



The Tacitly Situated Self: From Narration to Sedimentation and Projection

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Abstract

Recent analytic-philosophical works in the field of situated cognition have proposed to conceptualize the self as deeply entwined with the environment, and even as constituted by it. A common move has been to characterize the self in narrative terms, and then to argue that the narrative self is partly constituted by narratives about the past that are scaffolded (shaped and maintained) by, or distributed over, a variety of objects that can rekindle episodic memories. While we are sympathetic to these approaches, here we propose a different strategy to situate the self—one which can be seen as complementing the narrative one, and which draws from concepts and ideas central to the phenomenological-existentialist tradition. We suggest, first, that the self has a sense of its past not just via narratives and episodic memories, but in virtue of being embodied and thus, importantly, *sedimented* (in other words, it has, or rather is, a *body memory*). Embodiment and sedimentation, in turn, always necessarily imply an environment or a situation, entailing that the self is also *inherently situated*. Second, we discuss the future-oriented dimension of selfhood, and argue that we understand ourselves as *projected* into the future, again not necessarily only narratively and reflectively, but also tacitly, in a bodily and inherently situated way.

Keywords Situated cognition · Self · Identity · Embodiment · Body memory · Sedimentation · Projection · Self-understanding

1 Introduction

One of the many thought-provoking ideas that have emerged in recent years from the (primarily analytical) philosophical literature on situated cognition is that our selves depend in very intimate ways on our relation to our environment: we are *situated selves*, and our environment deeply influences, and possibly even *constitute*, the self (Wilson and Lenart 2015; Heersmink 2018, 2020; Piredda 2020; Candiottio and Piredda 2019). This idea was already anticipated, though briefly, by Clark and Chalmers (1998)

in their famous paper on the extended-mind thesis. According to this thesis, certain objects and other features of the environment—such as notebooks, calculators, or the spatial ordering of items—can be seen as, literally, constitutive parts of belief-states, and more generally of cognitive processes (planning, calculating, remembering, and so on). To the extent that belief-states also constitute the self, then, if belief-states can extend, so can the self (Clark and Chalmers 1998, p. 18). Outside the field of situated cognition, marketing and business researcher Belk (1988, 2013) has also advanced the notion of an extended self, although through quite different considerations. His view is influenced by James (1890), Goffman (1961), and empirical studies in the social psychology of self and identity (such as Csikszentmihaly and Rochberg-Halton 1981). Note that not all papers on the situated self defend the view that the self is “extended”. What they emphasize, however, is that the self should not be conceived of in isolation from its environment, given the latter’s pervasive role in supporting and shaping it.

The aim of this article is to contribute to this literature by linking it up with insights from the

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phenomenological-existentialist tradition of philosophy. We note in Sect. 2 that recent analytic-philosophical arguments for the situated nature of the self assume a narrative conception of the self, and focus primarily on how narratives about one's past can constitute the self. While we do not disagree that narratives, especially self-narratives about the past, can constitute the self, the key claim we make in this paper is that a narrative account is not necessary for appreciating the deeply situated nature of the self.¹ To develop this point, in subsequent sections we bring in conceptual resources from the phenomenological-existentialist tradition of philosophy, which has long emphasized that our existence is inherently embodied and situated (where these two notions go hand in hand, as they imply each other); and, moreover, that we understand ourselves tacitly or pre-reflectively (and thus non-narratively) as embodied and situated. Specifically, in Sect. 3 we draw on the notions of *body memory* and *sedimentation/incorporation* to argue that the self involves a tacit or pre-reflective experience of having a past—namely, of being a self that, as we put it, *tacitly carries its past within it*. Importantly, this experience is one of having been constituted over time through bodily engagements with the world—that is, an experience of the self as deeply embodied and situated (as also entailed by Thomas Fuchs's notion of *situational body memory*, which we discuss in some detail). In Sect. 4, we draw on the notion of *projection* to argue that the self is constituted also by a tacit experience of the future, and that this experience inherently involves an understanding of oneself as entangled with worldly objects. Overall, then, we agree that the self can be constituted by narratives about one's past and future, and that such narratives can be scaffolded (supported and shaped) or even distributed over various objects. Yet we believe that the self can also be constituted by tacit, non-narrative sedimentations and projections, which typically entail embodiment and situatedness.

