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Mineness without Minimal Selves

Abstract: *In this paper we focus on what is referred to as the ‘mineness’ of experience, that is, the intimate familiarity we have with our own thoughts, perceptions, and emotions. Most accounts characterize mineness in terms of an experiential dimension, the first-person givenness of experience, that is subsumed under the notion of minimal self-consciousness or a ‘minimal self’. We argue that this account faces problems and develop an alternative account of mineness in terms of the coherence of experiences with what we label an ‘embodied biography’. Building on a near consensus among consciousness researchers over the function of consciousness as integrating information, we argue that the phenomenology of mineness consists in the absence of any further thought on top of the experience itself. Finally we argue that this non-phenomenological account of mineness fits well with existing data on pathologies of mineness such as delusions of thought insertion.*

1. Introduction

Why is it that Mona Lisa appears to be smiling one moment while she looks entirely serious the next? This question, which has traditionally interested art historians and aesthetics in particular, has now received interest of neuroscientists working on vision. Neurobiologist Margaret Livingstone describes the phenomenon as follows: ‘she smiles *until* you look at her mouth, and then it fades, like a dim star that disappears when you look directly at it’ (Livingstone, 2000). Just as we can

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only see dim stars if we move our attention away from it, we can only see Mona Lisa's smile if we look at her eyes or the scene in the background. The neurobiological explanation is that peripheral vision is generally better at seeing big, blurry patterns, whereas central vision is primarily good at seeing fine-grained details. There is a big blurry smile on Mona Lisa's face, but no detailed one. Hence, people will report seeing or suspecting a smile when they do not focus on Mona Lisa's mouth, but as soon as they focus on the mouth, the smile disappears. Mona Lisa's smile is 'perceivable' only through a *lack* of focus. In this paper we argue that something similar holds for the phenomenon of what is referred to as the 'mineness of experience' or minimal self-consciousness.

Usually, when we consciously perceive something, think a thought, or feel an emotion, we experience these perceptions, thoughts, and emotions as *our own*. This fact was highlighted by phenomenologists such as Husserl, Sartre, Merleau-Ponty, and Henry, but is currently also discussed outside that tradition. There is a growing number of philosophers, neuroscientists, psychologists, and psychiatrists who explain this so-called 'mineness of experience' in terms of a pre-reflective sense of self, referred to as the 'minimal' or 'core' self (Zahavi, 2005a; Metzinger, 2004; Hohwy, 2007; Gallagher, 2000; Cermolacce, Naudin and Parnas, 2007; Mishara, 2007; Sass and Parnas, 2003; Sass, 2013). To be sure, there are fundamental differences between many of these views. Nonetheless, as we shall explain below, these authors share an important assumption, namely, that what makes an experience mine is explained in terms the *internal* structure of that experience, that is, the way in which each of my experiences is subjectively given to me. This is what we shall deny.

We claim that the mineness of experience is not given with the internal structure that is common to all individual experiences. Rather, we claim, it is the product of what we shall call the *external* structure of experience, i.e. the way in which each experience is connected with and embedded in a context of other experiences. Furthermore, we argue that this alternative account of mineness leads to a different view on the phenomenology of mineness. Whereas some authors describe a (sometimes elaborate) phenomenology of mineness, we show that mineness, accounted for in terms of the external structure of experience, resembles the Mona Lisa's smile in its evanescence. We shall claim that the mineness of our thoughts, perceptions, and emotions consists precisely in the *absence* of any further *experiential* feature and explain how this view is supported by a neuroscientific near-consensus on the function of consciousness.

The paper is set up as follows. In Section 2, we first give a brief overview of the existing positions that define mineness in terms of the internal structure of experience, i.e. in terms of a minimal self. We then focus specifically on Dan Zahavi's view, which is arguably the best known and most influential version of the minimal self idea. We show how on this view mineness is accounted for entirely in terms of what we shall label the 'internal' structure of experience — the structure that is common to all experiences. Thirdly, we show that crucial aspects of the notion of mineness cannot be captured in terms of the internal structure of experience but call for an explanation in terms of what we shall label the 'external' structure of experience — the ways in which experiences are interrelated. In Section 3, we introduce our own account of mineness in terms of the external structure of experience. We argue that the mineness of experience consists in the coherence of one's experiences with an implicit background made up of other experiences and mental states that comprise one's 'embodied biography'.

