

Supersenses

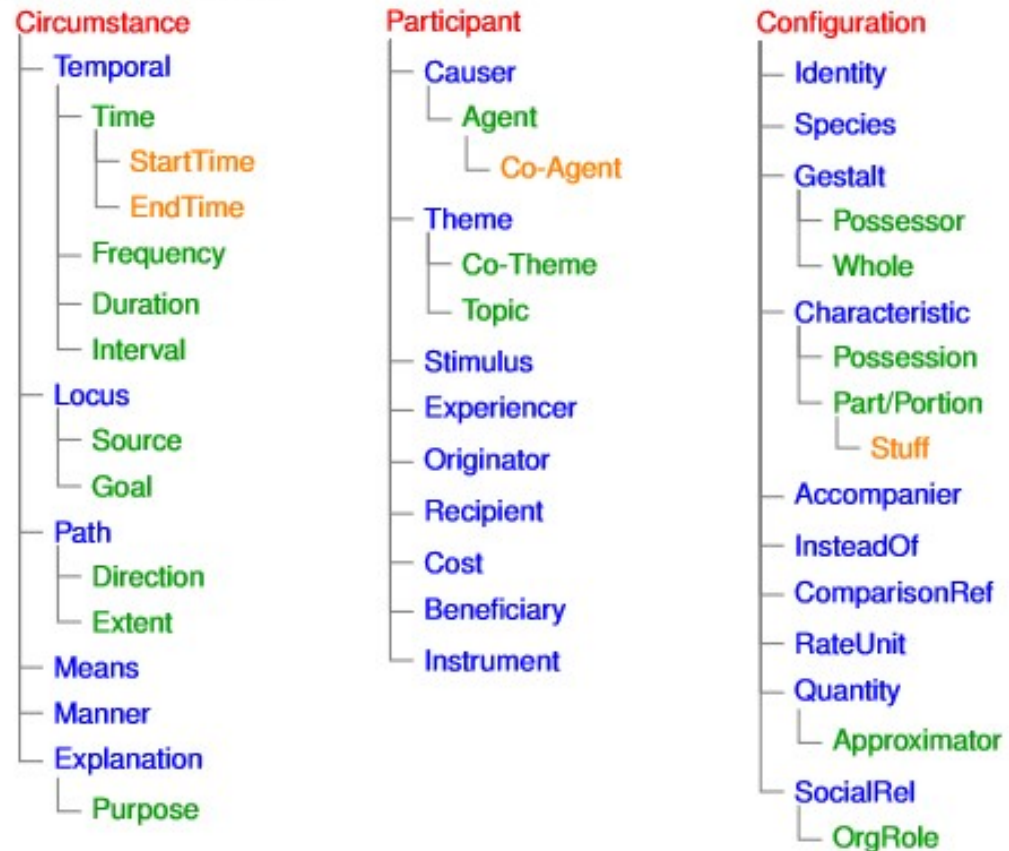
A Collection of Resources for Lexical Semantics

WordNet Supersenses

- **Nouns (26 supersenses):** *ACT, ANIMAL, ARTIFACT, ATTRIBUTE, BODY, COGNITION, COMMUNICATION, EVENT, FEELING, FOOD, GROUP, LOCATION, MOTIVE, NATURALOBJECT, PERSON, PHENOMENON, PLANT, POSSESSION, PROCESS, QUANTITY, RELATION, SHAPE, STATE, SUBSTANCE, TIME, OTHER*
- **Verbs (15 supersenses):** *BODY, CHANGE, COGNITION, COMMUNICATION, COMPETITION, CONSUMPTION, CONTACT, CREATION, EMOTION, MOTION, PERCEPTION, POSSESSION, SOCIAL, STATIVE, WEATHER*
 - [Ciaramita, M., & Altun, Y. \(2006\)](#)
- **Adjectives (13 supersenses):** *PERCEPTION, SPATIAL, TEMPORAL, MOTION, SUBSTANCE, WEATHER, BODY, FEELING, MIND, BEHAVIOR, SOCIAL, QUANTITY, MISC.*
 - [Tsvetkov, Y., et al. \(2014\).](#)

Prepositions

The v2 hierarchy is a tree with 50 labels. They are organized into three major subhierarchies: **CIRCUMSTANCE** (18 labels), **PARTICIPANT** (14 labels), and **CONFIGURATION** (18 labels).



Thematic Roles

“The decisive vote **by** the city council.” (Agent)

“My hovercraft is full **of** eels.” (Theme)

“I broke the window **with** a hammer. .” (Instrument)

“The cat jumped **from** the box.” (Source)

“The cat jumped **onto** the ledge.” (Goal)

“The bird flew **over** the building.” (Path)

Construal

- **Fictive Motion** (Talmy 1996)

“A road runs **through** my property.” (Locus → Path)

- **Semantic Innovations from a Prototype**

“I joined a protest **after** the shameful vote in Congress. (Explanation → Time)

Jena D. Hwang, Archana Bhatia, Na-Rae Han, Tim O’Gorman, Vivek Srikumar, and Nathan Schneider.
Double trouble: the problem of construal in semantic annotation of adpositions. In Proc. of *SEM,
pages 178–188, Vancouver, Canada, August 2017.

Resources – Wiki, Corpus, Machine Learning

- Wiki: <http://flat.nert.georgetown.edu/>
 - Languages – English, Korean, German (all in progress)
- Corpus: <https://github.com/nert-gu/streusle>
 - 55,000 words, noun/verb/adposition supersenses, and possessives
- Machine Learning (Automatic Supersense Disambiguation)