The interplay of phonology and orthography in visual cognate word

recognition: An ERP study

Montserrat Comesaña Universidade do Minho

This study examines the role of phonological and orthographic overlap in the

recognition of cognate words by recording electrophysiological (ERPs) and behavioral

data (reaction times -RTs and free recall). One hundred and ninety-two words were

selected: 96 cognate words attending to their phonological and orthographic overlap vs.

96 noncognate words. Twenty-four proficient European Portuguese-English bilinguals

performed a silent reading task with a masked priming paradigm. The results showed

that phonology interacts with orthography during the first stages of visual cognate word

recognition, supporting strong phonological proposals. Thus, the distinctive processing

of cognate words seems to be due to their cross-linguistic similarity, which is consistent

with a localist connectionist account on cognate representation and processing.

Keywords: cognate words, phonological and orthographic overlap, masked priming