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Commentary

Lost and Found

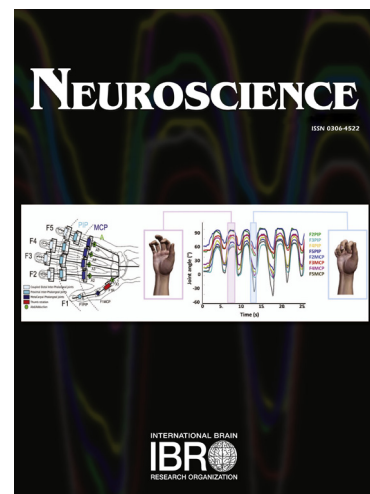
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Lost and Found

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“To forget, or not to forget. What are the questions?” Hamlet’s question was deeper - whether to live or to die - but as memory is so central to everyday life, retaining the capacity to remember is not so far from staying alive. A life without memory would be little life at all. So much has been investigated and written about memory – short and long-term, qualitatively different types of long-term memory, and the underlying brain areas and physiological mechanisms - that we are apt to ignore the potential importance of the ‘flip-side’ of memory, namely forgetting. Effective forgetting is also central to effective memory. Three new neurobiological papers have recently been published that highlight different aspects of forgetting (Madronal et al., 2016, Miguez et al., 2016, Roy et al., 2016).

Forgetting may, in the simplest case, be a true loss of memory. The underlying memory ‘trace’ becomes somehow degraded to the point where it is impossible, with any accuracy, to reactivate even bits of the information that had previously been encoded in the brain. Madronal et al’s and Miguez et al’s work speaks to this possibility. An alternative is that forgetting is sometimes a failure to access information that is still in some sense ‘in there’ but which cannot be reactivated. So called ‘tip-of-the-tongue’ experiences are of this kind, for they induce the curious mental dissociation of being unable to access a memory which we know that we have. Names of people are a case in point for, no sooner is the name given again, than one instantly recognises it as familiar amidst one’s embarrassment of having forgotten it. Roy et al’s paper zeroes in on the neurobiology of memory access – and they do so in the context of Alzheimer’s Disease.

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