Before continuing, a *caveat*. In line with the focus of this special issue on technology, in what follows we discuss the self as situated in the material environment (mainly objects and buildings, which we regard as forms of technology). Yet,

¹ Our arguments are thus in line with those proposed, for example, by Damasio (1999), Menary (2008), and Fuchs (2017, 2020). These authors do not deny that narrative conceptions of the self exist and can shape or even constitute the self, but they all emphasize that the self can also be non-narrative, primarily in virtue of its embodiment, often understood as minimal bodily self-awareness (sometimes also called “minimal self” or “core self”). In fact, the non-narrative, minimal/core bodily self is often also regarded as primary or foundational—namely, as a condition of possibility for other forms of selfhood, such as narrative ones. Although we are sympathetic to this “foundationalist” perspective, we do not make a case for it here, as this would require further arguments. Our proposal in this paper thus remains compatible with different possible understandings of the relationship between narrative and non-narrative selfhood (thanks to an anonymous reviewer for raising this question).

of course, the self is also importantly situated among other people, non-human animals, and other living beings. One could argue that these are even more fundamental than inanimate objects in shaping who we are and how we understand ourselves. In fact, the phenomenological-existentialist tradition has itself long acknowledged our fundamental being-with-others, and there is a rich and complex contemporary literature on our embodied and affective engagements with others, including complex analyses of intersubjectivity, empathy, and related phenomena. We are aware of this, and certainly do not want to suggest that selves are situated somehow only, or even more fundamentally or primarily amongst objects/technology rather than other humans and living beings. In fact, it is arguably unproductive to establish what is more important or foundational here. Moreover, we appreciate that to discuss one category only (non-living things) without considering others (e.g., other people) is an abstraction and simplification, given that in our everyday engagements we constantly deal simultaneously with people, other living beings, objects, and natural and built environments. In spite of these complications, we hope our reflections can help adding a further step toward the understanding of human situatedness.

2 Narrative Accounts of the Situated Self

The thesis of a situated self has been formulated in different ways, which reflect the diverse terminologies and conceptual frameworks that have come out from the analytic-philosophical debate on the extended-mind (or extended-cognition) thesis. Within the same paper, and across papers, we find talk of a situated, distributed, extended, and/or scaffolded self. In addition, “self” and “personal identity” are also often used interchangeably (Wilson and Lenart 2015; Heersmink 2018; Candiotta and Piredda 2019; Piredda 2020). Such differences notwithstanding, all those approaches share the claim that the self is *diachronically constituted via autobiographical memory*. The idea is that what allows for a person to remain identical over time (to be the same self) is their capacity to remember that they were the same person they were in the past. Accordingly, some theorists propose to situate the self by arguing that autobiographical memory can be scaffolded, or distributed, extended, and so on.

These theorists also assume, more or less explicitly, a *narrative* understanding of the self. According to this understanding, the self is a narrative construction: it is constructed, it comes to be, through some of form of narrative (roughly, a story) about oneself. Well-known supporters of narrative views of the self in philosophy include MacIntyre (1981), Ricoeur (1985/1998), Dennett (1991), and Schechtman (1996). The situated accounts of to the self in which we

are interested here typically assume or defend a narrative understanding of the self, mainly constituted by narratively structured autobiographical memories.² The clearest and most detailed version of this view has been developed by Heersmink (2018), who argues that “the self is essentially a narrative construct realized by autobiographical memory systems” (Heersmink 2018, p. 1830). As he also puts it, the self is a “self-narrative”, namely, “a subjective and personal story ... of a series of connected events and experiences that are (essential to) the person” (p. 1832). A self-narrative gives “meaning” to new experiences, and “directedness to one’s self” (p. 1833). Put this way, self-narratives involve the connection, organization, and coherent interpretation of memories and new experiences.

Importantly for present purposes, Heersmink further argues that self-narratives are *embodied* (in the sense of constructed out of embodied experiences, as also proposed by Menary 2008) as well as *distributed* (constructed out of interactions with external artefacts and other people, as well as constituted by these). He calls *evocative objects* those objects we use to structure and maintain our self-narratives, as they evoke autobiographical memories.³ Examples of evocative objects include pictures, souvenirs, musical instruments, and personal diaries. These objects, Heersmink claims, create an *autotopography* (a topography of the self), or “a spatial representation of important relations, emotional ties, and past events” (see Gonzalez 1995, p. 139; quoted in Heersmink 2018, p. 1836) that can be used to build and sustain self-narratives. Heersmink illustrates this notion with the key example of *lifelogs*—detailed databases about one’s life created through the use of self-tracking technologies, such as smartphones with sensors, wearable cameras, devices that trace one’s activity on social media, and so on. A useful application of such databases is Crete-Nishihata et al.’s (2012) *multimedia biographies* for people with mild cognitive impairment and Alzheimer’s disease, which consist of 15- to 60-minute long digital videos involving photos, home videos, documents, letters, music, and narrations representing a person’s life story, divided in

different phases (adolescence, marriage, career, etc.) and told chronologically.

