does similarity-based interference affect the choice of referring expression? *Journal of Memory and Language*, 65(3):331–344, 2011.
- [2] Herbert P Grice. Logic and conversation. In *Speech acts*, pages 41–58. Brill, 1975.
- [3] Rodica Ivan. *TALKING ABOUT HER(SELF): AMBIGUITY AVOIDANCE AND PRINCIPLE B. A Theoretical and Psycholinguistic Investigation of Romanian Pronouns*. PhD thesis, 2020.
- [4] Suzanne Lesage. Liage du réfléchi possessif en estonien : une approche expérimentale. *Etudes finno-ougriennes*, accepted.
- [5] Suzanne Lesage and Olivier Bonami. Gradient constraints on the use of estonian possessive reflexives. In *Proceedings of the First Workshop on Quantitative Syntax (Quasy, SyntaxFest 2019)*, pages 118–124, 2019.

- (1) Maarja-le_i meeldi-b Tõnu_j oma_{i/jj} / tema_{i/jj} iseloomu pärast.
 Maarja-ALL please-3SG.PRS Tõnu.NOM POSS.REFL 3SG.GEN temper.GEN because
 ‘Maarja like Tõnu because of her/his temper’.

Antecedent (allative)	Local competitor (nominative)	Possessive type	Nominative binder possible	Nonlocal binder possible
non-3rd	non-3rd	antireflexive	no	no
non-3rd	non-3rd	reflexive	yes	no
non-3rd	3rd	antireflexive	no	no
non-3rd	3rd	reflexive	yes	no
3rd	non-3rd	antireflexive	no	yes
3rd	non-3rd	reflexive	yes	no
3rd	3rd	antireflexive	yes	yes
3rd	3rd	reflexive	yes	no

Table 2: Potential ambiguity of possessives in sentences with three candidate antecedents

- (2) Actual estonian items corresponding to the translations in Table 1

a. Non-3rd **antecedent**, non-3rd **competitor**

Te räägite Liisa-ga. Te ütlete: „**Tõnu** on kurb, sest **tei-le** meeldin
 you speak Liisa-with you say Tõnu.NOM is sad because 2SG-ALL please
mina **oma/teie** Prantsusmaalt tagasitulekust saadik.
 1SG.NOM POSS France-from coming.back since

‘You are talking to Liisa. You say: “**Tõnu** is sad because **you** have liked **me** since **POSS** return from France.”’

b. Non-3rd **antecedent**, 3rd **competitor**

Te räägite Liisa-ga. Te ütlete: „**Tõnu** on kurb, sest **tei-le** meeldib
 you speak Liisa-with you say Tõnu.NOM is sad because 2SG-ALL please
Peeter **oma/teie** Prantsusmaalt tagasitulekust saadik.
 Peeter.NOM POSS France-from coming.back since

‘You are talking to Liisa. You say: “**Tõnu** is sad because **you** have liked **Peeter** since **POSS** return from France.”’

c. 3rd **antecedent**, non-3rd **competitor**

Te räägite Liisa-ga. Te ütlete: „**Tõnu** on kurb, sest **Maarja-le** meeldin
 you speak Liisa-with you say Tõnu.NOM is sad because Maarja-ALL please
mina **oma/tema** Prantsusmaalt tagasitulekust saadik.
 1SG.NOM POSS France-from coming.back since

You are talking to Liisa. You say: “**Tõnu** is sad because **Maarja** has liked **me** since **POSS** return from France.”’

d. 3rd **antecedent**, non-3rd **competitor**

Te räägite Liisa-ga. Te ütlete: „**Tõnu** on kurb, sest **Maarja-le** meeldib
 you speak Liisa-with you say Tõnu.NOM is sad because Maarja-ALL please
Peeter **oma/tema** Prantsusmaalt tagasitulekust saadik.
 Peeter.NOM POSS France-from coming.back since

‘You are talking to Liisa. You say: “**Tõnu** is sad because **Maarja** has liked **Peeter** since **POSS** return from France.”’