

Inheritance and Construction Morphology

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The basic question to be addressed in my talk is: what is the status of inheritance and default inheritance in the framework of Construction Morphology (CM)? This framework assumes a hierarchical lexicon with both abstract schemas and complex words that instantiate these schemas. However, as lexical items are fully specified, CM does not make use of inheritance in order to achieve underspecification of lexical entries.

There are a number of problems for the impoverished entry theory. The general objection to this approach is that it does not do justice to the insight that our lexical memory is vast, and that there is therefore no good reason to adopt a parsimonious approach to the lexicon. This objection is related to a general criterion for adequacy in linguistic models. A linguistic model must allow for “graceful integration” (Jackendoff 2011), that is, it must be in harmony with the findings of other linguistic subdisciplines such as psycholinguistics, language acquisition theory, and historical linguistics, and with those of cognitive science in general.

Consider what we know about morphological language acquisition. Morphological schemas are acquired on the basis of a set of memorized complex words, i.e. fully specified complex words. For instance, the user of English first acquires individual deverbal nouns in *-er*, and after sufficient exposure to a set of such words, the schema for deverbal nouns in *-er* such as *baker* and *writer* can be grasped. It would be odd to assume that once speakers have discovered the schema they throw away the information on individual complex words they have already stored in their lexical memory (Jackendoff 1997). There is no need to throw away information, once acquired, given the vastness of human memory. In terms of processing it is also advantageous that one does not need to compute properties of memorized complex words before using them as they can be retrieved directly from the mental lexicon. Therefore, the notion ‘inheritance’ has to be reinterpreted as ‘motivation’: a word formation schema motivates an individual complex word to the extent that it predicts its properties.

A lexicon with full entries avoids the problem of how to formalize default override, in particular in the domain of semantic properties which cannot obviously be specified in terms of feature: value combinations. Instead, complex words are supposed to differ in their degree of motivation. The degree of motivation is inversely proportional to the number of properties

overridden at lower levels, with the exception that schemas for polysemy and constructional idioms serve to introduce motivation on lower levels, and hence increase the degree of motivation.

The notion of 'default inheritance' has the advantage of enabling us to specify the regular properties of a set of complex words, while at the same time allowing for specification of exceptional properties of individual words without necessitating a complex hierarchy of classes of exceptions, as would be necessary in a theory of inheritance without default override. However, making use of default override raises the question of how to make a principled distinction between absolute and defeasible properties, and how to model the override of semantic properties. The empirical question is: which kind of properties specified in word formation schemas can be overridden for an individual complex word without obliterating the motivation relation?

The only candidates for absolute, non-defeasible properties in word formation schemas are the output category of complex words and the phonological shape of their constituent morphemes. However, phonological shape can vary within the boundaries of allomorphy.

The use of default inheritance implies that when faced with a word formation pattern with various subpatterns we have to decide between two descriptive options: one schema with default override, or one general schema with more specific subschemas. The basic criterion for making a choice is the productivity of each subpattern: if it is productive, there is good reason to assume a subschema. However, the problem for a consistent use of this criterion is that productivity is not a simple all-or-none phenomenon, and that productivity is a matter of degree. That is, there may be cases where the choice between the two options is not straightforward.

Both word formation schemas and sense extension schemas that account for systematic polysemy of words have a motivating function with respect to the existing set of words of a language, and each of them reduces the degree of arbitrariness between form and meaning in its own way.

Allomorphy does not impede the establishment of relations between words, which is a robust process. Finding a relation of motivation between a complex word and its base word(s) is always a matter of shared semantics, and if the relevant words share semantic properties, phonological variation is less of a problem. That is, the relationship between a complex word and its base word(s) is not necessarily obscured by phonological differences. It is not an absolute precondition for establishing lexical relatedness between a complex word and its base(s) that the former should contain constituents in exactly the phonological form seen in the latter. Therefore, complex words may receive motivation from being linked to base words even if they show some phonological dissimilarities. The predicted phonological form of the base word part of a complex word is therefore a property that can be overridden by the type of phonological variation that we

refer to as allomorphy: forms identical in meaning and similar in phonology. Allomorphy does not reduce the degree of motivation of a complex word.