



Klaus Oberauer

University of Zurich, Switzerland

23 MARCH 2021

Incidental and Intentional Memory – A New Dissociation Between Working Memory and Long-Term Memory?

Abstract:

I will provide evidence for a functional distinction between working memory (WM) and episodic long-term memory (LTM): Whereas episodic LTM keeps a non-selective record of experiences for future use, WM holds selectively only the information relevant for the current goal. Therefore, we should expect that the experiences we attend to and cognitively engage with leave a trace in episodic LTM irrespective of whether we intend to remember them or not. By contrast, information that we attend to and process is afterwards removed from WM immediately, unless we intend to maintain it. I will present experiments done together with Werner Greve (University of Hildesheim) in which participants made semantic judgments on words as an orienting task. Different groups were instructed to remember the words, forget the words after making the judgments, or given no instruction (incidental-memory baseline). In conditions typical for WM tests, the instruction to remember led to better recall than the other conditions. In conditions typical for LTM tests, there was no difference between conditions. In subsequent experiments we analyzed the effects of the three variables that distinguish WM tests from LTM tests: List length (close to WM capacity or much longer), retention interval (immediate or after a filled delay), and the amount of proactive interference from preceding trials. We found a beneficial effect of the intention to remember on the ability to recall the words only when lists were short, and proactive interference was strong. In these conditions, WM protects memory from proactive interference. Additional results revealed some unexpected effects that, among other things, call into question common assumptions about directed forgetting – if you want to know more, attend the seminar!