

What predicts productivity? Theory meets individuals

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Because they involve individual-level cognitive processes, psychological explanations of linguistic phenomena are in principle testable against individual behaviour. The present study draws on patterns of individual variation in corpus data to test explanations of productivity. Linguistic patterns are predicted to become more productive with higher type frequencies and lower token frequencies. This is because the formation of abstract mental representations is encouraged by varied types but counteracted by automation of high-frequency types. The predictions are tested for English *-ly* and *-ness*-derivation, as used by 698 individual journalists in the New York Times Annotated Corpus and 171 members of Parliament in the Hansard Corpus. Linear regression is used to model individual variation in productivity, in relation to type and token frequency, as well as several other predictor variables. While the expected effects are observed, there is also robust evidence of an interaction effect between type and token frequency, indicating that productivity is highest for patterns with many types and not-too-infrequent tokens. This fits best with a view of entrenchment as both a conservative and creative force in language. Further, some variation remains irreducibly individual and is not explained by currently known predictors of productivity.