

# 9

## AUTHENTICITY IN THE ETHICS OF HUMAN ENHANCEMENT

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### 9.1 Introduction

Human enhancement technologies can potentially change one's personality, mood, body, capabilities, traits, and other characteristics. This extensive potential for self-change has raised concerns about authenticity. Is the enhanced human being still authentic? Can you be true to yourself after changing yourself? Or can you become more authentic through enhancement? Authenticity has been recognized as a central concept in the ethics of human enhancement. Early on in the debate, authenticity was understood as a matter of either self-discovery or self-creation. Self-discovery accounts of authenticity claim that to be authentic one has to find the stable, if not unchanging and innate, true self and live according to it. This view is inspired by Jean-Jacques Rousseau and the Romantics. Self-creation accounts deny the existence of an individual essence. Instead, we have to freely create ourselves in order to be authentic. This tradition is rooted in existentialist philosophy, notably Jean-Paul Sartre, and the work of Friedrich Nietzsche and Søren Kierkegaard.

Enhancement technologies have been considered as threatening authenticity by leading us astray from the true self (Elliott, 2004; The President's Council on Bioethics, 2003). At the same time, some authors have argued that enhancement technologies can help us to become authentic by providing means for self-creation (DeGrazia, 2000). A currently widely agreed-upon view states that the self-discovery as well as self-creation accounts of authenticity are capturing important intuitions but also making empirically and metaphysically questionable assumptions (Bolt, 2007; Levy, 2011; Parens, 2005). The idea that we have an individual essence "deep down" that remains untouched by external influences seems unlikely, as does the possibility of a radically free act of self-creation (Caspi & Roberts, 2001; DeGrazia, 2000; Levy, 2018; Mackenzie & Walker, 2015). Therefore, in the philosophical debate, such strong versions of self-discovery and self-creation views are rarely anymore adopted.<sup>1</sup> Nonetheless, it seems true that on the one hand, there are parts of ourselves we can hardly change which may feel particularly true to who we are, and on the other hand that we can undertake projects of self-creation and actively change who we are. It seems that authenticity is best understood as an ideal guiding us between the constraints and possibilities of self-change.

In the last decade, a plethora of novel distinctions, specifications, and definitions of authenticity have been added to the debate. The conditions for authentic self-change as well as how the true self should be expressed have been worked out in more detail. The crude distinction between self-discovery and self-creation accounts is no longer particularly useful to navigate this dense landscape of definitions of authenticity. This chapter takes a step back and maps the different accounts of authen-

ticity to provide a more nuanced taxonomy of authenticity and reveal the emerging underlying structures of this concept (see Ahlin (2018) for another taxonomy of authenticity in the context of medical consent). Authenticity is a complex, multidimensional concept, but it is possible to pinpoint some shared, guiding ideas across different accounts of authenticity. In the following, three kinds of conditions for authentic creation and change of the true self are identified (coherence, endorsement, and relations) as well as the ways that the true self should be expressed (in one's self-conception, self-presentation, and one's body, emotions, and actions). Based on this analysis, the hopes and concerns human enhancement raises for authenticity are discussed. The effect of enhancement technologies on authenticity is multifaceted. Enhancement technologies do not threaten or foster authenticity across the board but affect different dimensions of authenticity individually. This chapter furthermore argues that the debate on authenticity in the ethics of human enhancement would profit from a more extended discussion on which accounts of authenticity are morally or prudentially valuable and why, as well as in which circumstances they have a prudential appeal.

## **9.2 Changing and creating the true self**

Unless we assume that the true self is an innate, unchanging essence (which is, as most authors in the debate agree, empirically and metaphysically implausible), there must be conditions for how to authentically create and change the true self. I identify three main concepts that provide conditions for creating and changing the true self that can be found across many different accounts of authenticity: coherence, endorsement, and relations. These three concepts often interact with each other and overlap in authenticity accounts.

### **9.2.1 Coherence**

A crucial element in many accounts of authenticity is that they demand a form of coherence of the true self. The individual should maintain or establish a coherence of the true self in both, authentic self-creation and self-change. We can distinguish between two different kinds of coherence of the self: synchronic and diachronic coherence.

