



Neg-words in Eton (Bantu): an HPSG-analysis

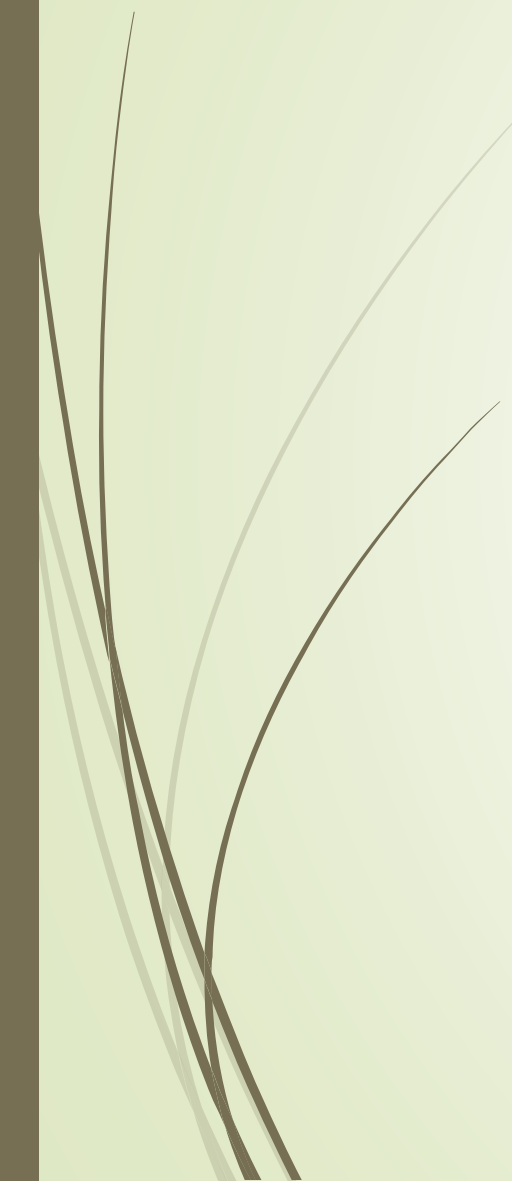
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1. Introduction

- ▶ Eton is a Bantu language spoken in Cameroon
- ▶ The only analysis of it so far has been done by Van de Velde (2008)
- ▶ This talk is based on my own fieldwork with a native speaker of Eton
- ▶ The variety here slightly differs from the one in Van de Velde (2008), but only in minor respects
- ▶ Eton is an SVO language, a non-NC language and possesses neg-words
- ▶ The neg-words identified are *te-mod* ('nobody'), *te-dzom* ('nothing') and *te-wom* ('nowhere')
- ▶ These can appear pre- and postverbally without any licenser
- ▶ The occurrence of two neg-words results in a DN reading

1. Data

- Pre- and postverbal use of neg-words:

(1) a. **Te-mod** a-ti di.
NEG-person 1-PROG eat.
'Nobody eats.'

b. James a-ti di **te-dzom**.
James 1-PROG eat NEG-thing
'James eats nothing.'

- Use as a fragment answer:

(2) a. Q: Paul a-ken-ge we?
Paul 1-go-PST where
'Where did Paul go?'

A: **Te-wom**.
NEG-place
'Nowhere.'

b. Q: Za-ti yen Linda?
Who.1-PROG see Linda
'Who sees Linda?'

B: **Te-mod**.
NEG-person
'Nobody.'

1. Data

- Finally, when two neg-words co-occur or a neg-word occurs together with the negation marker (*aa*), the result is a DN reading:

(3) a. **Te-mod** **aa-ti** di.
NEG-person 1.NM-PROG eat.
'Nobody doesn't eat.'

b. James **aa-ti** di **te-dzom**.
James 1.NM-PROG eat NEG-thing
'James doesn't eat nothing.'

c. **Te-mod** a-ti di **te-dzom**.
NEG-person 1-PROG eat NEG-thing
'Nobody eats nothing.'

d. Alex a-ti ve **te-mod** **te-dzom**.
Alex 1-PROG give NEG-person NEG-thing
'Alex gives nobody nothing.'



