Compound Stress Assignment Emerges from the Lexicon

In both psycholinguistic and theoretical-linguistic circles there is a debate about the nature and role of symbolic rules, associative networks, and analogical or exemplar-based models in the organization of language in general, and of morphology and the lexicon in particular. Compounding has featured prominently in this debate and the present paper complements this line research by focusing on an aspect of semi-regularity in compounds that had received little attention until a few years back: stress assignment in English noun-noun compounds.

English noun-noun compounds are traditionally assumed to be subject to the Compound Stress Rule, which states that the left-hand constituent is more prominent than the right-hand constituent. However, not all English noun-noun compounds abide to the Compound Stress Rule (cf. for example, *ópera glasses*, *wáth-maker* and *Óxford Street* versus *steel bridge*, *morning páper*, and *Madison Ávenue*). Rightward stress is far from exceptional, and the nature of the observable variability is still under debate.

In this paper I will argue that compound stress assignment emerges from the lexicon. We carried out a number of experimental and corpus-based quantitative and computational studies of a large number of English compounds that show that deterministic, rule-based approaches are not very successful in predicting compound stress. In contrast, it is possible to use the individual properties of stored compounds and different types of lexical relatedness between these compounds to successfully model compound stress assignment. This modeling can be done with the help of different kinds of multiple regression or by using analogical computational algorithms. Depending on the respective data set, these models vary in their predictive accuracy, but generally outperform deterministic models.

Our results are in line with the bulk of more recent psycholinguistic research on lexical processing and are impossible to account for under a rule-based theory of compound stress.