Abstract
In this paper we present our syntactic and semantic dependency parsing system, which extends the system of Zhang, Wang, & Uszkoreit (2008) in the multilingual direction, and achieves 76.49 average macro F1 Score on the closed joint task. Substantial improvements to the open SRL task have been observed that are attributed to the HPSG parses with hand-crafted grammars.

Results

Retraining Parse Disambiguation Models
- Original Parse selection models are trained with manually disambiguated HPSG treebanks
- Parse ranking model is retrained to maximize the agreement between HPSG dependency backbone and CoNLL unlabeled syntactic features:
  - Chart-mapping-based retokenization
  - Unknown word handling with POS mapping rules
  - Efficient best-first parsing with ambiguity packing

Deep Linguistic Grammars

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Reference