We find similar ideas in Wilson and Lenart (2015), who argue that personal identity can be extended through autobiographical memory. They reject what they consider hyper-rationalistic and individualistic Neo-Lockean accounts, according to which personal identity is constituted by the continuity of consciousness. They propose, instead, that personal identity is achieved via autobiographical memories that are often offloaded onto the environment and thus extended. Importantly for our purposes, they take autobiographical memory to be a form of auto-noetic episodic memory, falling under the broad umbrella of declarative memory (Wilson and Lenart 2015, p. 431).⁴

For Wilson and Lenart, autobiographical memory corresponds to a personal narrative (they tend to use these terms interchangeably) that gives rise to the “sense of having a continued existence over time” (2015, p. 431), which is what defines personal identity. From this perspective, when a person’s autobiographical memory is extended onto external resources (e.g., a notebook), their personal narrative and self/identity are extended as well.

Finally, Piredda (2020) also regards memory and narratives as constituting the self (at least diachronically), and argues that our self can be construed and maintained through the accumulation of, and continual interaction with, “affective artifacts” (objects that can alter our emotions, moods, and other affective states) such as wedding rings and comfort blankets. Similarly to Heersmink, Piredda emphasizes the role that affective artifacts play in the construction of our self-narratives (see also Candiotta and Piredda 2019).

We agree with all these authors that the self can be maintained through interactions with parts of the environment that facilitate, or even constitute, self-narratives. Lifelogs, wedding rings, and similar objects that depict, represent, or refer back to one’s past can certainly play an important role in the construction and maintenance of autobiographical narratives. This is not, however, the only sense in which the self should be regarded as deeply situated and even constituted by the environment. In our view, these accounts need to be complemented by a view of the situated self that does not depend on self-narratives. We find such a view in the phenomenological-existential tradition of philosophy—particularly in classical accounts of *sedimentation* and *projection*. It is to this tradition and accounts that we turn next.

² To be sure, the notion of a narrative is often elusive in the philosophical literature. Like Menary (2008) and others, we take narratives to have linguistic form (to narrate is usually to tell with words). For characterizations of narratives as non-linguistic, however, see for example Slors (1998), who regards a narrative as a process in which various mental contents are interrelated. See also Schechtman (2007) for a taxonomy of different narrative accounts of the self, which differ in degree of strength, depending on whether they involve just a sequential listing of events (weak narrative account), an account of the explanatory relations between them (medium), or a full-blown story with a unifying theme and direction (strong).

³ Heersmink (2018) takes the term “evocative objects” from Turkle (2007). Turkle herself uses this term more broadly, to refer to objects that evoke any kind of reflection or association—namely, objects that we can, as she puts it, “think with” as well as “feel with”.

⁴ They explicitly follow Endel Tulving, who proposed to regard episodic memory as a sub-category of declarative memory. It is useful to recall that, according to Tulving, information in declarative memory is accessible to introspection and can be expressed symbolically. Additionally, episodic memory is characterized as requiring “thinking ‘back’ to an earlier time” and is accompanied by an auto-noetic or self-knowing form of awareness (Tulving 1999/2001, p. 278).

3 Beyond Narration: Tacitly Carrying One's Past

The first step toward an alternative conception of the situated self is to acknowledge the embodiment of selfhood, and in particular the fact that bodies have (or rather are, at least in part) memories. Our activities and practices carve themselves into our bodies through repetition, shaping our bodies over time in distinctive ways and becoming habits. What we do shapes not just our muscles (e.g., by bulking them up), but also our posture (which depends on the totality of the musculoskeletal system) and, perhaps least obviously of all, the overall *style* of our actions, movements, and expressions. Thus, the body contains its past within it. This idea, as we discuss below in more detail, was already central in Merleau-Ponty (1945/2012).⁵ It has been revived more recently by Thomas Fuchs, who has written extensively about *body memory* as a form of memory that results from the embodiment of our existence, and that integrates a person's past into their present bodily self. Moreover, and crucially, body memory provides a continuity of selfhood which is not actively produced through explicit recollection (e.g., Fuchs 2017, 2020).

