

Cognitive Cost of Switching Between Standard and Dialect Varieties.

Neil Kirk¹, Mathieu Declerck², Ken Scott-Brown¹, Vera Kempe¹ & Andrea Philipp²

¹Abertay University, ²Rheinisch-Westphälische Technische Hochschule Aachen

Introduction:

- Switching between languages in picture naming incurs a cost associated with inhibition of the non-target language (Meuter & Allport, 1999).
- This cost is symmetrical in balanced bilinguals and asymmetrical in unbalanced bilinguals with higher cost associated with switching back into L1 (Costa & Santesteban, 2004).
- We investigated whether cost is incurred in similar ways by bidialectals switching between two dialects.
- To increase generalisability, we conducted this experiment in 2 locations: in Scotland using Standard Scottish English and Dundonian-Scots bidialectals) and in Germany using German and Öcher bidialectals).
- We also investigated differences between active vs. passive, and older vs. younger bidialectals.

Method:

Participants: 72 bidialectals

Scottish experiment: 16 'active', 16 'passive' bidialectals.

German experiment: 16 younger, 16 older bidialectals.

Materials:

- 2 cognate blocks (e.g. 'house' vs. 'hoose'; 'Banane' vs. 'Banan')
- 2 non-cognate blocks (e.g. 'children' vs. 'bairns'; 'Hose' vs. 'Boks').

Each block contained 72 items with a similar number of switch vs. non-switch trials distributed equally across items and dialect varieties.

Task: Name picture in one or other variety depending on colour cue.

Results:

Scottish experiment: significant effects of

Cognate Status: Cognates < Non-Cognates, $p < .001$

Switch Status: Non-Switch < Switch, $p < .001$

Cognate Status X Dialect Variety, $p < .001$

Cognate Status X Switch Status, $p = .001$

German experiment: significant effects of

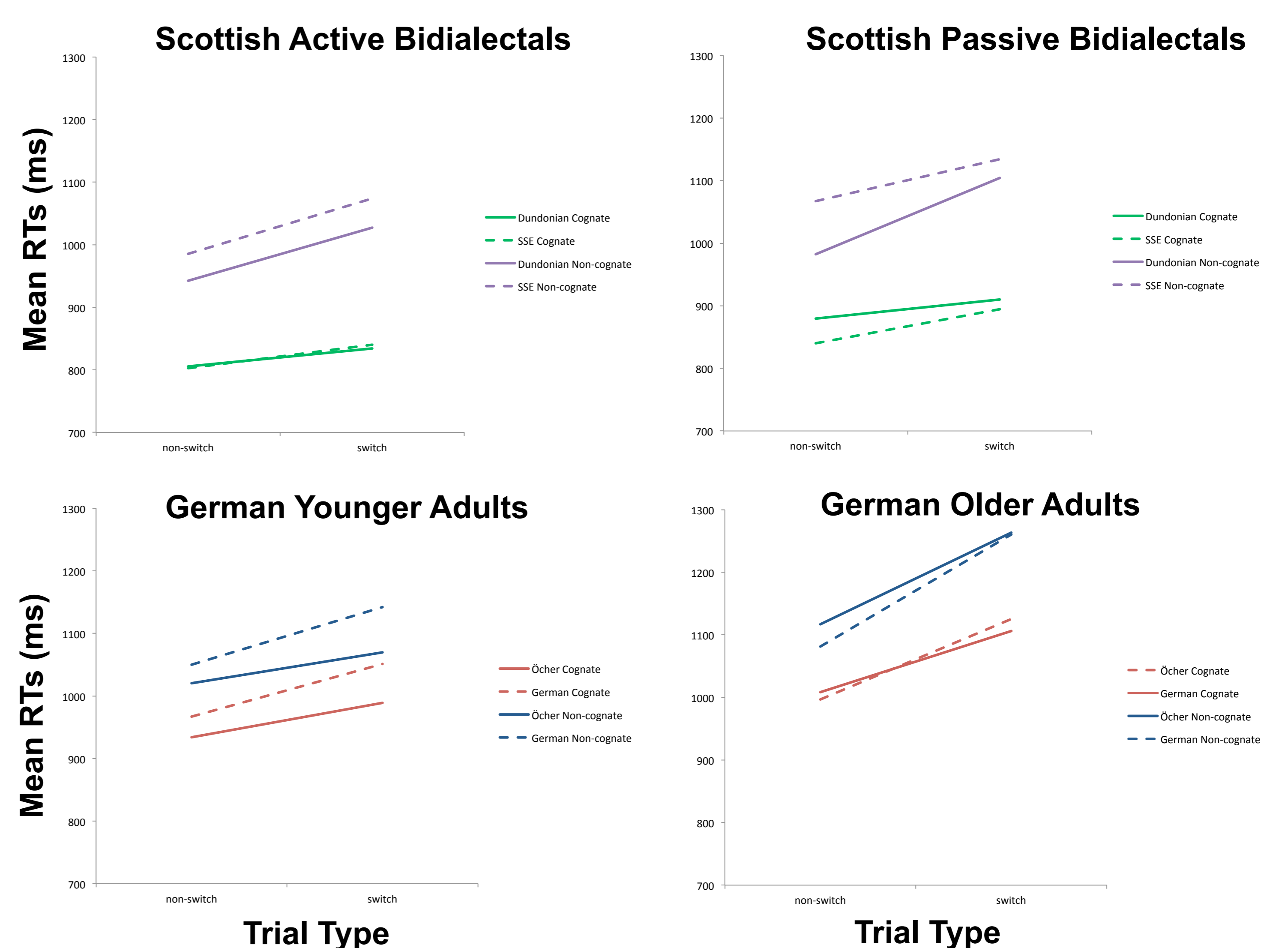
Cognate Status: Cognates < Non-Cognates, $p < .01$

Switch Status: Non-Switch < Switch, $p < .001$

Dialect Variety, $p < .05$

Dialect Variety X Age Group, $p < .05$

Dialect Variety X Switch Status, $p < .001$



Discussion:

- In both experiments, switch trials took longer than non-switch trials, replicating previous findings for bilinguals (Meuter & Allport, 1999). This suggests that there are distinct representations of dialect varieties, similar to languages.
- Both experiments also showed that cognates were named faster than non-cognates confirming that similarity reduces switch cost (Costa et al., 2000).
- A symmetrical switch cost, evidenced by lack of 'dialect variety x trial type' interactions in either experiment, was found for active and passive Scottish, as well as younger and older German bidialectals (Costa & Santesteban, 2004). Perhaps with equal exposure, asymmetry in production may not affect strength of representation.
- Further research needs to determine to what extent the switch cost is associated with inhibition of competing lexical entries or of competing articulatory settings.

References:

- Costa, A., Caramazza, A., & Sebastian-Galles, N. (2000). The cognate facilitation effect: implications for models of lexical access. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 26(5), 1283-1296.
- Costa, A., & Santesteban, M. (2004). Lexical access in bilingual speech production: Evidence from language switching in highly proficient bilinguals and L2 learners. *Journal of Memory and Language*, 50(4), 491-511.
- Meuter, R. F. I., & Allport, A. (1999). Bilingual language switching in naming: Asymmetrical costs of language selection. *Journal of Memory and Language*, 40, 25-40.

Acknowledgements:

Part of this research was funded by The Leverhulme Trust (RPG-375).



The Leverhulme Trust