

Lambek, J.

Pregroup grammars and Chomsky's earliest examples. (English) [Zbl 1162.68721]
J. Logic Lang. Inf. 17, No. 2, 141-160 (2008).

This expository paper aims at giving an introduction to the author's pregroup grammars [“A computational algebraic approach to English grammar”, *Syntax* 7, No. 2, 128–147 (2004); *Grammars* 4, No. 1, 21–39 (2001; Zbl 1007.03031); *Lect. Notes Comput. Sci.* 1582, 1–27 (1999; Zbl 0934.03043)] at the hands of a few examples of *N. Chomsky* [*Syntactic Structures*. The Hague: Mouton (1957)]. The author would like to see “how questions of syntax and morphology can be handled formally in the framework of pregroup grammar by appropriate type assignments to words in the mental dictionary”. Although the pregroup approach is not quite as simple as Chomsky's original generative-transformational one, the former is intended to complement the latter by providing a model for subconscious computations.

Reviewer: Hirokazu Nishimura (Tsukuba)

MSC:

68T50 Natural language processing
03B65 Logic of natural languages

Cited in 1 Review

Keywords:

computational linguistics; categorial grammars; pregroup grammars

Full Text: DOI

References:

- [1] Buszkowski, W. (2001). Lambek grammars based on pregroups. In P. de Groote, et al. (Eds.), Logical aspects of computational linguistics (pp. 95–109). Springer LNAI 2099. · Zbl 0990.03021
- [2] Chomsky, N.: Syntactic structures. Mouton, The Hague (1957)
- [3] Harris, Z.: A cyclic cancellation automaton for sentence well-formedness. International Computation Centre Bulletin 5, 69–94 (1966)
- [4] Harris, Z.: Mathematical structure of language. Interscience Publishers, New York (1968) · Zbl 0195.02202
- [5] Lambek, J. (1999). Type grammar revisited. In F. Lamarche, et al. (Eds.), Logical aspects of computational linguistics (pp. 1–27). Springer LNAI 1582. · Zbl 0934.03043
- [6] Lambek, J.: Type grammars as pregroups. Grammar 4, 21–39 (2001) · Zbl 1007.03031 · doi:10.1023/A:1011444711686
- [7] Lambek, J.: A computational algebraic approach to English grammar. Syntax 7(2), 128–147 (2004) · doi:10.1111/j.1467-9612.2004.00005.x

This reference list is based on information provided by the publisher or from digital mathematics libraries. Its items are heuristically matched to zbMATH identifiers and may contain data conversion errors. It attempts to reflect the references listed in the original paper as accurately as possible without claiming the completeness or perfect precision of the matching.