****

Responsible development of neurotechnologies requires us to anticipate and reflect on how they could alter cognitive functioning, individual agency and self-understanding (Mihailov and Savulescu 2018; Yuste et al. 2017). Optogenetics, a neuromodulatory technique involving the use of light to control activity of individual brain cells, has the unique potential to switch on and off selected memories on demand. This technique might help people with long lasting traumatic memories to move on and start anew. Zawadzki and Adamczyk (2021) rightly consider the potential ways in which memory modification technologies could disrupt one’s identity and personality. They make the case that some of our autobiographical memories are self-defining, in the sense that such memories may establish the most critical and organizing themes of narrative identity of a person. Thus, optogenetics interventions which aim to modify self-defining memories pose the most threat to personal authenticity. If we erase, for example, someone’s memories of victimization (prima facie a therapeutic and hence valuable goal) and these memories are self-defining, then we might trigger disruptive personality changes which cannot be made intelligible to the agent in the light of that agent’s pre-existing values and commitments.

This coherentist approach to authenticity is often illustrated by the analogy with rebuilding a raft on the open sea. We are like a sailor who has to replace parts of the raft while standing on other parts of the raft. Although we may come to change many of our constituent parts over time, such changes are authentic only if our decision to do so is made intelligible by some other values we maintain over the course of that change (Pugh, Maslen, and Savulescu 2017). The analogy with rebuilding a raft shows why it is intuitive that personality changes—even major changes—can occur without disrupting one’s identity. But this analogy encourages the mistaken view that preserving authenticity is done in isolation. Zawadzki and Adamczyk do not include the multiple modes of collective identities and alternative self-constituting possibilities presented by others. This means that their framework of authentic decision-making is overly individualistic. Although they acknowledge that other people may play a role in one’s narrative identity, they worry that the reference of the values of others distorts the language of authenticity, a concept whose value is tied to individual meaning.

We want to argue that while the agent is ultimately the one who has to make sense of what is happening to her, the parts that she replaces as well as the parts that she holds are constituted in a wider context of relationships and shared meanings, not in isolation from other people. Allowing others in the process of self-creation does not strip authenticity of its individual meaning. To see this, we have to distinguish between a metaphysical concept of relational authenticity and a methodological concept of relational authenticity. The metaphysical relational conception denies a private intimate self and asserts that we are essentially a social self. The methodological relational conception acknowledges the relational nature of the self but in a way that, in the end, directs us back to a kind of individual self who is more comprehensively constituted.[[1]](#footnote-1) Taking into account the various ways in which personal authenticity is socially embedded and intimately related to other people is an epistemic prerequisite for making something intelligible to the agent. The methodological relational conception does not deny the individual self, but only claims that there are relational elements in the process of self-constitution. Thus, merely reflecting upon one’s values will not be enough to secure one’s authenticity.

RELATIONAL ELEMENTS OF AUTHENTICITY

We propose to expand the theoretical framework of authentic decision-making by incorporating relational elements of authenticity - shared activities and shared meaning. Even if we regard authenticity as a value of independence, we have to acknowledge its inescapable social and intersubjective layout. Any possibility of self-expression or self-choosing (the latter case involving the existentialist understanding of authenticity) is taken up starting from a cultural legacy and compared to other shared alternatives that are publicly available. When we consider this wider context, we can avoid the mistake of believing that ownmost possibilities are strictly ‘ownmost’ (Gallagher, Morgan, and Rokotnitz 2018). To think of personal identity in relational terms means to recognize “a dynamic, socially, culturally, politically, and historically situated communicative activity (based in narrative and performance) that is informed by the interests, perspectives, and creative intentions of close and distant others” (Baylis 2013).

Shared activities, as a means to learning and doing things together, reveal that what is most our own is not to be discovered in solitude, but only through meaningful social interactions. The view that the human mind is embodied, embedded, enactive, and extended (4E) in a brain-body-environment system can deepen our understanding of when and how being-with-others and being-for-others contribute to one’s authenticity (Gallagher, Morgan, and Rokotnitz 2018). The notion of relational authenticity builds on the body of research dealing with imitation in infants, with the way learning activities change the perception of the (peripersonal) space, and generally speaking with our permanent striving to find the right kind of attunement to others.

Relational elements of authenticity require us to answer questions about who others are and what their contribution is to our own self-fashioning (Iftode 2019). Who are the significant others (in our search for authenticity)? Whom should we trust? How do the trustworthy contribute to our life stories and narrative identity? In answering these questions we have to make use of collaborative learning, dialogical understanding, mutual assessment of statements and conduct, as well as different sorts of collective production of meaning. Any self-interpretation process is a dynamic process. It involves an iterated negotiation of meaning between a person’s very own projections and the way the significant others perceive this person and react to her public statements.

