LREC 2014 paper

HamleDT 2.0:
Thirty Dependency Treebanks Stanfordized

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HamleDT 2.0

- 30 existing treebanks all converted to Prague Dependencies
- No need to learn 30 tagsets!
- No need to study 30 TB manuals!
- Now also in Universal Stanford Dependencies!

13 TBs free to download

- Ancient Greek
- Arabic
- Czech
- Danish
- Dutch
- Estonian
- Finnish
- Latin
- Persian
- Portuguese
- Romanian
- Swedish
- Tamil

8 TBs easy to get
(free download from owners)

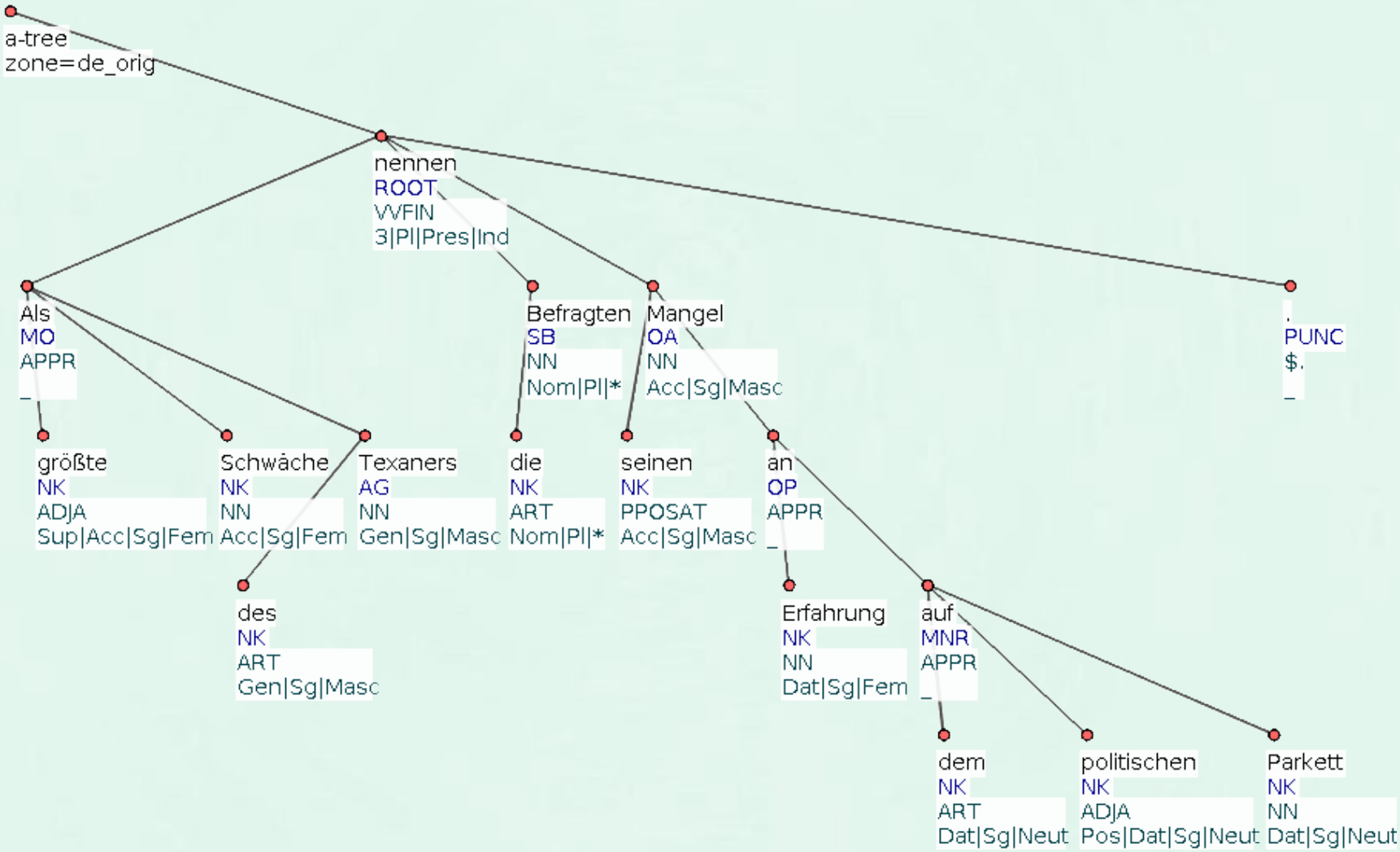
- Bulgarian
- Catalan
- German
- Hungarian
- Japanese
- Slovene
- Spanish
- Turkish

