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## Morphological decomposition: all at once or step by step?

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While there is substantial evidence for morphological effects in word recognition, there is no unified account of how the decomposition process is implemented (Amenta & Crepaldi, 2012). Partly, this is due to a focus on single-affixed forms as the processing of more complex words has only recently been investigated using fMRI (e.g. Pliatsikas et al., 2014). Complex words that were matched on critical lexical factors showed differences in LIFG activation, depending on derivational depth.

Based on these findings, we turned to the processing of multimorphemic pseudowords. In a series of four lexical decision tasks with delayed priming, we investigated the processing of two sets of German pseudowords. The pseudowords were derived using the following sequence of derivations: *adjective* > *zero-derived verb* > *complex noun* in *-ung*. While the final noun form did not exist in both sets (*\*Spitzung* - ‘sharpening’; *\*Hübschung* - ‘beautifying’), there were differences in internal composition: only the *\*Spitzung* set had an existing lexical representation in the intermediate derivation; thus compare *\*Spitzung* (*spitz<sub>A</sub>* (sharp) > *spitzen<sub>V</sub>* > *\*Spitzung*) with *\*Hübschung* (*hübsch<sub>A</sub>* (pretty) > *\*hübschen<sub>V</sub>* > *\*Hübschung*). We found that the priming effect between *\*Spitzung* and *spitz* was significantly stronger than for *\*Hübschung* and *hübsch*. This suggests that intermediate levels of derivation were accessed during decomposition. Together with the findings reported by Pliatsikas et al. (2014), the present results point to step-wise decomposition of multimorphemic forms in which the internal composition of intermediate levels is considered.

**References:** • Amenta, S., & Crepaldi, D. (2012). Morphological processing as we know it: An analytical review of morphological effects in visual word identification. *Frontiers in Psychology*, 3. • Pliatsikas, C., Wheeldon, L., Lahiri, A., & Hansen, P. (2014). Processing of zero-derived words in English: An fMRI investigation. *Neuropsychologia*, 53, 47-53.