

Increasing Coverage of Syntactic Subcategorization Patterns in FrameNet Using Verbnet

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Frame-Semantic Parsing

Semantic Parsing with FrameNet

- ▶ Annotate a predicate with a FrameNet frame label and its arguments with frame-specific frame-elements.
- ▶ Supervised parsers are trained on examples illustrating syntax/semantics mappings.



Deduplication

copy.v duplicate.v photocopy.v reduplicate.v replicate.v ...

This frame involves a **creator** making a duplicate, the **Copy**, of some **Original** entity. A **Source**, the location of the **Original**, and **Goal**, the location of the **Copy**, may be expressed.

None-core frame elements: **Manner** **Purpose**

Coverage of FrameNet annotations

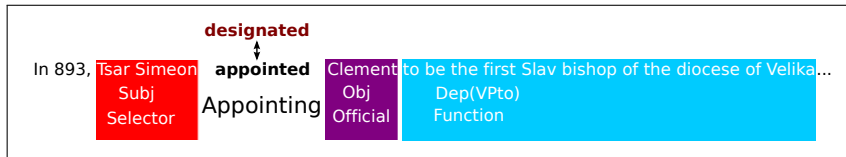
Problem

Lexicographic FrameNet annotations illustrate only 53.4% of syntax/semantics mappings in fulltext.

Applying Existing Annotations to New Verbs

Share example annotations and syntax/semantics mappings between verbs that are

- ▶ semantically similar (same FrameNet frame)
- ▶ known to behave syntactically equivalent (same set of Verbnet classes)



Results

- ▶ 209,475 new example annotations.
- ▶ Boost coverage to 78.7% of all verbs (99.5% for previously annotated words).
- ▶ High syntactic correctness and semantic adequacy.
- ▶ Resulting dictionary of syntax/semantics mappings available online.