< 100 000 tokens
< 500 000 tokens
> 500 000 tokens

9 TBs harder to get
(have to ask/pay the owners)

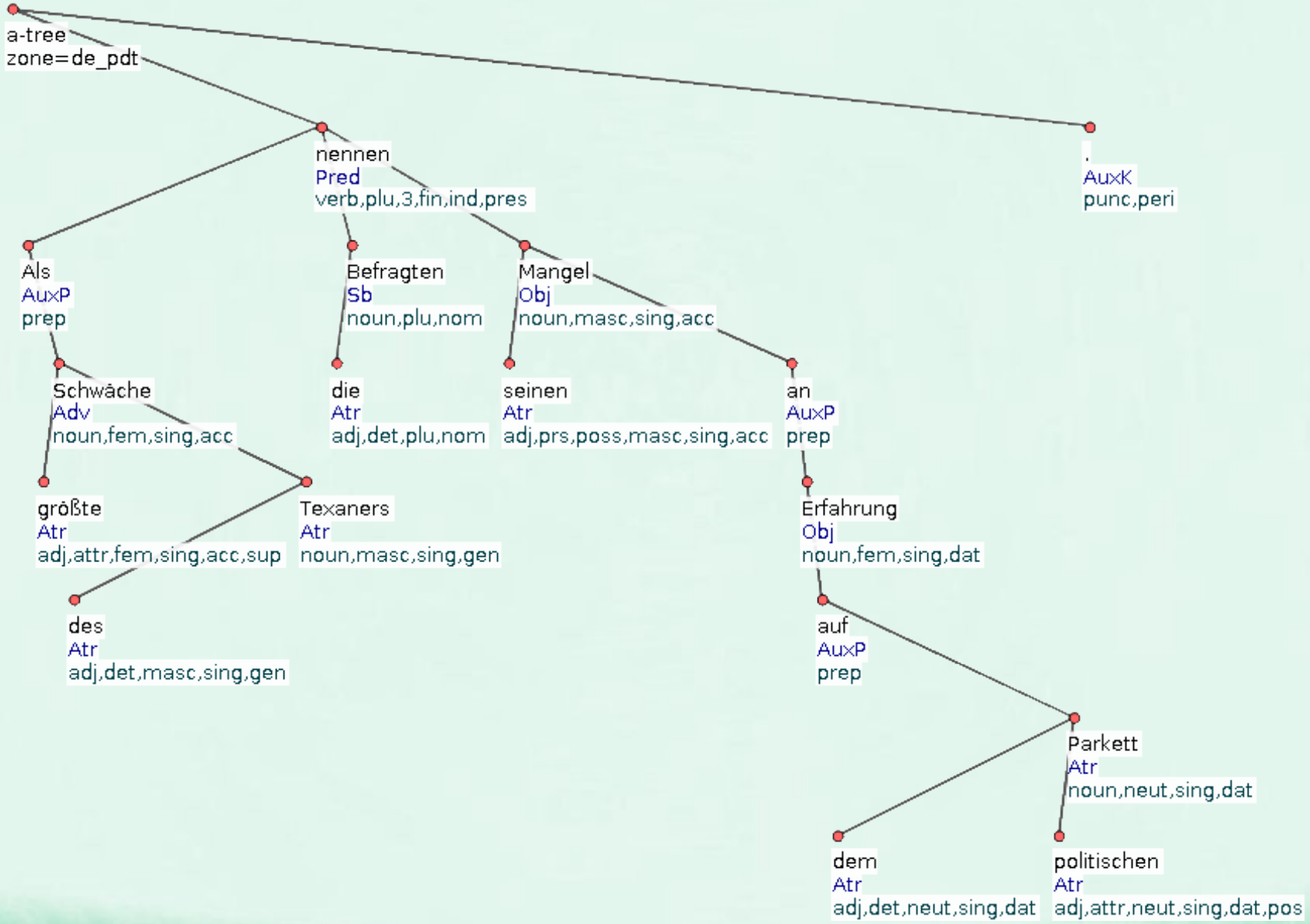
- Basque
- Bengali
- English
- Greek
- Hindi
- Italian
- Russian
- Slovak
- Telugu