Synchronic coherence is the coherence of a network of characteristics at a particular time. In a synchronically coherent self, a person's dispositions, traits, values, beliefs, and other characteristics at a given time make sense in the light of each other. They are connected to each other in structured hierarchies, creating a mutually supportive network of characteristics. In terms of an account of authenticity, this means that the features of the self which are part of such a coherent network are considered authentic and should not be changed, or only gradually or piecemeal (like Neurath's raft), to maintain the coherent network. An authentic person is not ambivalent in their core wishes and values. There may be conflicts, but the authentic individual has to take a clear stance for one side or the other.

Harry Frankfurt develops an account of authenticity based on synchronic coherence in his later work on wholeheartedness (Frankfurt, 1987). He argues that ambivalence in our higher-order volitions (effective desires about effective desires) can be resolved through a wholehearted decision. Through wholehearted decisions, we constitute who we authentically are. Without going into the details of Frankfurt's view, the idea of an authentic person he introduces is one who is not conflicted or ambivalent but settles internal conflicts through wholehearted decisions. Those decisions both define us and constrain our will while freeing us from uncertainty. More recently, Pugh, Maslen, and Savulescu have introduced a similar account of authenticity based on synchronic coherence (Pugh et al., 2017). They argue that the true self is composed of the coherent (i.e., mutually compatible) elements of the individual's values and rational beliefs.<sup>2</sup>

Enhancement technologies could threaten authenticity in terms of synchronic coherence if they introduce characteristics that do not cohere with the individual's network of core beliefs and

values or if they change this cohering set of characteristics or wholehearted choices which constitute the true self. A person undergoing moral enhancement could, for example, change their core commitments and coherent values. The true self may then no longer be a synchronically coherent unity. Enhancement technologies can provide us with the ability to modify the true self in ways that render the change unintelligible in light of the rest of the cohering set of beliefs and values.

However, it is also possible that enhancement technologies make users more authentic by helping them to overcome their present incoherence or to fully commit themselves to a life project. Through physical enhancement, a devoted athlete could manage to pursue a professional sports career and fully commit to this life project. Various forms of mental enhancement, for instance, increased focus and concentration, could similarly help to stick to a commitment or give mental strength to act in accordance with one's coherent set of values.

According to diachronic coherence views, the authenticity of a person (or one of their characteristics) cannot be assessed by considering a specific moment or time slice. At a given time, the values, beliefs, desires, and other characteristics of a person need not be coherent and may be conflicting and ambivalent. However, a person's progression over time should display an element of coherence.

Accounts of authenticity in terms of diachronic coherence tend to be based on a narrative conception of the self. The narrative self-view claims that the self is constituted by the internalized, ongoing story of your life – the self-narrative – in which you integrate your experiences, values, beliefs, and other personal characteristics. Elsewhere, I introduce a conception of narrative authenticity according to which an authentic person has an accurate and coherent self-narrative that depicts a well-defined person (Leuenberger, 2020). This account focuses on self-knowledge (or self-understanding) as an important dimension of authenticity. Through a coherent self-narrative we make ourselves intelligible to others and to ourselves. Diachronic coherence in narrative terms means that one's beliefs, values, actions, etc. make sense in light of each other, not because they are not conflicting but because we can make sense of how they came to coexist within an individual through their integration in the wider context of the narrative of their life. Even conflicting elements and radical changes can be accounted for in the narrative and become mutually supportive through the self-narrative. A person who always wanted to change a feature of herself but refused to do so once given the chance would be diachronically incoherent, even if she would be synchronically coherent. Erler argues that we should not change central aspects of our narrative identity where it might be tempting to do so unless it arises out of a commitment that was already part of the narrative self (Erler, 2011). Through the previous commitment, the narrative retains diachronic coherence through self-change.

A different notion of diachronic coherence can be found in accounts that define authenticity as being reached through experimental self-finding projects. Iftode, with reference to Nietzsche's notion of "brief habits," argues that authenticity is not just to be found in permanent traits, values, beliefs, and commitments we maintain over time but in those that we continually come back to after experimenting with other perspectives and mindsets (Iftode, 2019; Iftode et al., 2022). Even in an idea of the path to authenticity as fundamentally changing and experimental, the true self is understood as revealed in the recurring elements that build a version of diachronic coherence.

