## Structural Divergence in Dialogue

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## **Abstract**

It is often observed that people engaged in conversation appear to display close co-ordination of body movements, speech styles and patterns of language use. It has been proposed that these patterns of cross-person matching are the consequence of an automatic priming mechanism that underpins all human interaction. Key empirical support for this proposal comes from studies which indicate that people tend to match the syntactic structure of each other's turns during dialogue. Evidence that these are priming effects comes from corpus analyses that show levels of structural matching for specific constructions decay across turns. This talk will argue that these studies are undermined by task and sample bias, by a lack of suitable baseline comparisons and by partial confounding of lexical (word) and syntactic (structural) similarity. Using data from two large dialogue corpora we argue that in ordinary, dyadic dialogue patterns of syntactic matching do not follow the predictions of an automatic priming-based account. We show that within-speaker and between-speaker similarity follow systematically different patterns. If levels of lexical matching are taken into account levels of cross-person structural matching are reliably lower than chance (i.e. people systematically diverge). Moreover, although there is a reliable pattern of decay in use of syntactic constructions across turns for each individual participant there is no reliable pattern of decay in cross-person structural similarity. This leads to the conclusion that ordinary dialogue is characterised by local patterns of structural divergence. People move a conversation forward by repeating lexical items to sustain the topic but use them in divergent syntactic constructions e.g. to pose and answer questions, to make and evaluate proposals and to agree and disagree.