Step 1: Existing TB



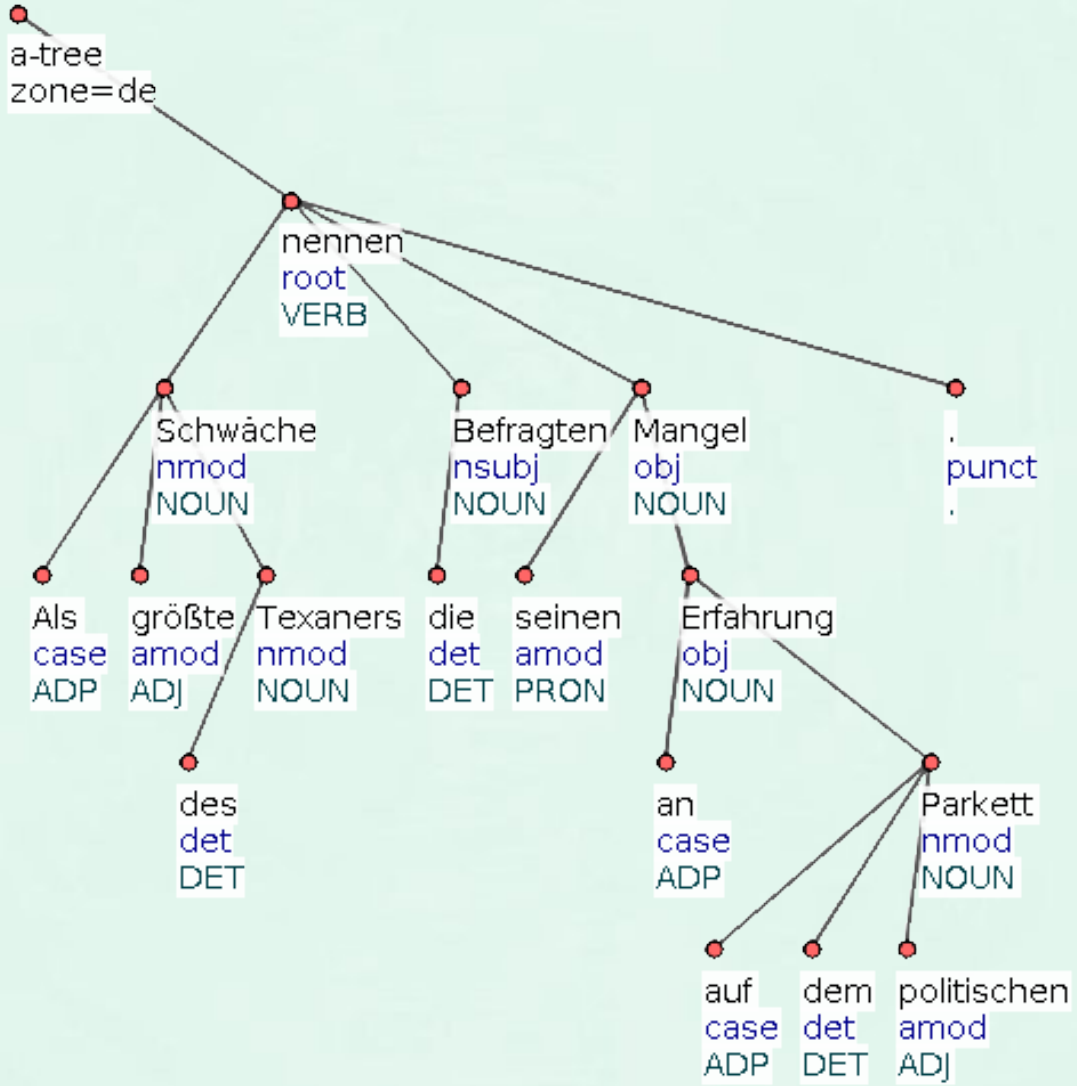
treebank-specific annotation (dependecy labels, POS tags, morphological features)

