Parsimony in usage-based argument structure

Theoretical accounts of argument structure typically try to explain meaning differences between alternating argument structures in terms of general semantic notions, such as affectedness, directionality or agency. The underlying idea is that these notions allow us to explain meaning differences using only few theoretical assumptions, i.e. that they provide parsimonious explanations. However, corpus linguists often find that such notions are simply too vague to successfully predict the meaning distinctions that they observe in their studies. Specifically, meaning distinctions between argument structures often appear to differ from one verb to the next. For instance, the English at-alternation expresses repetition for the verb '*chip*', e.g. '*He chipped (at) the edges, widening the hole*', while it expresses conation for the verb '*slap*', e.g. '*Melinda slapped (at) a mosquito on her arm*' (Perek 2015).

As such, we are presented with the following challenge. How can we hypothesize semantic distinctions that are specific enough to yield successful predictions regarding variation in argument structure, while at the same time maintaining theoretical parsimony? To tackle this challenge, I propose an algorithm that can be used to formulate hypotheses at various levels of schematicity, which can then systematically be put to the test. I will present a case study on optional prepositions to illustrate this algorithm.