

Predictability and informativeness in iconicity of complexity: A Gricean perspective

Jürgen Bohnemeyer
Department of Linguistics, University at Buffalo - SUNY
jb77@buffalo.edu

Keywords: causatives; iconicity; predictability; informativeness; implicature

This paper argues that iconicity of complexity is motivated not only by a semiotic ecology of predictability, as argued by Haspelmath (2008a,b), but also by a semiotic ecology of informativeness. Moreover, predictability-driven iconicity and informativeness-driven iconicity can be unified under a single theoretical umbrella: Grice's (1989) theory of generalized conversational implicatures. The paper's domain of inquiry are causatives. Its empirical core are recent experimental studies (Bellingham et al 2017, ms.; Bohnemeyer et al 2010; Kawachi et al 2018) that have confirmed the preferential association of conceptually simple causal chains (binary, physical, agentive, causation dynamics) with morphosyntactically simple expressions (lexical or morphological) and of more complex chains (non-binary, nonphysical, non-agentive, and/or involving enabling dynamics) with structurally more complex expressions (morphological, periphrastic, clause-combining), complementing similar findings from corpus studies (Haspelmath 2008a: 22-23; Levshina 2015, 2016, 2017). A frequency/predictability-based Gricean account of this distribution was first proposed by McCawley (1978): simple, high-frequency expressions trigger implicatures to stereotypicality based on the second Quantity maxim (Atlas & Levinson 1981), illustrated by Sally stepping on the car's brakes in (1), while complex, low-frequency expressions trigger implicatures to atypicality based on the Manner maxims, e.g., Sally stepping into the road in front of the car in (2). Zipf's Law of Abbreviation (Zipf 1935, 1945) submits to this analysis more generally (Levinson 2000: 112-113).

(1) *Sally stopped the car*

(2) *Sally caused the car to stop*

The theoretical contribution of the present paper is to argue that iconicity of complexity also springs from a second, independent source: when a more complex expression is more informative than a simpler alternative, the use of the more complex expression is preferentially restricted to information-richer meanings, based on the first Quantity maxim. The entailment relations in (3) illustrate informativeness asymmetries, and the corresponding scalar implicatures in (4) illustrate the preferential distributions over simple/complex scenarios (using \therefore for 'entails', $+>$ for 'implicates'):

- | | | |
|-----|---|--|
| (3) | a. <i>Floyd has more than two cats</i> | \therefore <i>Floyd has two cats</i> |
| | b. <i>Sally and Floyd bought a piano</i> | \therefore <i>Sally bought a piano</i> |
| | c. <i>Floyd broke the vase</i> | \therefore <i>The vase broke</i> |
| | d. <i>Sally made Floyd break the vase</i> | \therefore <i>Floyd broke the vase</i> |
| (4) | a. <i>Floyd has two cats</i> | $+>$ <i>Floyd has exactly two cats</i> |
| | b. <i>Sally bought a piano</i> | $+>$ <i>Sally bought a piano by herself</i> |
| | c. <i>The vase broke</i> | $+>$ <i>The vase broke by itself (no agent involved)</i> |
| | d. <i>Floyd broke the vase</i> | $+>$ <i>Floyd broke the vase on his own account</i> |

Examples (4a-b) are standard examples of scalar implicatures; (4c-d) illustrate the parallel behavior of causatives. Informativeness and predictability thus conspire to create the default mapping of direct causation to simple expressions and of indirect causation to complex expressions, contrary to Haspelmath's (2008a) purely predictability-based proposal. Future research will have to attempt to tease the contributions of the two principles apart empirically. That both Manner and Quantity maxims serve to ensure iconicity in natural language utterances was clearly seen by Grice (1989: 358).

Selected references

- Haspelmath, M. (2008a). Frequency vs. iconicity in explaining grammatical asymmetries. *Cognitive Linguistics* 19(1): 1-33.
- Kawachi, Kazuhiro, Erika Bellingham, & Jürgen Bohnemeyer. Different types of causality and clause linkage in English, Japanese, Sidaama, and Yucatec Maya. *Papers from the 18th National Conference of the Japanese Cognitive Linguistics Association*.
- Levinson, S. C. (2000). *Presumptive meanings: The theory of generalized conversational implicature*. Cambridge, M.A.: MIT Press.
- McCawley, J. (1978). Conversational implicature and the lexicon. In P. Cole (ed.), *Syntax and semantics Vol. 9, Pragmatics*. New York, NY: Academic Press. 245-259.