Step 2: Harmonization



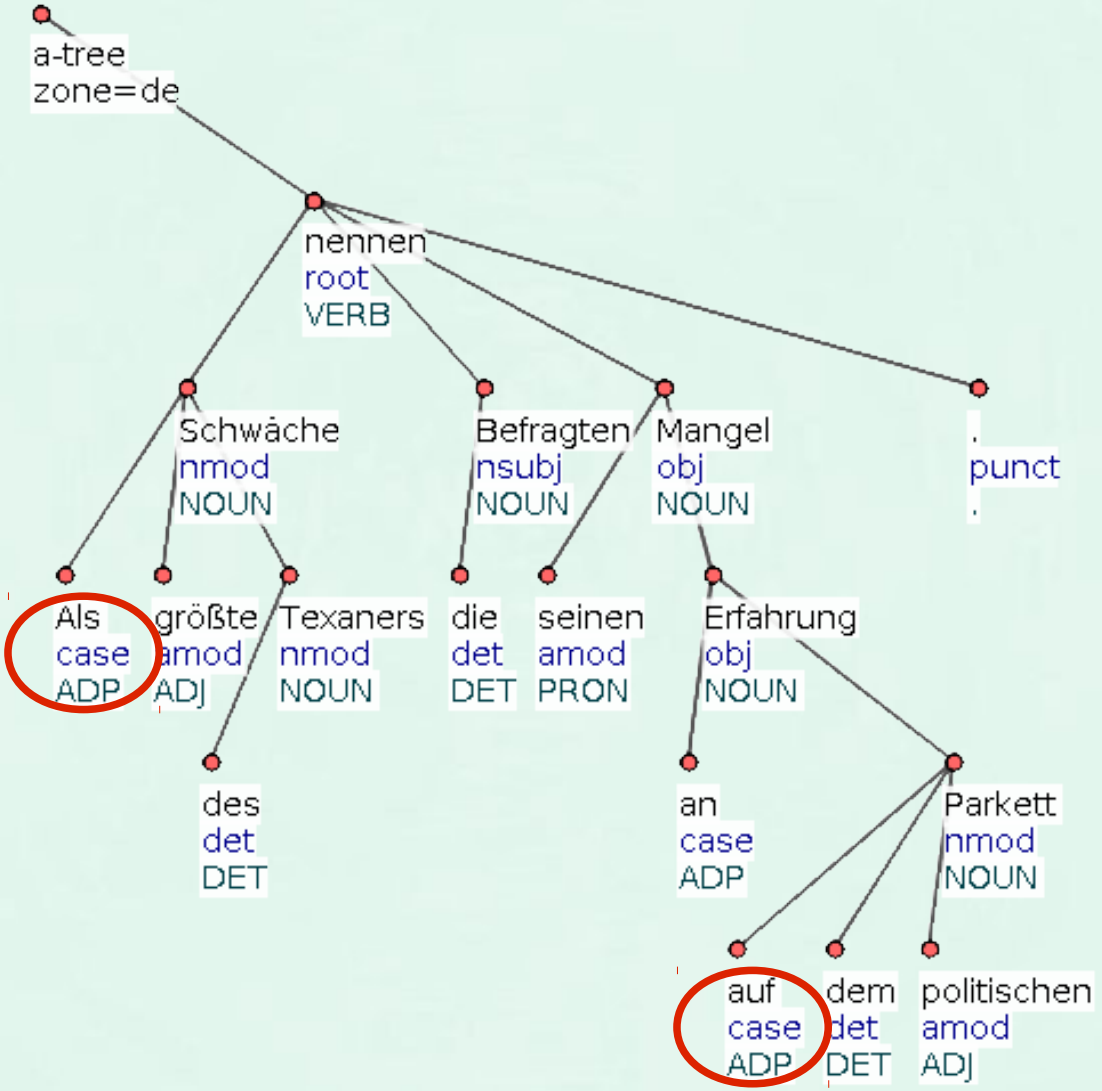
treebank-specific conversion to Prague dependencies and Interset

