

Parameters of Variation in English Filler-Gap Constructions  
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This paper delineates the parameters of variation among English Filler-Gap constructions (e.g. topicalization, wh-interrogatives, wh-relatives, wh-exclamatives, and comparative correlatives):

- Is there a distinguished wh-element in the filler daughter, and if so, what kind (int, rel, excl, def, none)?
- What are the possible syntactic categories of the filler daughter (among NP, PP, AP, AdvP)?
- What are the possible syntactic categories of the head daughter (S, CP, VP)?
- Can the head daughter be inverted/finite? Must it be?
- What is the semantics and/or syntactic category of the mother?
- What is the semantics and/or syntactic category of the head daughter?
- Is the clause an island? Must it be an ‘independent clause’?

This domain of facts stands as a critical challenge to mainstream generative grammar (MGG). My account of the Filler-Gap constructions is articulated within the emerging framework of Sign-Based Construction Grammar (SBCG; Boas (ed.) to appear), a mathematically precise, constraint-based (in fact, model-theoretic in the sense of Pullum & Scholz 2001) framework that builds directly on prior results in Head-Driven Phrase Structure Grammar (HPSG; Pollard and Sag 1994). The model-theoretic and sign-based nature of this theory is attractive from the perspective of computational psycholinguistics, as it embeds naturally in models of processing that integrate stochastic information and/or allow the incremental computation of partial semantic through-put.

Though construction-based approaches to TRANSFORMATIONAL grammar were criticized by Chomsky and others in the 1980s, I will demonstrate that a surfacist constructions-based theory employing type hierarchies and constraint inheritance allows a satisfying account of the general properties of extraction, the idiosyncratic details often arbitrarily shunted to the grammatical ‘periphery’, and the variety of intermediate-grain generalizations that are pervasive in language.

References:

- Boas, Hans (Ed.). to appear. Papers in Sign-Based Construction Grammar. Stanford: CSLI Publications.
- Pollard, Carl and Ivan A. Sag. 1994. Head-Driven Phrase Structure Grammar. Chicago: University of Chicago Press and Stanford: CSLI Publications.
- Pullum, Geoffrey K. and Barbara C. Scholz. 2001. On the distinction between model-theoretic and generative-enumerative syntactic frameworks. In *Logical Aspects of Computational Linguistics: 4<sup>th</sup> International Conference (Lecture Notes in Artificial Intelligence, 2099)*, ed. by Philippe de Groote, Glyn Morrill, and Christian Retoré, 17-43. Berlin: Springer Verlag.