What’s special about ‘not feeling like oneself’? A deflationary account of self(-illness) ambiguity

Roy Dings & Leon C. de Bruin

To cite this article: Roy Dings & Leon C. de Bruin (2022): What’s special about ‘not feeling like oneself’? A deflationary account of self(-illness) ambiguity, Philosophical Explorations, DOI: 10.1080/13869795.2022.2051592

To link to this article: https://doi.org/10.1080/13869795.2022.2051592

Published online: 22 Mar 2022.
ABSTRACT
The article provides a conceptualization of self(-illness) ambiguity and investigates to what extent self(-illness) ambiguity is ‘special’. First, we draw on empirical findings to argue that self-ambiguity is a ubiquitous phenomenon. We suggest that these findings are best explained by a multidimensional account, according to which selves consist of various dimensions that mutually affect each other. On such an account, any change to any particular self-aspect may change other self-aspects and thereby alter the overall structural pattern of self-aspects, potentially leading to self-ambiguity. Second, we propose that self-ambiguity comes in degrees and should be understood as a spectrum (as opposed to there being qualitative differences among instances of self-ambiguity). Third, we argue that complexity is the most useful dimension to organize cases of self-ambiguity, with mundane instances of self-ambiguity on the one end and self-illness ambiguity on the other end of the spectrum. Fourth, we address the promises and perils of narrativity with regard to self-ambiguity. Finally, we link our deflationary account of self(-illness) ambiguity to pattern theories of self.

1. Introduction: is self-ambiguity special?
If you would have to describe someone who has received a diagnosis of Autism Spectrum Disorder (ASD), would you call them ‘a person with autism’ or rather ‘an autistic person’? Researchers have recently addressed linguistic preferences when describing people with ASD and found that one of the main determinants of such a preference is the way they think of the person in relation to their mental disorder: as being separate or as overlapping. For instance, in the study by Bury et al. (2020), 198 Australian adults who were diagnosed with ASD were asked how they would describe themselves and, when subsequently asked to motivate their answer, they might say ‘autism is intertwined with who I am, my identity, you cannot separate the two, I would be a completely different person’. Others would highlight that their ASD is only a part of who they are. Yet others would hold the opposite view. Kenny et al. (2016), investigating linguistic preferences across several British populations, found that most mental health care
professionals would say e.g. ‘We need to describe the individual and ASD as separate entities with the emphasis on the individual not the disorder’ (ibid., 451).

What is expressed in all these linguistic phrases is how people conceptualize themselves in relation to their diagnosis or disorder. This is a task many patients struggle with. Such cases have been discussed under the header of illness ambiguity (Karp 1992) or self-illness ambiguity (Sadler 2007). These terms highlight that for individuals struggling with mental disorder, it may be difficult and indeed ambiguous to determine whether a particular thought, feeling, disposition, attitude or behavior is best ascribed to themselves or to the disorder.1

Recently it has been argued that such self-illness ambiguity is best understood as being a specific instance of the more general phenomenon of self-ambiguity (Dings 2020a). Roughly, the idea is that people frequently struggle to demarcate themselves from all kinds of things: social pressures, upbringing, work stress, physiological abnormalities and so forth. All of those factors may potentially contribute to an individual ‘not feeling like oneself’, in the sense that one may feel, think or behave in a way that makes one wonder ‘is this me, or is this because of my upbringing, stress at work, my low blood sugar, …?’. Given that self-ambiguity is only emerging as an explicit object of interdisciplinary investigation, this paper builds on earlier work and sets out to explore what could be ‘special’ about self-ambiguity, specifically in the case of mental illness.

In Section 2, we start by investigating whether experiences of self-ambiguity are special in the sense of being exceptional. We show that, in contrast to what some philosophers and scientists seem to presuppose, self-ambiguity is a fairly common experience. There is a growing body of psychological and sociological research on state authenticity and identity disruptions, which suggests that self-ambiguity is a ubiquitous phenomenon. We argue that this is best accounted for by a multidimensional account, according to which selves consist of various dimensions (e.g. embodiment, narrative, values, psychological attitudes, …) that may mutually affect each other. On such an account, any change to any particular self-aspect may change other selves and have an effect on this structure, potentially leading an individual to ‘not feel like oneself’. However, this does not rule out the possibility that there are special cases of self-ambiguity that are qualitatively different or unique in comparison to some of other, perhaps more mundane instances of self-ambiguity. Using the example of deep brain stimulation (DBS), we will argue that these special cases should be seen as extremes on a continuum or a spectrum, rather than qualitatively different or unique. In other words, we suggest that self-ambiguity comes in degrees. The next question is which dimension is most useful to organize and distinguish cases of self-ambiguity and, given that dimension, which cases of self-ambiguity form the extremes on that spectrum. In Section 3 we propose that complexity might to be the most useful dimension to differentiate between self-ambiguity cases. Thus, degrees of complexity enable us to position a particular instance of self-ambiguity on the spectrum. Mundane instances of self-ambiguity (e.g. self-hunger ambiguity) form one extreme of the spectrum. Self-illness ambiguity, we argue, forms the other extreme.

Given that any change to a particular self-aspect can in this way in principle result in self-ambiguity, the question is whether there are self-aspects that are special in the sense that they play a bigger role in the emergence or resolution of self-ambiguity. In
Section 4 we suggest that narrativity is important, yet we argue for a balanced role for narrativity in cases of self-ambiguity, acknowledging both its promises and perils. In Section 5 we discuss how to further flesh out the idea that selves consist of various dimensions (e.g. embodiment, narrative, values, psychological attitudes, …) that are strongly interrelated. We present our own so-called ‘deflationary’ account of self-illness ambiguity, which assumes that multidimensional selves have a ‘pattern’-like structure. Section 6 concludes with some remaining issues and outlines important questions for future research.

2. Multidimensional selves and the integration of self-aspects

There is plenty of empirical evidence from clinical psychology, social psychology and sociology that the extent to which people ‘feel like themselves’ may fluctuate on a daily basis (Nezlek and Plesko 2001; Heppner et al. 2008; Lenton et al. 2013; Schmader and Sedikides 2018). One of the studies by Lenton et al. (2013) \((N = 104)\) showed that 91% over participants did not feel like themselves, or felt less like themselves, every two months (See also Lenton, Slabu, and Sedikides 2016).

