

# **Linguistic Distance Modulate Word Recognition Processes in Chinese-English Bilinguals Learning to Read Different Types of Third Language**

Chun-Ying Tu

Department of Psychology, National Chung Cheng University.

## **Abstract**

The purpose of the present study is to examine whether linguistic distance modulate cognitive processes of first (L1) and second language (L2) word recognition in Chinese-English bilinguals learning to read a different orthographic third language (i.e., Spanish and Japanese). Previous studies have shown L1 may influence L2 word recognition processes, and vice versa (Koda, 1996; Wang and Koda, 2005; Akamatsu, 2002; Van Hell and Dijkstra, 2002). Perfetti et al. (2007) further suggested that different types of bilingualism may result in two different processes: assimilation and accommodation. However, few studies have directly examined the relationship between the type of bilingualism (i.e., linguistic distance between L1 and L2) and its effect on L1 and L2 word recognition processes in a longitudinal study. The present study thus proposes to investigate how L1 and L2 word recognition processes may be affected by the assimilation and accommodation due to different linguistic distances among L1, L2, and L3 by comparing two bilingual groups (i.e., Chinese-English bilinguals learning to read Spanish vs. Chinese-English bilinguals learning to read Japanese) after one year of language training in L3. The results provided a weak support for the hypothesis that there do have a difference between three language groups. Although not statistically significant but we do observe that after 12 months of language training on L3, Chinese-English bilinguals learning to read Spanish, the L3 with a longer linguistic distance to L1, showed preferences in phonological processing indexed by the regularity effect in L1/L2 naming task and the phonological interference in L1/L2 semantic categorization task; whereas those learning to read Japanese, the L3 with a shorter linguistic distance to L1, showed preferences in orthographic processing indexed by the null effect of regularity in L1/L2 naming task and the orthographic interference in L1/L2 semantic categorization task.