

theories than with others. It will, at the same time, be more convincing as a theory of justice.

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## REFERENCE

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***The Metaphysics of Memory*, by Sven Bernecker. New York: Springer, 2008, ix+191 pp. ISBN: 978-1-4020-8219-1 hb £81.00**

Given the recent dearth of philosophical work on memory, Sven Bernecker's *The Metaphysics of Memory* comes as a welcome intervention, particularly as it brings historical philosophical debates around memory into contact with relevant recent philosophical work and (though to a lesser extent) with relevant empirical work on memory. The book will be an indispensable addition to the library of any philosopher of memory; due to its systematic but accessible character, it will also be a useful resource for other researchers and advanced students in need of an introduction to the area.

Bernecker begins with a brief chapter providing some background on the project of the book. His focus on fact (rather than object, property, or event) memory, on veridical (rather than ostensible) memory, and on occurrent (rather than dispositional) memory is natural and familiar. His distinction between reproductive memory (memory for facts) and metarepresentational memory (memory for one's own mental states) is less so, and as he returns to the distinction elsewhere in the book, it would have been helpful to see it developed in more detail.<sup>1</sup> Chapter 1 also considers preliminary analyses of reproductive and metarepresentational memory; these amount to a schematic statement of the venerable causal theory of memory, according to which remembering requires a causal connection (via a memory trace) between a current representation and an earlier representation. Part I of the book then develops and defends a more precise version of the causal theory, while Part II argues for direct realism about the objects of memory and responds to scepticism about memorial knowledge by applying epistemological externalism to memory. Part III, the shortest but most interesting section of the book, is concerned with reconciling the factivity constraint (the requirement that the content of a memory matches a previously represented content) with the observation that memory is in general reconstructive, arguing in the process for a novel memorial contextualism according to which 'whether a memory state must be identical with the representational state it causally derives from or whether it suffices that the two states are merely similar depends on the conversational context of the rememberer and the attributor' (p. 169).

Part I begins with a chapter discussing a range of direct arguments for and against the causal theory. For example, In response to Malcolm's argument (against the theory) that

there are no causal laws governing memory, Bernecker points out that the relevant laws are likely to be complex and hence difficult to discover and that psychologists have anyway already discovered many lawlike regularities of memory (for example, the Ebbinghaus forgetting curve). And for example, in response to Martin and Deutscher's argument (for the causal theory) that memory counterfactually depends on earlier representations, he points out that the relevant counterfactual statements are not equivalent to causal statements. Having dismissed a range of arguments both for and against the causal theory, Bernecker nevertheless concludes in favour of the theory on the ground that its main rival, the epistemic theory (according to which memory is retained knowledge), is unsatisfactory. According to the 'pure retention' variant of that theory, memory requires (roughly) 'having learned something and not forgotten it' (Ryle's formulation); Bernecker points out that the pure retention approach fails to provide any account of what is involved in retaining knowledge. According to the 'evidential retention' variant of the theory, memory requires sameness of justification; the basic problem for the evidential retention approach, according to Bernecker, is in the end simply that it is a version of the epistemic theory, for while memory implies truth, it does not (contra the epistemic theory) imply justification.

While Chapter 2 provides a general argument for understanding memory in causal terms, Chapter 3 argues specifically for understanding memory causation in terms of memory traces; the alternative is Russell's theory of mnemonic causation, according to which past experiences can be directly causally active over a temporal distance. Bernecker's strategy here is again indirect: he concedes that Russell's theory is tenable in principle, but argues that we should come down in favour of traces if the latter are understood as theoretical posits.<sup>2</sup> Bernecker considers and rejects several arguments for the existence of traces, including an argument from neurobiology. The basic thought here seems to be that since the empirical evidence for traces is inconclusive, we are not entitled to rely on it when formulating a philosophical theory of memory; this is a puzzling strategy, for it sets the evidential bar unreasonably high, even while failing to respond to the available explicit psychological and neuroscientific discussions of the evidence for traces. After defending Russell's notion of mnemonic causation by suggesting that causation can be defined in terms of regular sequences, Bernecker nevertheless concludes that we should endorse traces, for unlike mnemonic causation, causation via traces actually explains the retention of information.

Chapter 4 completes the account of memory causation by providing an account of the conditions under which a trace can be said to give rise to genuine remembering; the concern here is with the contribution of cues to remembering. Bernecker's view is that the content of the trace 'must be an independently sufficient condition (that is not preempted by another independently sufficient condition) of a state of recounting or at least a necessary condition of such an independently sufficient condition' (p. 54). The formulation is a mouthful, but it is nicely clarified by discussion of a series of examples; the upshot is that only in cases in which a cue preempts a trace does genuine remembering fail to occur. Bernecker's approach here is fairly similar to Martin and Deutscher's influential account, though (as he notes) it differs from the latter on certain points.