CO-AUTHORSHIP OF THE SELF

Co-authorship of narrative identity refers to the idea that relational identity is dialogical and therefore identity is shaped within a negotiation space between the individual and the others around her. A key feature of the framework given by this idea is that narrative identity is not just a story you have about yourself but also the stories others tell about you (Schechtman 2014). Consider the following case adapted from De Haan et al. (2017):

For Adrian deep brain stimulation was immediately very effective. He lost about 95% of compulsions. Adrian is very happy with the changes. He is much more open and spontaneous and enjoys being able to now join his wife to parties and dinners with friends. He thinks he has become more himself. If he had not developed OCD at the age of 13, he would have been like this. His wife, however, is not so happy with the changes. She finds he has changed to the extent that she feels: ‘This is not the man I married’. She reports that he often does socially inappropriate things, like talking to strangers on the street and that he does not pick up on signals when people are annoyed by him. When they are with friends he does not ask them much about their lives. Since she often feels embarrassed about his behaviour, she feels less like going out with him.

A coherentist approach focused on individual internal conditions implies that Adrian is fine. His authenticity is secured. But in reality, his story is more complicated than getting over his frustration with compulsions. Instead, Adrian and his wife would most likely begin a process of negotiation for their shared narrative (as a couple), and for his new identity, after the intervention. Now, imagine a different version of Elisabeth’s case:

While in middle school Elisabeth and her best friend, Sara, were constantly bullied. The memories of those years still haunt Elisabeth and Sara, but they got involved in different kinds of anti-bullying activities, going as far as choosing a career through which they could extend these efforts. Moreover, they remained close friends throughout all these years. While Sara did not want to resort to an optogenetics intervention, Elisabeth chose this alternative and it was immediately effective for her. She got rid of her memories of victimization and she is extremely happy. Despite this, her best friend remembers. For Sara, Elisabeth is still a victim.

The fact is that Elisabeth remains a victim of abuse, even if she has erased a traumatic auto-biographical memory. Eventually she will have to acknowledge different bits of Sara’s narrative about the traumatic experience of bullying. Elisabeth cannot use her memories as tools to defend her narratives and to counter others’ narratives about her. She will refer to a co-authorship of narrative identity in that context of abuse. Erasing the memory of an event does not erase the story of that event. While the main author may have the final say in how narrative scripts are assembled, she will have to deal with the stories that are being told by significant others.

FUNDING

This work was supported by a grant of the Romanian Ministery of Education and Research, CNCS – UEFISCDI, project number PN-III-P4-ID-PCE-2020-0521, within PNCDI III.

**REFERENCES**

1. Yuste, R., Goering, S., Bi, G., Carmena, J. M., Carter, A., Fins, J. J., ... & Kellmeyer, P. (2017). Four ethical priorities for neurotechnologies and AI. *Nature News* 551 (7679): 159. doi:10.1038/551159a.
2. Mihailov, E., and J. Savulescu. 2018. Social policy and cognitive enhancement: Lessons from chess. *Neuroethics* 11 (2):115-127. <https://doi.org/10.1007/s12152-018-9354-y>
3. Zawadzki, P., and A. Adamczyk. 2020. Personality and authenticity in light of the memory-modifying potential of optogenetics. *AJOB Neuroscience*.
4. Pugh, J., Maslen, H., and J. Savulescu. 2017. Deep brain stimulation, authenticity and value. *Cambridge quarterly of healthcare ethics* 26 (4):640-657. doi:10.1017/S0963180117000147.
5. Christman, J. 2004. Relational autonomy, liberal individualism, and the social constitution of selves. *Philosophical Studies* 117 (1/2):143-164.
6. Gallagher, S., Morgan, B., and N. Rokotnitz. 2018. Relational authenticity. In G. D. Caruso and O. Flanagan (eds.), *Neuroexistentialism: Meaning, Morals, and Purpose in the Age of Neuroscience*, Oxford University Press.
7. Iftode, C. 2019. Assessing Enhancement Technologies: Authenticity as a Social Virtue and Experiment. *The New Bioethics* 25 (1): 24-38. doi:10.1080/20502877.2019.1565472.
8. Baylis, F. 2013. “I am who I am”: on the perceived threats to personal identity from deep brain stimulation. *Neuroethics* 6 (3):513-526. DOI 10.1007/s12152-011-9137-1
9. Schechtman, M. (2014). *Staying alive: Personal identity, practical concerns, and the unity of a life*. Oxford University Press.
10. De Haan, S., Rietveld, E., Stokhof, M., and D. Denys. 2017. Becoming more oneself? Changes in personality following DBS treatment for psychiatric disorders: Experiences of OCD patients and general considerations. PLoS One 12 (4):e0175748. <https://doi.org/10.1371/journal.pone.0175748>

1. In drawing this type of distinction, we have been inspired by Christman’s analysis of relational autonomy (see Christman 2004). [↑](#footnote-ref-1)