In Section 4 we argue that the coherence of an experience with its background does not amount to the experience of coherence — on the contrary. Building on existing psychological and neuroscientific theories about the function of active conscious attention as a phenomenon that emerges from conflicting information in the brain and serves the purpose of integrating information, we argue that the coherence of an experience with its background is witnessed on the experiential level precisely by the *absence* of anything but the experience itself. In Section 5 we argue that some of the evidence from cognitive neuroscience that is used by minimal self accounts of mineness actually supports an account of mineness in terms of the external structure of experience (i.e. a coherentist account) rather than an account in terms of the internal structure of experience (i.e. a minimal self account). We illustrate this with a discussion of different accounts of pathologies of mineness, such as thought insertion.

2. Mineness as Minimal Self-Consciousness

Whenever we consciously perceive something, think a thought, or feel an emotion, these perceptions, thoughts, and emotions are somehow given to us as *our own*. Our experiences (broadly conceived to include our conscious thoughts, emotions, and perceptions) are not given to us neutrally in the sense that they can be anyone's experiences; they are given to us as ours. The idea that there is something like the mineness of experience is widespread both in continental and

analytic philosophy, as well as in cognitive neuroscience, psychology, and psychiatry. This ‘mineness of experience’ is often accounted for in terms of a minimal self-consciousness which is referred to as a ‘minimal’ or ‘core self’ (Zahavi, 2005a; 2010; Damasio, 2011) or phenomenal self-model (Metzinger, 2004; 2009), but others express similar ideas in different vocabulary, and refer to a ‘rudimentary first-person perspective’ (Baker, 2013, see esp. p. 30, fn. 2), a ‘sentient self’ (Craig, 2010), ‘observing self’ (Baars, Ramsøy and Laureys, 2003), or ‘who system’ (de Vignemont and Fourneret, 2004). Though different in many respects, these views agree on the idea that the mineness of experiences can be characterized and explained in terms of the ‘internal’ features of experiences.

A typical proponent of this view is Thomas Metzinger, who claims that in ordinary states of consciousness ‘there is always someone *having* the experience — someone consciously experiencing himself as directed toward the world, as a self in the act of attending, knowing, desiring, willing, and acting’ (Metzinger, 2009, p. 7). He claims we have an ‘integrated inner image of ourselves that is firmly anchored in our feelings and bodily sensations’ providing for ‘the experience of a *point of view*’ (*ibid.*). To be sure, Metzinger’s claims pertain merely to our experiences, not to a possible reality these experiences might answer to. The ‘experiential reality’ is merely a virtual kind of reality according to him; it is a model that is constructed by our brains. Hence, the minimal self that is inevitably part of experiential reality is a model too: a ‘phenomenal self-model’. According to Metzinger, we are ‘unable to realize that [this model] is just the content of a simulation in your brain’ (*ibid.*, p. 8); we experience our minimal self as very real, even though it isn’t. The claim that the experienced self does not exist in reality is heavily contested (see e.g. Zahavi, 2005b; Gallagher, 2005b). We shall set that debate aside, for our concern is merely with the nature of (the mineness of) experience, on which these authors agree.

Though Metzinger is one of the principal proponents of the view we will oppose, we shall focus on a version of this view that is, in our view, a stronger and better representative of the larger group of theories referred to above. One problem with Metzinger’s ‘phenomenal self model’ is that, at least on the face of it, it does not sit well with David Hume’s famous (or infamous) claim that:

[W]hen I enter most intimately into what I call myself, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never catch myself at anytime without

a perception, and never can observe any thing but the perception.
(Hume, 1739/1958, p. 252)

Hume's observation is widely acknowledged (which does not mean that his conclusion that there is no self has received an equal amount of approval). Most minimal self theorists make sure they do not contradict this Humean observation in any direct sense. One view that explicitly avoids Humean troubles is Dan Zahavi's. Zahavi draws heavily on the phenomenological tradition and provides us with a subtle, detailed, and above all very influential view on the first-personal character of experience that is a fair and representative target for our discussion.

Zahavi's minimal self provides our experiences with a sense of mineness, yet it is not itself an (inner) object that can be experienced straightforwardly. But neither is it merely a transcendent principle, as Kantians suppose. My minimal self *is* part, according to Zahavi, of every experience that I experience as mine. To explain why and how a minimal self can be part of an experience without being an object of experience, Zahavi makes use of Gurwitsch's notion of 'ecological consciousness':

[W]hen I watch a movie by Bergman, I am not only intentionally directed at the movie, nor merely aware of the movie being watched, I am also aware that it is being watched by me, that is, that I am watching the movie. In short, there is an object of experience (the movie), there is an experience (the watching), and there is a subject of experience, myself. (Zahavi, 2005a, p. 99)

The minimal self, then, is part of the very *structure* of experience. Normal conscious experience has an 'object-experience-subject' structure. The subject of experience is not present in the experience in the way that the experience itself, in which the object of experience is presented, is present. Thus, there are no Humean misgivings. But the subject of experience (the minimal self) *is* present in an experiential way, namely in the fact that the object is presented in experience from a first-personal point of view. It is the 'first-person givenness' of experiences in which the minimal self manifests itself. The minimal self has experiential reality without being an object of experience:

[T]he self is claimed to possess experiential reality, is taken to be closely linked to the first-person perspective, and is, in fact, identified with the very first-personal givenness of the experiential phenomena...

[T]he self referred to is not something standing beyond or opposed to the stream of experiences but is rather a feature or function of its givenness. (*Ibid.*, p. 106)

This first-personal givenness is what provides experiences with a sense of mineness, according to Zahavi: ‘If the experience is given in a first-personal mode of presentation, it is experienced as my experience, otherwise not’ (*ibid.*, p. 124).

It is important for our discussion to emphasize that the structure of experience that Zahavi refers to is what we shall call the *internal* structure of experience. With this we mean that it is the structure of experiences that remains unaffected when we look at an experience ‘in isolation’, i.e. in abstraction from the context of further experiences or the stream of consciousness it is part of. Even if we strip away all the context of a given experience (watching a sunset, say), the ‘object-experience-subject’ structure will be unaffected. In Gallagher’s words:

This approach leaves aside questions about the degree to which the self is extended beyond the short-term or ‘specious present’ to include past thoughts and actions... [T]he concept of the minimal self is limited to that which is accessible to immediate self-consciousness. (Gallagher, 2000, p. 15)

This is not to say that Zahavi or Gallagher ignore the diachronic aspects of selfhood, but it does involve the claim that our experiences could, at least in *principle*, be given as ‘mine’ in isolation of their diachronic context. However, there appear to be aspects of mineness that defy an explanation in terms of the internal structure of experience; aspects that seem to imply that mineness involves more than the ‘specious present’. These richer aspects are recognized by proponents of minimal self views as well. Metzinger, for example, states the following:

Here are some typical examples of how we, linguistically, refer to [mineness] in folk-psychological contexts: ‘I experience my leg subjectively as always having belonged to me’; ‘I always experience my thoughts, my focal attention, and my emotions as part of my own stream of consciousness’... (Metzinger, 2004, p. 302)

These linguistic references suggest that the mineness of an experience is sometimes understood as its *belonging* to a stream of consciousness, i.e. its being a *part of* a larger whole. The comparison with experiencing one’s leg as one’s own is suggestive: the mineness in question involves the feeling of one’s leg as belonging to the rest of one’s body. Moreover, whereas the body may be conceived as a synchronous whole, the metaphor of a *stream* of consciousness to which an experience may belong suggests that the larger whole may well be diachronic. In an essay on mineness, Fasching is explicit about this:

There are not simply successive experiences, each with its own ‘mine-ness’ (first-personal givenness), but rather it is I who has this experience now and that experience then. And based on this, I have a clear intuition of what it means for some future or past experience to be experienced by me. (Fasching, 2009, p. 134)

While we do not endorse a philosophical agenda in support of the view that the ‘I’ who experiences is a diachronically existing ‘ego’, we do think that Fasching is right here. Mineness has a diachronic aspect to it. Past or future experiences can be mine, just as well as my present experiences are mine. If Metzinger is right (which we think he is) to say that mineness involves belonging to my stream of consciousness, then the mineness of my past, present, and future experiences involve their belonging to the same stream of consciousness.