Part II begins with chapters arguing for direct realism and against representative realism and concludes with a chapter arguing that scepticism about memorial knowledge can be avoided by applying epistemological externalism to memory. Chapter 5 defends direct realism against objections and argues that the view is compatible with the causal theory. In defence of direct realism itself, Bernecker suggests, for example, that we adopt a counterpart of disjunctivism in the philosophy of perception in order to account for memory hallucinations. Bernecker responds to a variety of worries about the compatibility

of direct realism and the causal theory (with its reliance on traces), but his chief (and convincing) claim here seems to be that '[m]emory-data do not function as the primary objects of awareness, but are merely the vehicle of the remembered information' (p. 75). Chapter 6 challenges representative realism by arguing that it leads to scepticism about memory knowledge. Critiquing responses to the problem of scepticism in terms of memory markers, Bernecker discusses, *inter alia*, Hume's proposal that memory is distinguished from imagination by its vivacity and Russell's proposal that memories are marked by familiarity and a feeling of pastness. Unfortunately, while he notes the similarity of these proposals to the contemporary psychological source monitoring and fluency processing frameworks (respectively), he does not investigate in any detail whether such recent work on metamemory might provide new resources enabling the representative realist to avoid scepticism about memorial knowledge. Nevertheless, given the nature of internalist standards for knowledge, his conclusion that the only way to avoid scepticism about memorial knowledge is to reject internalism is likely right. Chapter 7 provides additional argument in favour of externalism about memorial knowledge. Bernecker's strategy here is once more indirect: he argues that internalism about memorial knowledge is untenable (for example, by arguing that internalism is unable to cope with the problem of forgotten evidence) and concludes that some form of externalism about memorial knowledge—he favours either Burge's account in terms of an *a priori* entitlement to rely on memory or Goldman's account in terms of reliable cognitive processes—must be correct.

Part III, the final section of the book, is concerned with reconciling the factivity constraint with the observation that memory does not simply reproduce stored thoughts but rather actively processes them, which reconciliation Bernecker proposes to effect via a form of memorial contextualism. Chapter 8 challenges the 'xerox' model of memory that the factivity constraint is often taken to imply and argues that memory involves not only the storage but also the processing of information. The argument against the xerox model, according to which the content of a memory must be type-identical to that of an earlier thought, is welcome but does not go far enough. Bernecker rightly emphasizes that successful remembering is compatible with a certain amount of reconstruction of content. Oddly, however, he seems to suggest that psychologists have failed adequately to take the constructive nature of memory into account; here, he cites early frameworks (gestalt psychology, Freudianism, etc.) and several works from the 1970s but ignores the voluminous contemporary psychological literature on constructive memory. Due perhaps to this failure to draw on the contemporary literature, Bernecker does not manage to leave the xerox model fully behind even when he argues that successful remembering is a matter of reconstructive information processing. He writes, for example, that '[s]ometimes our memory *is* supposed to work like a tape recorder giving a verbatim rerun of stored information', giving various supposed examples of this function of memory, including 'particularly vivid memories of important events' (p. 146). The contemporary literature, however, makes clear that (however much we might sometimes wish that our memories at least sometimes worked like tape recorders), literal reproduction is no part of the function of memory; the literature on flashbulb memories, for example, shows that even particularly vivid memories of important events involve reconstruction (Christianson 1989; Talarico and Rubin 2007; Cubelli and Della Sala 2008).

Though this failure to acknowledge the thoroughly constructive character of memory affects the final two chapters of the book, these nevertheless contain extremely valuable contributions. Chapter 9 develops an answer to the question how much difference between the original content and the retrieved content is compatible with genuine remembering. Here, Bernecker proposes a set of principles spelling out the similarity

requirement; these cover tense adjustment, universal instantiation, existential generalization, conjunction elimination, and the like. The various principles have in common that they permit loss but not enrichment of information, and indeed Bernecker argues explicitly that remembering is incompatible with enrichment of content. The crucial move in the latter argument is an appeal to the fact that 'we often rectify our memory claims, once their falsity has been pointed out to us, by reducing their informational content' (p. 164). This appeal to our everyday practice is unsatisfying, however, given that contemporary psychology tells us that enrichment of content by memory is a routine matter. Despite the overly restrictive nature of Bernecker's similarity requirement, the development of a detailed account of the similarity of memory contents to the earlier contents from which they stem is an important contribution.

The final chapter of the book is concerned with what determines whether precise content matching or only content similarity is required for successful remembering; drawing inspiration from contextualist epistemology, Bernecker argues that this is determined by the conversational context (of the rememberer and the attributor). Most likely, those who are attracted to contextualism in epistemology will be favourably disposed towards memorial contextualism, while those who have doubts about epistemic contextualism will similarly have doubts about memorial contextualism; nevertheless, the proposal is novel and represents an important contribution to the analysis of memory. Hopefully, future work will explore whether memorial contextualism can be combined with a similarity requirement permitting enrichment of content.

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## NOTES

<sup>1</sup> Bernecker does suggest that the reproductive/metarepresentational distinction maps onto the psychologists' semantic/episodic distinction, but the discussion of the relation between the two distinctions is too brief to be of much help.

<sup>2</sup> His discussion of the nature of traces perhaps goes by too quickly: he identifies the traces involved in fact memory with dispositional beliefs; but memory stores both traces which the subject would not accept if they were retrieved (so that she lacks the corresponding beliefs) and traces which are irretrievable (so that she lacks the corresponding dispositions).

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