1. Introduction

Why is that interesting?

1. Typologically interesting because it clearly opposes Haspelmath (1997) and Weiß (2004)

► Haspelmath (1997):

- Languages where a neg-word alone can contribute negation are restricted to a certain European area

➡ Eton clearly proves this wrong

► Weiß (2004):

- English and German are actually hidden NC languages

- Their neg-words only contribute negation because of standardization

- A major criterion for being a non-NC language is the non-existence of neg-words in the corresponding language

➡ Eton does not have a standard variety and even if, it would rather tend towards French

1. Introduction

2. The neg-words from Eton are obviously decompositional

- ▶ The prefix *te* can be separated from the stem which can also appear alone:

(4) a. James aa-ti yen mod. b. Mod a-ti di.
James 1.NM-PROG see person person 1-PROG eat
‘James doesn’t see anybody.’ ‘Somebody eats.’

- ▶ In contrast, English and German neg-words are not as synchronically transparent
- ▶ Due to the data, it seems plausible to assume that *te* contributes the negation, but no quantification
- ▶ The prefix cannot be combined with any other elements than the neg-word stems (generalized indefinites)
- ▶ The translation of the stems, by the way, provides evidence for treating the neg-words as contributing existential quantification and not universal quantification, as proposed for Korean by Sells & Kim (2006)



1. Starting position

- ▶ Main aim:
 - Integrating Eton's neg-words into the HPSG framework and accounting for
 - Their inherent negativity
 - Their obvious decompositionality
- ▶ Therefore, we need to reconcile the inherently negative approach proposed by de Swart & Sag (2002) or Richter & Sailer (2006) with the non-negative approach put forth by Penka & Zeijlstra (2005)
- ▶ The analysis itself is mainly based on the concepts presented and developed in Levine, Richter & Sailer (2014)

2. The negative approach

- ▶ Treating neg-words as negative quantifiers (de Swart & Sag 2002, Richter & Sailer 2006)
- ▶ In DN languages like Eton: multiple negative quantifiers cannot agree as opposed to NC-languages
- ▶ Evidence comes from the negative contribution the neg-words make whenever they appear in DN languages
- ▶ Negation Faithfulness Constraint (Richter & Sailer 2006:317):

(5)

NEGATION FAITHFULNESS CONSTRAINT (German, Dutch, English):

a. **In every phrase: there is no element of the form $\neg\alpha$ which is on the PARTS list of both the head-daughter and the nonhead-daughter.**

b. $phrase \Rightarrow \left(\begin{array}{l} \left[\begin{array}{l} \text{H-DTR LF PARTS } \boxed{A} \\ \text{N-DTR LF PARTS } \boxed{B} \end{array} \right] \\ \text{and not } E_{\boxed{I}} E_{\alpha} \left(\begin{array}{l} \boxed{I} = \neg\alpha \\ \text{and member}(\boxed{I}, \boxed{A}) \\ \text{and member}(\boxed{I}, \boxed{B}) \end{array} \right) \end{array} \right)$

2. The non-negative/decompositional approach

- ▶ Neg-words as combinations of an abstract negative operator and a non-negative indefinite (Penka & Zeijlstra 2005)
- ▶ Main argument for not treating neg-words in DN languages as inherently negative: split-scope readings

▶ German example:

(6) Es muss kein Arzt anwesend sein. (Penka & Zeijlstra 2005:3)
there must no physician present be

a. 'It is not required that there be a physician present.' $\neg > \text{must} > \exists$

b. *'There is no physician who is required to be present.' $\neg > \exists > \text{must}$

c. 'It is required that there be no physician present.' $\text{must} > \neg > \exists$

- ▶ The modal can intervene between the negation and the existential quantifier
- ▶ Proposal that neg-word is not inherently negative itself

3. The situation in Eton

- ▶ *Te* can only appear with the generalized indefinites, so, examples like (6) are impossible
- ▶ *Te* cannot function as a determiner unlike *no* or German *kein(e)*
- ▶ In these cases, sentential negation is used

(7) a. *John a-ti yen te metwa.