Not feeling like oneself may increase and be more severe following life-events (e.g. Burke 2006; Manzi, Vignoles, and Regalia 2010). To some extent, identity change is inevitable in life (Roberts, Walton, and Viechtbauer 2006). But for some, transitions such as going to university or becoming a parent may have substantial and long-lasting destabilizing effects on their self-concept (Manzi, Vignoles, and Regalia 2010). Indeed disruptions to our sense of self may come from various domains. Regarding our professional lives, it has been shown that people who hold multiple jobs, or who transition across jobs frequently, may not feel like themselves in some work-related contexts (Caza, Moss, and Vough 2018). They struggle with feeling authentic as a result of not being able to balance multiple (seemingly incommensurable) identities. Regarding our hobbies, Carter (2016) has suggested that an authentic self-experience and certainty about oneself, might fluctuate for sports fans depending on the achievements of ‘their’ sports team. Unsurprisingly, many challenges to our sense of self stem from our social lives. Getting married or becoming a parent may significantly affect whether and to what extent we feel like ourselves (Burke and Cast 1997; Burke 2006). A particularly disrupting life-event is a romantic breakup. A study by Slotter, Gardner, and Finkel (2010) investigated how people struggled with confusion and ambiguity regarding ‘who they are’ post-breakup. Earlier research on self-other inclusion indicated that people may quite literally wonder ‘where do “you” end and “I” begin?’ (Slotter and Gardner 2009). The skeptic may want to downplay the impact of romantic breakups by suggesting there is ‘only’ a change in relationship status. However, research shows (and some people may know from personal experience) that the end of a relationship may have severe physical, emotional and behavioral consequences (Davis, Shaver, and Vernon 2003). Slotter, Gardner, and Finkel (2010, 148) emphasize this point as well: ‘individuals may [post-breakup] alter their appearance, social circles, activities, goals, or even their values or beliefs’.

Thus, empirical research suggests that self-ambiguity is a relatively common phenomenon, where all kinds of (life-)events may result in self-ambiguity. But how can we explain that the extent to which people ‘feel like themselves’ may fluctuate on a daily basis? That is, what theory of self is able to account for the empirical findings that self-ambiguity is an
everyday phenomenon? Selves are notoriously difficult to define and there exists a plethora of theories concerning what selves consist of. Our own position in this debate is thoroughly pragmatic: a suitable theory of self has to be informed by the task at hand. That is, what selves ‘are’ depends on what you want that concept to cover. In the case of self-ambiguity a broad, multidimensional conception of selves is required (See Dings (2020a) for a more elaborate argument. See also Sadler 2007; Tekin 2019). Our argument for such a conception of selves is thoroughly pragmatic as well: for any self-aspect S, if a substantial change or alteration to it might plausibly result in an individual reporting self-ambiguous, this means that S should be included in a theory of self when investigating self-ambiguity.4

For instance, there have been some recent debates as to whether we should construe the self as being extended (for a discussion and overview see Heersmink 2020). For most tasks in cognitive science the question of whether the concept of self should be construed as an ‘extended self’ is crucial and not easily resolved. However, for understanding self-ambiguity the answer is, quite easily, yes, selves are extended. As Russell Belk’s research has convincingly shown, personal possessions may be incorporated into someone’s life or self-image to such an extent, that losing those possessions feels, to the person losing the object, as a loss of self (Belk 1988).

There are various theories of self that emphasize the multidimensionality of selves (Gallagher 2013; Dings and De Bruin 2016; Tekin 2019; Newen 2018). What these theories have in common is that they acknowledge (and try to account for) the interrelation of various dimensions. That is, they do not merely claim that selves consist of various dimensions (e.g. extended aspects, psychological attitudes, self-narratives, social relations, embodiment, and so forth) but also postulate that these dimensions may mutually affect each other. One’s social relations may change one’s personal values which in turn may alter psychological attitudes which have an impact on one’s embodiment, et cetera.5 On such a view, isolating any particular self-aspects leads to an artificial portrayal of selves. By contrast, a more complete (and ecological valid) depiction of selves highlights precisely the dynamic interactions between various self-aspects.

To see why this is crucial for understanding self-ambiguity, consider that ‘minor changes’ to the self (i.e. changes that would not result in someone not feeling like themselves per se) may, through dynamic interaction of self-aspects, result in ‘major changes’ to the self (i.e. changes that may result in someone not feeling like themselves). To use the seemingly trivial example of hunger: this may lead to self-ambiguity because our physiological state is inextricably connected to other self-aspects. Lack of nutrients may alter one’s motivational states and decrease one’s cognitive capacities, leading to less performance on a work-related task or not meeting a deadline. If your boss scolds you for this, this may further decrease your self-esteem. Or if you get frustrated about not meeting the deadline this may result in you taking it out on your partner. The point is that hunger (as a physiological state) does not suffice for an instance of self-ambiguity, but a lack of self-esteem or a fight with one’s partner may, in some cases, give rise to a feeling of self-ambiguity.

A multidimensional theory of self is able to account for these cases of self-ambiguity. On the one hand, selves consist of various particular self-aspects, and any change in self-aspects may, in principle, lead that person to not feel like oneself. On the other hand, because selves are dynamic systems where any small deviation or alteration may have
substantial effects on another part of the system, self-ambiguity arises not only when the ‘significant’ parts of the self are directly affected, but also when they are altered indirectly, as the result of interrelated self-aspects.

One might worry that it remains unclear at what point we actually have a case of self-ambiguity. What has to change for someone to not feel like oneself? Consider the response by De Haan et al. (2017, 6) in reaction to the multidimensional theory of self we presented in earlier work on Deep Brain Stimulation (DBS, cf. Dings and De Bruin 2016):

[T]he result of their deliberately ‘inflationary’ account, is that it no longer has discriminatory power, (...) [it] provides no criteria for how to determine whether changes are alien or authentic to patients’ selves. Summing up, there are two main questions that an account of personality or personal identity should answer in order to be of use for evaluating the changes due to DBS treatment. First, an account should help to determine which changes amount to changes in personality or personal identity—as opposed to changes that do not affect the person qua person. And, second, it should provide suggestions for how to assess the character of these changes; that is, how can one determine whether a change entails becoming more or rather less oneself?

