

KATHOLIEKE UNIVERSITEIT LEUVEN

GrETEL 2.0



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GrETEL

How to combine the data-oriented approach of treebank mining with the knowledge-oriented method of theoretical and descriptive linguistics? And in a user-friendly way?





For Dutch (LASSY/CGN)

XPath

- –Not user-friendly
- -Knowledge of Alpino grammar necessary

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- = problematic for non-technical linguists
- Verify theory through data with corpus or treebank examples
- •Time consuming, requires some effort

How to make interaction between computational linguistics and theoretical linguistics possible?

Why GrETEL?

GrETEL meets a demand:

- Many theoretical/descriptive linguists want tools that are <u>easy</u> to use, if not:
 - -they don't start using them from the beginning (the tools scare them)
 - -they stop using them
- Even when improved at a later stage, it may already be a dead loss

GrETEL turns out to be easy to use

-You don't need to know a query language and is used at several universities in both Flanders and the Netherlands (teaching)

Treebanks

- 2 treebanks, each +/- 1M tokens:
- Lassy small (written Dutch)
- CGN (spoken Dutch)
- Treebanks to be added in the near future
- Lassy large (written Dutch, <500M tokens)
- AfriBooms treebank (written Afrikaans, 55K tokens)

Using GrETEL

An example:

"look for all NP nodes in which the head noun is modified by the adjective 'politiek', e.g. *politieke discussies*"

•XPath:

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//node[@cat="np" and node[@rel="mod" and @pos="adj" and
@root="politiek"] and node[@rel="hd" and @pos="noun"]
•GrETEL:
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-"ze voeren politieke discussies" (415 hits in 406 sentences)

[they had political discussions]

Thanks for your attention!

Questions?

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