The "Cost-free" Code-mixing in Trilinguals: A Revision to the Adaptive Control Hypothesis

Bilingual speakers frequently juggle two languages that are co-active during language processing. Switching back and forth between two languages, therefore incurs great cognitive cost. Whether language switching is particularly less or more effortful in certain bilinguals remains unclear (Van Hell et al., 2015). The present study zooms into trilingual speakers in Hong Kong, proposing that intra-sentential code-switching (i.e., code-mixing) between L1 and L2 is less taxing for this population. Seven Cantonese(L1)-English(L2)-Mandarin(L3) trilinguals were recruited. A language history questionnaire was administered to investigate their use of code-mixing. A cognitive battery consisting eight tasks was conducted to assess inhibition, attention, working memory and executive control. Task results and participants' frequencies of code-mixing in different contexts were put into a regression model. Results suggest that the frequency of code-mixing between L1 and L2 with peers significantly predicts better performance in working memory and attention, but has little influence on inhibition control. A possible explanation is that code-mixing frequency between L1 and L2 is way higher than that between L1/L2 and L3. Further, participants do not deliberately code-mix between L1 and L2, rather, code-mixing is a product of spontaneous communication because most Cantonese(L1) equivalents of English(L2) that they code-mix is rarely used in daily communication. Although switching between two languages activates general processing in BA44/45, switching is not particularly effortful for this population. Taken together, the dense code-switching context that Green and Abutalebi (2013) proposed in Adaptive Control Hypothesis to account for switching cost should be further revised to fit the Hong Kong context.

(250 words)

References

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