Annotation Schemes for Surface Construction Labeling

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Abstract

In this talk I will describe the interaction of linguistics and language technologies in Surface Construction Labeling (SCL) from the perspective of corpus annotation tasks such as definiteness, modality, and causality. Linguistically, following Construction Grammar, SCL recognizes that meaning may be carried by morphemes, words, or arbitrary constellations of morpho-lexical elements. SCL is like Shallow Semantic Parsing in that it does not attempt a full compositional analysis of meaning, but rather identifies only the main elements of a semantic frame, where the frames may be invoked by constructions as well as lexical items. Computationally, SCL is different from tasks such as information extraction in that it deals only with meanings that are expressed in a conventional, grammaticalized way and does not address inferred meanings. I review the work of Dunietz (2018) on the labeling of causal frames including causal connectives and cause and effect arguments. I will describe how to design an annotation scheme for SCL, including isolating basic units of form and meaning and building a "construction". I will conclude with remarks about the nature of universal categories and universal meaning representations in language technologies. This talk describes joint work with Jaime Carbonell, Jesse Dunietz, Nathan Schneider, and Miriam Petruck.

Bio

Lori Levin received a B.A. in linguistics from the University of Pennsylvania in 1979 and a Ph.D. in linguistics from MIT in 1986. She is a Research Professor at the Language Technologies Institute at Carnegie Mellon University, specializing in language technologies for low-resource languages. She is also co-Chair of the North American Computational Linguistics Olympiad.

References

Jesse Dunietz. 2018. Annotating and automatically tagging constructions of causal language. Ph.D. dissertation, Carnegie Mellon University, Pittsburgh, Pennsylvania, USA.