John 1-PROG see NEG car

Intended: 'John sees no car.'

b. John aa-ti yen metwa.

John 1.NM-PROG see car

'John sees no car.'

- ▶ However, there is still another possibility for split scope readings

3. The situation in Eton

- Sentences like *Alex can do nothing* also have split scope readings and are possible in Eton

(8) Alex a-ne quam te-dzom.

Alex 1-COP/can do NEG-thing

'Alex can do nothing.'

- This, by the way, again provides evidence for the assumption that Eton's neg-words are existential quantifiers and not universal quantifiers
- Following Penka & Zeijlstra (2005:3), such examples theoretically have three possible readings:

(9) a. It is not possible that Alex does something. $\neg > \text{can} > \exists$
b. There is nothing, Alex can do. $\neg > \exists > \text{can}$
c. It is possible that Alex does nothing. $\text{can} > \neg > \exists$

3. The solution to this problem

- The constraints in LRS do not necessarily demand that the negation directly precedes the existential quantification
- Richter & Sailer (2006:312) propose the following structure:

(10)

$$\left[\begin{array}{l} \text{PHON } \langle \textit{personne/nikt/niemand} \rangle \\ \text{SYNSEM NP} \\ \text{LF } \left[\begin{array}{l} \text{EXC } \boxed{1} \exists x(\alpha \wedge \beta) \\ \text{PARTS } \langle x, \boxed{1}, \textit{human}'(x), \neg\gamma \rangle \end{array} \right] \end{array} \right] \text{ and } \textit{human}'(x) \triangleleft (\text{is a component of}) \alpha \\ \text{and } \boxed{1} \text{ is a component of } \gamma$$

- Thus, readings where the modal intervenes between the negation and the quantification are not disallowed, i.e. they are possible
- This is an advantage over the approach by de Swart & Sag (2002)

3. Analysis

- ▶ (11) Lexical entry for *te-dzom*:

PHON <te-dzom>

HEAD [noun
NEG +]

VAL [SUBJ <>
SPR <>
COMPS <>]

DR x

PARTS < x, thing, 1 : thing(x), \exists , 2 : $\exists x(\psi: \psi')$, $-\varphi$ >