Step 3: Stanfordization



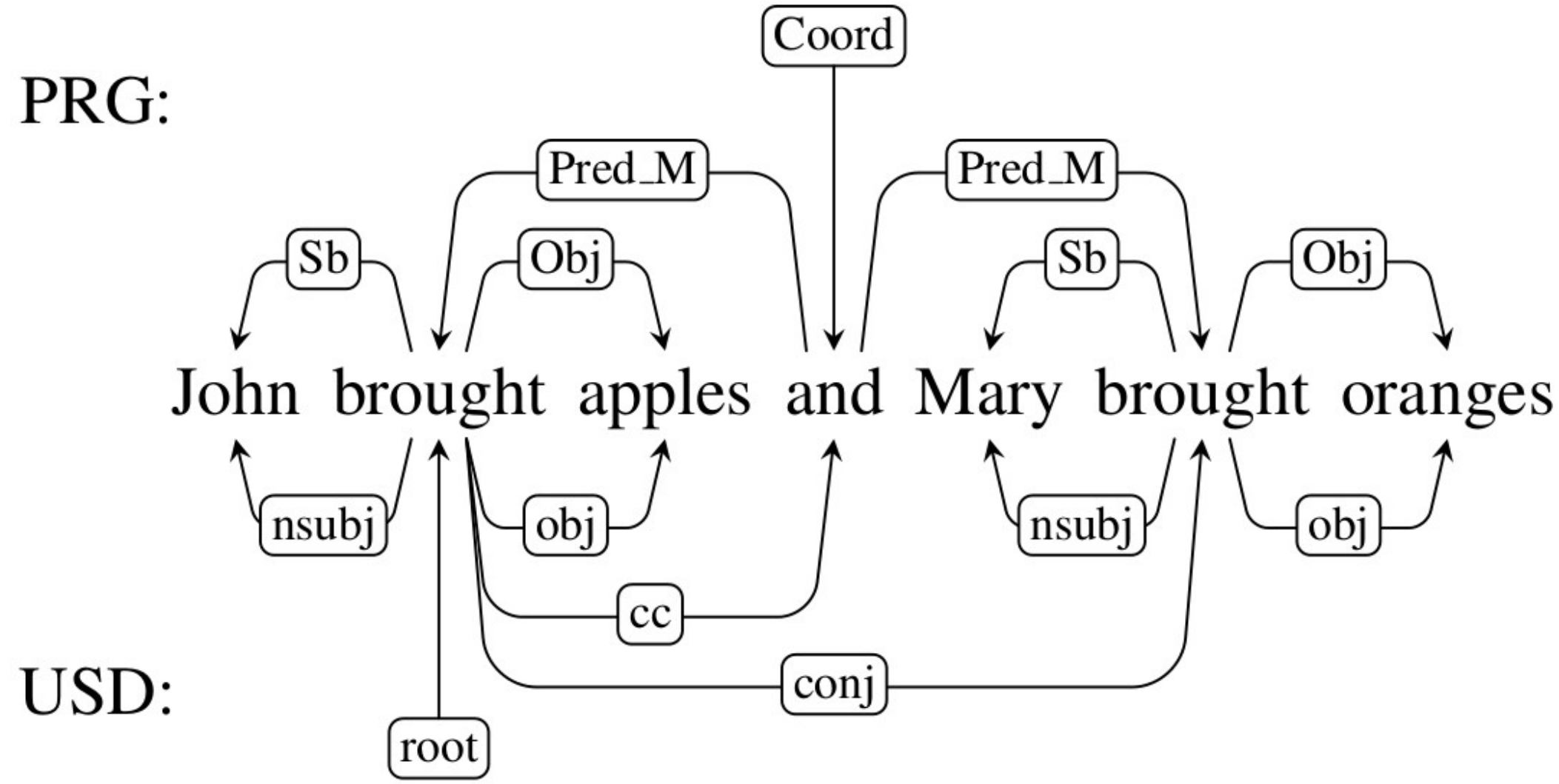
conversion to Universal Stanford Dependencies (USD) and Universal POS Tagset

