

# Productivity in SBCG

Matthew Adams  
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Kay (2002) proposes a distinction between constructions and patterns of coining. The distinction centers on the notion of productivity, and Kay cites examples in which a putative collocation is productive and therefore qualifies as a construction of the grammar alongside examples that do not rise to the level of being productive. Kay’s main point in delineating a boundary between grammatical constructions and meta-grammatical patterns of coining is to preserve “the idea that a grammar contains all and only the information a person needs to speak and understand the language” (15). That is, if patterns of coining are admitted as licit constructions in the grammar, then, Kay maintains, one “abandons prediction of grammaticality as a key method in empirical grammatical study” (15). My guiding question in this response is to examine more closely the notion of “productivity,” which is a central point of distinguishing true constructions from patterns of coining but which is left as an intuitive concept. What exactly is productivity, and how does it figure into licensing certain constructions in a grammar while ruling out others as meta-grammatical patterns of coining?

From the perspective of Sign-Based Construction Grammar (SBCG; Fillmore et al. 2007), a construction is “a constraint that licenses a particular class of feature structures by specifying certain properties that they must have” (89). Formally, a construction “specifies” a construct, which is a feature structure that contains a mother sign and a list (empty or non-empty) of daughter signs. Signs are licensed by the Principle of Construction in SBCG, which states, “Every sign must be the mother of a construct licensed by some construction of the grammar” (89). Extending Kay’s proposal to SBCG, strings like the bracketed phrase in *[All I can drink] is half a pint* are constructs whose mother is a sign having a specific type — say, *all-cleft* — and whose daughters are signs of different types unified in the appropriate fashion based on the principles of a multiple inheritance hierarchy. On the other hand, strings like *light as a feather* do not qualify as constructs, as there is no construction in the grammar that licenses this particular class of feature structures.

One of the main diagnostics for deciding whether the grammar of English has a particular construction is determining the productivity of a particular collocation. Kay states that *all-clefts* are fully productive, while A *as* NP collocations are not. He notes that the

list of A *as* NP examples is very large, but that membership in the set cannot be easily extended. Thus, *heavy as a truck* does not mean “very heavy.” Furthermore, the existing examples are not compositional in the same way that *blue car* is; the adjective in *big as a house* specifies something commonly agreed to be a property of houses, but it’s doubtful that one would want to say that *big* is part of the meaning of *house*, even though the intended meaning of the collocation is “extremely big.” So the principle seems to be that if non-licit examples are easily found, such as *heavy as a truck*, the entire class of A *as* NP collocations qualify as coinings, and not constructions of the grammar. Likewise, try as one might, but for every verb inserted into the *all*-cleft construction, the intended meaning of “below expectation” is derived.<sup>1</sup>

But is degree of productivity the axis along which we should be differentiating constructions from their coined counterparts? Kay’s proposal ultimately depends on an ontological distinction between synchronicity and diachronicity. Patterns of coining have two types of members: They include fixed sayings, such as *light as a feather* and they include extensions, built analogically. The latter include examples like *wide-eyed as a marigold* and can be pulled from corpora. Deciding between fixed sayings and true coinings is not an easy task, but is slightly beside the point here.

More central to the question of productivity is whether, from a diachronic perspective, there come to be *so many* examples of A *as* NP that it becomes absurd not to accord them constructional status. Envision a very fruitful period of coining, such that the number of examples increased 100-fold. That’s a very large number of expressions to deny grammatical status, and so productivity has to be seen (i) as a relative measure and (ii) as coupled with some other grammatical principle. For the number of coinings to increase 100-fold and be considered constructionally part of the grammar, very likely a consistent principle of formation would have to be devised that applied to all members of the class. Perhaps all new coinings are simply patterns of the form *dark as darkness*, where the NP is always a nominalized form of the adjective (and still having the meaning “extremely dark”). If these particular types of A *as* NP examples overwhelmingly represent the greatest proportion, with less transparent examples such as *light as a feather* increasingly uncommon proportionally, then at what point does the pattern stop being a set of coinages and start being a construction of the grammar? Put another way, since any speaker of the language is able to derive the meaning of strings like *dark as darkness* from the meaning of the parts, there is absolutely no reason to deny A *as* NP examples constructional status. The overriding conclusion here seems to be that productivity entails an underlying consistent principle of formation. Productivity is therefore a measure of the ratio of consistently formed items to idiosyncratic items in a particular class. Synchronically, Kay is correct in seeing the A *as*

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<sup>1</sup>At least as long as the construction is constrained so as to have a modal or some aspectual marker. Sentences like *All she raves about is musicals* never have the intended “below expectation” reading and have instead the generalized quantifier reading. And note the difference between *All she eats is pizza* and *All she’s eating is pizza*, where the latter has the “below expectation” reading and the necessary aspectual modification peculiar to the *all*-cleft construction.

NP pattern as primarily idiosyncratic, but his proposal needs to make room for the possibility that given a consistent principle of formation, the pattern could become, over time, a construction of the grammar as non-idiosyncratic cases become proportionally higher. The problem that remains is deciding where the cut-off lies: Should the ratio be close to 1, or is something like .5 tolerable enough to admit the entire class as a construction of the grammar?

## References

- [1] Kay, Paul. 2002. Patterns of coining. Ms., University of California, Berkeley.
- [2] Fillmore, Charles et al. 2007. Sign-Based Construction Grammar. Ms., University of California, Berkeley, Stanford University, University of Colorado, Boulder.