Seeing stems everywhere and being blind to affixes

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Recent evidence has shown that suffixes influence nonword processing only when they follow an existing stem (e.g., in 'shootment', but not in 'mentshoot'), suggesting that their mental representation is position-locked (Crepaldi, Rastle & Davis, 2010). These results raise questions about the nature of morpheme position coding, an issue that has typically been neglected in morphological research; although it is clear that morphemes must be coded for position during word identification (otherwise we could not distinguish between words like 'overhang' and 'hangover'), even the most recent theoretical attempts (e.g., Crepaldi, Rastle, Coltheart & Nickels, 2010; Taft, 2006) have not addressed this issue. In the present experiments we asked whether prefix and stem identification is also sensitive to positional constraints (as suffix identification is).

In Experiment 1 we showed that the rejection time of pseudo-prefixed nonwords (e.g., predrink) is longer than that of matched control nonwords (e.g., pledrink), which was not the case when the prefix followed the stem (e.g., drinkpre took as long as drinkple to be rejected). This result suggests that prefix identification is position-specific.

In Experiment 2 we showed that the rejection time of reversed compounds (e.g., moonhoney) is longer than that of matched control nonwords (e.g., moonbasin), indicating that 'honey' and 'moon' were identified within 'moonhoney', and the representations of these morphemes then activated (at least partially) the word 'honeymoon'. This result suggests that stems are coded is a position-independent fashion.

This latter conclusion was strengthened by the results of Experiment 3, in which the masked presentation of reversed compounds (e.g., moonhoney) facilitated the identification of compound words (honeymoon). In contrast monomorphemic control pairs did not produce a similar pattern (i.e., rickmave did not prime maverick), indicating that the effect for 'moonhoney' pairs was not due simply to orthographic similarity.