Thus characterized, body memory is evidently *not* a form of episodic memory of the kind usually entailed by narrative accounts of the self. First, it is not an explicit (episodic, declarative, reflective) act of recollection. Rather, it is *tacit* or, equivalently, pre-attentive or pre-reflective—namely, it unfolds without the person explicitly attending to it or reflecting on it. Importantly, tacit and pre-reflective do not mean “unconscious” in the sense of inaccessible (after all, we can become explicitly aware of our style of comportment without the help of a psychoanalyst). They are terms used in phenomenology to denote a dimension of our lived experience that is typically not noted or thematized—and, accordingly, not narrativized (at least in the sense of narrating that involves storytelling).

The second step involves acknowledging that embodiment and body memory typically do not occur in a vacuum, but rather entail a relation to the world. The body as memory is usually a (tacit) remembering of a relation to the world. Otherwise put, body memory is always a body-in-the-world memory. Fuchs introduces the specific notion of *situational body memory* to capture this idea. Central to Fuchs's notion is the consideration that body memory is not only memory for how to do things with the body (e.g., how to squat or point), but also memory for the body-in-context. As he puts it, situational body memory is a bodily-remembered

familiarity with the world, and is particularly linked to interiors that, over time, become imbued with references to the past and atmospheres of familiarity. Fuchs chooses to illustrate this form of body memory with an example from Gaston Bachelard which is worth quoting in full:

But over and beyond our memories, the house we were born in is physically inscribed in us. It is a group of organic habits. After 20 years, in spite of all the other anonymous stairways, we would recapture the reflexes of the ‘first stairway’, we would not stumble on that rather high step. The house's entire being would open up, faithful to our own being. We would push the door that creaks with the same gesture, we would find our way in the dark to the distant attic. The feel of the tiniest latch has remained in our hands. The successive houses in which we have lived have no doubt made our gestures commonplace. But we are very surprised, when we return to the old house, after an odyssey of many years, to find that the most delicate gestures, the earliest gestures suddenly come alive, are still faultless. In short, the house we were born in has engraved within us the hierarchy of the various functions of inhabiting. [...] all of the other houses are but variations on a fundamental theme. The word habit is too worn a word to express this passionate liaison of our bodies, which do not forget, with an unforgettable house. (Bachelard 1958/2014, p. 36)

This passage articulates rather wonderfully the idea that our past relations to the material world are deeply entrenched in our bodies, yet tacitly—which is why we are “very surprised” to discover that our body remembers the house of our youth (as the latter is typically not reflectively remembered, at least not at the level of detailed sensuousness described in the passage).

The notion of situational body memory is not new. We find it expressed in various ways in classical phenomenology—especially, as one would expect, in Merleau-Ponty 1945/2012. In fact, Bachelard's passage is reminiscent of Merleau-Ponty's own description of his familiarity with his house: “When I move about in my house, I know immediately and without any intervening discourse that to walk toward the bathroom involves passing close to the bedroom, or that to look out the window involves having the fireplace to my left. In this small world, each gesture or each perception is immediately situated in relation to a thousand virtual coordinates” (1945/2012, p. 131). As Merleau-Ponty also writes, his apartment “remains around me as my familiar domain if I still hold ‘in my hands’ or ‘in my legs’ its principal distances and directions” (p. 131).

⁵ Merleau-Ponty had in turn been influenced by Bergson's notion of *habit memory* as distinct from memory as a replicative replay of the past in some representational format (see Casey 1984 for a comparison of the two authors' views on memory and the habitual body).

Merleau-Ponty's term for the taking-into-the-body of all sorts of styles of comportment in, and relations to, the world, is *sedimentation*. This term is closely related to (in fact, it overlaps with) the notions of *incorporation* and the *habitual body*. Sedimentation, in geology, refers to a layering or stratification of the past that shows up in a rock's current structure and configuration. It also refers to the *processes* whereby the rock comes to have that structure and configuration. Likewise, in Merleau-Ponty, sedimentation refers to the processes whereby the situated body, through its repeated activities and engagements with the world, takes into itself (incorporates) a variety of styles that end up making it what it is—its habits, themselves always subject to further modifications. Importantly, sedimentation does not fix the body in some rigid form; our bodies remain open to new incorporations, and can adapt to new contexts. Merleau-Ponty illustrates this point with the example of an expert organist who needs to rehearse only one hour on an unfamiliar organ (one with a different number of keyboards, or a different arrangement of stops compared to his usual instrument) in order to get used to it and to play it skillfully. This case shows that, although sedimented, the organist's playing is flexible, that is, able to adapt to a different instrument with only little practice.⁶

