

Language context matters: An ERP study of transient and sustained control in bilingual language switching

Ingrid Christoffels

Leiden Institute for Psychological Research Leiden Institute for Brain and Cognition

Carien Caljouw

Leiden Institute for Psychological Research TNO Technische Menskunde

Guido Band

Leiden Institute for Psychological Research Leiden Institute for Brain and Cognition

Niels Schiller

Department of Linguistics Leiden Institute for Brain and Cognition

Lorenza Colzato

Leiden Institute for Psychological Research Leiden Institute for Brain and Cognition

Abstract: There is an ongoing discussion in research on bilingual speech production on how control of language comes about. Recent studies showed that especially the dominant language suffers when switching between languages. Naming becomes much slower in such a mixed language context. We argued that these language context effects evidenced sustained global language control, which should be distinguished from transient local control induced by the switching between languages. Recently, we assessed the effects of language context by manipulating the percentage of switches between languages. Again, both behavioral and EEG data suggested that mixing had a profound effect on the first language, even when tested in a monolingual task. It appears that both sustained and transient control processes are important for language control, and that both processes may be best characterized in a qualitatively different way and subserve different aspect of language control.