The experimental notion of authenticity is clearly in favor of enhancement technologies. By letting us explore new ways of being, enhancement technologies could help us find out who we truly are and who we continuously come back to be. For this experimental notion of authenticity, it would be particularly important that the enhancement is reversible (Iftode, 2019). The narrative account of diachronic coherence is more ambivalent toward enhancement technologies. In case the enhancement would lead to a very sudden change that is hard to account for through the self-narrative, it could disrupt its coherence. This would however not necessarily mean that we should refrain from such enhancement technologies because even sudden change could leave the option of adjusting the self-narrative to integrate it. A shy person enhancing himself to be more com-

municative and outgoing might at first experience the enhancement as a disruption of narrative coherence, but he may connect the change to his longstanding wish of being more outgoing and his previous attempts to overcome his shyness. This would also be in line with Erler's condition that changing central elements of the narrative self are authentic if they are in line with previous commitments (Erler, 2011). Furthermore, enhancement technology can promote diachronic coherence. Memory enhancement would be a particularly powerful tool to make sense of one's past and construe a coherent self-narrative. Intelligence enhancement could have similar effects.

### 9.2.2 Endorsement

The second central idea for changing and creating the true self authentically found across different accounts is that authentic aspects of the self (e.g., desires, actions, traits) or self-creation projects are those we identify with or endorse. This can either be understood synchronically, as endorsing a set of mental states, dispositions, or actions, or diachronically, as endorsing the causal history of an action or of how one acquired a mental state or disposition.<sup>3</sup> Examples of the former would be Frankfurt's account (introduced above) which defines authenticity in terms of a wholehearted identification with one's volitions or Pugh et al.'s account according to which the true self is constituted by the cohering and rationally endorsed elements of the self (Pugh et al., 2017). The individual identifies with certain features of the self or self-changes and endorses them as part of their true self. A diachronic view of authenticity as endorsement would be DeGrazia's account (DeGrazia, 2005) (for other examples see Gordon, 2022 and Mele, 2001). He argues that self-creation projects are authentic if they are autonomous and honest. For instance, a woman who undergoes cosmetic surgery to conform to sexist standards of beauty would be acting authentically if she is aware of her sexist socialization and its impact on her desires and seriously considered alternatives.

Most endorsement views of authenticity define authenticity as closely related to autonomy – either as dependent on autonomy (e.g., (DeGrazia, 2005)) or as a precondition for autonomy (e.g., (Pugh, 2020)). Therefore, they tend to understand reason as the superior principle in defining the individual (compared to other characteristics, such as our inclinations or emotions). Through reason, we can assess other aspects of the self from a third-personal view. Thereby, reason and identification reveal who we truly are. Even seemingly self-mutilating decisions which undermine natural inclinations and other features of the self are deemed authentic as long as they are rationally endorsed (Schechtman, 2004).

Rational endorsement accounts of authenticity generally look favorably on enhancement technologies. Enhancement can help people to identify with how they look, act, or feel by allowing them to be who they want to be. As a transgender character in the movie *All About My Mother* by Pedro Almodóvar says while showing off her silicone implants, “you are more and more authentic the more you look like someone you dreamed of being” (Almodóvar, 1999). As long as the enhancement is rationally endorsed by the individual, it can foster authenticity. To allow for a genuine rational endorsement, it is important that the individual is well-informed about the consequences of the enhancement and is, again, not manipulated or otherwise tricked or pressured into using enhancement. Moreover, enhancement technologies could enhance rational capacities and thereby facilitate and support the process of rational endorsement. The widespread use of enhancement technologies could, however, lead to social pressures for enhancement that could undermine processes of autonomous, rational endorsement.

### 9.2.3 Relations

Finally, authenticity is often defined in terms of how you relate to others, notably how others influence you, and to what degree changing and creating the true self is independent. Generally, authentic changes and creations of the self need to originate from the individual, independent of certain perni-

scious external influences. A person who is just following the newest trends or adapting their beliefs to their current social environment is not authentic. Historically, the condition of independence can be found in both the self-discovery and self-creationist traditions of authenticity. Rousseau, one of the first proponents of the idea of authenticity, if not its originator, held a self-discovery view according to which the true self is natural and innate. Society exerts a corrupting influence on the self from which we should shield ourselves and particularly our children (Rousseau, 1992, 2009). In accounts that understand authenticity as a matter of self-creation, the demand for independence in self-creation is also very prominent. Heidegger warns against following the anonymous *das Man* (“the They”) and against doing what “one does” (Heidegger, 1996). *Eigentlichkeit*, a term usually translated as authenticity, requires independent self-creation while embedded with others in a social world. Similarly, Sartre argues that it is an instance of bad faith if we just follow or play social scripts (Sartre, 1956). Being authentic, according to this conception of independence, means listening to one’s own voice and shaping one’s individual identity in an original manner to find one’s very own path through life (Taylor, 2003). In my own account of authenticity, I argue that to be true to oneself, the self needs to be well-defined (Leuenberger, 2020). A well-defined self requires that one actively takes charge of one’s life and actualizes characteristics or traits one claims to have. If you just do what your parents expect you to do, it remains unclear what you yourself would have done, given the chance. Beyond the fact that you are pleasing your parents, it is unclear what kind of person you are. To be authentic, you need to make independent choices and enact them to constitute a well-defined self.

