Code-switching in the Formation of Conceptual Pacts

Dialogue studies show that speakers conventionalise referring expressions through lexical entrainment and grounding where they implicitly agree to use the same expression to describe an object (Brennan & Clark, 1996; Mills, 2014; Nölle et al., 2020). However, there are no studies on how using multiple languages in the same conversation (i.e., code-switching) affects the formation of conceptual pacts even though psycholinguistic studies have noted that bilinguals can have shared conceptual representations despite lexical resources being separate among languages (Gollan et al., 2005; De Bot, 2020). In this study, we investigate how referring expressions become established in bilingual chat-based interactions, and whether or not speakers code-switch when invoking an established conceptual pact. We hypothesise that if the formation of pacts requires lexical entrainment, bilingual speakers are unlikely to code-switch when producing an established referring expression.

We conducted an experiment in which 10 Swedish-English bilingual participants interacted via a chat tool (Mills & Healey, 2013) as illustrated in figures 1 and 2. The participants' proficiency in English was recorded by administering the LexTALE vocabulary test (Lemhöfer & Broersma, 2012) and the Language Experience and Proficiency Questionnaire (Marian, Blumenfeld, & Kaushanskaya, 2007). The experiment involved a tangram task consisting of two language conditions –English (non-mixed), and Swedish-English (mixed). The critical trials of the non-mixed condition involved 8 target tangram figures used to elicit the formation of conceptual pacts. In the mixed condition, we reused the target figures from the non-mixed condition to test whether the participants maintained the language in which the pact was established or if they code-switched.

We quantitatively analysed the data by categorising the responses in the mixed condition as either code-switched or non-code-switched. Results from a mixed-effects logistic regression model show that the type of response depends on whether or not the conceptual pact was established. Considering the participants' everyday language experience, participants who are used to code-switching in general code-switched in the experiment when their partner had failed to identify the correct target tangram. On the other hand, bilingual speakers who did not code-switch often in everyday life used English in the non-mixed condition and Swedish in the mixed condition. We conclude that language environment and experience of bilingual speakers equally determine code-switching behaviour when referring to objects in interaction. More importantly, we observe that code-switching affords grounding even in the absence of lexical entrainment.

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Figures: