BOOK REVIEW

**Mental time travel: Episodic memory and our knowledge of the personal past**, by Kourken Michaelian, Cambridge, Massachusetts, MIT Press, 2016, 219 pp., $43.00 (hardback), ISBN 9780262034098

Kourken Michaelian is one of the principal architects in the emerging field of philosophy of memory (see, e.g., Michaelian & Sutton, 2017). His book *Mental Time Travel: Episodic Memory and Our Knowledge of the Personal Past* (hereafter, *MTT*), lucidly written and empirically well-informed throughout, is a landmark in the contemporary development of this field. Aside from being essential reading for memory researchers, it has a wealth of material that can be engaged with by more general philosophers of mind, psychologists, and anyone else who wants to know about the current state of the art regarding episodic memory. The book is well situated within philosophical and psychological research. Michaelian draws on a wide body of empirical work, providing a philosophical theory of episodic memory as a generative process rather than a preservative one. He also acknowledges that some of the arguments developed in the book (e.g., about meta-memory) are pending further empirical work. These arguments helpfully serve as an indication of the further empirical work that needs to be done.

One of the desiderata of the philosophy of memory is an adequate theory of episodic memory – one that is informed by science and that can guide further empirical work. The tripartite aim of *MTT* is to tell us the following:

1. What episodic memory is.
2. How episodic memory gives us knowledge.
3. Why episodic memory evolved the way it did.

Episodic memory is familiar to people as the recollection of episodes from one’s life in a quasi-perceptual format. It has phenomenological features that are also typical of imagination, making the question about the reliability of episodic memory in delivering knowledge even more pressing. Episodic memory is a fundamental and widespread phenomenon of human mental life; it applies to all, with the important exception of those who have specific forms of brain damage and those who have certain forms of aphantasia and cannot summon mental imagery. Michaelian makes reference to the former but not the latter. Nonetheless, his account could easily accommodate the case of aphantasiac individuals who simultaneously lack the ability to episodically remember and to experientially imagine because his project is to show that they involve the same mental phenomenon at work. In addition to outlining alternative theories on offer, *MTT* argues for an adequate theory of episodic memory.

While the explanatory target is human episodic memory, characterized as conscious mental time travel, Michaelian weighs in on many adjacent debates as his argument progresses, from the current state of epistemology to the evidence required to determine whether a trait is an adaptation. Sometimes his coverage of these adjacent debates is labored, and other times, it is quite quick. Although this potentially leaves *MTT* vulnerable to challenges at many points, every stage of the central argument – that
episodic memory is the imagination at work yet can still give us knowledge – is well argued, with continued reference to empirical work, as well as explanations for how that empirical work supports his argument.

_MTT_ has four parts that function as stages of an overarching argument. In Part 1, “Epistemology and Human Memory,” Michaelian sets out a clear and helpful guide for subsequent chapters (Chapter 1). He claims that memory is not a natural kind, and he delineates various types of memory, situating episodic memory in that taxonomy (Chapter 2). He also clarifies his epistemological approach, adopting a methodologically naturalist, moderate reliabilist, and pluralist viewpoint that seeks to sidestep the problems that have plagued epistemology (Chapter 3). The purpose of this part of the book is largely to set the stage for the next parts.

In Part 2, “Episodic Memory as Mental Time Travel,” Michaelian pursues aim 1. He rejects a number of common-sense commitments people intuitively have toward episodic memory (Chapter 4), and he argues against preservationist and causal theories of memory (Chapter 5). He even distances himself from standard constructionist theories of memory, adopting instead a pure simulationist theory of episodic memory that sees it as a form of mental time-travel on par with imagining the future (Chapter 6). One must return to the past via the imagination, and there is no need for any causal connection between the earlier experience and one’s imagination of it. This move distinguishes his view from an ostensibly similar theory by Robert Hopkins, which claims that while episodic memory is the imagination at work, it is also shaped by the past and is therefore causally dependent on the past. Michaelian points out that episodic memory involves construction at every stage, including encoding, storage, and retrieval, and it can include the generation of substantial new content without detracting from its epistemic reliability (see Hopkins, 2018).

In Part 3, “Mental Time Travel as a Source of Knowledge,” Michaelian pursues aim 2. He defends episodic memory as a genuine and generally reliable source of knowledge, going against the mainstream viewpoint of psychology as influenced by Frederic Bartlett and Elizabeth Loftus. He provides a detailed argument for the claim that testimonial information from others about events that we experienced can be unconsciously incorporated into the constructive process of episodic remembering. Furthermore, he adds that this argument could be generalized for other forms of unconscious incorporation, which could scaffold and bolster the epistemic reliability of episodic memory (Chapter 7). Further explanation is given for how episodic memory is reliable by appeal to two forms of meta-cognitive monitoring: source monitoring and process monitoring. Michaelian refers to these as meta-memory. Both types of monitoring can occur consciously or unconsciously. In source monitoring, people are able to monitor whether remembered information comes from a reliable source (Chapter 8), and in process monitoring, people are able to monitor whether they are remembering or imagining. Although there is no essential feature that distinguishes imagining from remembering, there are often characteristic differences which, when taken collectively, can help us to monitor the process of imagining and remembering (Chapter 9).