In cases of what we might call self-DBS ambiguity, patients grappled with the question whether the changes in their behavior, affect and world-view were ‘part of them’ or whether they should be attributed to the DBS treatment (cf. Schüpbach et al. 2006; Dings and De Bruin 2016; De Haan et al. 2017). But if both DBS patients and hungry people may report ‘not feeling like themselves’, then to what extent are they talking about similar experiences? In other words, to what extent can we compare cases of self-DBS ambiguity with what one might call self-hunger ambiguity? Intuitively one might think that the DBS patients have undergone more severe or more significant changes but the question remains whether we can see these cases as being two extremes on the same continuum, or whether there is a qualitative difference between them. As of yet, this question has not been addressed. Arguably, researchers working on DBS-induced changes tend to implicitly endorse a ‘qualitative difference’ position by default. However it remains unclear what that difference consists of. De Haan et al. distinguish between changes that ‘affect the person qua person’ and those that do not. They thereby presuppose some sort of threshold, at which point the person changes qua person. Below that threshold ‘changes are mere changes’, above the threshold they are ‘changes in the person qua person’. On the inflationary account that we aim to put forward in this article, there is no such strict threshold. There is nothing ‘special’ that cases above the threshold have and that cases below the threshold lack. Thus, we will advocate a ‘two extremes on a continuum’-position which suggests that self-ambiguity comes in degrees. However, such a spectrum view is not devoid of normativity. That is, even if there is a spectrum, we need to be able to make clear where on the spectrum a particular instance of self-ambiguity is located. Thus we need to be able to provide a norm or standard. This requires more careful consideration.

3. Complexity of self-ambiguity

Which norm or standard subserves the spectrum of self-ambiguity? How to order or organize different instances of self-ambiguity? Here we wish to suggest complexity of
self-ambiguity as the most useful dimension to ‘rank’ instances of self-ambiguity, or to locate them on the same spectrum.\(^8\)

Complexity can be derived from both sides of self-ambiguity, so to speak: the self and the ‘ambiguating factor’. Ambiguating factors are those factors with which one may struggle to determine whether it is internal (i.e. ‘part of the self’) or external or (i.e. ‘not part of the self’), such as hunger, social pressures, upbringing, medication or mental illness. The complexity of selves, in terms of their multidimensionality, was already addressed in the previous section.\(^9\) In the current section we thus zoom in on the complexities of the ambiguating factor.

Whether an object, event, person or phenomenon is an ambiguating factor depends on its potential impact on the self, on whether and in what ways it may relate to the self. A pocket watch is enormously complex, but people probably do not experience self-ambiguity in relation to it, due to the fact that clocks typically do no relate to us in any substantial way.\(^10\) So complexity of objects in a colloquial sense is not what we have in mind here. Rather, because self-ambiguity is a relational phenomenon, we want to focus on the complexity of how an object, event, person or phenomenon may relate to an individual. Roughly, we may then distinguish between how the ambiguating factor has an impact on our self (the ‘origin’ of the self-ambiguity, so to speak) and how we ourselves may have an impact on the ambiguating factor (the ‘means to resolve’ self-ambiguity, so to speak).

Let us make this more concrete by turning to what we think is a good example of the ‘simple’ end of the spectrum of self-ambiguity: self-hunger ambiguity. The reason for why this is not a particularly complex form of self-ambiguity is that both the origins as well as the means to resolve self-hunger ambiguity are relatively straightforward: it arises due to a lack of nutrition and can be resolved by eating. Moreover, the self-aspects that it may impact in the first place seem relatively clear as well: A typical instance of self-hunger ambiguity may be connected to self-aspects that are easy to demarcate (e.g. embodied self-aspects such as fatigue; affective self-aspects such as a loss of motivation; cognitive self-aspects such as a loss of concentration). To emphasize, we are making a relatively trivial point here: hunger is something we understand. We have a grasp on what hunger is, how it typically affects us, how it emerges and how it can be resolved. Therefore, it has little potential for creating self-ambiguity.\(^11\)

The opposite is true for what we think is the other end of the self-ambiguity spectrum: self-illness ambiguity, particularly when it comes to mental disorders. Much like selves, mental disorders cover the full range of human life. If we take into account the causal origins of a mental disorder, how it is experienced or expressed, and its impact on present and future agency, then we require a broad, multidimensional account as well. That is, mental disorders cannot be understood in isolation from experiential self-aspects (e.g. psychosis), emotional aspects (e.g. feelings of sadness or mania), intersubjective aspects (e.g. social pressures or one’s upbringing), cognitive aspects (e.g. lack of concentration or reasoning capacities), socially and materially extended aspects (e.g. changes in one’s professional or social life), and so forth. Indeed mental disorder and selves form two sides of the same coin: an analysis of mental disorder is inevitably also an analysis of self (Dings and De Bruin 2016; Gallagher and Daly 2018).

The multidimensionality of mental disorder is what makes self-illness ambiguity so complex. We talked about self-hunger ambiguity above. But one might also consider
slightly more complex instances of self-ambiguity, such as self-ambiguity after losing one’s job or following a romantic break-up. Here too the self-ambiguity can be traced back to events or domains of one’s life that are relatively easy to delineate. For someone who wants to resolve self-ambiguity after they lost their job, the ‘task’ at hand is clear, so to speak: this person knows, more or less, what she has to come to terms with in order to get rid of the feelings of self-ambiguity. Importantly, we are not saying that this is in any case an easy task. These instances of self-ambiguity may still require a lot of effort and take plenty of time. They may even require assistance from family members or professional therapists. But the point is that the ambiguity of those instances of self-ambiguity only ‘points in one direction’, if you will, namely to the ‘self’. One experiences ambiguity regarding ‘who one is’. One does not, or not so much, experience ambiguity regarding the ‘origin’ of the self-ambiguity. That is relatively clear. But in the case of mental disorder, even the possible ‘origin’ of the ambiguity that you experience regarding yourself, may be ambiguous (Dings and Glas 2020). Are you depressed because of stress at work? Because of a traumatic event in your childhood? Because of a decrease in particular neurotransmitters in particular brain areas? Because of a recent life-event? Or because of all of the above?

Thus, self-illness ambiguity adds another level of complexity to self-ambiguity, because of the multidimensionality of mental disorders. In a coarse-grained taxonomy of self-ambiguity, one might point out that there are other forms of self-ambiguity which are also complex (e.g. because they are also multidimensional or difficult to delineate). Think for instance of self-medication ambiguity (Karp 2006), self-DBS ambiguity (Dings and De Bruin 2016) or self-brain ambiguity (Singh 2013). Medication, DBS and the functioning of the brain are all complex and the ambiguity they give rise to when it comes to self-experience and self-understanding may be more difficult to resolve than e.g. self-hunger ambiguity. However, one may still think of self-illness ambiguity as one of the most complex instances of self-ambiguity because typically when one suffers from self-illness ambiguity, one not only tries to clarify one’s relation to the illness, but also to e.g. the treatment (e.g. medication) or possible origins (e.g. brain functioning). Thus, self-illness ambiguity often comprises other forms of self-ambiguity.