Strong external influences undermine authenticity, but of course, we cannot (and need not try to) avoid being influenced by others and our broader social context. Therefore, there has been a lively debate on the role of others and the social context for authenticity which has pushed back against the idea that authenticity is best pursued in total independence. Those arguments for a relational dimension of authenticity include that we can only define ourselves against the backdrop of shared horizons of meaning (Taylor, 2003), that we define ourselves in dialogue with others (Iftode, 2019; Iftode et al., 2022; Mihailov et al., 2021), that adopting an identity depends on the recognition of others (Baylis, 2013; Elliott, 2011; Lindemann, 2001), and that authenticity is a social virtue and social expectation (Iftode, 2019; Williams, 2002). In the words of Neil Levy: “Human beings frequently answer identity questions by citing irreducibly social features: their group membership or identification, for instance. [...] Authenticity is not something we achieve from the inside out, but also from the outside in.” (Levy, 2007).

Thus, even if social influences are shaping people’s desire to use enhancement technologies, they are not necessarily inauthentic. As discussed in the section on endorsement, enhancement technologies can be used to express the individual’s original, independent voice. Nonetheless, enhancement is sometimes pursued due to social pressure, stigma, and oppressive cultural norms (e.g., in some cases of cosmetic surgery) (Elliott, 2011; Juth, 2011). By increasing our power to define who we are, some people do and will use enhancement technologies to conform to social expectations to a problematic degree, which would contradict the demands of authenticity for independence and originality. Once enhancement technologies are widely used, the pressure to use them increases further. The authentic characteristics of some people may not be favored in the professional and social life of their society. By making them easier to change, enhancement technologies may allow those individuals to lead an easier, and potentially happier life because they might reach their professional and social goals more easily while remaining genuine. However, this can shift the burden of change to the individual, even if it would be better to change society to be more accommodating to a variety of characteristics (Leuenberger, 2022).

### **9.3 Expressing the true self**

Besides conditions for authentic creation and changes of the true self, authenticity can be further defined with respect to how this true self should be expressed. To authentically express the true

self, there should be a consistency relation between the true self and other dimensions of the self. In the following, I discuss the idea that the true self should be adequately represented in one's self-conception, self-presentation, or one's body, actions, and emotions. Of course, both branches – the creation and change of the true self and its expression – are connected. In expressing the true self, we also create and change it. Many accounts of authenticity address both aspects, but some define authenticity almost exclusively on one side. For instance, views that understand the true self as one's innate and unchanging nature do, of course, not define any conditions for its creation or change but define authenticity in terms of how it should be expressed.

The consistency relation between the true self and one's self-conception translates into a demand for self-knowledge. Who you take yourself to be should correspond to the true self. An authentic person should not be self-deluded and know who they are. Self-knowledge is furthermore a precondition for other dimensions of authenticity, notably for authenticity as endorsement. In my account of authenticity, I argue that to be authentic, one's narrative identity should be sustainable, meaning that there should be little tension between your lived experience and who you take yourself to be (Leuenberger, 2020). Even though many characteristics of the self are to some degree a question of interpretation, the self-narrative is constrained by subjective and objective facts about oneself (e.g., one's emotions, thoughts, intentions, bodily features, or facts about actions and live events). Authenticity requires acknowledging those facts and, therefore, extended self-knowledge. Some enhancement technologies can contribute to increased self-knowledge, notably the enhancement of memory or intelligence. They may help us to achieve a greater self-understanding and reduce self-delusion. Other enhancement technologies could however be used to avoid facing uncomfortable truths about oneself. Mood enhancers could make it easier to not acknowledge that you no longer love your spouse or enjoy your job.

Rousseau's account of authenticity also requires self-knowledge, but in addition, he demands that the individual's self-presentation is consistent with this true self-conception. You should know who you are and you should present yourself to others truthfully. Thus, according to Rousseau, an authentic person cannot lie about themselves, whereas in my account, if a person is aware of why they are lying they can still be authentic.<sup>4</sup> Within the enhancement literature, Erler argues that authenticity entails an accurate presentation of key features of one's narrative identity to others (Erler, 2011). The idea of authenticity as accurate self-presentation can also be understood as a consistency relation between the true self and one's self-presentation, without demanding self-knowledge (Kadlac, 2018). According to this view, to be authentic you should not be a phony. In contrast to Erler's, Rousseau's, and my account, you may be authentic by accident in the case that you are a self-deluded liar who just happens to tell the truth about yourself. Enhancement technologies can undermine authenticity as truthful self-presentation if they are not sufficiently disclosed. Using enhancement to gain an advantage in sports or professional life without being open about it would be phony and inauthentic (Kadlac, 2018). Of course, this would depend on current common expectations. If enhancement became the norm in a certain setting, an explicit disclosure of one's use of enhancement would not be required for truthful self-presentation.

The true self can furthermore find expression in one's actions, emotions, and body beyond settings of other-directed self-presentation. In this sense, to be authentic can mean to express who you are in completely private circumstances by enacting, feeling, and embodying the true self. What this kind of self-expression entails depends on the conception of the true self. It could mean to act, feel, and look in accordance with wholehearted, rationally endorsed, or independently formed decisions, or it could mean to freely express one's natural inclinations (Schechtman, 2004).

Meyers offers an account focusing on enactment for authenticity (Meyers, 2000, 2005) that links authenticity to autonomy competency. The authentic self arises from a set of autonomy skills, including introspection, imagination, memory, communication, reasoning, interpretation, and volition that enable self-discovery and self-creation. Insofar as enhancement technologies may foster those skills, they can contribute to enacting and constituting an authentic self.

The President's Council on Bioethics has raised concerns about the authenticity of enhanced emotions (The President's Council on Bioethics, 2003). They argue that enhancement technologies could detach our emotions from reality. Enhancement technologies could make us happy or confident even if we have no reason to be either (Dees, 2007). However, in most situations, more than one emotional reaction would be appropriate (Erler, 2011). Thus, simply changing an emotional reaction through enhancement would not necessarily mean it is inappropriate. Enhanced emotions could still be responsive to reality. Moreover, when we look at which emotions people describe as feeling authentic, there seems to be no link between an artificially induced emotion and a feeling of authenticity (Kraemer, 2011). The increased control over your emotions through enhancement can however allow you to ignore emotions that might be considered authentic. Particularly in the philosophy of Rousseau and the Romantics, deep emotions are considered as revealing the true self and should be followed, not suppressed or changed (Ferrara, 1993; Rousseau, 1997).

The true self can also be embodied insofar as it can be expressed through bodily appearance. An involuntary mismatch between one's body and one's self-conception can cause great distress and a feeling of alienation, as in the case of transgender people (Mason-Schrock, 1996). Cosmetic surgery, sex-reassignment surgery, and even healthy limb amputations have been described as a way of getting in touch with the true self (Elliott, 2011). Enhancement technologies can help people to express who they take themselves to be through their bodies. In turn, if someone is mistaken about who they are, enhancement equally facilitates the expression of an inauthentic self.

#### **9.4 The value of authenticity**

The discussion so far has revealed a highly multidimensional concept of authenticity, entailing conditions of coherence, endorsement, and independence that guide the creation and change of the true self as well as norms about how the true self should correspond to and be expressed in other dimensions of the self (self-conception, self-presentation, and one's actions, body, and emotions). Enhancement technologies can influence those dimensions individually, sometimes increasing authenticity with respect to one aspect while threatening another. This leads to the question as to which dimension/s of authenticity we should pursue and try to protect from threats through enhancement technologies as well as what the value of authenticity is.

Authenticity is typically considered as instrumentally rather than intrinsically valuable. Several candidates have been suggested for the instrumental value of authenticity, such as increasing well-being, autonomy, or the moral good. Authenticity can contribute to well-being in many cases because feeling authentic is generally considered a positive mental state in comparison to inauthenticity or alienation (Kraemer, 2013). However, being authentic can entail giving up comfort, pleasure, or easy routes to happiness. Unless we assume the true self is fundamentally good,<sup>5</sup> being authentic would not necessarily entail being morally good. A paradigmatic example would be Gauguin who abandoned his family to become an artist in pursuit of authenticity. An authentic life is furthermore claimed to be fulfilled and meaningful (Strohming et al., 2017; Taylor, 2003), but how authenticity contributes to a fulfilled and meaningful life often remains vague (see Schlegel et al., 2022 for a valuable recent exploration of this topic). For accounts that define authenticity as instrumental for or constitutive of autonomy, its value is linked to the value of autonomy.

Arguments for the value of authenticity in the ethics of human enhancement regularly rely on 1) the common appeal of authenticity as an ideal, 2) empirical studies investigating how people understand and value authenticity (Sutton, 2020), 3) showing how authenticity contributes to well-being, autonomy, or other pragmatic advantages (Erler, 2011; Leuenberger, 2021; Pugh, 2020), or 4) linking the specific account of authenticity to broader philosophical arguments for the value of authenticity, such as Taylor's work on authenticity as an ethical ideal (Taylor, 2003), John Stuart Mill's defense of individuality (Mill, 1989), or Sartre's notion of bad faith (Sartre, 1956).

These approaches commonly lead to one of two problems. The first problem occurs when data or arguments that are grounded on one account of authenticity are used to argue for the value of a different account (Bublitz & Repantis, 2021). For instance, a psychological study showing that people think in terms of a true self and attribute it with meaning only speaks to the view on authenticity investigated in that study. The second problem arises from applying arguments for the value of authenticity grounded on a broad understanding of authenticity to more specific accounts. The issue does not arise from the validity of the argument but from the aims of the debate on enhancement and authenticity. Mill's views on the value of individuality, for instance, can be applied to accounts that understand authenticity as a matter of endorsement or of independence as well as to different ways to express the true self. This kind of value argument tends not to distinguish between the different accounts and could be applied to different ones equally. Similarly, arguments in favor of the value of authenticity by virtue of its contribution to well-being or autonomy often apply to multiple dimensions of authenticity equally well. Because individual accounts of authenticity can give different recommendations for or against the use of enhancement technologies, it is relevant to be able to decide between them. To show whether we should use enhancement technologies based on authenticity claims requires an argument for why we should value one dimension of authenticity over another, for instance, why we should value experimental self-creation over a coherent self.

The debate on authenticity in the ethics of human enhancement would profit from a more extended discussion on which accounts of authenticity are morally valuable and why, as well as in which circumstances they have prudential value and contribute to well-being. A comparative analysis, which would contrast and weigh the value of different accounts of authenticity and discuss their appeal to people in different circumstances and with different conceptions of the good life would be beneficial. Once we understand the different accounts of authenticity and why or in which cases they are valuable, we are in a better position to weigh the multifaceted impact of human enhancement on authenticity and thereby assess the desirability and the ethics of human enhancement in a broader sense.

A reason why this has proven difficult so far is that bioethicists generally try not to make specific claims about what counts as a good, flourishing life. Instead, they want to rely on broad claims to leave room for diverse views. But the impact of enhancement technologies on authenticity is so multifaceted and dependent on the specific interpretation of the concept of authenticity and the good life that it is hard to tackle through broad, non-committal claims. This does not mean that we should stop discussing authenticity in the context of human enhancement. People still care about authenticity and worry whether they should use or avoid enhancement technologies to achieve it. If we consider authenticity as a multidimensional concept, an argument that enhancement technologies are threatening or supporting authenticity across the board is almost impossible. Bioethics can however clarify how enhancement technologies impact specific dimensions of authenticity, uncover which conceptions of the self and the good life are at the heart of the individual dimensions of authenticity, and give reasons for why we should pursue them.

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## **Notes**

- 1 However, studies have shown that the idea of a true, unchanging self is a common belief (Strohmingier et al., 2017), although the authors argue that it is rather a useful fiction than a scientific concept.

- 2 They argue that their account of authenticity is diachronic because authenticity must appeal to diachronic values, but the notion of coherence is synchronic – a coherence of a person’s characteristics at a specific time.
- 3 I would like to thank Jonathan Pugh for raising this point.
- 4 A similar idea of authenticity as combining self-knowledge and self-presentation can be found in *Rameau’s Nephew* by Diderot and the idea of authenticity reconstructed through this novel by Williams (Diderot, 2016; Williams, 2002). Rameau’s nephew is also honest to himself and to others (he may occasionally be lying and flattering others, but he is also honest about that) but in contrast to Rousseau, he is a figure who constantly changes who he is. There is no coherence or permanence in his personality, but he is always truthful in representing who he momentarily is. Based on two very different ideas of the true self, Diderot and Rousseau introduce the same conditions for authentic self-expression.
- 5 Empirical studies have shown that people seem to consider the true self as fundamentally good (Strohming et al., 2017). This would however imply a radically subjectivist and unverifiable true self.