INC 1

EXC 2

Constraints: 1 $\triangleleft \psi$

2 $\triangleleft \varphi$

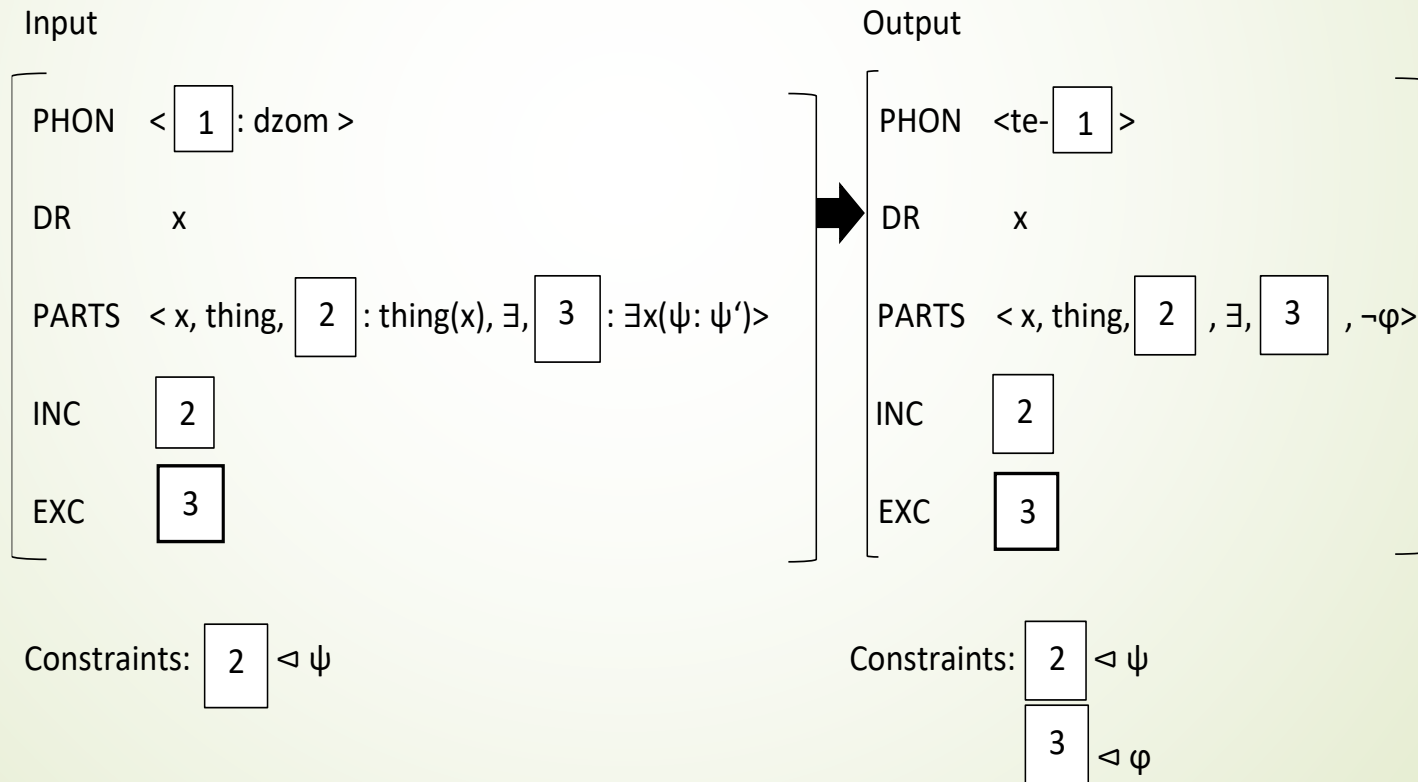


3. The decompositional approach

- ▶ Nonetheless, the decompositional concept of the non-negative approach can be helpful for Eton
 - ▶ The prefix *te* is similar to the covert negative operator that Penka & Zeijlstra (2005) assume following the syntactic agreement approach by Zeijlstra (2004)
 - ▶ However, in contrast to this negative operator, *te* does not license the occurrence of the neg-words, but is crucial for their negative contribution
 - ▶ To capture the composition of the neg-words, we need a lexical rule
 - ▶ This lexical rule should merge the negative prefix with *mod*, *dzom* and *wom*
 - ▶ I will follow the basic concept of Iordachioaia & Richter (2015) who create a lexical rule for negative verb forms in Romanian
- ➡ the concept of (de-)composition is perfectly applicable to HPSG

3. Analysis

- (12) Lexical rule for neg-words in Eton (first version):





3. Some problems

- Remaining issues with the lexical rule:
- i) - It is an applied rule and not a general one -> what distinguishes *mod*, *dzom* and *wom* from other elements?/what are the restrictions for *te*?
- ii) - *Mod*, *dzom* and *wom* can also be simple nouns meaning 'person', 'thing' and 'place'
 - There is no indefinite article in Eton -> could it be that *mod*, *dzom* and *wom* do not contribute quantification at all and that the prefix is only a negative quantifier?
- iii) – If so, why can *te* only combine with three nouns?