Sedimentation is the source of the tacit feeling of familiarity that characterizes our interactions with habitual objects and environments. This feeling of familiarity, we suggest, underscores an important affective dimension of the situated self. Familiarity implies a high degree of intimacy, and the more intimate we are with something (e.g., an object or a place), the stronger the relationship between ourselves and it. This affective dimension is made explicit by Bachelard when he talks of the “passionate liaison” our body has with our native home (a place that often is deeply familiar to us). We typically forget how well our bodies are habituated to a certain space, until we find ourselves in new environments. One of us (first author) recently stayed at the Chinese University of Hong Kong (CUHK) for one term. The campus is large and on a hill, which makes it particularly

challenging to orient oneself, at least at first. During my first week there, I had the distinctive impression of trying to find my way in an Escher drawing. The experience of unfamiliarity was pervasive, accompanied by a sense of disorientation and continuously thwarted expectations. It was a useful reminder that we typically take for granted the experience that comes with living in familiar surroundings. Now that I have become habituated to the CUHK campus, I just know where to go, without any need for reflection or actively consulting (or internally visualizing) a map; accordingly, I have a variety of tacit expectations that are constantly fulfilled (I expect the road to curve when I turn the corner, I expect a certain scent when passing next to the canteen, and so on). To put it *à la* Merleau-Ponty, I now have “in my legs” and “in my nose” the principal distances and directions of the campus.

One thing to remark before we link up these ideas with the more recent debate on the situated self is that the notions of sedimentation and habituation, as we understand them, are broader than Fuchs's notion of situational body memory. Fuchs presents the latter as *one* out of six other forms of body memory. The other five forms he distinguishes are: procedural, intercorporeal, incorporative, traumatic, and pain memory (Fuchs 2012). Procedural memory is involved in sensorimotor habits and skills, such as playing an instrument; intercorporeal memory is the memory of our encounters with others; incorporative memory refers to the incorporation of others' attitudes and roles into one's bodily habits (as in bodily imitation); pain and traumatic memories, as the names suggest, are body memories of past pains and traumas (which can result in psychosomatic disorders). For Fuchs, situational body memory seems to differ from these in that it centrally involves a feeling of familiarity with the world.

The notions of sedimentation and incorporation, however, as we have introduced them, apply to *all* the forms of body memory listed by Fuchs. Our bodies have (or rather are) the memories of what has happened to them through their being-in-the-world—which is just another way of saying that body memory is typically already a situated-body memory: what our body remembers is not just itself, so to speak, but itself-in-the-world. Relatedly, familiarity is a feature of all the forms of body memory Fuchs describes—even, alas, of traumatic memories, where familiarity takes on a negative or painful connotation.⁷

⁶ The term “sedimentation” had already been introduced by Husserl in his later work (e.g., Husserl 1948/1973), to refer to what sinks into the background of habituality, and can be “reactivated” in occurrent practices (e.g., solving a geometrical problem). In Husserl already, what is sedimented is not inactive but can influence us, including contributing to experiences of familiarity. Objects, and more generally the world, are not completely alien to us because we have experienced other objects before, and those experiences have been sedimented. Husserl's treatment is, as one would expect, quite complex and includes discussions of the sedimentation of instincts and drives, subjectivity, judgements, as well as of collective forms of knowledge (e.g., geometry) through written text. For a more detailed discussion of the differences between Husserl's and Merleau-Ponty's notions of sedimentation, and also of different notions of sedimentation in Merleau-Ponty, see Geniusas (2023).

⁷ A reviewer interestingly asked whether familiarity necessarily characterizes past events or situations we experience as part of the self. They offered the possible counterexample of retaining as part of the self the experience of having being attacked (once only, so that the experience remains that of an unfamiliar event). It seems to us that if the past event is experienced as unfamiliar, then it will not be experienced as part of the self, because unfamiliarity entails a degree of detachment or alienation. On the other hand, it is possible that even a

Where does this leave us in relation to the contemporary analytic debate on the nature of the situated self? The point we are driving at is that, when selfhood is understood as inherently embodied and sedimented (as it is in phenomenology), situatedness comes with it—without the need to appeal to narrative conceptions of selfhood, and in turn to regard narratives as distributed or offloaded onto environmental items that encode or represent episodes of the past (such as personal diaries or lifelogs). Past selfhood need not have a narrative structure; relatedly, the self can come to include objects of the past, yet not necessarily through narrated autobiography and explicit recollection of one’s interactions with those objects and what they represent for one. Rather, the situated self can be a matter of *tacitly carrying within oneself, as sedimented*, one’s past interactions with objects—i.e., to have an implicit sense of oneself as the (ever-shifting) outcome of the history of such interactions. Past selfhood, in other words, need not be only a matter of reflecting on and narrating one’s past, but also a matter of experiencing oneself tacitly as shaped through past activities and interactions that have carved themselves into the bodily self.

