

## Dowtyian Proto-properties and Lexical Mapping Theory

Davis & Koenig 2000 develop a linking proposal within the multiple inheritance architecture of HPSG. Among other properties of their proposal, they argue against the use of a semantic role hierarchy found in standard lexical mapping (LMT) theory of LFG and argue for adopting a reification of Dowtyian proto-roles in a fashion similar to Alsina 1993. They argue that the approach outlined in Dowty 1991 for a modest subset of grammatical phenomena is incapable, in principle, of addressing some simple and common patterns of grammatical function encoding. For example, they observe (1) that the causer in causative constructions is always realized as the subject, irrespective of whether it possesses the most agentive properties for the arguments of the causative predicate and they note that (2) "proto-agent agent roles are linked to subject regardless of transitivity," thus explaining the absence of natural language predicates such as "yearn for" in which the non-agentive argument is realized as subject while the object of the preposition is the agentive argument, i.e., \*A porsche yearns for the president. Perhaps even more problematic, on their view, is the fact that such a proposal does not address grammatical function alternations evident in passive, as in (1) or in the lexically determined alternations typified by (2):

- (1a.) The duck ate the worm.
- (1.b) The worm was eaten by the duck.
  
- (2a.) Water filled the tank.
- (2b.) The tank filled with water.

Relying on a tradition within LMT which eschews the use of argument hierarchies for determining argument encoding (Ackerman 1990, 1992, Zaenen 1992, Joshi 1993, Asudeh), we argue for a variant of LMT which distinguishes between non-meaning changing alternations (referred to as *morphosyntactic* in Spencer & Sadler 1998) versus meaning changing alternations (referred to as *morphosemantic* in Spencer & Sadler 1998): this is a distinction which underlies the proposals of Simpson 1983, Ackerman 1990, 1992, Joshi 1993 and Dubinsky and Simongo, among others.) Given independent evidence for the explanatoriness of appealing to Dowtyian proto-property sets for *morphosemantic* alternations (Ackerman and Moore 2000, Aronovich 2000, among others), we focus in this talk on adapting Dowtyian assumptions to the *morphosyntactic* encoding and alternations claimed to be problematic by Davis and Koenig. We demonstrate these are straightforwardly addressed by Dowtyian assumptions augmented by LMT assumptions concerning the monotonicity constraint on establishing feature sets for predicate arguments.

The basic result of this proposal is that, contra Davis and Koenig, a Dowtyian proto-property approach without reified role-types and with counting provides a uniform set of assumptions for addressing both morphosemantic and morphosyntactic operations. Standard LMT assumptions are all that are needed to make such an approach compatible with the types of morphosyntactic phenomena cited as problematic by Davis & Koenig.