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Who Controls the Past Controls the Future: Reconsolidating Concerns Over Memory Manipulations

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Who Controls the Past Controls the Future: Reconsolidating Concerns Over Memory Manipulations

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The ethical and legal debate about manipulating memories is still in its infancy and has to catch up with advances in memory research. We support the quest by Elsey and Kindt (2016) to ground ethical debates in empirical science rather than “pure intuition or imagination” (228) and commend their insightful empirical work. However, just as ethics has to be cognizant of empirical science, the panoply of ethical concerns has to be recognized. The authors seek to dismiss worries about pharmacologically manipulating the emotional valence of memories, but are only partially successful as they brush over important parts too quickly. Ethical problems run deeper, and persuasive refutations require fully appreciating them first. For this, imagination is a valuable tool of the humanities that affords elucidating intuitions and articulating them more precisely. A clearer grasp of problems also allows, as we indicate, generating novel research questions. Imagination is a start, not an endpoint, of bioethical discourse.

While the target article mainly concerns interventions targeting reconsolidation of pathological memories, ethical problems of memory manipulations cannot be detached from broader considerations. The first insight of memory research that the authors duly note, but which neither ethics nor social practice has begun to appreciate in full scale, is the constant alterability of memories even through ordinary recall and reconsolidation. Contrary to artifacts with memorable content such as diaries, humans handle their memories quite negligently. The findings of memory research urge a thorough inquiry into remembering adequately. Perhaps we should treat significant memories more carefully, for example, recall them only under special conditions to avoid contamination, or develop techniques to strengthen them. In the best case, applied memory research establishes a novel *ars memoriae* (including the art of forgetting).

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The possibility of intentionally manipulating memories calls for developing a—yet outstanding—comprehensive ethics of memory. A common ethical intuition of which the authors are aware but that they never spell out fully suggests that it is valuable to work through burdening events and difficult life experiences through ordinary “psychological” ways: reflection and understanding of one’s emotional reactions, relating these to one’s personality and biography, finding patterns, attaching meaning and embedding it in one’s narratives. Together with the healing powers of time, this mode of engaging with the past seems to be most conducive to personal development. One does not have to subscribe to dubious dualistic mind–brain metaphysics or other ill-founded criticism of pharmaceuticals to prefer psychological ways over means that appear as escapism, getting rid of emotions rather than strenuously engaging with them. Given that humans discount long-term effects and are notoriously prone to avoid unpleasant work with themselves, concerns about circumventing burdensome processes beneficial in the long run seem warranted.

Surely, as is highly familiar to therapists, these processes are sometimes impaired because of trauma, or are too burdensome and resource-demanding. Those cases call for exceptions. However, and this is our first suggestion for further research, it is unclear whether (or which) patients, in the long run, are better off when undergoing pharmacological modulations, all things considered. At least, PTSD symptoms are an insufficient measure for all implicated dimensions of personality development. Broader tests or inventories have to be utilized. Presumably, it is ethically advisable to use reconsolidation targeting only embedded in the context of a broader psychotherapeutic engagement with disruptive memories, especially when they are too devastating to be dealt with through normal therapeutic procedures.

Once pharmaceutical manipulations are understood as exceptional means to come to terms with the past, the question of proper indications arises. The target article seems to suggest that manipulations might even be used for alleviating nonpathological hardship resulting from life difficulties (breakups, grief), if people are willing to take the trouble for them. Such a *laissez-faire* approach evades worries rather than refutes them (cf. Henry, Fishman, and Youngner 2007).

Beyond concerns for the individual, the ethics of memory pertains to social or collective interests. The article suggests that manipulations are largely individual treatment decisions. This is a normative claim that presupposes that patients’ interests in overcoming trauma prevail over potential countervailing interests. In this generality, the presupposition falls short of properly accommodating the collective dimension of memory. It mainly comprises two interrelated aspects: duties to retain one’s own memories for social purposes, mainly as a witness; and duties to not impair memories of others (Bublitz and Dresler 2015). Regarding the former, the authors reject concerns over “declarative amnesia” (229). However, the ethically

relevant threshold is much lower. Since eyewitness testimony is one of the most important epistemic sources in legal proceedings, tampering with memory that slightly falsifies recall or renders testimony unsuitable as evidence in court already harms collective interests (Kolber 2006). At present, the mere fact of a witness having undergone memory-manipulative procedures likely suffices to seriously undermine that witness’s probative value. The authors seek to appease such worries by referring to abundant false memories. This is methodologically misleading: Likely, contaminating other persons’ memories is ethically condemnable because a duty to not impair them exists. Even if this duty is partially unfulfillable because contamination is inevitable, it does not follow that other avoidable, let alone more sophisticated, alterations are therefore permissible. False memories thus do not provide an argument in favor of further manipulations. Instead, the conflict has to be fully appreciated, and the way to solve it lies in weighing the burdens of memory against social interest in testimony.

