Processes and Mechanisms of Bilingual Control: Insights from Monolingual Task Performance Extended to Simultaneous Interpretation

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Abstract

A topical question in the study of bilingualism from a psycholinguistic perspective is how bilinguals manage to produce relatively pure monolingual language output when the communicative setting requires them to do so. Models that account for this behaviour assume subtle control processes that differentially activate and/or inhibit each of the two underlying language sub-systems and that inhibit — prior to articulation — output of the non-target language sub-system that might otherwise seep through. The control operations in simultaneous interpreting are likely to be even more complex due to the fact that this form of language behaviour demands that both of the interpreter’s language sub-systems are activated, but possibly to a different extent. In this paper we will discuss a number of views on bilingual language control in “monolingual” tasks and, especially, in simultaneous interpreting, which presumably is the cognitively most demanding “bilingual” task. A monolingual task (as we define it) is one where, in theory, the (bilingual) participants only have to address one of their language sub-systems and where, ideally, pure output is produced. A bilingual task is one where task performance requires that both language sub-systems are implicated. A number of studies suggest that the control exerted by bilinguals in monolingual and bilingual language tasks is effectuated by a more general cognitive system that takes care of the control of action in
general. An attempt will be made to relate simultaneous interpreting to this more general theory of control.

1. Introduction

After decades of relative neglect, the question of how bilinguals control their two languages such that most of the time the output emerging from the system is in the “target” language — the language the bilingual “intended” to speak and that is appropriate given the specifics of the communicative setting — now features prominently on the research agenda of many researchers of bilingualism. Intrusions of the non-target language (“language switches”) do occur, but their incidence is typically low, especially in the speech of relatively fluent bilinguals (Poulisse 1999) and in settings where code switching would hinder the conversation flow, such as when a bilingual speaker shares only one language with a monolingual interlocutor (Grosjean 1997a). How does the bilingual manage such relatively language-pure output? An answer to this question is of special interest to translators and interpreters, for whom it is a professional requirement that elements from the source language input intrude in the target language output as infrequently as possible. This paper provides insights gained from psycholinguistic research on the processes and mechanisms that prevent these unwanted language switches from occurring more frequently than they do.

1.1 Co-activation of the non-target language

The low incidence of language switches is especially surprising given the fact that a steadily increasing number of bilingual studies suggest that, both during the various stages of processing a language input (in comprehension) and during the various stages from a conceptual message to be verbalized to the actual language output (in production), not only elements belonging to the target language are activated in bilingual memory but also elements of the non-target language. Pertinent evidence that points at activation of the non-target language in bilingual language comprehension comes from at least three types of bilingual studies: “interlexical neighbourhood” studies, “phonological activation” studies, and “interlexical homograph” studies (see De Groot, Delmaar, and Lupker 2000 for details). The interlexical neighbourhood studies have shown