

## Reference and Representational Formats in Episodic Memory

On simulationist accounts of episodic memory, remembering a past event does not require the preservation of an appropriate causal connection between the original experience and its subsequent retrieval. Instead, episodic remembering is understood as the product of a reliable episodic construction system that simulates experiential episodes belonging to the subject's personal past. While this framework offers a powerful alternative to causal theories of memory, it faces an explanatory challenge: if episodic memories are not causally connected to past experiences, how can a given memory be about one particular past event rather than another event of the same type?

Openshaw and Michaelian (2024) address this challenge by proposing a broadly reliabilist model of mnemonic reference-fixing. Drawing on work on singular thought, their account explains reference not in terms of causal chains, but in terms of reliable, non-accidental relations between mnemonic representations and features of past events.

In this paper, I argue that this model overlooks a crucial dimension of episodic memory, namely the diversity of its representational formats. Both philosophical theorizing and empirical research leave open the possibility that episodic memories do not all share the same representational format. In addition to propositional representations, episodic memory has also been modeled as involving depictive or imagistic representations, among others. Because representational format constrains the ways in which a mental state can refer to events and properties, the question of format is directly relevant to evaluating the scope and adequacy of any model of mnemonic reference-fixing.

I distinguish at least three candidate formats for episodic memory—propositional, depictive, and analog—and examine whether Openshaw and Michaelian's model, and in particular what they call the *referentiality* and *veridicality* conditions, applies equally well to each. I argue that the referentiality condition is well suited to propositional episodic memories, which explicitly attribute properties to past events and are therefore naturally evaluated in terms of truth and error. By contrast, difficulties arise in non-propositional cases. Depictive and analog episodic memories do not explicitly, or even implicitly, attribute all relevant properties. Instead, they also rely on what I call *interpretive properties*, which are not directly encoded in the representational format itself.

I show that the original referentiality condition does not adequately capture how such interpretive properties are fixed. While depictive representations can explicitly or implicitly encode spatial and visual features, and analog representations can covary with certain magnitudes, neither format by itself allows to attribute emotional or conceptual properties. To account for these cases, I propose an amendment of the referentiality condition that distinguishes between attributable properties, which are fixed through explicit or implicit attribution by the episodic construction system, and interpretive properties, which are fixed through reliable interpretive processes operating on the output of that system.

I then turn to the veridicality condition, which is meant to account for how a successful episodic memory accurately represents the relevant past event. I argue that this condition also requires amendment once the diversity of representational formats is taken seriously. In particular, while propositional episodic memories can be evaluated in terms of truth and falsity, depictive and analog memories are more naturally assessed in terms of degrees of

accuracy. Moreover, different formats impose different constraints on what counts as accurate remembering, since not all formats are capable of representing the same properties. I therefore propose revised versions of the veridicality condition that (i) allow for graded accuracy, (ii) reflect the dependence of accuracy on representational format, and (iii) distinguish between accuracy with respect to attributable properties and accuracy with respect to interpretive properties.

The resulting account preserves the core simulationist–reliabilist insight that reference in episodic memory is fixed by reliable cognitive processes rather than by causal traces, while accommodating the heterogeneity of mnemonic representation. I conclude by considering and responding to worries about this proposal.