

**Jeanine Treffers-Daller** (University of Reading, United Kingdom), **Zehra Ongun** (University of Reading, United Kingdom), **Cise Cavusoglu** (Near East University, Northern Cyprus, Cyprus), **Valentina Christodoulou** (University of Cyprus, Cyprus), **Theodosia Demetriou** (University of Nicosia, Cyprus), **Christiana Themistocleous** (University of Reading, United Kingdom), **Julia Hofweber** (University College London, United Kingdom) & **Michal Korenar** (University of Reading, United Kingdom): *Can two unrelated languages be mixed? Evidence from a new method to investigate codemixing*

In this paper we use a novel experimental approach to study intrasentential code-switching (the use of more than one language within one utterance) in two typologically unrelated languages, with a view to contributing to the development of the four-way typology of code-switching presented in Muysken (2013), and to advancing the discussion about ways in which linguistic patterns that fall outside formal standard language can be investigated.

One of the most intimate forms in which bilinguals can mix languages in an utterance is congruent lexicalization: in this form of mixing, speakers create a shared grammatical frame in which content and function words from two languages can be freely mixed (see example 1 below). This type of codemixing is generally found among closely related languages, and in speech communities with a long tradition of language contact.

In this paper we set out to investigate to what extent this kind of mixing can be found in typologically unrelated languages, namely English and Turkish, which have different word orders (SVO and SOV respectively) and lexica with very few cognates, which makes congruent lexicalization an unlikely option (Muysken, 2013). There could, however, be interesting differences with respect to the occurrence of congruent lexicalization, related to the intensity and time depth of language contact: Muysken's model also predicts that bilingual groups with a long tradition of co-activating two languages will engage more in congruent lexicalisation than recent immigrants. This study aims to throw further light on this issue, and to illustrate how a stigmatised marker such as codemixing can be investigated under experimental setting.

We focus on codemixing in two English-Turkish bilingual communities with different traditions of language contact with English: one from Turkey and one from Cyprus. We hypothesized, first of all, that it is the Turkish-Cypriots who will engage more in congruent lexicalization because English has been used in Cyprus for over 100 years (Issa, 2006). The island was part of the British Empire since the late 1800s and was a Crown colony until 1960. English is an integral part of the daily lives of many Cypriots (Themistocleous, 2018) much more than in mainland Turkey. Because of the longstanding contact between English and Turkish in Cyprus, SVO word order is commonly found in Cypriot Turkish, a change that has been attributed to influence from English and Greek (Demir & Johanson, 2006). Second, we assumed that the Cypriots in the UK would engage less in congruent lexicalization than those in Cyprus due to the fact that the UK-based Cypriots would be influenced by standard English norms more than those in Cyprus.

#### Methods

Participants were 30 UK-based Turks (mean age 32.3, SD7.9), 70 UK Turkish Cypriots (mean age 32.07, SD = 9.81). The Cypriots reported having a slightly higher proficiency in English (6.5 on a scale on 1-10, SD.81) than the Turks (5.71, SD = .91), but there were no difference in age, gender, education, or years of use of English.

## Instruments

We developed a new Standard Turkish and Cypriot Turkish version of a code-switching frequency task with 98 examples of code-switching representing the four different types distinguished by Muysken (2013), and control sentences with monolingual and Turkish sentences. Examples were drawn from the literature on English-Turkish code-switching, supplemented with examples of switching between Turkish and German. Switches were presented in random order, in oral form through headphones with support of the written form on a PPT slide (see Hofweber et al., 2019, for further details). Respondents were asked how frequently they encountered in their environment sentences such as those presented in the task. Following Onar Valk and Backus (2013), we asked participants about “frequency” rather than “acceptability” of sentences to avoid participants referring to norms that are prevalent in a monolingual mode rather than in a bilingual mode. As shown in Hofweber, Marinis, and Treffers-Daller (2019), there is evidence that answers to a receptive code-switching frequency task correlate to bilinguals’ productive use of code-switching. Participants answered on a Visual Analogue Scale (VAS) (Llamas & Watt, 2014), which consisted of a ten centimetre horizontal line on which the endpoints were labelled on the left as “never” and on the right as “always”, which allows for collecting more subtle answers than would be possible with a Likert scale. Participants also filled in the Language History Questionnaire (Li, Zhang, Tsai, and Puls (2014). Participants were individually tested by the second author of the paper.

## Results

We found that there was a significant difference between groups in their scores on items representing congruent lexicalization (ANOVA,  $F(1,98) = 6.67$ ,  $p = 0.01$ ), in the direction of Turkish to English as in (1).

(1) Ağustos is iğrenç

“August is disgusting.” (Treffers-Daller, 2020)

In line with expectations, the UK-based Turks indicated encountering this type of code-switching least frequently ( $M = 40.11$ ,  $SD = 11.240$ ), whereas among the Cypriots it was the Cyprus-born Turkish-Cypriots living in Cyprus who reported encountering it most frequently ( $M = 48.8$ ,  $SD = 9.47$ ), although the differences among the three Cypriot groups were not significant (probably due to lack of statistical power).

## Discussion

In the paper we have shown that congruent lexicalization can be found in language pairs which are typologically distinct, if there is a long tradition of language contact between both languages. It was possible to capture the subtle differences in codemixing patterns with the help of a novel task, the code-switching frequency task, which was created on the basis of corpus data, and thus has ecological validity. As this is a receptive task, validity for informants’ productive codemixing behaviour cannot automatically be claimed. It is however, a good option for those researchers wishing to tap into informants’ codemixing behaviour in experimental settings where collecting corpora of spontaneous speech is not an option.