

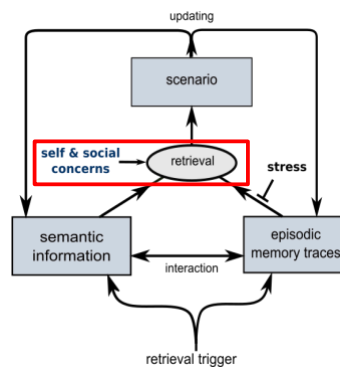
Memory and Self: How the narrative self shapes episodic recall.....A. Newen, R. Dings, N. Axmacher.....Project P7/FOR 2812

Abstract

We presuppose a framework of constructive memory such that episodic memory includes a central process of scenario construction (Cheng, Werning & Suddendorf, 2016). We discuss three routes of influence of the narrative self on episodic recall, namely **modifying the output, the process and the input** of scenario construction.

Related publications:

- Cheng, S., Werning, M., & Suddendorf, T. (2016). Dissociating memory traces and scenario construction in mental time travel. *Neuroscience & Biobehavioral Reviews*, 60, 82-99.
- Newen, A. (2018). The embodied self, the pattern theory of self, and the predictive mind. *Frontiers in psychology*, 9, 2270.
- Dings, R. & Newen, A. (submitted). Constructing the Past. How the narrative self shapes episodic recall.

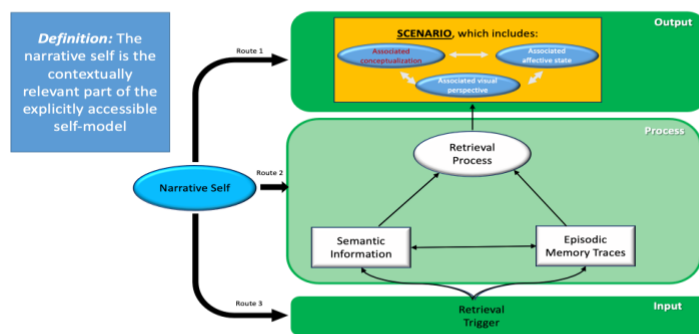


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Theoretical Framework

A Self-Memory Model with a focus on generative episodic memory

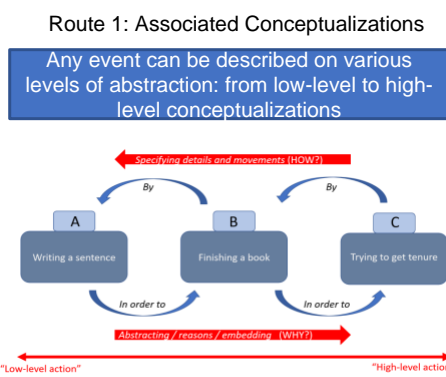


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Results

- Route 1: The narrative self influences the output of scenario construction:** The (Re-)conceptualization of fully constructed scenario's determines how the event is recalled. This has effects on visual and affective phenomenology:
- Perspectivity: If the content of episodic recall is incompatible with one's self-concept then observer perspective is becoming dominant (Libby and Eibach 2011).
 - Affective intensity: The narrative self can influence the emotional intensity of episodic recall (Valenti, Libby and Eibach 2011).



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Results/Conclusions

- Route 2: The narrative self influences the process of scenario construction by constraining and selecting (semantic) information.** This is due to the conceptualization of scenario components. For example, one component of a scenario construction process can be a wedding speech: the speech may be conceptualized as "the day two families became one" (high-level) or "the opening of a fun party at venue X" (lower level). The low-level conceptualization makes detailed information about e.g. the venue more relevant and accessible. If the high-level conceptualization is applied then this detailed information is abstracted from and not accessible for the recall.
- Route 3: The narrative self influences the input to scenario construction by behavioral embedding (niche construction) and reweighting the relevance of an event (for oneself):** This route entails that the narrative self may actively alter the environment such as to fit our narrative concerns. We distinguish two strategies. First, *behavioral embedding* entails that the narrative self may modulate the accessibility and availability of cues for memory retrieval, e.g. by putting objects triggering pleasant memories in the house and avoiding to meet people triggering unpleasant evidence (Heersmink 2018; Dings 2019). Second, the narrative self may change the relevance of events by *changing their narrative meaning*, e.g. by downgrading the relevance of a failure of an exam (Glenberg 1997; Dings 2020).

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Results / Conclusions

→ We distinguish three routes of influences of the narrative self on episodic recall, namely by influencing the output, the process and the input of scenario construction.