

Steps in the direction of testing a GF RG

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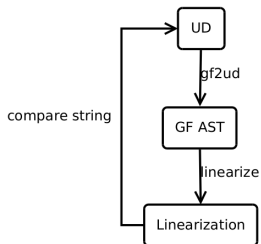
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Two approaches

- ▶ Top-down
- ▶ Bottom-Up

Top-Down

Workflow:



Problems: Missing Constructions in the grammar, variations in linearization

Bottom-Up

- ▶ Extend lexicon
- ▶ Test against state-of-the-art morphology
- ▶ Test coverage against treebank
- ▶ Test sentence coverage

Extend lexicon

- ▶ Whitaker's Words
(<http://archives.nd.edu/whitaker/wordsdoc.htm>) -
39225 Entries
- ▶ Perl script and manual postcorrection \Rightarrow

Test against state-of-the-art morphology

- ▶ LatMor by Uwe Springman (<http://www.cis.uni-muenchen.de/~schmid/tools/LatMor/>, based on SFST)
- ▶ Generated 2184 noun forms, 3740 verb forms, and 5184 adjective forms with GF and analyzed them with LatMor
- ▶ Recognized 2095 noun forms (89 unknown, 96% recognized), 2282 verb forms (1458 unknown, 61% recognized) and 4731 adjective forms (453 missing, 91% recognized)

Problems: Modern words for LatMor

Test coverage against treebank

- ▶ Caesar's "Commentarii de Bello Gallico" in UD: 1329 Sentences, 6600 unique Tokens, 2491 unique Lemmas
- ▶ LatMor recognizes 6520 Tokens (80 unknown, 99% recognized) and 2434 Lemmas (57 unknown, 98% recognized)
- ▶ GF recognizes x Tokens and y Lemmas

Problems: Normalization and lexicon coverage (for GF)

Test sentence coverage

Maybe next summer school