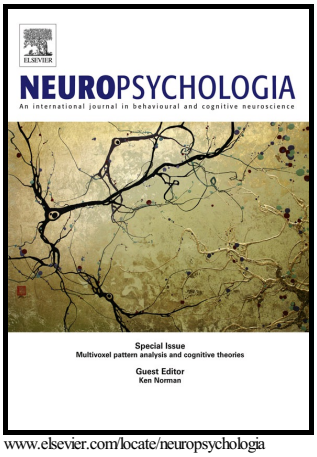

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Abnormal Semantic Knowledge in a Case of Developmental Amnesia

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Abstract

An important theory holds that semantic knowledge can develop independently of episodic memory. One strong source of evidence supporting this independence comes from the observation that individuals with early hippocampal damage leading to developmental amnesia generally perform normally on standard tests of semantic memory, despite their profound impairment in episodic memory. However, one aspect of semantic memory that has not been explored is conceptual structure. We built on the theoretically important distinction between intrinsic features of object concepts (e.g., shape, colour, parts) and extrinsic features (e.g., how something is used, where it is typically located). The accrual of extrinsic feature knowledge that is important for concepts such as *chair* or *spoon* may depend on binding mechanisms in the hippocampus. We tested HC, an individual with developmental amnesia due to a well-characterized lesion of the hippocampus, on her ability to generate semantic features for object concepts. HC generated fewer extrinsic features than controls, but a similar number of intrinsic