Just as personal diaries and lifelogs can constitute one’s sense of self (Heersmink 2018), then, so too can environments that have shaped one’s life and have become sedimented. When we consult a lifelog, we reconstruct our past narratively and reflectively. We do not, on the other hand, “consult” or “reconstruct” our sedimented environments; rather, we typically *live them through, tacitly*, as part of our non-reflective sense of our history, and of how our past has been making us into who we are. Bachelard’s and Merleau-Ponty’s passages on their homes illustrate nicely that we can carry our past interactions with the environment within our body, so to speak—and that we can do so in a tacit and non-discursive way, which also involves a deep feeling of familiarity with our world.

This view takes seriously a claim that Heersmink does make, yet only in passing. He rightly dismisses the suggestion, advanced for example by Bell and Gemmill (2009), that lifelogging allows “total recall” or “total capture” of one’s life. He notes that this claim assumes that memory is like an archive, and that “on such a view, we should try to develop a complete external archive (visual or otherwise) of our past events” (Heersmink 2018, p. 1838). He is critical of this approach because, he adds, “human memory is not like an archive. An archive-like view on memory is evolutionarily implausible as there is too much information coming in and there is no need to store everything we experience in

detail” (ibid.). His alternative is to favor the composition of “selective” lifelogs (ibid.), namely, lifelogs that do not aim to log *every* aspect of one’s life. This alternative, however, still appears to assume that memory is like an archive—a partial one, with selected information, but an archive nonetheless (in the sense of a collection of records of the past).

We agree that human memory is not like an archive, but do not think that the only alternative is to characterize it as a selective archive. Whereas self-narratives can indeed be selective, memory also comes, as we have just seen, in the form of tacit body memory. The latter is not *at all* like an archive—not even a selective one. It is not accessed through a “consultation” (as one does with an archive), but rather manifests itself in current practices, habits, and skills, which in turn shape it further, in an open-ended process.

Moreover, body memory gives our situations and surroundings a feeling of familiarity that cannot be achieved only by having a selective archive-like memory such as that emphasized in some narrative approaches. Consider the difference between going back to a bedroom one slept in for many years in the past, and a hotel room one stayed in only for a couple of nights. These cases, it seems, will be marked by a striking difference in sense of familiarity. The hotel room may be not entirely unfamiliar, but one will not feel a deep connection to it, as one would in the case of one’s long-lived home. Achieving deep familiarity or intimacy with objects and places take time and, sometimes, effort (e.g., we organize and decorate our houses so that we feel more at home in them). The time and effort that allow for and facilitate processes of sedimentation seems to be lacking in the experience of the hotel room—even if, we suggest, one remembers the latter rather vividly in declarative memory, and/or the hotel room is part of one’s narrative of a trip. It does not seem that the hotel room will be experienced as an integral part of the self.

4 Projecting the Future Self

So far we have proposed to complement existing accounts of situated selfhood with a view of the self that does not imply past-oriented autobiographical narration but rather an implicit sense of being a sedimented person, in which past activities, spaces, and objects have left deep traces that constitute, in part, the experience of who one is. In this section we propose another addition to existing accounts—namely, an emphasis on the role not just of the past but also of the *future* in the notion of a situated self. After all, our sense of who we are involves not just who we were or have been, but

one-off attack comes to permeate one’s sense of self—in which case we would say it has become familiar, yet not in the positive and comforting sense of the term (but more as in Fuchs’s notion of traumatic body memory).

also of who we expect or want to be in a nearer or further future.⁸

It is relatively easy to see how the self can come to include narratives about one's future—such as one's career, family life, specific achievements (or failures), life-span, health condition, and so on. We often tell stories, to others and ourselves, about what we want or plan to do, and what we hope or fear we will do or become. A paradigmatic example of this kind of future-oriented self-narrative is the story one may tell about oneself during a job interview when asked how one sees oneself in the next five years. Answering this question requires providing a reflective, explicit account of one's envisaged professional development, projects, goals, and aspirations. Though not all our future-oriented narratives involve such high degree of reflection and detailed planned life-trajectory, there is no doubt that we often come up with explicit stories about our future selves (e.g., whether we want to marry and/or have children, where we want to live, what activities we want to take up, and so on).

