A process of free creation: Word comprehension and production beyond recognition and selection

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Many theories of human language processing, especially prominent localist accounts, assume a lexical level of representation (for words or word forms) and a semantic level of representation (for word meanings or concepts), with links between these levels. In this framework, language production is usually conceptualized as selecting the appropriate lexical representation(s) to express an intended meaning; and vice versa, language comprehension is activating the appropriate meaning representation given an activated lexical representation. However, as illustrated by for example the application of the Luce choice rule in models of language production, such approaches explicitly or at least implicitly assume a finite set of lexical representations and semantic representations from which to select or which to activate during language processing. In front of this background, I will present several studies which show that (a) speakers can and do routinely process new words and create new meanings for them, and that (b) speakers can and do routinely create new words to express new but also familiar meanings and concepts. This ability to create new words and meanings "on the fly" necessitates a revision of theoretical models to include plausible mechanisms for the on-line creation of new lexical and semantic representations during language processing, or revisions to their underlying assumptions.

Since December 2021, Fritz Günther is a Junior Research Group leader at the Humboldt-University zu Berlin, Department of Psychology, Computational Modelling group. His group project on labelling choices (which names do we pick for objects?), word formation (which new words do we create?), and framing effects of labels (does it matter if one calls the exact same thing by different names?) is currently funded by a multi-year Emmy-Noether-Grant by the German Research Foundation. In his previous positions as a PhD student in Tübingen and Trento (2013-2017) and as a postdoc in Tübingen and Milano (2017-2021), he worked mainly on (distributional) models of semantic memory, with a focus on conceptual combination, the process by which we can combine two concepts into a single (new) one, but also on questions regarding the grounding of concepts in sensorimotor experience and the interplay between vision and language.