4. The role of narrativity in self-ambiguity: promises and pitfalls

In Section 2, we proposed that selves should be conceptualized as consisting of a multitude of interrelated dimensions and that any change in a particular self-aspect may in principle lead to an instance of self-ambiguity. This gives rise to the following question, which will be addressed in this section: are there self-aspects that are special in the sense that they play a bigger role in the emergence or resolving of self-ambiguity? In previous work we have suggested that narrative self-aspects play an important role in the emergence of self-ambiguity and that they may also serve as an important tool to resolve such ambiguity (Dings and Glas 2020). To clarify why this is the case, we shall first (in 4.1) reiterate how we think self-ambiguity arises and may be resolved. Then (in 4.2) we point out some advantages of narrativity in the context of self-ambiguity. We go on to address some worries about the insufficiency of narrative self-aspects (in 4.3). In Section 5, we will defend our deflationary take on self-(illness) ambiguity from these worries.
4.1. Self-ambiguity and coherence among self-aspects

On our view, self-ambiguity arises when there is a lack of coherence among self-aspects, and self-ambiguity may be reduced by increasing coherence. What is particularly important, we think, is the coherence between our reflective agency and our unreflective agency. For instance, the story we tell about ourselves has to be in line with our emotions and bodily feelings (Bortolan 2017). More generally: how we (consciously or reflectively) think about ourselves should more or less cohere with how we (unconsciously or pre-reflectively) experience ourselves. This coherence, or the lack thereof, is experienced first and foremost in our practical engagement with our social and material environment (Dings 2019).

Note that this is a thoroughly relational view on what constitutes an authentic self-experience (i.e. one that is not self-ambiguous). As we have argued elsewhere, the diachronic concerns that stem from our reflective self-image or self-narrative are strongly intertwined with how we experience the world, its objects and its possibilities (Dings 2018; 2020b; 2021). The emphasis on agency suggests that an experience of ‘being oneself’ occurs when one experiences the world, or one’s engagement with that world, in the right way. Such a view is in line with recent empirical research on state authenticity. Such ‘state authenticity’ is distinguished from ‘trait authenticity’. The latter is what psychologists have hitherto focused on, and concerns a more detached reflective evaluation of ‘being authentic’. In contrast, state authenticity is a (shorter-lived) felt experience which involves a set of emotions, cognitions and actions in a particular situation (cf. Sedikides et al. 2017). Research on state authenticity suggests ‘that people are authentic in a situation only if there is a match between their enduring propensities (e.g. attitudes, values, beliefs, personality) and their cognitions or actions in that situation’ (Lenton et al. 2013, 277). In this respect, Schmader and Sedikides (2018) have developed the ‘State Authenticity as Fit to Environment’ (SAFE) model which posits that ‘state authenticity is experienced when aspects of the self and identity are a fit to the surrounding environment’ (230). There are various interrelated ways in which the environment may ‘fit’ according to the SAFE model (ibid., 229). There may be environmental cues that fit one’s self-concept (‘self-concept fit’) leading to cognitive fluency and a sense of ‘true self’. In addition, environmental cues may afford personal values and goals (‘goal fit’) leading to motivational fluency and self-determined action. Finally, environmental cues may signal validation from others (‘social fit’) leading to interpersonal fluency and a lack of social constraints. Jointly such fit leads to felt authenticity which ‘helps to maintain and facilitate self-coherence’ and ‘tells people whether they are integrated and organized’ (Lenton et al. 2013, 277).

With the idea of self-ambiguity as pertaining to a lack of coherence among (in particular reflective and unreflective) self-aspects in place, we now aim to further elucidate the role of narrativity and strive towards a balanced account of narrative self-aspects, highlighting both its promises and pitfalls.

4.2. Why narrativity is (relatively) special

The first argument, in a nutshell, is this: establishing and maintaining coherence across self-aspects depends on the capacity for integration. As we will argue below, narrativity
pertains to the highest level of integration in a (cognitive) system. Consequently, a disruption of narrative self-aspects may most likely result in self-ambiguity (and conversely, narrativity may be considered an obvious starting point for resolving self-ambiguity).

The idea that narrativity constitutes the highest level of integration for an agent or cognitive system is commonly held in the psychological sciences (see e.g. Singer and Blagov 2004). Its potential for integration comes from two properties: on the one hand, narratives pertain to the most temporally encompassing level – they include past, present and future. On the other hand, they are sufficiently abstract to transcend concrete scenario's and facilitate integration (e.g. by highlighting patterns across scenario's or by providing a narrative explanation for why such a pattern is lacking). Because of this, narrative plays a central role in various cognitive and agential capacities (for a recent overview and discussion see Bouízegarene et al. in press). For instance, researchers on memory and mental time travel use the level of life-stories to make sense of high-level characteristics of how people process information across different temporal domains (Conway, Justice, and D’Argembeau 2019).

Crucially, this theoretical argument that narrativity potentially enables integration is backed up by empirical research which shows that people actually rely on narrativity for ‘diachronic meaningful self-understanding’. There is an abundance of research in clinical, existential and social psychology which highlights that people, as a matter of fact, use narratives to make sense of themselves (Singer 2004; McAdams 2011). To clarify, the diachronic meaningful self-understanding that people engage in requires us to elucidate where the ‘meaning’ comes from. Research is clear on this point: the meaning comes from narratives (Schechtman 1996; Singer 2004; McAdams 2011). That is, in establishing relations between short-term and long-term goals, or acts in the past, acts in the present and acts in the future, we inevitably construct a narrative (Walker 2012).

Note that this is particularly relevant in contexts of self-ambiguity. If one experiences self(-illness) ambiguity and tries to make sense of a particular action or event, one requires a narrative to make that action or event intelligible (Hassall 2020). As we discussed in Section 2, self-ambiguity may frequently arise following life-events such as romantic breakups or traumatic experiences. Research shows that people very often engage in narrative meaning-making to help deal with (the consequences of) such life events (Park 2010). Constructing a story about mental disorder and its effects on your life, sometimes derived from cultural narratives, may help to address and potentially resolve the ambiguity that one experiences (Hassall 2020). Thus, narratives allow for reducing the complexity of selves and mental disorders, and to form meaningful relations between components of each of those (Howard 2006; Yanos, Roe, and Lysaker 2010; Tekin 2011; Hassall 2020). Similarly, in the context of self-DBS ambiguity we find many accounts which stress narrative identity and narrative agency (Goddard 2017; Jecker and Ko 2017; Leuenberger 2021. But see e.g. Pugh, Maslen, and Savulescu 2017 for a critical perspective).

Importantly, the assumption that narrativity enables integration does not necessarily imply that self-illness ambiguity always can or needs to be resolved. In some cases, patients’ self-understanding may be largely determined by their identification with a particular disorder, to the extent that even the process of recovery feels as a threat to their self (Kokanovic, Bendelow, and Philip 2013). In these cases, it might be helpful for patients to integrate their illness story into a larger narrative that also offers them other identification points (e.g. their role as a parent). But even if the ambiguity that they experience...
is not fully resolved in this way, that doesn’t invalidate the integrative power of narrativity. On the contrary, it is precisely this integrative power that allow us to juggle different perspectives on ourselves in our life narrative.

4.3. Why narrativity is less special: reflection, sociality and normativity

So far we have explored reasons for thinking that narrativity has a special status when it comes to self-ambiguity: it is widely considered to be an important tool for achieving an integrated self-understanding. And there is also evidence that, as a matter of fact, people typically rely on narrativity to make sense of themselves, also in the context of self-ambiguity.

We now turn to reasons for why narrativity should not be deemed special, why it may be insufficient, and why it may even be deemed problematic in the context of self-ambiguity. First, narrativity seems to rely to a large extent on reflective agential capacities. That is, the person has to reflect on his or her life and use their cognitive resources to establish an integrative self-narrative. However, as we all know, our (reflective) cognitive capacities are often limited. Indeed it seems intuitively clear that we cannot resolve all instances of self-ambiguity simply by thinking about them. Establishing an integrative self-narrative is -at best- a necessary condition for resolving self-ambiguity, but it is seldom a sufficient condition. Constructing a narrative about self-hunger ambiguity may help to counter the negative effects of such self-ambiguity; but constructing a narrative about self-DBS ambiguity may not in itself resolve e.g. negative emotions or a skewed body-image.

Second, and relatedly, relying on narrativity may lead to an over-individualistic view on how self-ambiguity arises and may be resolved. Analogous to the previous point, it seems that if I establish an integrative self-narrative concerning my self-ambiguity, this does not automatically resolve it. Especially as long as it is not a ‘convincing’ self-narrative. Moreover, it seems implausible that one constructs a self-narrative all by oneself.

There is an additional worry about the insufficiency of narrative in the context of self-ambiguity, which pertains to the topic of normativity. On the presented view so far, self-ambiguity may arise when there is a lack of coherence among self-aspects, and self-ambiguity may be resolved when this coherence is increased. Furthermore, narrativity plays an important role in establishing and maintaining coherence. However, there is normativity involved in these claims. To see why, we need to acknowledge that there are various self-narratives that one can develop, and some of these may be more useful or stable in establishing or maintaining the coherence that is needed to resolve self-ambiguity. Thus, it seems that only a good or authentic self-narrative can do the job of resolving self-ambiguity. But what constitutes a good or authentic self-narrative? In other words, how does a good or authentic self-narrative differ from a bad or inauthentic self-narrative?

This is a problem because the narrative approach notoriously struggles to accommodate authenticity. Many psychological approaches to narrativity simply acknowledge the fundamentally subjective nature of authenticity. They rely on self-report measures to study authenticity. The idea seems to be: whether a narrative is authentic is determined by the person holding the narrative. A fortiori, Wilt, Thomas, and McAdams (2019, 9) talk about ‘personal myths’ which are narratives concerning authenticity. That is, people themselves construct narratives about what it means to be authentic and employ that narrative (and its normativity) to evaluate their own authenticity.
Another interesting development in this respect is the increasing usage in psychological research of the concept of a ‘true self’. Narrative identity research follows this trend (Schlegel et al. 2011; Wilt, Thomas, and McAdams 2019). In a nutshell, the concept of a ‘true self’ substantiates the intuition that many people across cultures have, which is that ‘deep down’ there is a ‘core’ of who you are, and this core exemplifies who you really are – your most authentic essence (for an overview of recent research, see Strohminger, Knobe, and Newman 2017). If we accept the notion of a true self, then this does offer some insights on how to distinguish an authentic narrative from an inauthentic one. That is, research shows that people evaluate ‘true selves’ differently than selves in general. For instance, regardless of how one thinks of (one)self in general, the true self is deemed to be essentially a moral self (Strohminger and Nichols 2015) and a morally good self at that (Strohminger, Knobe, and Newman 2017). Although we are making big argumentative steps here, this might entail that an authentic narrative is a self-narrative that is about morally good acts. One worry that skeptics of narrative approaches have when it comes to authenticity is that ‘anything goes’. On this view, narrative implies self-creation, yet authenticity also seems to require self-discovery (Leuenberger 2021). Narrative approaches sometimes voice the opposite worry: that other accounts of authenticity do not accommodate the self-creative component. So the challenge really is to find a balance between those demands.

To counter the idea that ‘anything goes’, philosophers have tried to delineate the normative constraints on narratives (in a way that goes beyond subjective appraisals). The most famous of these are the reality constraint and articulation constraint that Marya Schechtman formulated in her book The Constitution of Selves. The latter entails that a narrator must be able, to a large extent, to make her self-narrative explicit and intelligible. She adds ‘A person need not be able to narrate her whole life in a self-conscious way, but she must be able to narrate parts of it’ (1996, 105). Regarding the reality constraint Schechtman writes that it need not be ‘that a narrative must be totally accurate in every regard or contain no trivial mistakes, but it should exhibit a fundamental grasp of what the world is like’ (1996, 83). This reality constraint is clearly an important notion, offering an important means for approximating some sort of ‘narrative truth’ (Walker 2012). One of the main reasons for twisting reality a bit is to strive for consistency or coherence. Indeed a completely inconsistent narrative is unlikely to be an authentic one. Note that this is basically a further emphasis on normativity. Given that one and the same event may be narrated in different ways, then how to determine which narrative ‘is best’ if we have two inconsistent or incompatible self-narratives?

