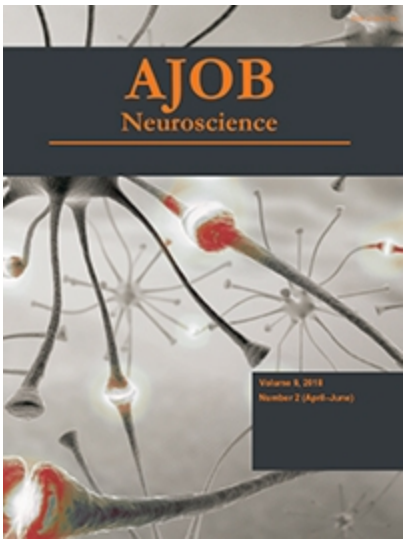

Mapping the Dimensions of Agency: The Narrative as Unifying Mechanism

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Mapping the Dimensions of Agency: The Narrative as Unifying Mechanism

Schönau et al. (2021) identified four dimensions of agency (authenticity, privacy, self–trust, and responsibility) that may be influenced by the use of neurotechnologies, such as deep brain stimulation (DBS) or brain–computer–interfaces (BCI). The Agency Map they proposed depicts the role of each dimension, and indicates how they may interact. The authors emphasize that a strength of their approach is that it allows to capture the agency dimensions that were previously seen as disconnected and independent as intricately interwoven parts of the person's experience. This intended unification may help to understand personal agency more fully in various contexts important in neuroethical considerations. However, what is missing in Schönau et al.'s analysis is the mechanism—the very link—by which these various dimensions can come together. As Zawadzki (2020) points out discussing his account of the self (PTS–moral aspects)—which also includes the agency dimensions indicated by Schönau et al. (both authenticity, and responsibility, but also autonomy)—what is crucial in order to unify these various dimensions is *narrative*.

Schönau et al. make a distinction between overall agency and the sense of agency. As their goal is to understand "an individual's experience of agency", they focus on the latter. Two main strands in the debate on the sense of agency can be distinguished: a low–level comparator–based approach and high–level narrative–based approach. Since Schönau et al. aim for synthesis, they do not engage in a fine–grained conceptual analysis of "the sense of agency". Consequently, it is not clear which account (comparator or narrative–based) they employ. One could argue that they merge these two approaches, since they define the experience of agency as: "the phenomenal component of exercising agency or what it is like to enact one's intention on the world." In this commentary, I would like to argue that if Schönau et al. continue to develop their valuable model, they should focus on agency in the lens of narrative–based account, since agentive dimensions they consider are "rich" and "thick" in content, therefore narrative is required both to understand each dimension and to unify their four–dimensional approach.

According to comparator–based account, a sub–personal system of motor control uses copies of motor commands to generate predictions of the bodily movements. These predictions are then used in comparisons between the predicted (efferent) movements and actual (re–afferent) trajectories. The crucial point of the comparator approach is that the sense of agency "can be generated by mechanisms that need not—and typically will not—have access to fully–fledged intentions. From the perspective of the comparator account, there is no need for a centralized narrator with access to high-level representations to get into the action" (Bayne & Pacherie, 2007).

Although our sense of agency depends to some extent on the pre–reflective processes postulated by comparator–based approach, "both phenomenological reflection and brain-imaging experiments suggest that the whole story about the sense of agency cannot be told in terms of efferent processes, even reinforced by re–afferent signals. The intentional aspects, and the meaning of what I am trying to do (my aim, goal, or intention), and what I actually accomplish in the world, enter into my sense of

