PROCESSING OF DERIVATIONAL MORPHOLOGY IN VISUAL WORD RECOGNITION: A STUDY WITH ADULT DYSLEXICS

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ABSTRACT OF EXTENDED SUMMARY (Up to 300 words)

The morphological processing of dyslexics is still an issue of intense debate. The reason for this debate is that morphemes possess both form and meaning properties. Hence, in one view, which supports the form-driven hypothesis, morphological processing is primarily based on form. In another view, the semantic properties of morphemes are at stake, as suggested by the meaning-driven hypothesis. Here we address both hypotheses and aim to provide insights into the influence of each of these properties by investigating adult dyslexics, native speakers of Brazilian Portuguese, while processing written morphology. As part of a broader ongoing study on the processing of derivational morphology in subjects with developmental dyslexia, in the present experiment we address the question of whether adults diagnosed with dyslexia rely on morphemes during visual word recognition, and if so, whether this reliance is influenced by their semantic properties. Based on Quémart & Casalis' study (2013), we carried out a masked priming experiment. The participants performed a lexical decision task based on four conditions: morphological (e.g. livreiro – LIVRO, "*bookseller – BOOK*"), pseudoderivation (e.g., vagão – vaga, "*wagon – VACANCY*"), orthographic control (e.g. corrida – COR, "*race – COLOR*"), and semantic control (e.g., maçã – FRUTA, "*apple – FRUIT*"). They were presented with words on the computer screen and were required to decide whether the words were real words in Brazilian Portuguese. Results showed that dyslexics relied on morphemes during visual word recognition, in line with the results in Quémart & Casalis (2013). Significant morphological priming effects in the morphological condition, only, support the hypothesis that dyslexics are able to process larger units, i.e. morphemes, to decode words faster. Together, these results are interpreted as evidence that there is more influence of meaning than of form in dyslexics' morphological processing and that the mental lexicon of adult dyslexics is organized around morpheme units.

K**eywords: Developmental dyslexia; Derivational morphology; Reading processing, Brazilian Portuguese; Adults.**

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