Compound representation and individual experience

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In recent years, new psycholinguistic research has advanced the understanding of the conditions under which the meanings of compound constituents are activated in online lexical processing (e.g., Marelli & Luzzatti, 2012). At the same time, there has been considerable evidence that patterns of individual experience drive the development of meaning relations within compound words (Libben, Westbury & Jarema, 2012). This paper presents new evidence regarding the effect of such experience and the role of individual variation in compound representation and processing.

The results of two experiments are presented. Experiment 1 employed a combined lexical recognition-production experiment using the P3 paradigm (Libben, Weber, & Miwa, 2012). The paradigm employs Primed Progressive Demasking, reading aloud, and typed word production to yield dependent variables for reading latency and accuracy, inter-letter typing times, and whole-word production time.

In Experiment 2, the P3 paradigm was employed in dyadic word recognition and production. In this experimental paradigm, two participants are tested at the same time. One member of the dyad sees progressively demasked stimuli and says them aloud. The other participant types the compound stimuli (as one would in a classic dictation task).

In total, 98 participants were tested. Experiment 1 yielded evidence that individual participant characteristics including education, linguistic background and metalinguistic knowledge affected performance on both tasks. The results of Experiment 2 showed than persons tested in pairs showed higher levels of accuracy and lower latencies that those tested alone. Moreover, there were effects of the differences between the two participants of a dyad in terms of their individual characteristics. These effects are captured using Visual Participant Profiles, a new data visualization technique. This technique may enable us to capture multivariate participant data and their relations to patterns of experimental results.

References