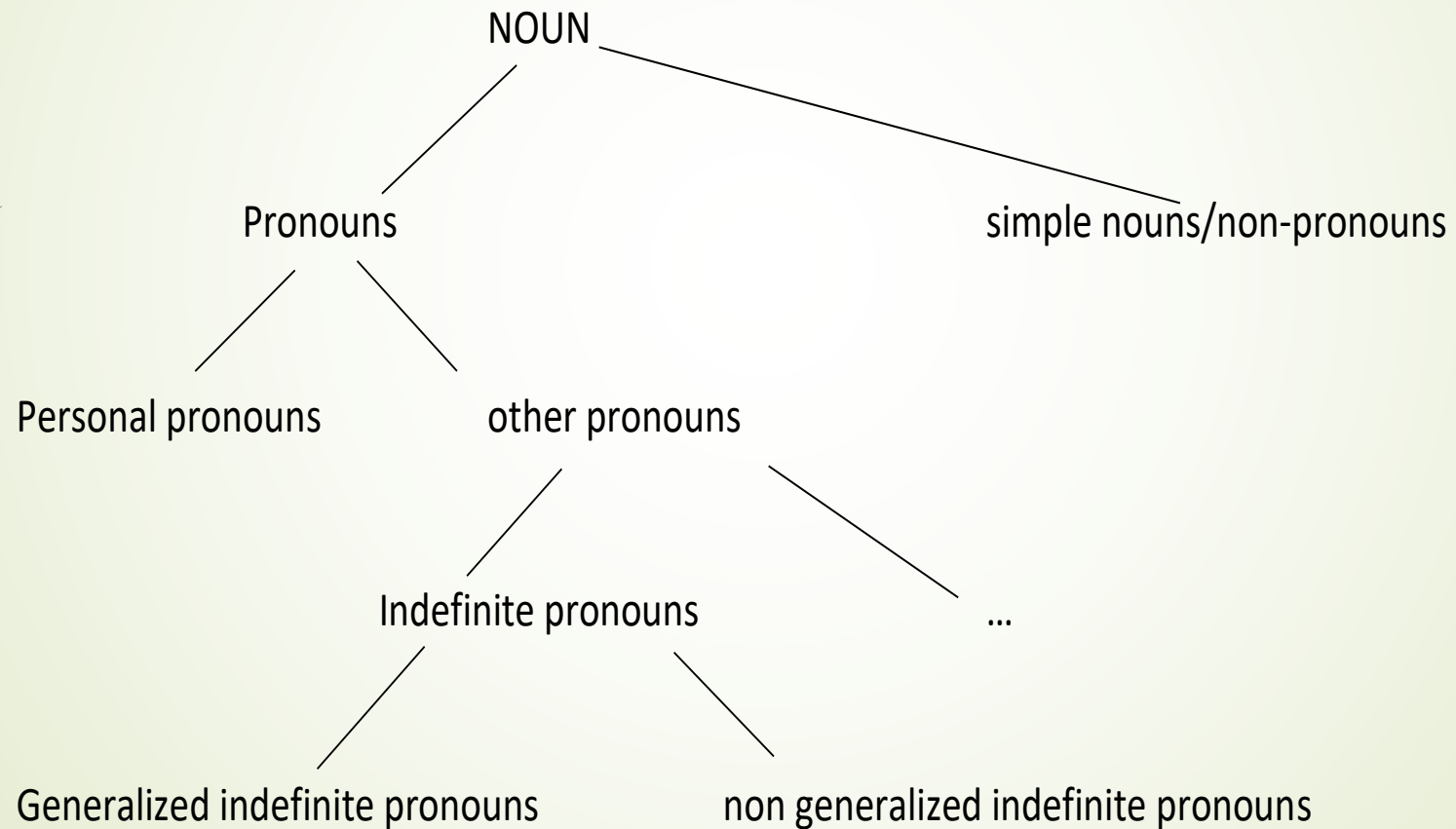


3. Some answers

- ▶ Even though the neg-word stems can also be simple nouns, I propose that these three elements have a dual nature
- ▶ This gains slight evidence from their lexical translation
- ▶ Thus, there are two separate lexical entries for *mod*, *dzom* and *wom*, one as a simple noun and the other as an indefinite
- ▶ I suggest the generalized indefinites to be a (sub)part of speech, consisting only of the three neg-word stems
- ▶ Due to the stems already contributing quantification, we have further evidence that *te* does not contribute quantification

