Discussion: Leveraging DELPH-IN Grammars to Develop Educational Materials

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Educational Materials from the ERG

- Syntactic Well-Formedness Diagnosis and Error-Based Coaching in Computer Assisted Language Learning using Machine Translation (Da Costa, Bond and He, 2016)
- ERG adaptation for grammar-checking with ESL learners (Flickinger)

Extracting Sentences by Phenomenon

- Discovering syntactic phenomena with and within precision grammars (Letcher, 2018)
- From Database to Treebank: On Enhancing Hypertext Grammars with Grammar Engineering and Treebank Search (Bender et al., 2012)

Smaller Delphin Grammars

- Larger Grammars
  - Jacy
  - Indra
  - Zhong
  - Spanish Resource Grammar
- Smaller Grammars
  - Nuuchahnulth
    - 31% coverage over 628 sentences (195 sentences with parses)
  - Lushootseed
    - 66% coverage over 691 sentences (460 sentences with parses)
  - Ancient Greek
    - 20% over 8940 sentences (2337 sentences with parses)
  - Thai

Leveraging Smaller Grammars to Develop Educational Materials

- How big does a grammar need to be to be useful?
- What concrete tasks could we do with a dissertation-sized grammar?
  - sentence generation?
  - extracting sentences by phenomenon?

Other Considerations

- Orthographic or phonetic representation (Nuuchahnulth eg. currently uses the morpheme segmented line)
- Other concerns?