agency" (Gallagher, 2020, p. 45). If our agentive experience were only a product of sensorimotor integration, its content would be limited to information about proprioceptive consequences of our actions. But, as Gallagher (2020, p. 40) reminds us "it is not enough, or even relevant, to provide an account of one's actions in terms of strictly causal motor control mechanisms if one is asked 'Why' one acted thus and so. 'Why did you poison the people in that house?' The answer is not 'Because I moved my arm up and down on the water pump.' The question calls for an answer, not in terms of motor control or internal mechanisms, but in terms of a narrative. 'I didn't know the water was poisoned […]'." Thus, in order to account for both content of our agentive experience and agency self–attribution, we need higher–order levels representations provided by narrative–based account. As seen in the example above, narrative allow for retrospective reflection on agency self–attribution. However, the sense of agency often involves prospective component, i.e., we deliberate on our future acts and form intentions prospectively (Pacherie, 2007). Part of phenomenology of agency may depend on this prospective formation of a prior intentions, e.g., a person who buys a fancy car without prior planning, even if she does not deny her agency later, would certainly feel more in charge (have a stronger sense of agency) if she planned on this and form intention to purchase a car a week in advance (Gallagher, 2020). What is worth noting, in order for actions to "go as intended", a person must form her prior intentions in terms of reasons (based on her beliefs, desires, or evaluations)—and this may (and should) be framed in narrative terms (Velleman, 2005). As Hutto (2009) argues, although reason explanations (e.g., I went out "to get a car") do not obviously appear to count as "giving a narrative", these appearances are deceiving: "to give one's reason in response to a question is, for the well trained, only to tell the most relevant part of a potentially much longer story. Thus, in line with the polite etiquette of conversational implicature reason explanations are generally extremely compressed, truncated and elliptical. It does not follow that our capacity to produce such truncated explanations is not an essentially narrative capacity." On the top of it, the more we enter into a deliberative sphere of our daily life, the more strongly our ability to integrate these conceptually–laden intentions (and actions that were based upon them) into a complex representation of our diachronic self–narrative seems to influence our sense of agency.

On the account of Schönau et al., the agent exercises a given agentive competency by actively navigating through the respective domain. Having in mind the above considerations, we may tell how this is realized through narrative practices, and how they allow to grasp this process in a unified way. Starting from authenticity, as Schönau et al. claim, this agentive competency is about "maintaining continuity via the integration of previous, future, and current states of the self." This process is possible only through narrative measures, since the narrative is specially tailored to allow a person to create a coherent diachronic identity and provide her with unity, purpose and meaning by enabling her to make sense of her motives, values, goals, traits, and beliefs (Leuenberger, 2021; Zawadzki & Adamczyk, 2021). "Defining individual privacy realms [relies on] negotiating with others over their access to the individual." This competency (privacy) comes down, therefore, to giving reasons for our preferred way of treatment and, as mentioned above, the narrative is embedded in the reason explanations, however

"compressed, truncated and elliptical" this narrative is in this practice. In light of Schönau et al. model, self–trust competency relies on "trusting oneself to interpret sensory feedback regarding one's positioning". Thus, it may depend on both levels of agency processing—both comparator and narrative–based system may be relevant for users to trust "themselves" as they act using neural device, since both sensory feedback (appropriate timing, intensity etc.) and conceptually–laden intentions (motivations, goals, and/or self–narrative) may be employed in this process. Finally, since Schönau et al. define the sense of responsibility in such a way that it is identified with "intentional control over a goal–directed action," the narrative seems to be crucial for this agentive competency as well (goal–direction requires a prior intention). Moreover, regret—emotion that play a critical role in feeling responsible for one's own misdeeds—involve self–knowledge that takes narrative form in which "I, as the narrator, can give an account, and evaluate my past action. Assuming that I have made the wrong choice sometime in the past, I come to regret that choice, and this is something that manifests itself in my self-narrative" (Gallagher & Daly, 2018).

In light of these considerations, we should not underestimate the role of narrativity in personal agency. The narrative is critical in understanding how agentive competencies work. Self–narrative determines to some extent what we experience as disturbing to our authenticity, self–trust, privacy, and responsibility. Finally, our account of agentive competency disruption is *expressed* through narrative. Although Schönau et al. implicitly assume this last point in their proposition of Qualitative Agentive Competency Tool (Q-ACT), more consideration on this process is required, since both content as well as the form of the narrative may be relevant in informing us about possible alterations of agential competencies of patients. The agency map may help neuroethicists by drawing our attention to the most important threads—authenticity, privacy, self–trust, and responsibility—that we should focus on in learning from persons' stories. We should remember, however, that we can thoroughly understand the experiences of patients only *through* narratives and *on* narrative terms.

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