3. Analysis

(13) Class of nouns





3. Some rules

(14) Descriptive rules:

- a. *Te* can only combine with elements already contributing existential quantification themselves
- b. *Te* can only combine with bare words, not with syntactic/semantic (cf. Beavers 2003 and literature therein for the treatment of nouns with no article) or morphological combinations (with the exception being noun class markers)
- c. *Te* can only combine with indefinites denoting a person, thing or place
 - ▶ These majorly ensure that only the generalized indefinites can be prefixed by *te*, however, one can get more concrete



3. Some rules

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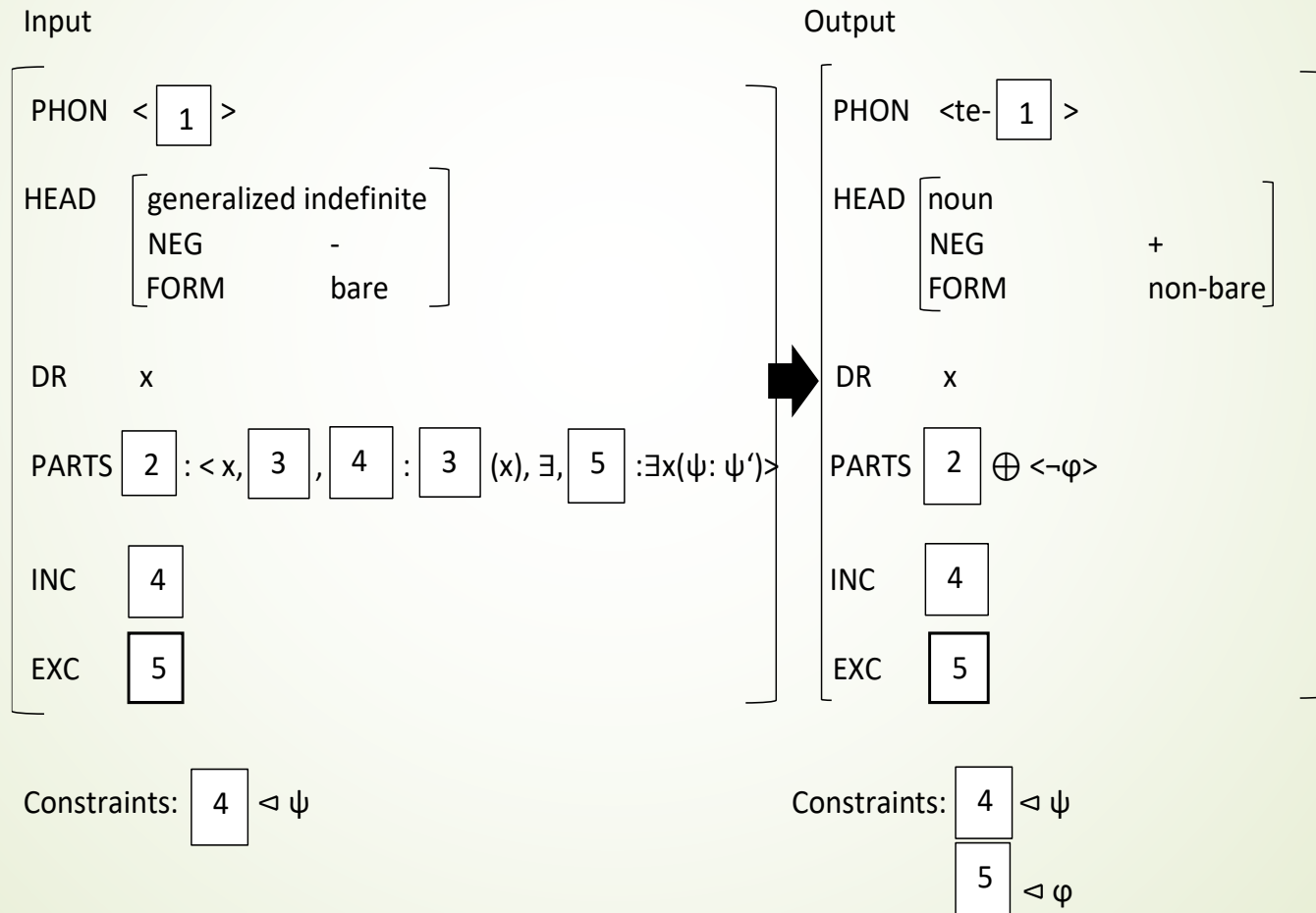
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 - ▶ These majorly ensure that only the generalized indefinites can be prefixed by *te*, however, one can get more concrete:

(15) a. *Te* can only combine with generalized indefinites.

- b. Generalized indefinites contribute existential quantification, have not undergone syntactic/semantic or morphological* processes and denote a person, thing or place.
- c. The only generalized indefinites in Eton are *mod*, *dzom* and *wom*.

3. Analysis

➤ (16) Lexical rule for neg-words in Eton: (final version)





4. Conclusion

- ▶ Haspelmath's (1997) geographic restriction on neg-words being able to contribute negation themselves is inadequate
- ▶ Weiß' (2004) criterion on neg-words and non-NC languages cannot be upheld
- ▶ The negative prefix is the overt proof for the negative contribution of the neg-words
- ▶ The negative prefix is similar to the silent negative operator assumed in other frameworks in only contributing negation
- ▶ Neg-words in Eton are inherently negative indefinites contributing existential quantification
- ▶ Split-scope readings can be accounted for by the constraints in LRS
- ▶ The decompositionality of the neg-words can be captured by a lexical rule



THANK YOU FOR YOUR ATTENTION!

5. References

- Beavers, John. 2003. More head and less categories: A new look at noun phrase structure. *International Conference on Head-Driven Phrase Structure Grammar (HPSG)* 10. 47-67.
- Haspelmath, Martin. 1997. *Indefinite pronouns*. Oxford: Oxford University Press.
- Iordachioaia, Gianina & Frank Richter. 2015. Negative concord with polyadic quantifiers: The case of Romanian. *Natural Language & Linguistic Theory* 33 (2). 607-658.
- Levine, Robert D., Frank Richter & Manfred Sailer. 2014. *Formal semantics: An empirically grounded approach* (manuscript). Ohio/Frankfurt: Ohio State University and University of Frankfurt aM.
- Penka, Doris & Hedde Zeijlstra. 2005. *Negative indefinites in Dutch and German* (manuscript). Tübingen: University of Tübingen. Lingbuzz/000192. https://ling.sprachwiss.uni-konstanz.de/pages/home/penka/Pubs/penka_zeijlstra_CGSW05.pdf. (10 July, 2021.)
- Richter, Frank & Manfred Sailer. 2006. Modelling typological markedness in semantics: The case of negative concord. *International Conference on Head-Driven Phrase Structure Grammar (HPSG)* 13. 305-325.
- Sells, Peter & Shin-Sook Kim. 2006. Korean NPIs scope over negation. *Language Research* 42 (2). 275-297.
- Swart, Henriette de & Ivan A. Sag. 2002. Negation and negative concord in Romance. *Linguistics and Philosophy* 25(4). 373-417.
- Velde, Mark L. O. van de. 2008. *A grammar of Eton*. Berlin: de Gruyter.
- Weiß, Helmut. 2004. A question of relevance: Some remarks on standard languages. *Studies in Language* 28 (3). 648-674.
- Zeijlstra, Hedde. 2004. Sentential negation and negative concord. Amsterdam: University of Amsterdam dissertation.