Step 3: Stanfordization

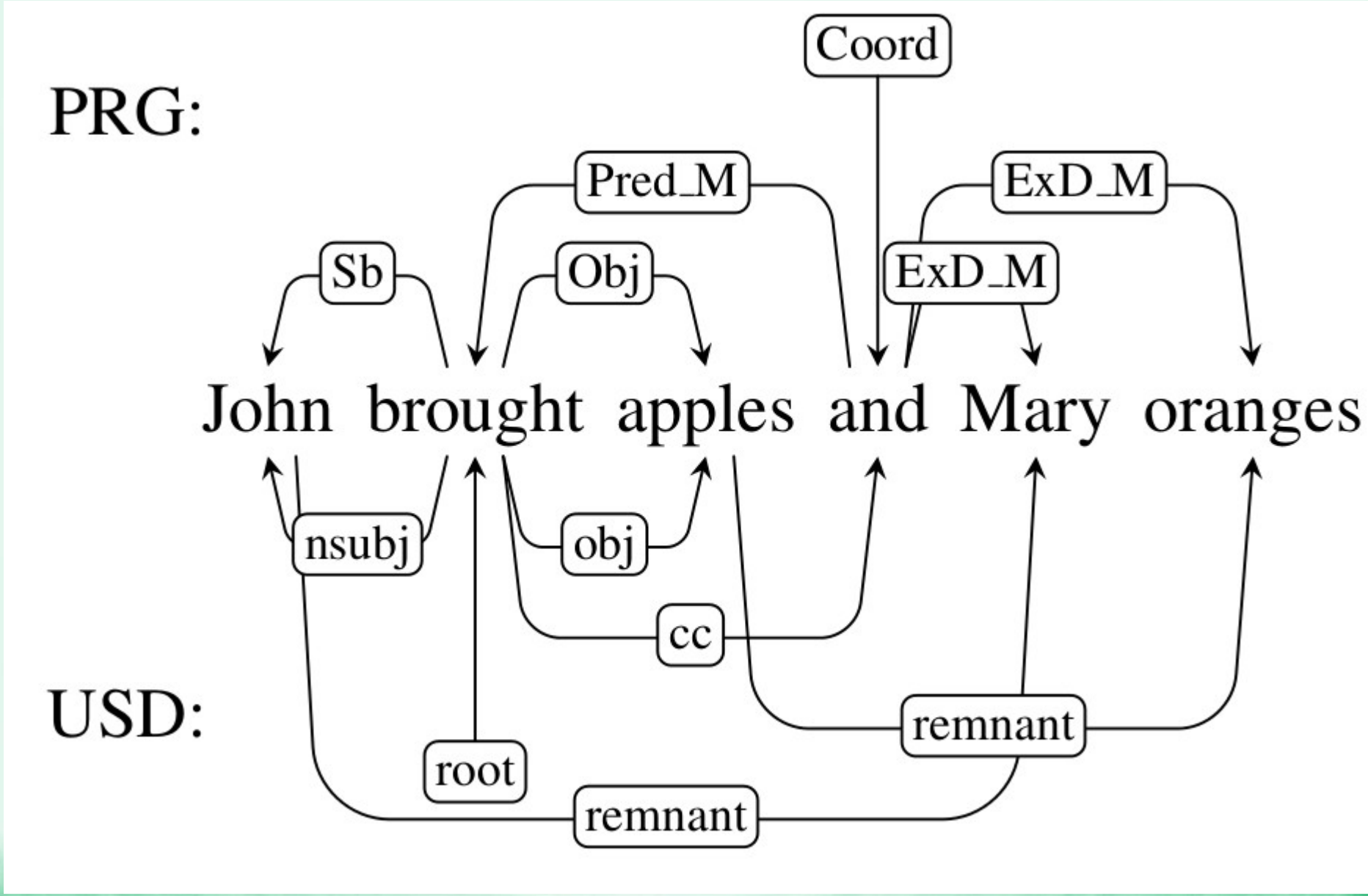


USD: all auxiliary nodes are leaves (conjunctions, copulas, adpositions, articles,...)

Coordination



Coordination with ellipsis



Visit us at...

http://ufal.mff.cuni.cz/hamledt

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- 13 treebanks for download from LINDAT
  - 3 formats: *.conll, *.treex.gz, *.stanford
  - 3 styles: Prague, Stanford, original
  - Train & test split
- Conversion pipeline for all 30 treebanks available in Treex
- Queryable via PML-TQ from LINDAT

Future work

- HamleDT 3.0?
  - more languages, more treebanks per language
    (We know about 110 dependency treebanks.)
  - more “Free” treebanks
  - English translations and alignments (Google Translate)
  - Interset vs. new Universal Features
  - new CoNLL-U format
- Closer cooperation with Stanford and Google teams
- PML-TQ (update, more public treebanks)
- Experiments with parsers and learnability

Thank you

Questions?