## References

- Ahlin, J. (2018). The impossibility of reliably determining the authenticity of desires: Implications for informed consent. *Medicine, Health Care and Philosophy*, 21(1), 43–50.
- Almodóvar, P. (1999). *All About My Mother*. Sony Pictures Classics.
- Baylis, F. (2013). ‘I am who I am’: On the perceived threats to personal identity from deep brain stimulation. *Neuroethics*, 6(3), 513–526.
- Bolt, L. L. E. (2007). True to oneself? Broad and narrow ideas on authenticity in the enhancement debate. *Theoretical Medicine and Bioethics*, 28(4), 285–300.
- Bublitz, J. C., & Repantis, D. (2021). Memory, authenticity, and optogenetics. *AJOB Neuroscience*, 12(1), 30–32.
- Caspi, A., & Roberts, B. W. (2001). Personality development across the life course: The argument for change and continuity. *Psychological Inquiry*, 12(2), 49–66.
- Dees, R. H. (2007). Better brains, better selves? The ethics of neuroenhancements. *Kennedy Institute of Ethics Journal*, 17(4), 371–395.
- DeGrazia, D. (2000). Prozac, enhancement, and self-creation. *The Hastings Center Report*, 30(2), 34–40.
- DeGrazia, D. (2005). *Human Identity and Bioethics*. New York: Cambridge University Press.
- Diderot, D. (2016). *Rameau’s Nephew: Le Neveu de Rameau* (2nd ed.). Cambridge: Open Book Publishers.
- Elliott, C. (2004). *Better than Well: American Medicine Meets the American Dream*. New York: W.W. Norton.
- Elliott, C. (2011). Enhancement technologies and the modern self. *Journal of Medicine and Philosophy*, 36(4), 364–374.
- Erler, A. (2011). Does memory modification threaten authenticity? *Neuroethics*, 4(3), 234–249.
- Ferrara, A. (1993). *Modernity and Authenticity: A Study in the Social and Ethical Thought of Jean-Jacques Rousseau*. Albany: State University of New York Press.
- Frankfurt, H. (1987). Identification and wholeheartedness. In F. D. Schoeman (Ed.), *Responsibility, Character, and the Emotions: New Essays in Moral Psychology*. Cambridge University Press.
- Gordon, E. C. (2022). Cognitive enhancement and authenticity: Moving beyond the impasse. *Medicine, Health Care and Philosophy*, 25, 281–288.
- Heidegger, M. (1996). *Being and Time: A Translation of Sein und Zeit*. Albany: State University of New York Press.
- Iftode, C. (2019). Assessing enhancement technologies: Authenticity as a social virtue and experiment. *The New Bioethics*, 25(1), 24–38.
- Iftode, C., Zorilă, A., Vică, C., & Mihailov, E. (2022). Experimental and relational authenticity: How neuro-technologies impact narrative identities. *Phenomenology and the Cognitive Sciences*, 1–18.
- Juth, N. (2011). Enhancement, autonomy and authenticity. In J. Savulescu, R. Meulen, & G. Kahane (Eds.), *Enhancing Human Capacities*. Oxford: Blackwell.
- Kadlac, A. (2018). The challenge of authenticity: Enhancement and accurate self-presentation. *Journal of Applied Philosophy*, 35(4), 790–808.
- Kraemer, F. (2011). Authenticity anyone? The enhancement of emotions via neuro-psychopharmacology. *Neuroethics*, 4(1), 51–64.
- Kraemer, F. (2013). Me, myself and my brain implant: Deep brain stimulation raises questions of personal authenticity and alienation. *Neuroethics*, 6(3), 483–497.
- Leuenberger, M. (2020). In defense of narrative authenticity. *Cambridge Quarterly of Healthcare Ethics*, 29(4), 656–667.
- Leuenberger, M. (2021). What is the point of being your true self? A genealogy of essentialist authenticity. *Philosophy*, 96(3), 409–431.
- Leuenberger, M. (2022). Memory modification and authenticity: A narrative approach. *Neuroethics*, 15(1), 10.

