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Is Future-oriented Mental Time Travel Inextricably Linked to the Self?

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Abstract

Ganeri's discussion of mental time travel and the self focuses on remembering the past, but has less to say with respect to the status of future-oriented mental time travel. This paper aims to disambiguate the relation between prospection and the self from the framework of Ganeri's interpretation of three Buddhist views - by Buddhaghosa, Vasubandhu, and Dignaga. Is the scope of Ganeri's discussion confined to the past, or is there a stronger assumption that future thought always entails self-representation? I argue that if mental time travel towards the past and towards the future are continuous, both past and future thought should be possible independently of self-representation. An assumption of discontinuity however would enable the employment of the self as one of the defining differences between remembering the past and imagining the future. The two options can be further contrasted on the basis of distinct ways of constructing past/future scenarios (field vs. observer perspective), modes of experiencing time (known vs. lived), and the origin of mental time travel (episodic vs. semantic memory). I further assess the compatibility of future-oriented thought with the three Buddhist views on the basis of these coordinates.

1. Introduction

Does mental time travel require a sense of self? Or, to use Tulving's (1985) metaphor, can there be mental time travel without a traveller? In 'Mental Time Travel and Attention', Ganeri addresses these questions from the perspective of three Buddhist views on memory and mental time travel. Owing to its negation of the self-implication condition, and its independence from representationalism, Ganeri favours Buddhaghosa's view. While Ganeri's arguments hold if mental time travel is thought of predominantly on the model of remembering the past, one may wonder where the future comes in within this picture. The range of the self-implication condition can be explored through a set of distinctions involving future thought: the debate between continuism and discontinuism, field and observer perspective, known time and lived time, and semantic versus episodic memory accounts of mental time travel. This paper aims to disambiguate the status of future-oriented time travel in relation to the self from the offset of Ganeri's investigation. The

motivation for this inquiry lies in the role of prospection in current psychological research on memory and mental time travel.

Remembering the past as the paradigmatic case of mental time travel transpires from Ganeri's definition of mental time travel, alongside his reconstructions of two of the Buddhist views (Buddhaghosa's and Vasubandhu's). From the onset, describing Tulving's challenge, Ganeri (forthcoming) defines mental time travel from the perspective of the past: 'mental time travel is the reliving or re-experiencing of an experience one has had before, a relocating of oneself in subjective time to the past (or, equally, to the future)' (p. 3). Likewise, the reconstruction of Buddhaghosa's view focuses on the past, with no mention whether the future would by default require the self, or whether this perspective may be extended to the future: 'Buddhaghosa's contribution to this discussion is to argue that *consciousness of one's past* can be grounded in a type of auto-noesis that does not require self-representation' (p. 16, my emphasis). Moreover, in Ganeri's description of Vasubandhu's approach, future-oriented thought only appears in conjunction with self-representation: 'for Vasubandhu, however, both autobiographical episodic memory and future-oriented thought are forms of delusion...' (p. 24). While not overtly stating it, Ganeri appears to either confine his talk about time without self to the past, or, on a stronger claim, to assume that the self-implication condition always holds for future-oriented mental time travel. In what follows I show that both interpretations above – extending Ganeri's argument for the past to the future, or arguing that unlike the past, future thought requires a sense of self - can find support in present psychology.

2. The importance of mental time travel towards the future

Regarding the role of memory and mental time travel, one hypothesis from psychology focuses on the pursuit of future goals, rather than on remembering past events. For instance, Suddendorf and Corballis claim that 'the crux of mental time travel lies in its role in enhancing biological fitness in the future, so that mental time travel into the past is subsidiary to our ability to imagine future scenarios' (2007: 302). Klein brings forth a proposal along the same lines: 'it is possible that memory enabled humans, over the course of evolutionary history, to be aware of the future before we were able to consciously experience the past' (2013: 64). It should be noted that these claims are made from a naturalistic perspective, where the preservation of the self holds a central role. My focus, however, rests on a number of philosophical issues related to the function of future-oriented mental time travel, as well as its relation to remembering the past.

