A boat in a boot: Cognate effects during interlingual homograph translation

Randi Goertz, Ton Dijkstra & Alex Wahl
Radboud University

Translation is a complex process as it requires comprehension in one language and subsequent production of the translation equivalent in the other language. The aim of the current study was to gain more insight in the selection processes during word translation. We conducted a translation production task in proficient Dutch-English bilinguals. We included cognates (e.g., beaver-bever), interlingual homographs (IHs, e.g., room-kamer, the Dutch word room translates to cream), words that are a combination of cognates and IHs (e.g., angel-engel, the Dutch word angel translates to sting), and IHs with the other reading being a cognate (e.g., boot-laars, but the Dutch word boot translates to boat). The materials were distributed across two blocks, one for each translation direction. We replicated the IH interference effect, (i.e., slower translations and more errors for IHs than control words), and showed that the cognate facilitation effect (i.e., faster translations and higher accuracy for cognates than control words) is similar in IHs and non-IHs. ‘Hidden cognate’ IHs (e.g., boot-laars) elicited more errors than normal IHs (e.g., room-kamer), but reaction times did not differ. Furthermore, translations from English to Dutch were slower and elicited more errors in the second block when the English reading had to be inhibited in the first block. Our findings are in line with the idea that the irrelevant reading of the IHs is inhibited and suggest that the word selection is made at the semantic level. We suggest that effects of translation direction and block order are due to sustained inhibition of the irrelevant language.
Figure 1. Examples of the translation process of an Interlingual Homograph/Cognate combination (left side, Dutch *boot* to English *boat*) and a ‘Hidden Cognate’ Interlingual Homograph (right side, English *boot* to Dutch *laars*).