- Levy, N. (2007). Rethinking neuroethics in the light of the extended mind thesis. *The American Journal of Bioethics*, 7(9), 3–11.
- Levy, N. (2011). Enhancing authenticity. *Journal of Applied Philosophy*, 28(3), 308–318.
- Levy, N. (2018). Choices without choosers: Toward a neuropsychologically plausible existentialism. In G. Caruso & O. Flanagan (Eds.), *Neuroexistentialism: Meaning, Morals, and Purpose in the Age of Neuroscience* (pp. 111–126). Oxford University Press.
- Lindemann, H. (2001). *Damaged Identities, Narrative Repair*. Ithaca: Cornell University Press.
- Mackenzie, C., & Walker, M. (2015). Neurotechnologies, personal identity, and the ethics of authenticity. In J. Clausen & N. Levy (Eds.), *Handbook of Neuroethics* (pp. 373–392). Dodrecht: Springer.
- Mason-Schrock, D. (1996). Transsexuals' narrative construction of the "true self". *Social Psychology Quarterly*, 59(3), 176–192.
- Mele, A. R. (2001). *Autonomous Agents: From Self-control to Autonomy*. Oxford: Oxford University Press.
- Meyers, D.T. (2000). Authenticity for real people. In *The Proceedings of the Twentieth World Congress of Philosophy*. (pp. 195–202). Charlottesville: Philosophy Documentation Centre.
- Meyers, D. T. (2005). Decentralizing autonomy: Five faces of selfhood. In J. Anderson & J. Christman (Eds.), *Autonomy and the Challenges to Liberalism: New Essays* (pp. 27–55). Cambridge: Cambridge University Press.
- Mihailov, E., Zorila, A., & Iftode, C. (2021). Taking relational authenticity seriously: Neurotechnologies, narrative identity, and co-authorship of the self. *AJOB Neuroscience*, 12(1), 35–37.
- Mill, J. S. (1989). *'On Liberty' and Other Writings*. Cambridge: Cambridge University Press.
- Parens, E. (2005). Authenticity and ambivalence: Toward understanding the enhancement debate. *The Hastings Center Report*, 35(3), 34–41.
- Pugh, J. (2020). *Autonomy, Rationality, and Contemporary Bioethics*. Oxford: Oxford University Press.
- Pugh, J., Maslen, H., & Savulescu, J. (2017). Deep brain stimulation, authenticity and value. *Cambridge Quarterly of Healthcare Ethics*, 26(4), 640–657.
- Rousseau, J.-J. (1992). *Discourse on the Origins of Inequality (Second Discourse): Polemics; and, Political Economy*. Hanover, London: University Press of New England.
- Rousseau, J.-J. (1997). *Julie, or, The New Héloïse: Letters of Two Lovers Who Live in a Small Town at the Foot of the Alps*. Hanover, London: University Press of New England.
- Rousseau, J.-J. (2009). *Emile, or, On Education: Includes, Emile and Sophie, or, The Solitaries*. Hanover, London: University Press of New England.
- Sartre, J.-P. (1956). *Being and Nothingness: An Essay on Phenomenological Ontology* (H. E. Barnes, Trans.). New York: Philosophical Library.
- Schechtman, M. (2004). Self-expression and self-control. *Ratio*, 17(4), 409–427.
- Schlegel, R. J., Holte, P. N., Maffly-Kipp, J., Guthrie, D., & Hicks, J. A. (2022). Authenticity as a pathway to coherence, purpose, and significance. In K. Tobia (Ed.), *Experimental Philosophy of Identity and the Self* (1st ed., pp. 169–181). London: Bloomsbury Academic.
- Strohming, N., Newman, G., & Knobe, J. (2017). The true self: A psychological concept distinct from the self. *Perspectives on Psychological Science*, 12(4), 551–560.
- Sutton, A. (2020). Living the good life: A meta-analysis of authenticity, well-being and engagement. *Personality and Individual Differences*, 153, 109645.
- Taylor, C. (2003). *The Ethics of Authenticity* (11th print ed.). Cambridge: Harvard University Press.
- The President's Council on Bioethics. (2003). *Beyond Therapy: Biotechnology and the Pursuit of Happiness*. New York: Regan Books.
- Williams, B. (2002). *Truth & Truthfulness: An Essay in Genealogy*. Princeton: Princeton University Press.