Just as with past-oriented self-narratives, future-oriented ones can be developed, expanded, and maintained through interactions with a variety of objects, most obviously text-based ones such as journals and planners. They may also be supported by objects that remind oneself of one's goals or aspirations, motivating one to keep working toward those, or helping one see oneself as a person with a certain role and social identity. A person may buy a specific practice-related item, such as a kayak, an aikido uniform, or a guitar, to sustain explicit narratives of who one is and/or wants to be. Thus, just as autobiographical objects can be part of one's narrative self in the way Heersmink (2018) proposes, so can objects we may call *motivational* or *aspirational*.

Furthermore, however, just as narratives about one's past do not exhaust the past self, narratives about one's future do not exhaust the future self either. And just as the past self can be constituted by objects tacitly and non-narratively, through ongoing sedimentations, so can the future self be constituted by objects tacitly and non-narratively, through what we shall call *projection*—this time borrowing a term most famously associated, in phenomenology and existentialism, with Heidegger (1926/2010). Without having to go into the details of Heidegger's complex and difficult work, we can recall that, for Heidegger, our existence is always, necessarily, projected into the future, and that this

projectedness is tied up with our object-involving activities as well as, importantly, our self-understanding.

Remember that, for Heidegger, the world is disclosed to human existence (*Dasein* or being-there) primarily *pragmatically*, in terms of what we can do in and with the world. Objects are not for us primarily things we understand theoretically, in a detached and disinterested way; rather, they are *Zeug*—"useful things" or "equipment"⁹ with which we can accomplish a variety of projects. Objects are typically *zuhanden* (handy, at hand), discovered by us in terms of their usability and utility; they are "essentially 'something in order to...'" (1926/2010, p. 68). To use Heidegger's classic example, we understand a hammer primarily in terms of what we can do with it, and whether it is useful for our projects.

At the same time, in this pragmatic understanding of objects (and in actually using them), we understand *ourselves* in terms of specific projects. When I use a hammer to hang a picture in my living room, for example, I understand myself as someone who is acting toward a certain goal, and who in doing so is also projecting her aesthetic preferences, values, etc. Similarly, when I lecture in class, using the various tools the classroom provides, I understand myself as someone able to lecture, and I project all sorts of lecturing-related possibilities (such that the students will understand what I am saying, may ask questions about it, will refer back to it in class discussion, and so on). Importantly, this self-understanding is not reflective or explicit, and does not take the form of a narrative. It is available for reflective examination, yet it is typically tacit, i.e., pre-reflective and non-narratively lived through. I do not reflect on my projections while I lecture, although I can recognize them as constitutive of being a lecturer (and of lecturing) upon reflection. Likewise for our other activities, unless something goes wrong—e.g., a tool breaks down, in which case it famously becomes, in Heidegger's terminology, "unhandy".

If this account is right (and we think it is), it implies that we always already understand ourselves in relation to the future. We are not primarily mere-present selves that can stretch themselves into the future only via narration. Rather, we inherently understand ourselves, implicitly, as projected—as existing for and toward what is to come. We do so, moreover, as situated in a complex network of objects, which we also understand in relation to our projects. The breakdown or malfunctioning of *Zeug* brings our projection clearly into light, as it makes us explicitly

⁸ The importance of the future in writings on the situated/distributed/extended self or identity has of course not gone unnoticed. Heersmink (2018) remarks that who we are is constituted not only by the past but also by the future (e.g., we are shaped by our goals about the future), and Candiotta and Piredda (2019) mention that objects can be used to project oneself into the future (e.g., a wedding ring). Their discussions of this aspect are, however, quite brief and in need of further elaboration.

⁹ "Equipment" is Macquarrie and Robinson's preferred translation of *Zeug* (see Heidegger 1926/1962) and the term most frequently used in Anglophone scholarship on Heidegger. "Useful things" is Stambaugh's translation (Heidegger 1926/2010 usually considered more accessible). We prefer Stambaugh's translation here, and follow it in the rest of this section (including using "handy", rather than "ready-to-hand", for *zuhanden*; see main text below).

or reflectively aware of the important role of objects for accomplishing our tasks, and thus makes us aware of our essential future-orientedness (Heidegger's *Worumwillen* or for-the-sake-of-which).

