

- We review evidence on inhibition in human memory.
- We review applications of inhibitory mechanisms in Personal Information Management.
- By adopting cognitive principles, computers are currently in the process of learning to forget.

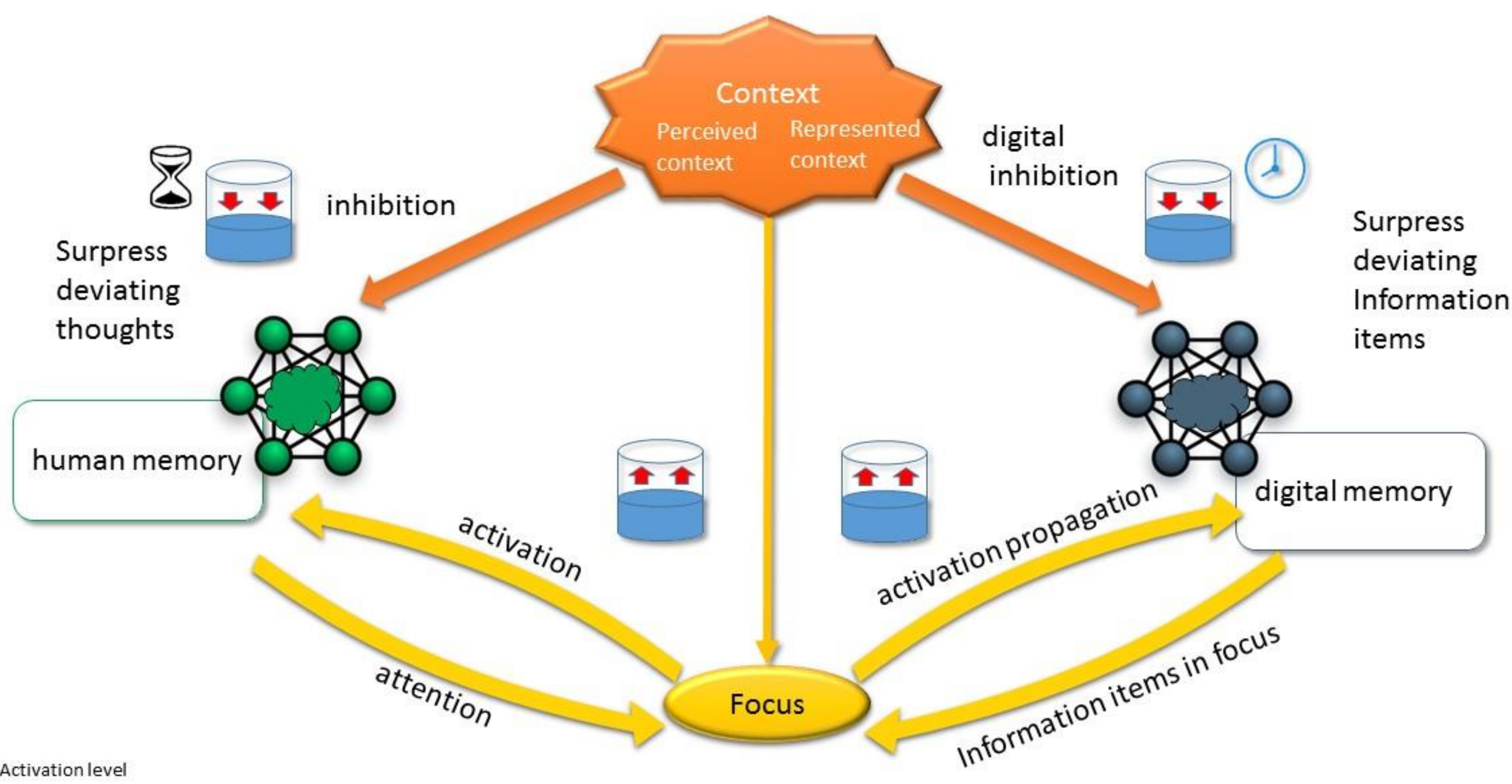


Temporarily Unavailable: Memory Inhibition in Cognitive and ComputerScience

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In press at *Interacting with Computers*

We develop a model of a combined psychological-computer-science approach for investigating inhibition in human and digital memory.



Memory		Inspired CS concepts	
Phenomenon	Function of inhibitory mechanism	Optimizing digital memory	Fostering cognitive process
Retrieval-induced forgetting	Enhancing task focus	Easing access to frequently accessed items (e.g. ranking, favorite lists, caching) on the cost of less frequently accessed ones	Highlighting of important items in user interface, un-stressing of less important ones
Forgetting in the think-no-think paradigm	Targeted suppression of currently unwanted information	Discourage or disallow access to parts of digital memory	Recommending not to access selected information; e.g., filtering of junk mail or blocking of applications
Directed forgetting	Excluding no longer relevant / outdated information	For items to be forgotten: punishment in ranking (retrieval); index pruning; information restructuring; (virtual) deletion	Context-based information hiding (dropping memory buoyancy at task switches)



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