Focusing on illness narratives, Tekin (2011) explores what distinguishes a ‘good’ narrative from a ‘restrictive’ one. Tekin mentions three characteristics of a ‘good’ narrative which, we believe, offer a refinement to the reality constraint that Schechtman posed. A good narrative, according to Tekin, is at least, (1) responsive, i.e. does not leave out events that have a substantial impact on one’s (psychological) life, nor should it be the product of wishful thinking. In addition it should be (2) comprehensive in that it should encompass all domains of life (e.g. someone who is both an academic and a parent should not have a self-narrative that exclusively focuses on their academic achievements). Finally, a good narrative is (3) resourceful in that it provides the agent with reasons for her actions, facilitates autonomy and is not dogmatic (in the sense of using the same type of explanation regardless of the context).
More recently, Leuenberger (2021) defended a narrativist account of authenticity in the debate on self-DBS ambiguity. She argues that an authentic self-narrative has to meet at least two (sets of) requirements: sustainability and self-definition. Regarding sustainability she notes that

a sustainable self-narrative does not require too much work to uphold because it is not in tension with one’s lived experiences. It accurately reflects and coherently represents them. In an unsustainable narrative, aspects of the story are off because relevant actions, emotions, thoughts or other personal facts are ignored or suppressed. (5)

She further adds that

A narrative is easier to uphold if it makes sense and the elements of the story build on and support each other. A self-narrative is coherent if it succeeds in making single episodes of a person’s life and her characteristics intelligible by integrating them in a wider context. (ibid., italics added)

Thus, a sustainable self-narrative is a coherent self-narrative, and coherence is based on psychological intelligibility. Leuenberger hereby suggests working towards a balance where the self-narrative fits reality as much as possible but may deviate from reality insofar as the narrative requires coherence, i.e. intelligibility.

In addition, Leuenberger notes that a self-narrative has to be self-defining, meaning that it should not be too vague or provide ‘many disparate and equally right answers’. Self-narratives that rely too much on potentiality run this risk: an authentic self-narrative should also consist of what is actualized or enacted by the individual. What is particularly relevant for self-ambiguity, is finding a balance between being an active agent and a passive recipient. That is, balancing ‘internal’ and ‘external’ factors. A self-narrative that is biased towards externalization, for instance, is not apt or authentic (cf. Tekin’s view on resourcefulness, where a self-narrative should not be dogmatic).15

What this brief discussion shows is that the worry that ‘anything goes’ in narrative approaches is unwarranted. The normativity of the degree to which a narrative integrates self-aspects (i.e. is coherent) is derived from a balance between fitting to reality, on the one hand, and various constraints (e.g. internal coherence of the narrative, intelligibility, resourcefulness) on the other. The balance between those enables a robust and stable self-narrative. Importantly, we do not deem the discussed constraints to be exhaustive: different contexts, different people, different cultures may all add additional constraints. They may also modify constraints, in the sense that in the increasingly digitalized world, the ‘reality’ that the reality constraint focuses on is, arguably, less clear than in pre-digital societies, allowing for more pliancy.

5. A deflationary account of self-ambiguity

In this section, we explore the benefits of connecting our deflationary account of self-illness ambiguity to pattern views on selfhood and defend this account from the worries concerning narrativity raised in Section 4.3.

Pattern theory approaches to selfhood have been developed in philosophy (Gallagher 2013; Newen 2018) and are being applied across diverse fields such as ethics, artificial intelligence and cognitive neuroscience (Ryan, Agrawal, and Franklin 2020; Fingelkurts,
What these approaches converge on is the idea that selves are not ‘entities’ or things which have self-aspects such as embodiment, psychological attitudes, emotions or self-narratives. Rather, selves are, consist of, the pattern of interrelated self-aspects. In other words, the Gestalt-like relation amongst various self-aspects constitutes a self. A pattern theory approach thus foregrounds the multidimensionality of selves. Crucially, these various self-aspects are strongly inter-related: each self-aspect may potentially modulate another self-aspect, thereby constituting a thoroughly dynamic system. In addition, contextual factors play a major role in modulating the pattern, as each self-aspect may be influenced by contextual factors which in turn may have repercussions for the rest of the pattern. On this view then, it does not make sense to treat particular self-aspects in isolation from another. For instance, if one is interested in the sense of agency, then on the pattern theory approach the appropriate way to conceptualize the agent at hand is also multidimensional. Thus, the sense of agency is a complex experience which may manifest itself pre-reflectively (i.e. experiential self-aspects), is generated in motoric processes (i.e. embodied, neural and behavioral self-aspects) but also operates as part of reflective deliberation and may be enhanced by narrative practices (Gallagher 2013).

In this respect, pattern theory approaches acknowledge the important role of narrativity within a self-pattern (Newen 2018). For instance Gallagher and Daly (2018, 5) suggest that narrative self-aspects offer a way to map the dynamical relations among the various other factors of the self. Self-narratives in some sense reflect, explicitly in content, or implicitly in form, all of the other aspects of the self-pattern (...). Specifically, narrative is a means of retrieving, disclosing, temporally mapping, and connecting all the other aspects.

At the same time, the framework of pattern theories puts us in a position to rebut the worries of overemphasizing narrativity (as discussed in 4.3). Regarding the issue of overemphasizing reflective capacities, a pattern theory approach would highlight that narrative deliberation is mainly effective (or only effective) when it works in tandem with our unreflective agency and when it is sensitive to e.g. environmental or bodily constraints (for similar arguments see Dings 2019). Central to our view is the idea that to understand the dynamics of self-ambiguity, we need to understand the interplay between moments of narrative self-deliberation and moments of unreflective engagement with the environment. These latter moments are informed by the reflective deliberation, and vice versa. When there is congruence between the deliberatively formed narrative and the unreflective agency, then these are characterized with a phenomenology of authentic agency (i.e. a lack of self-ambiguity). Therefore, we think there is an important role for investigating narrativity not in isolation from, but as strongly intertwined with e.g. the bodily habits, emotional dispositions and socio-material environment of the agent (cf. Dings 2019; Heersmink 2020; Wagner 2021). As for overemphasizing the individual contribution to self-narratives, the pattern theory approach not only enables us to incorporate the socio-cultural self-aspects into our view on selfhood; it also emphasizes the impact of our social environment as it is the social context that modulates the self-pattern. In this respect we side with the view that you are, at best, the co-author of your self-narrative (Schechtman 1996). Moreover, research shows that revising a self-narrative in order to deal with self (-illness) ambiguity is seldom done in isolation from other people, and that developed
self-narratives are typically ‘tested’ in social contexts before fully endorsing them (Inder et al. 2008; Shea 2010; Glas and Dings 2020). Also, as we pointed out in the previous section, although self-narratives are a powerful tool for integration, we should not expect them to fully resolve self(-illness) ambiguity once and for all.