One issue is the debate over continuity versus discontinuity between future and past-oriented mental time travel. Perrin and Michaelian (2017) describe discontinuism and continuism as follows:

‘for the latter, there is a difference in kind between what we do when we remember the past and what we do when we imagine the future; for the former, there is only a difference of degree’ (p. 229). For the purposes here, adherence to one of these views may bring about different consequences with respect to the relation between mental time travel towards the past and the future. Continuism would require an explanation of imagining the future consistent with the main characteristics of remembering the past. By contrast, discontinuism would leave open the possibility of completely distinct processes involved in thinking about the past and the future, and the two can, at least in principle, be investigated separately.¹ The consequences of these two stances, along with the connection between semantic memory and imagining the future will be brought together with self-implication in the next section.

Another issue, analyzed by Klein and Steindam (2016), is the relation between mental time travel and the subjective experience of temporality. The authors distinguish between ‘lived time’ and ‘known time’. As the authors put it, ‘in the former case, subjective temporality is directly given as part of one’s occurrent mental state, whereas in the latter, subjective temporality is the product of inferential or interpretive acts’ (p. 142). For my purposes here, the key difference is that unlike ‘known time’, ‘lived time’ requires a sense of self. In continuation of Tulving’s (1985) work, the authors extend ‘known time’ to noetic consciousness and future scenarios on the basis of semantic memory: ‘by allowing that noetic consciousness can promote a form of temporal subjectivity based on conceptual analysis (i.e., “known time”), the construct can be modified to accommodate the type of subjective temporality associated with semantic-based FMTT [future mental time travel]’ (p. 143). The future scenarios based on semantic memory go against the view that future-oriented mental time travel originates exclusively in episodic memory, and is illustrated by Klein by reference to patients with memory impairments who can imagine a public future, but lack the sense of ownership of the scenario (see D.B.’s case, in Klein 2013).

A final distinction is between observer perspective and field perspective (Nigro and Nisser 1983). The field perspective, despite its association with the first person perspective, appears to correspond largely to memories where one remembers a view, but not one having experienced the view: ‘... the scene appears from one’s own position; one seems to have roughly the field of view that was available in the original situation and one does not “see oneself” (Nigro and Nisser 1983: 467-468). This is contrasted with memories where one sees one’s self, from a third person view, having the same experience. Research by McDermott et al. (2016) shows that these two perspectives also apply to anticipating the future. The work by Nigro and Nisser, McDermott et al.,

¹ On the classification by Perrin and Michaelian, extreme discontinuism holds that the two can be investigated separately.

and D'Argembeau and Van der Linden converges on the prevalence of the observer perspective for events going further back or forward in time. This distinction is important for the paper here for two reasons. Firstly, the field perspective may be compatible with scenarios akin to the one by Buddhagosa's, where a memory is reenacted as if one were reexperiencing it without seeing one's self as part of the memory. With the addition of insights by McDermott et al., this may provide a lead to extending Ganeri's take on Buddhagosa's view to the future. Namely, if remembering a past experience is a kind of simulation (Ganeri 2017: 414), the same paradigm could apply to anticipating an experience constituted of familiar states. Secondly, if this distinction applies to both future and past, it adds to the evidence for continuism: people can experience both the future and the past from both perspectives.

3. Future-oriented mental time travel and the self

The distinctions above help disambiguate the relation between future-oriented mental time travel and the self-implication condition. Notably, the psychological evidence favouring continuity would imply that the possibility of remembering one's past without remembering one's experiencing it may equally apply to imagining the future. The distinctions between lived time and known time, as well as the observer and the field perspective would flesh out the continuist picture. By contrast, discontinuity would enable a separate treatment of remembering the past, imagining the future, and their connection to the self-implication condition.

If there is continuity between past and future-oriented mental time travel, and it is possible to remember the past without a sense of ownership of the experience, then the same should hold for anticipating the future. The question is how to describe a future scenario where there is no ownership from the subject's part. There are two answers, based on the distinctions by Nigro and Nisser on the one hand, and Klein and Steindam, on the other hand. Firstly, the field perspective can be mapped onto future scenarios without including one's sense of self. Thus, it would be possible, for instance, for one to anticipate seeing a sunset from the field perspective, without conceptualizing one's self as watching the sunset, on the basis of previous acquaintance with the surroundings, having watched sunsets from different angles etc. As sketched above, connecting the field perspective to the future may provide the starting point for an extension of Ganeri's considerations on Buddhaghosa and recollecting the past. Ganeri's (2017) approach to mental time travel towards the past as simulation may as well work for future scenarios involving previously experienced components (as opposed to, say, a scenario based on recollection). Secondly, future scenarios independent from the sense of self can fall under 'known time'. As shown by Klein (2013), imagining future scenarios on the basis of semantic memory is possible under impairments of

