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**Representing Underspecification by Semantic Verb Classes
Incorporating Selectional Preferences**

Semantic verb classifications, i.e., groupings of verbs according to semantic properties, are of great interest to both theoretical and computational linguistics. In theoretical linguistics, verb classes are a useful means to organise verbs with respect to common properties, such as meaning components, or shared argument structure. In computational linguistics, semantic verb classifications represent a valuable source of underspecification, by generalising over the verbs according to their shared properties.

Our poster presents a novel approach to a semantic classification of verbs, that incorporates selectional preferences as common verb properties. We rely on the Expectation-Maximisation (EM) Algorithm as a soft-clustering technique, and model verb classification by probabilistic class membership of verbs and their semantic properties. In contrast to earlier work, we choose a more complex set of semantic properties: rather than directly using bilexical head dependencies between verbs and (direct object) nouns as clustering dimensions, we abstract over the noun dimension by selectional preferences. Consequently, a semantic class generalises over verb senses (as one dimension), and selectional preferences (as a second dimension). The classification approach is introduced in some detail, by providing an overview of the parameters of the clustering technique, and a range of examples.