6. Conclusion and questions for future research

In this paper we explored the conceptual landscape of self(-illness) ambiguity by addressing several questions as to what might be ‘special’ about self-ambiguity. To start, we highlighted that self-ambiguity is not special in the sense that it seems to be a fairly common experience. One of the ways we accounted for this is by highlighting the multidimensionality of selves: a change to any self-aspects might in itself lead someone to report not feeling like themselves, and any change in self-aspects might alter other self-aspects which, again, may lead someone to not feel like themselves. This also led us to the ‘spectrum’ view on self-ambiguity which suggests that self-ambiguity is not ‘special’ in the sense that it requires a unique type of experience. Rather, self-ambiguity seems to come in degrees. To distinguish between different instances of self-ambiguity (i.e. locating them on the spectrum) we suggested that complexity is the most useful dimension. Mundane instances of self-ambiguity then form one extreme of the spectrum, self-illness ambiguity the other. Given the multidimensionality of selfhood, we also addressed the question of whether there is any ‘special’ self-aspects when it comes to self-ambiguity. We suggested narrative self-aspects to have a special role due to their integrative nature, but also worked towards a balanced view that does not overemphasize narrative capacities.

Across this paper, there are various topics that we touched upon which certainly require further conceptual work and would ideally be empirically investigated. For instance, there seems to be, prima facie, considerable room for exchange between our theoretical work on self-ambiguity and the empirical work on state authenticity. It would be worthwhile to investigate to which extent research on self-ambiguity could provide some conceptual counterpart to the empirical research and, conversely, the empirical work could help to further develop the conceptual work. Similarly, it would be beneficial to clarify the relation between the concept of self-illness ambiguity and other methodological tools for empirically investigating identity disruptions. That is, much of the research discussed in Section 2 relies on concepts and methodological tools which may relate to self(-illness) ambiguity in various ways. For instance, how does self(-illness) ambiguity relate to scales that measure illness representation (Weinman et al. 1996), self-concept clarity (Campbell et al. 1996) or self-complexity (Linville 1987)? Furthermore, how apt are models of self (and illness) that rely on the idea of a ‘pattern’ when it comes to studying self-illness ambiguity? What we offered here is a mere starting point. Another crucial topic concerns normativity. On the one hand, this concerns the normativity that is inherent to mental illness, and the question is whether pattern approaches can or should deal with that. On the other hand it concerns the normativity that is inherent to selves (or self-patterns). We looked at narrativity as both a source and obstacle for normativity, but more research is needed here as well.

One final issue that we wish to draw attention to is research on lay conceptualizations of self and illness. As suggested by Dings (2020a), research on how lay people
conceptualize themselves (or ‘selves’) in relation to (their) illness could substantially contribute to elucidating the phenomenon of self-illness ambiguity. Although there is plenty of research on lay concepts of mental disorders (e.g. Haslam, Ban, and Kaufmann 2007), as well as research into lay conceptions of selfhood (Strohminger, Knobe, and Newman 2017), there is close to no research on lay conceptions of how selfhood and mental disorders interrelate. For instance, how does the aforementioned ‘true self’ concept relate to mental illness? Do people think that their true self remains unchanged by mental illness? Or is the alteration of the true self precisely what characterizes the impact of mental illness (as opposed to more ‘superficial’ changes to the self)? A link to state authenticity research could be made here as well.

We think the proposed pattern approach also fits this issue. For instance, research on lay concepts indicates that many people think of selves in terms of causally interacting self-aspects (e.g. Chen, Urminsky, and Bartels 2016) and of disorders in terms of causally interacting symptoms (e.g. Kim and Ahn 2002). Yet we should be cautious, as there is also research on lay reasoning that suggest a different picture, i.e. where lay people think about selves or disorders in terms of essences (see e.g. Haslam, Bastian, and Bissett 2004). Nevertheless, there are important indications that the proposed pattern approach to the self-illness relation is worth exploring. For instance, there has been some work that suggests that this kind of approach is beneficial for patients to make sense of their conditions (Frewen et al. 2013). These researchers show that framing the condition in terms of a network of interacting symptoms can serve as a complement for existing classifications and treatments. Moreover, psychiatric patients often think about themselves in relation to their disorder in terms of a continuum: their symptoms are ‘extreme’ aspects of who they are (Estroff et al. 1991; Pedley et al. 2017). Thus they, their selves, are not isolated from the symptoms – the symptoms are thoroughly non-hyponarrative. They are deviations within a pattern, but who they are is this pattern. This fits well with an often voiced conceptualization in the autism community, which construes autism as a ‘way of being’ (Bagatell 2010).

Notes

1. Self-illness ambiguity may also appear from a third-person perspective, e.g. when person A is not sure whether she should attribute a particular behavior or utterance to person B or to B’s mental disorder (see e.g. Bröer and Besseling 2017). Thus from a third-person perspective there is conceptual ambiguity concerning the relation of person and illness. From a first-person perspective there is also phenomenological ambiguity, which interacts with conceptual ambiguity in various ways (see Dings 2020a).
2. The change in sense of self following marriage and child birth shows that positive events may lead to self-ambiguity as well. However, research suggests that negative events tends to have a more substantial impact than positive events (Nezlek and Plesko 2001). Indeed self-ambiguity, or inauthentic experiences, tend to be avoided (Lenton et al. 2013).
3. Measured as a lack of self-concept clarity and a change in self-concept content.
4. Importantly, this argument targets to what Gallagher (2013) calls the meta-theoretical level, where we are simply listing aspects of the self that may be relevant to the task at hand. On this level, no claims are being made about self-aspects being necessary or sufficient. In contrast, on type- or token-levels of self-patterns, further specification is required. In other words: it makes sense to incorporate e.g. religious self-aspects because it seems plausible that certain people may experience self-ambiguity after significant changes in such religious...
self-aspects. Even if for other people such religious self-aspects are irrelevant (because they are not religious), leaving them out altogether in a self-ambiguity approach would mean we’d have trouble making sense of the former cases. A broad multidimensional conception of selves is required for potential cases of self-ambiguity, even if not each token instance of self-ambiguity actually involves such self-aspects.

