The interplay of language switching and morphological configuration switching

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When people switch between two languages in language production or language comprehension, both the specific semantic meaning and the specific morpho-syntactic form of the word are important. Word formation hereby includes a morphological configuration whenever a word contains more than one free morpheme. The morphological configuration is variable both within and between languages for example in two-digit number names (is the decade named first as in twenty-one or the unit named first as in seventeen) and in compound words (is the modifier or the head named first). The aim of the present study was to examine the interplay of language switching and morphological configuration switching. In four experiments, multilingual participants had to switch between three languages (e.g., German, English and Spanish) and between morphological configurations in either number processing or compound word processing. Language-switch costs were measured as the performance difference between language-switch and language-repetition trials. In two experiments, participants performed a language-comprehension task on two-digit number word, and in two experiments participants performed a language-production task (producing either a two-digit number word or a compound word). All four experiments revealed an under-additive switchcost pattern in which a larger language-switch cost occurred in morphological-configuration repetition trials than in morphological-configuration switch trials. More specifically, a benefit of repeating the same language in two successive trials was mainly observed when also the morphological configuration was repeated. Thus, the present data indicate an integration of the language into one language-related schema – irrespective of the language task (comprehension vs. production) and the type of stimuli (number words vs. compound nouns). Further, our results suggest that the morphological configuration order played a critical role in the comprehension, representation, and the production of two-digit numbers and compounds words and needs to be taken into account in models of language switching with complex words (or even phrases and sentences).

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