episodic memory. One example is the patient D.B., who, despite remembering past events, had trouble claiming ownership of his memories. Nevertheless, he could anticipate a public future. The possibility of constructing both past and future scenarios on the basis of semantic memory is consistent with continuism. The difference between this way of imagining the future and the field perspective is that 'known time' is inferential. That is, one can reconstruct the past or project the future by putting together information which does not necessarily involve one's self. This picture is more sophisticated than the reconstruction of Buddhaghosa's view, as it requires representation, and may work as an interpretation of reflexivity under Dignaga's view. Finally, it should be noted that continuism is not completely incompatible with the self-implication condition. If the self is defined such that it accommodates differences in degree, but not in kind, between remembering the past and anticipating the future, then the self-implication condition need not stand or fall along continuity between past and future-directed mental time travel.

If mental time travel towards the future and towards the past are discontinuous, then the self-implication requirement may contribute to the difference in kind between the two. Under the assumption of discontinuity, it could be the sense of self as such, or a set of capacities that may apply to the future but not to the past constituting the self, that distinguish past from future-oriented mental time travel. In relation to the 'lived time'-'known time' distinction, a version of discontinuity reliant on self-implication would deny the possibility of future scenarios based solely on known time, and thus, even when they originate in semantic memory, the self may still be present. This appears to hold in Klein's (2013) interpretation of the situation of another patient, R.B., who can imagine a personal future on the basis of semantic memory. The self-implication condition for future-oriented mental time travel under the discontinuity assumption can be further supported by the naturalistic perspective sketched above. Namely, if the purpose of memory and mental time travel is the preservation of one's self, the sense of self may not be essential for remembering the past, but it is always present upon imagining the future. This can be strengthened by the observer perspective holding for distant future, where scenarios are more often accompanied by a vision of one's self in third person perspective. While this appears to be inferential, as in the case of known time, the representation of the time traveller is necessary. As with continuism above, discontinuism does not necessarily rule out the possibility of future-oriented mental time travel without the self. Nevertheless, since under discontinuism remembering the past and imagining the future may be underwritten by different capacities, an account of future-oriented mental time travel independent from the self-implication condition would need to employ structures different from those that hold for past-oriented time travel.

4. Conclusions

Simply put, if Ganeri's argument mainly applies to past-oriented mental time travel, the current investigation could widen its scope, to include the future. However, if Ganeri assumes future-oriented mental time travel to entail the self, then this stance can draw either from a commitment to a version of discontinuism focusing on the self, or from a definition of the self consistent with the evidence for continuity (i.e., as a matter of degree) applying to the future, but not to the past.

If future and past-oriented mental time travel are continuous, the self-implication requirement can hold for the future and not the past only if the concept of self relies on differences in degree between the two. If the past and future modes are discontinuous, the self, as a requirement for imagining the future, may be one of the features distinguishing them. If the discontinuity amounts to different capacities, then future scenarios independent from a sense of self are possible, but they should be accounted for independently of what holds for remembering the past. Another consequence is that admitting of future scenarios involving 'known time' only would enable future-oriented mental time travel without the self. Thus, tying future scenarios to the sense of self, would also imply that projecting, simulating, and imagining involve 'lived time'. This appears to be in line with Klein's and Steindam's interpretation of Tulving's original considerations. Finally, the field and observer perspectives can support both interpretations – the field perspective for future scenarios may be an instance of imagining the future without imagining one's self experiencing it, while the observer perspective for distant future events can be interpreted through the naturalistic claim that mental time travel would ultimately serve purposes linked to the self.

Regarding the three Buddhist approaches, Ganeri's interpretation of Buddhaghosa's view applies to past-oriented mental time travel, and could be extended to the future under a view coalescing the field perspective and future thought. Vasubandhu's considerations on the mind would gain more support from a view explaining the connection between the future and the self (through 'lived time', or the naturalistic focus on the future). Dignaga's concept of reflexivity could support personal and impersonal interpretations in accordance with the stance of whether past or future representations are necessarily tied to self-representation. In the case of continuity, known time and semantic memory may provide impersonal future scenarios that nevertheless involve representations. In the case of discontinuity, even with the semantic memory in place, and under impairments of episodic memory there may still be a sense of self (as Klein interprets R.B.'s case).

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