

# Study shows bilinguals are unable to 'turn off' a language completely

August 18 2009

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With a vast majority of the world speaking more than one language, it is no wonder that psychologists are interested in its effect on cognitive functioning. For instance, how does the human brain switch between languages? Are we able to seamlessly activate one language and disregard knowledge of other languages completely?

According to a recent study published in *Psychological Science*, a journal of the Association for Psychological Science, it appears humans are not actually capable of "turning off" another [language](#) entirely. Psychologists Eva Van Assche, Wouter Duyck, Robert Hartsuiker and Kevin Diependaele from Ghent University found that knowledge of a second language actually has a continuous impact on native-language reading.

The researchers selected 45 Ghent University students whose native-language was Dutch and secondary language was English. The psychologists asked the students to read several sentences containing control words — plain words in their native-language—and cognates. Cognates are words that have a similar meaning and form across languages, often descending from the same ancient language; for example, "cold" is a cognate of the German word "kalt" since they both descended from Middle English.

While the students read the sentences, their eye movements were recorded and their fixation locations were measured—that is, where in the sentence their eyes paused. The researchers found that the students looked a shorter period of time at the cognates than at the controls. So in

the example sentence "Ben heeft een oude OVEN/LADE gevonden tussen de rommel op zolder" (Ben found an old OVEN/DRAWER among the rubbish in the attic"), the bilingual students read over "oven" more quickly than "lade."

According to the psychologists, it is the overlap of the two languages that speeds up the brain's activation of cognates. So even though participants did not need to use their second language to read in their native-language, they still were unable to simply "turn it off." It appears, then, that not only is a second language always active, it has a direct impact on reading another language—even when the reader is more proficient in one language than another.

Source: Association for [Psychological Science](#) (news : [web](#))

Citation: Study shows bilinguals are unable to 'turn off' a language completely (2009, August 18)  
retrieved 26 April 2024 from  
<https://medicalxpress.com/news/2009-08-bilinguals-unable-language.html>

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