Specialized 'event' cells help your brain keep all your memories organized, study suggests

Our <u>recollection of events</u> is usually not like a replay of digital video from a security camera—a passive observation that faithfully reconstructs the spatial and sensory details of everything that happened. More often memory segments what we experience into a string of discrete, connected events. For instance, you might remember that you went for a walk before lunch at a given time last week without recalling the soda bottle strewn on the sidewalk.

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Your mind designates a mental basket for "walk" and a subsequent bin for "lunch" that, once accessed, make many of these finer details available. This arrangement raises the question of how the brain performs such categorization.

A new study by neuroscientist Susumu Tonegawa of the Massachusetts Institute of Technology and his colleagues claims to have discovered the neural processing that makes this organization of memory into discrete units possible.

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[T]his idea may offer insight into how the brain generalizes knowledge to learn efficiently. "You're transferring knowledge you already have, based on past experience, to learn new things," Tonegawa says. "That's why we can learn things much faster." These insights, he thinks, could help engineers develop AI systems with the ability to transfer competencies from one environment to another, such as for medical robots moved between hospitals.

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