

Lexical access of trilingual speakers of Brazilian Portuguese, German and English in language comprehension and production

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Lexical access is a complex process in itself, which, for multilinguals, can become more complex than for bilinguals and monolinguals, due to the greater possibilities of language influence and/or interference among the languages (Szubko-Sitarek, 2015). Therefore, it is assumed, that the processing of one or two languages differs from the process of three or more languages. This assumption is supported by scholars in the area of multilingualism (such as Cenoz, 2008, De Angelis, 2007, Jessner, 2006). The present study investigated whether lexical access of multilinguals is selective or non-selective with respect to language. Two experiments dealing with language comprehension and production were carried out with trilingual speakers of Brazilian Portuguese, German and English. Our main goals were (1) to investigate the effect of triple cognates (among Brazilian Portuguese, German and English) in the comprehension of English as the target language, and (2) to investigate cross language priming in a language production task. The following groups of participants took part in the present study: (1) native speakers of English – the L1G, (2) native speakers of Brazilian Portuguese with English as the L2 – the L2G, and (3), native speakers of Brazilian Portuguese, with German as the L2 and English as the L3 – the L3G. In Experiment 1, data from 35 participants (L1G= 11; L2G= 11; L3G= 13) was analyzed. The experiment consisted of a sentence comprehension task containing cognates among the participants' three languages. This experiment was carried out with the eye tracking technique. Experiment 2, on the other hand, was a picture naming task with the masked priming paradigm and was performed by 41 participants (L1G=13; L2G=12; L3G=16). The results of Experiment 1 showed that triple cognates facilitated the comprehension of English sentences for the L3 group, but not for the L2 and L1 groups, which was interpreted as evidence of the effect of the L2 – German. In Experiment 2, the results showed that when the prime word was presented in German (the L2), there was an increase in reaction time as compared to when the prime word was presented in the L1 (Brazilian-Portuguese) or in the L3 (English). This effect was only observed for the L3G. which was in line with the results of the Experiment 1. The results of this second experiment are also in favor of the effect of the L2 – German in the processing of the L3 – English. The results of the two experiments were interpreted as evidence of non-selective lexical access as well as of a common lexical storage for the trilinguals' languages.

References

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