A duty to not impair others’ memories may prompt changes in social practices to preserve memories. In an ongoing study, we induce pseudo-traumata in healthy volunteers through movies and examine whether the way persons speak about a mildly traumatizing event affects subsequent development of PTSD-like symptoms. Our hypothesis is that due to the “testing effect” (Karpicke and Roediger 2008), emphasis on facts enhances factual memory whereas emphasis on experienced emotions strengthens affective symptoms. If this proves correct, it is advisable to speak with potentially traumatized persons about factual experiences and avoid emotional language, even though a humanistic and emphatic stance may suggest precisely the opposite.

A further hidden presupposition of the authors’ argument that merits explication is that social interests only pertain to declarative, not emotional, memory. Indeed, if science were able to cut the connection between factual and emotional aspects of memory along the lines of moral significance, many worries would vanish. However, social interests may not be confined to declarative memory but extend to emotions. The article misconceives the problems with moral emotions, which are often exemplified by military use, the historical emergence of PTSD (“shell shock”), and war veterans. Concerns are not about fearless supersoldiers but about subduing valuable moral emotions, mainly shame and guilt. Decoupling emotional from factual memory may afford the frightening possibility that wrongdoers rid themselves from pangs of conscience (Donovan 2010). As PTSD does not develop along human-made moral categories, some afflicted by it were actively involved in traumatizing events, sometimes as perpetrators of heinous deeds (Evans et al. 2007). With respect to those suffering from justified guilt, the question arises of whether pharmacological manipulations interfere with the burdensome process of penance, of coming to terms with one’s deeds and reforming oneself. Through penal institutions, societies invest heavily (though not necessarily efficiently) in inducing such processes. To

some scholars, penance constitutes the main penological aim (Duff 2001). Although the precise relation between guilt, memory, and PTSD is not yet clear, they seem deeply interwoven. Guilt is a prime mediator of PTSD, and targeting secondary emotions such as guilt is a common element of trauma therapy (Marx et al. 2010). While innocent patients are often overconcerned with guilt, the worry is that memory manipulations enable perpetrators to evade self-critical processes by overcoming the sting of memory. Ultimately, the intriguing question is to which extent social interests in guilt, remorse, and rehabilitation should restrict the use of pharmacological interventions. Even the authors of this commentary are deeply divided over this matter. In the spirit of the target article, we would like to encourage empirical research on the effects of pharmacological memory manipulations on guilt and offender rehabilitation.

Finally, we wish to add to the suggestion that interventions during reconsolidation may evade some ethical problems of those during consolidation: Likely, recent memories are rather accurate but deteriorate soon. The earlier the intervention, the better the memory manipulated. However, from a regulatory perspective, reconsolidation approaches may also be more problematic. If a duty to preserve memories exists, the authors' technique clearly contravenes it. This might not be true for ordinary activities impairing initial consolidation. In our research, we investigate effects of video games and sleep deprivation on development of PTSD. If such behavioral interventions affect memories, they are not restrictable in the same way as specific reconsolidation techniques. Omitting special precautions for proper consolidation such as sleeping differs from undergoing procedures actively targeting reconsolidation. After all, we may not have a duty to live our lives in a way conducive to memory preservation, but we may have one to not intentionally manipulate socially relevant memories through specific techniques. ■

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What We May Forget When Discussing Human Memory Manipulation

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Manipulating human memory through reconsolidation is an important new frontier of research in the therapeutic field (Soeter and Kindt 2011). The ethical implications of these techniques to treat traumatic and disruptive memories have been appropriately analyzed by Elsey and Kindt (2016). The authors point out that when discussing the

moral consequences of such techniques, hypothetical scenarios should be realistic and speculations about the future cannot ignore the data and restrictions provided by the research. However, there do seem to be real ethical concerns in relation to both clinical and nonclinical memory manipulations through propranolol administration (Kindt, Soeter,

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