

# Comparison - Semantic Roles

**AMR:** 70+ non-core roles, many verb-sense specific roles  
(up to 5 args/roleset, more than 10,000 rolesets)

**FrameNet:** large inventory of frame-specific roles

**VerbNet:** inventory of thematic roles

**Groningen Meaning Bank:** VerbNet inventory

**Most others:** small inventory of roles (agent, theme, etc.)

# Comparison - Sense Lexicon

**Groningen Meaning Bank:** (automatic) WordNet synsets

**FrameNet/UCCA:** Mark senses by frame/script, not lemma

**AMR /PropBank:** coarse-grained senses (get high ITA)

**Prague Dependency TB:** valency lexicon rolesets

**Most others:** undisambiguated concepts as predicates

# Comparison - Entities

**AMR:** Rich named entity ontology (100+ types), wikification

**GALE/Ontonotes Annotations:** 29 types, 64 subtypes

**Groningen Meaning Bank:** 7 NE types

**Domain-specific (ACE/UMLS/etc.):** rich; not all entities

**Others:** no entity typing

# Comparison - Alignment with text

**Deepbank; Groningen Meaning Bank:** Semantics linked up to a theory of its derivation from syntax (HPSG; CCG)

**PropBank, Semantic Treebank:** grounded in PTB

**Most others:** Some link to words in sentence

**AMR:** No alignment to text (plan to release a few alignments)

# Comparison - Logic/Scope/Entailments

**Deepbank; Groningen Meaning Bank:** Semantics grounds out in logical formalisms (DRT and MRS, respectively)

**AMR entailment:** linkage between its lexicon and VerbNet may allow rich decomposition

**AMR scope:** No scope of quantification

# Comparison - Size and Quality

**AMR:** 18,779 sentences, goes beyond newswire, fully manual  
**Prague Dependency TB:** WSJ in Czech and English, manual

**Deepbank; Groningen Meaning Bank:** Large; automatic parses with human correction/feedback.

**UCCA:** fully manual, 160k tokens

**Rich semantic systems with little affiliated data:** TMR, LCS,

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