In Part 4, “The Evolution of Mental Time Travel,” Michaelian pursues aim 3. He speculates on the emergence of conscious mental time travel as an evolutionary adaptation, adding traction to the reliability and power of episodic memory as a source of knowledge. While this section is more speculative, there is a characteristic supply of evidence and argument to support his view. His focus is on why human episodic memory is conscious. Comparative work is addressed regarding animal episodic-like memory, and great effort is put into characterizing the conscious element of human episodic memory. This characterization looks at issues regarding self-awareness
and the subjective experience of time. Michaelian concedes that it is more difficult to
account for the adaptive nature of human episodic memory, which is distinctively
conscious, than animal episodic-like memory (Chapter 10). The contending accounts,
which seek to explain the adaptive nature of episodic memory, are characterized,
categorized, and considered. The account reviewed most favorably by MTT is a meta-
cognitive one. MTT then rejects this account in its present form and builds upon it. The
distinctive features of conscious episodic memory help agents to distinguish the
genuine events of the past from those that are merely imagined through unconsciously
driven metacognition (Chapter 11). In the last chapter, Michaelian provides the reader
with a short conclusion to the book, leaving us with an analogy and a reminder: episodic
memory is more like a painting than a photograph, and paintings can nonetheless be
more or less accurate conveyors of information (Chapter 12).

This book contains novel suggestions throughout, but one striking source of original
and thought-provoking argumentation is found in the defense of the intuition that
episodic memory is reliable. In this regard, Michaelian is protecting the epistemic status
of episodic memory while preserving the view that episodic memory is constructive. He
is therefore setting a boundary on Loftus-style research which seems to imply that the
constructiveness of memory entails its unreliability, and which has dominated psychol-
ogy and received popular coverage. He doesn’t criticize Loftus much; rather, he gives
foundational reasons to believe that epistemic memory must be reliable – appealing to
its evolutionary adaptiveness as part of a larger episodic construction system. Most
people are able, for the most part, to effortlessly distinguish a given act of remembering
from imagining and vice versa. Loftus’ studies on the unreliability of memory in some
situations are not in dispute. What is in dispute is the way that these studies tend to be
extrapolated to claim that episodic memory is unreliable by its nature – a claim which
has become like a paradigm in recent memory research.

The merits of this book are numerous. Any shortcomings the book may have can be
taken as invitations for others to engage in the philosophy of memory, whether that is
through supplying further details to defend Michaelian’s view of episodic memory, or
through challenging his view with a better defense of alternative theories. Nonetheless,
MTT is not a textbook on the contemporary philosophy of memory, although much
outlining of extant accounts can function in this way for the reader. Rather, it is a strong
attempt to convince others of Michaelian’s own viewpoint on the various issues he
covers. One of the main messages he hopes readers will take away is that we should
abandon one criterion of episodic memory: the apparently intuitive need for a causal
connection between a previous experience and our recollection of it. The neuroscience
of the present suggests, according to Michaelian, that episodic remembering and
imagining use mostly the same areas of the brain, which supports the view that we
have a single episodic construction system. Since our ability to recall events can be
understood as part of a more general system that constructs episodic simulations, we
have no need for a causal connection between past events and recollections of those
events. To remember is purely to simulate (or, equivalently, to imagine) what the past
was like. This theory claims that “there is no intrinsic difference between remembering
and imagining – to remember, it turns out, is just to imagine the past” (p. 14). Episodic
memory is a form of episodic imagination, distinguishable only by its temporal
orientation (p. 57).

Nonetheless, Michaelian grants that imagination and episodic memory tend to have
typical phenomenological points of difference, such as vivacity. While these differences do
not clearly distinguish episodic memory from imagination, they are often used (con-
sciously or unconsciously) for monitoring whether we are imagining or remembering,
and this increases reliability (pp. 186–187). Given the phenomenological differences that can be found between episodic memory and other forms of mental time travel, I was left wondering whether there might be more to be said regarding how to distinguish between episodic memory and the imagination. Even if there are no essential phenomenological differences between the two, the typical differences that help agents distinguish between them might point toward a more substantial distinction at the functional and neurological levels. We can therefore locate a dialectical tension in the overarching argument: theoretically, if one wanted to secure episodic memory as reliable, one would need to play up the phenomenological differences between episodic memory and imagination so that meta-memory monitors effectively; however, these phenomenological differences are precisely what might distinguish the two states from each other. We could also speculate that there might be good adaptive reasons for there being typical phenomenal differences between the two states, which are underwritten by subtle and fine-grained neural differences. Such differences may even help us to uncover causal connections from prior experience, based on the way the brain stores information about those experiences.

To avoid these worries, more could have been said in the positive project about the single episodic construction system that supposedly unites episodic remembering and imagining. Ultimately, we await further empirical work, but for now, there is no substantial reason to adopt a guiding framework that takes remembering to be, basically, imagining. Rather, there is a continued need for dialogue between philosophy and the sciences in its joint investigation of episodic memory. *Mental Time Travel* is a crucial contribution to that conversation.

**References**


Ben Springett

*Birkbeck College, University of London*

✉️ b.springett@bbk.ac.uk  🌐 http://orcid.org/0000-0001-6891-4296

© 2020 Ben Springett

https://doi.org/10.1080/09515089.2020.1761543