

# Dissertation Abstract

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My dissertation addresses questions of syntactic productivity of the following form: Based on independent (e.g. semantic) properties of a given word, can it be predicted whether the word may occupy a given syntactic position? For example, can it be predicted from the meaning of *disappear* that it cannot function transitively (*\*He disappeared the rabbit*)? Why is *mere* restricted to prenominal position (*\*The child is mere*)?

Such questions pertain to the empirical foundations of *Baker's Paradox* (Pinker 1989, after Baker 1979), which comprises the following premises: (i) *Productivity*: An infinite number of items can, in principle, instantiate a given syntactic pattern (as long as they satisfy certain criteria); (ii) *Arbitrariness*: There are particular items that fail to instantiate the pattern despite meeting the criteria; (iii) *No Negative Evidence*: Negative evidence, that is, evidence for the ungrammaticality of sentences, is either not available or not used in language acquisition. (As I argue in the dissertation, this is a paradox in the sense that all three premises cannot hold simultaneously, but not in the sense that we are compelled to accept all of the premises; negative evidence does seem to play a role in language learning.) The main focus is on questioning premise (ii).

Questioning the premise of arbitrariness is important, because it has consequences for the theory of language learnability and acquisition. Besides potentially leading to a paradox, the existence of arbitrary exceptions has been taken as evidence that the learner is both *conservative* and *attentive* (Culicover, 1999). Arbitrary exceptions have also been taken as evidence for the role of *statistical preemption* and *item-specific learning* in language acquisition (Goldberg, 2006; Bowerman and Croft, 2008; Wonnacott et al., 2008).

Although it has consequences for language learning, arbitrariness is a purely linguistic claim. Consider for example the causative alternation (*John broke the glass* ~ *The glass broke*). Its productivity is known to be governed by certain semantic criteria (Pinker, 1989; Levin and Rappaport Hovav, 1995), but Bowerman and Croft (2008) claim that "there are verbs that satisfy the [criteria] and yet do not alternate" (p. 284), such as *totter* and *waver*. Analogous claims have been made regarding the dative alternation (Wonnacott et al. 2008: *John donated a car to the church* ~ *\*John donated the church a car*), preposition pied-piping and stranding (Culicover 1999: *This is the bridge from/\*off which she jumped*, *What class did you fall asleep in/\*during?*), and the positioning of adjectives (Goldberg 2006: *She is a sweet/mere child* ~ *She is sweet/\*mere*).

Addressing each of these domains individually, I show that under close inspection, the putative arbitrary exceptions can be understood on the basis of general criteria limiting the productivity of the relevant patterns. The first step is to identify

the criteria; then it is necessary to determine whether the items in question fit the criteria. If a word satisfies the criteria governing a given syntactic pattern, yet fails to instantiate that pattern, then it is indeed an arbitrary exception.

In some cases, good criteria have already been identified, and it is only a matter of finding a way to apply them. In other cases, I identify new criteria. In the chapter on adjectives, for example, I propose the *Predicativity Principle*: An adjective is syntactically predicative if and only if it is semantically predicative (for a particular definition of semantic predicativity that includes gradable adjectives such as *tall*). Thus one can call someone *a mere child* but not declare *\*The child is mere*, with *mere* in a syntactically predicative position, because *mere* is not semantically predicative. One type of evidence comes from sentence-level adverbs like *obviously*: One can speak of *an obviously red barn* but not *\*an obviously mere child*. This follows if sentence-level adverbs attach to propositions, semantically predicative adjectives produce propositions, and *mere* is not semantically predicative.

For all of the items that have been argued to be arbitrary exceptions in the domains considered (the causative and dative alternations, preposition pied-piping and stranding, and adjective positioning), I argue that they are not. This removes the linguistic argument for item-specific learning, at least in these domains. I suggest the *explanation-seeking learner* as an alternative model: the learner prefers general explanations over arbitrary stipulations.

## References

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