

Matthew Purver and Ruth Kempson (2004)

**"Context-Based Incremental Generation for Dialogue"**

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**Abstract**

This paper describes an implemented model of context-based incremental tactical generation within the Dynamic Syntax framework (Kempson et al., 2001) which directly reflects dialogue phenomena such as alignment, routinization and shared utterances, problematic for many theoretical and computational approaches (Pickering & Garrod, 2004). In Dynamic Syntax, both parsing and generation are defined in terms of actions on semantic tree structures, allowing these structures to be built in a word-by-word incremental fashion. This paper proposes a model of dialogue context which includes these trees and their associated actions, and shows how alignment and routinization result directly from minimisation of lexicon search (and hence speaker's effort), and how switch of speaker/hearer roles in shared utterances can be seen as a switch between incremental processes directed by different goals, but sharing the same (partial) data structures.