In relation to the idea of a situated self, the implication is that we can understand the self as situated, because *we project ourselves into the future, tacitly and non-narratively, as situated*. Just as we tacitly carry the past within ourselves, in the form of sedimented situations and objects, so we tacitly project the future ahead of ourselves, including future situations, roles, and related objects. This tacit dimension of past- and future-oriented selfhood provides an alternative account of the self as situated—one that can be regarded as complementing narrative accounts.

Finally, note that, importantly, although we have discussed sedimentation and projection separately, they are not independent from one another. Heidegger (1926/2010) does not mention sedimentation, yet it is clear that sedimented capacities and knowledge contribute to projected self-understandings.¹⁰ A student of violin will project themselves as a violinist on the basis of an implicit sense of their past as conducive to that identity. When I see a hammer in terms of what I can do with it, I do so on the basis of my familiarity with a hammer and its uses; through previous engagements with hammers, I have in my body the ability to use hammers, and so I see hammers as having a utility and understand them in relation to my projects (of hanging pictures, repairing pipes, etc.).¹¹ Likewise, when I project myself as a lecturer, with the activities, situations, and items of equipment that this role and activity involves, I do so on the basis of a tacit sense of “carrying a past” that is conducive to this projection. If I did not have such a tacit sense, I would not project myself as a lecturer—just as I do not project possibilities related to being a violinist (as I never learnt to play the violin), an architect, or a scuba diver. I could, of course, come up with reflective plans of changing my career or taking up a new hobby, but these plans would be considered against the background of my tacit sense of what is possible on the basis of my past, and in any case

would indeed be *reflective*, i.e., not belong to the tacit level of projection we have discussed.¹²

5 Conclusion

A number of recent works in analytic philosophy have suggested that the self is situated, and perhaps even distributed or extended over various aspects of the environment. As we have shown, this suggestion has been developed primarily by assuming a narrative conception of the self, and by arguing that narratives about one's past can be scaffolded by a variety of objects—what Heersmink (2018) and others call “evocative” or “autobiographical” objects. We are sympathetic to these accounts, as we agree that narratives contribute to the sense of self, that the latter importantly includes a sense of one's past, and that objects of various kinds can support and maintain narratives about one's past which shape the self in important ways. In this sense, autobiographical objects can be seen as constituting the self. We do not object either to the claim that such accounts support the view that the self, narratively understood, is extended or distributed over such objects.

In this paper, we have aimed to complement this view by drawing on phenomenological-existential understandings of the self not as narratively constructed, but as involving a tacit sense of one's past as well as future. We have illustrated this point through a discussion of the notions of sedimentation and projection, primarily as they appear in Merleau-Ponty and Heidegger. Although these authors use these notions differently, and/or in the context of more or less subtly different accounts which have been the topic of many detailed scholarly examinations, they all importantly emphasize the existence of a pre-reflective level of self-awareness. They show that, in spite of its tacit nature, this level of self-awareness is temporally thick, and simultaneously world-involving. Once again, then, the classical phenomenological-existentialist tradition of philosophy turns out to have precious conceptual resources that can contribute to enriching and refining contemporary views of the mind and related phenomena.

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¹⁰ In fact, although Heidegger does not adopt the term “sedimentation”, in his (notoriously difficult) discussion of temporality he argues that the anticipation of one's future possibilities requires a self-understanding that also takes one's past into account. Similarly, the later Husserl related sedimentation to anticipation and familiarity (e.g., Husserl 1948/1973).

¹¹ This simple account hides a complexity that we will not address here, but that requires at least a brief mention. Our projects are nested into each other. For example, I use a hammer to hang a picture in my living room; I hang the picture to make the living room look nice; I make the living room look nice to feel comfortable in it, and also to convey a certain social status to my guests; and so on. Whereas a hammer is thus most obviously for hammering, the hammering activity itself is in the context of various (temporally nearer and further) interrelated self-projects.

¹² Of course, our past does not completely determine our projects, and our projects change over the course of our life. This is partly because projection depends also on our current condition, our factual situation (*Lage*), as Heidegger would put it. What we project as adolescents is not the same as what we project later in life, due to how we understand ourselves in relation to our health condition and life expectancy. Also, the projections of a businessman will be different from those of a housewife, a philosophy student, a new mother, a refugee, a disabled person, and so on.

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