Which self-aspects are to be included on a meta-theoretical level is a topic for discussion. We think the list provided by Gallagher (2013) offers a good starting point.

Thanks to two anonymous reviewers for pressing us on these matters.

5. Although we acknowledge that many theories on the multidimensionality of self are lacking precisely in this respect, we are optimistic about recent attempts to shed light on the inter-relation of self-aspects (cf. Gallagher and Daly 2018; Dings 2019).

6. DBS is a complex neurosurgical procedure for several motor disorders and, increasingly, as a last-resort treatment for psychiatric conditions. The implantation of a stimulating device deep into the brain has raised ethical concerns about its effect on, amongst other things, the patients’ self-experience, autonomy and informed consent (see Schermer 2011).

7. In the literature on such self-DBS ambiguity, there is a tendency to see these post-DBS changes as somewhat ‘miraculous’ or ‘science fiction’-like (which may explain the surge of interest in these cases from philosophers and ethicists, cf. Gilbert, Viaña, and Ineichen 2018).

8. Other dimensions could be e.g. abruptness, duration or severity of the self-ambiguity, but we think these dimensions can actually be subsumed under the more general criterion of complexity.

9. One additional remark entails that the complexity of the self may also serve as a protective factor in dealing with self-ambiguity, as it enables someone to strengthen a particular self-aspects when another self-aspects is threatened or ambiguated (Wisdom et al. 2008; Dings and Glas 2020).

10. Importantly, our deflationary account, by its very nature, does not rule out the possibility that even objects like pocket watches may lead to self-ambiguity. Our point here is that such instances are rare.

11. We re-emphasize the point that point from Section 2, that self-hunger ambiguity may increase in complexity when it spreads to other self-aspects. As we previously mentioned, lack of nutrients may lead to a decrease of cognitive capacities, which affects your work performance, for which you may be scolded by your boss, for which you may feel angry, which may make you lash out on your loved one. At some point, the ‘whole self’ is connected to this self-ambiguity. Moreover, one’s relation to hunger may become a source of self-ambiguity, like in the case of anorexia nervosa.

12. For an exception see e.g. Schlegel et al. (2009) who, in one of their studies, explore whether we can use reaction times to measure the accessibility of -parts of- the self-concept as a measurement of authenticity.

13. The concept of ‘true self’ has not been investigated in relation to mental disorder (but see Nichols & Strohminger 2015). We think this is an important avenue for future research which may form an insightful contribution to how laypeople understand themselves in relation to their illness.

14. Tekin (2011, 362) defines ‘good’ narratives as those narratives which having a positive influence on the person’s moral development. Thus, she remains silent on the topic of authenticity. Although it probably goes too far to conflate good narratives with authentic narratives, we do reckon that any authentic narrative must be a good narrative (but not the other way around).

15. At the same time, we should recognize that it is psychologically and practically impossible for human beings to be fully consistent in their self-narrative. In fact, the impression of perfect consistency tends to raise suspicion. A person who rationalizes away any inconsistencies in his or her self-narrative, would not make a particularly good impression as a reliable and trustworthy storyteller. An obsessive striving for perfection in this sense might indicate vulnerabilities in psychological, neurocognitive or personality profile (cf. McGeer 2008). Such obsession with consistency can be associated with rigidity (e.g., in cases of autism), feelings of fear or
nagging uncertainty (e.g., in the course of OCD), or intolerance of feelings of inferiority when being held to account by others (e.g., in narcissistic personalities).

Thus, a certain amount of inconsistency in self-narratives seems inevitable. But this does not necessarily pose a problem for the narrativist approach. On the one hand, one could suggest that people flexibly switch between inconsistent self-narratives depending on the context (see e.g., Lumsden 2013). On the other hand, inconsistent self-narratives may themselves be accommodated within an overarching narrative (see e.g., Leuenberger 2021). That is, if one struggles with whether something should be seen as internal or external to oneself, two self-narratives may be developed targeting each of those possibilities. But in addition, the struggle itself may be integrated into one’s self-narrative. This is important because becoming another person or remaining oneself can be a journey and narrative can capture that journey.

16. Which is an advantage because a reified construal of selves and/or illness provides an obstacle for resolving self-illness ambiguity (Dings and Glas 2020).

17. Empirical research on narrative identity also tends to overemphasize reflective agency by construing narrative self-understanding in terms of deliberate reflection. Consequently, investigations into e.g. authenticity from the perspective of narrative identity typically focus on such reflective acts. For instance, Wilt, Thomas, and McAdams (2019) suggest that ‘authenticity and inauthenticity emerge as one self-reflects on whether their behaviors, goals and feelings in specific circumstances were congruent or not with their ‘true self’ concept’ (p.2, italics added). In other words, these researchers focus on trait authenticity (i.e. evaluations of whether enduring traits may be deemed authentic) as opposed to the aforementioned state authenticity (i.e. experiences of authenticity which may or may not be fleeting). Crucially, self-ambiguity may occur both on a reflective/conceptual level as well as on an unreflective/experiential level (Dings 2020a). Thus, most existing research on narrative identity and authenticity only provides a part of the picture. We have attempted to resolve this by reconceptualizing narrativity as something that results from the interplay of the conceptual and experiential level (as outlined in Dings 2019).

18. There is some research going in this direction, e.g. Strohminger & Nichols (2014, 2015) and, from a more social psychological perspective, Bröer and Besseling (2017). We think a more focused study, employing the self-ambiguity construct, would be particularly illuminating.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by Deutsche Forschungsgemeinschaft: [Grant Number 419046236].

Notes on contributors

Roy Dings is a postdoctoral researcher at Ruhr-University Bochum. He obtained his PhD at Radboud University and was a visiting researcher at the University of Memphis. His research targets self-understanding and self-experience, in both healthy populations as well as in the context of psychiatric illness. Leon de Bruin is an associate professor at Radboud University and at VU University Amsterdam. He has published various papers and books on social cognition, 4E cognition, philosophy of psychiatry and philosophy of neuroscience.

Leon C. de Bruin, in his research De Bruin focuses on embodied and situated cognition and its philosophical and empirical ramifications, in particular in the field of neuroscience and psychiatry. He is co-editor of ‘The Oxford Handbook of 4E Cognition’, and co-author of ‘Philosophy of Mind, Brain and Behavior’.
References


