

# The overly lenient judgment by bilingual speakers: *Wh*-topicalization under first language attrition

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## Abstract

When formulating a *wh*-question, speakers of *wh*-movement, languages like English would move the *wh*-phrase from its canonical position to the left-periphery of the sentence. In contrast, speakers of Chinese, Korean or Japanese usually keep the *wh*-phrase at its original place (Yuan & Dugarova, 2012). Those languages are considered as *wh-in situ* languages. Under certain discourse and pragmatic conditions, the *wh*-phrases can be moved to the top of the sentence, a phenomenon called *wh*-topicalization. The processing of *wh*-topicalization lies at the syntax-discourse interface, the properties of which were discovered to be cognitive-demanding, and more susceptible to language attrition, compared to structures only involve features that are internal to formal grammars (see Sorace, 2011, for a review).

Using a word-by-word, speeded acceptability judgment task, the current study investigated bilingual speakers' acceptability judgment of *wh*-topicalization in Chinese Mandarin, while they were supposedly under the influence of first language (L1) attrition. Three groups of Mandarin-English bilinguals were tested: Mandarin-English passive bilinguals (in China), Mandarin-English bilinguals with short-term exposure, and Mandarin-English bilinguals with long-term exposures (in Edinburgh). The short-term group was retested in the same environment after 6 months, see Table 1 for detailed linguistic profiles of each group. With regards to L1 attrition effects, the results were inconsistent: there were distinct intra-speaker differences across a time-span of 6 months ( $\beta = -.08, df = 4180.04, t = -2.41^*$ ), however, the inter-speaker differences were not significant on a group level.

In addition to the speeded acceptability judgment task, a battery of tasks measuring working memory and cognitive control abilities were also conducted. We believe that cognitive factors play a significant role during online processing, particularly under the effect of L1 attrition, the results will be discussed in relation to cognitive load of the tasks and individual differences in working memory capacity.

## References

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	Long-term Group	Short-term Group	Comparison
Age (years)	26.75 (6.47)	23.43 (1.75)	**
LoR (mths)	60 (46)	6 (1)	***
IELTS	7 (0.63)	6.82 (0.46)	NS
L2 Education	0.93 (0.15)	0.98 (0.08)	NS
Highest degree	0.74 (0.21)	0.74 (0.08)	NS
Visit home	0.38 (0.16)	0.04 (0.12)	***
L1 proficiency Before	0.85 (0.15)	0.86 (0.16)	NS
L1 proficiency Now	0.73 (0.2)	0.86 (0.17)	**
L1 Use	0.06 (0.16)	0.12 (0.22)	NS
L2 Proficiency Before	0.47 (0.27)	0.51 (0.16)	NS
L2 Proficiency Now	0.69 (0.18)	0.54 (0.14)	***

Table 1: Responses to the sociolinguistic questionnaire in the two groups, and comparison (t-test for numerical variables, Wilcoxon test for ordinal variables; ordinal variables coding: 0, 0.25, 0.5, 0.75, 1): \* :  $p < .05$ ; \*\* :  $p < .01$ ; \*\*\* :  $p < .001$ .