

Cognate facilitation and switching costs in unimodal bilingualism: British Sign Language and Irish sign language (BSL)

This presentation reports on a study of sign language unimodal bilingualism. It is not known whether it resembles unimodal spoken language bilingualism, whether it is more like bimodal (spoken and signed) bilingualism, or whether it has unique qualities.

Bilinguals are able to separate two languages during language production. (Costa and Santesteban, 2004). In a picture naming study comparing language switching performance in L2 learners and highly proficient performers, Costa and Santesteban (2004:507) found a switching cost, with switch responses taking longer than same-language responses. This cost was asymmetric for L2 learners. Switching to L1 was harder than switching to L2, and proficient bilinguals were faster at naming pictures in their L2 than in their L1. Similar findings had been previously reported by Meuter and Allport (1999). In a recent study, Christoffels et al (2007:192) found a cognate facilitation effect as well, with more rapid naming of pictures where the words in the two language were related. Because of iconicity in sign languages, signs may be similar in unrelated sign languages, and thus appear like cognates ("pseudo-cognates").

The study on unimodal (sign language) bilingualism reported here used a picture naming task to investigate switching costs between British Sign Language and Irish Sign Language - historically unrelated and mutually unintelligible sign languages. The signs for half of the pictures were totally different in the two sign languages; the signs for the remaining stimuli were pseudo-cognates differing by one or two articulation parameters (eg handshape, location or movement). A switching cost was found, with switch responses slower than non-switch responses trials. A clear L2-L1 asymmetry was not found, but there did appear to be a language specific effect: producing ISL is faster than producing BSL. A stronger cognate facilitation effect was found where response latency was shorter where the item had pseudo-cognates in both ISL and BSL. The implications of these findings for models of bilingual lexical access will be discussed.