What options are there for minimal self views to take this aspect of mineness into account? When it comes to the diachronic self, Zahavi and Gallagher usually take recourse to ‘the narrative self’. While there is much to be said about this notion, for now we need only stress that the minimal self (i) does not require or presuppose a narrative self, and (ii) is in fact considered by Zahavi (but not by others, see e.g. Schechtman, 2008) to be a *precondition* for narrative selfhood:

I want to suggest that the narrative... take on self must be complemented by an experiential or phenomenological take on the self. To put it very simply, it takes a self to experience one’s life as a story. In order to begin a self-narrative, the narrator must be able to differentiate between self and nonself, must be able to self-attribute actions and experience agency, and must be able to refer to him- or herself by means of the first-person pronoun. All of this presupposes that the narrator is in possession of a first-person perspective. (Zahavi, 2005a, p. 114; see also Menary, 2008; Baker, forthcoming)

The phenomenological approach of Gallagher and Zahavi does allow for diachronic aspects of the minimal self, however, which may seem to leave open the option of accounting for the diachronicity of mine-ness in terms of the minimal self.¹ The notion of the ‘specious present’ may be complemented by insights from the phenomenology of time-consciousness. For instance, Dainton (2006) argues that the specious present overlaps with ‘the next specious present’ in a stream of consciousness. It may thus be argued that the minimal self that is part of the internal structure of the specious present is also involved in the next specious present, and the next, etc. The internal structure of experience of the specious present can thus remain intact throughout longer stretches of our stream of consciousness.

[1] Thanks to an anonymous referee of this journal for pointing this out to us.

Gallagher and Zahavi (2008, pp. 73–8) do not favour Dainton's account, though. Instead they adopt a classical Husserlian approach according to which experiences do not only pertain to an infinitely small point in time — 'now' — but also involve backwards referring elements of 'retention' and forwards pointing elements of 'protention'. Without going into too much detail, it might be argued that this account also allows for a diachronic version of the minimal self rather than one that is tied to the specious present only. Stretches of someone's stream of consciousness may be thought of as seamlessly continuous because aspects of protention in one's present experience blend into the next moment, while the consciousness of that next moment involves new elements of protention that connect it to yet another moment (and elements of retention connect it to the preceding one). Again, it might be argued that in such seamlessly continuous consciousness the internal structure of experience, including the minimal self, can be retained for some time.

We acknowledge these possibilities of turning the minimal self into a more diachronic notion. The problem, however, is that these options presuppose seamlessly continuous consciousness in which each conscious experience blends into the next. This means that such accounts of the diachronicity of the minimal self are limited to uninterrupted (e.g. by deep sleep) episodes of consciousness. We take it, however, that when Fasching and others claim that we have intuitions about the mineness of past and future experiences, this includes experiences that are further removed from the present than, say, a day or two, i.e. experiences that will occur after or have occurred before a period of unconsciousness. Likewise, we take it that when Metzinger speaks of 'being part of a stream of consciousness', this stream of consciousness extends over days, weeks, years, or possibly lives.

For this we need an account of the mineness of experience that can incorporate diachronicity in a stronger sense. Take the example of remembering a particular event during your last vacation. There is a sense of mineness in the very act of remembering. But there is also a sense of mineness in the experience that is remembered. We need an account that can explain *both* instances of mineness, *as well as* their connection — *you* are remembering *your* past experiences. Similarly, we need an account that can explain why you dread going to the dentist next week (say) because you anticipate that future pain will be *yours*. We need an account that can explain why the mineness of a particular thought is connected to the mineness of earlier thoughts that it follows up on — so that the *whole* train of thought can be said to be mine. The internal structure of experience of which the minimal self is

an integral part is not sufficient for this. Nor will it be enough to keep mineness confined to body-based experiences. In the next two sections we propose an account of mineness in terms of the external structure of experience.

3. A Coherentist Account of Mineness

We propose to abandon the idea that mineness somehow involves a relation between a minimal self and an experience. Instead we propose that the mineness of experiences may be accounted for in terms of their holistically fitting into a *background* of earlier and co-temporal experiences, thoughts, memories, proprioceptions, interoceptions, etc. against which an experience occurs. The bottom-line of such a coherentist account is this: what makes a conscious experience mine is not some inner core or intrinsic structure of the experience; it is the implicit realization (more on this below) that the experience is part of a much larger whole, i.e. a ‘psychobiography’.

One version of this idea can be found in Barry Dainton’s *The Phenomenal Self*:

Do all experiences come stamped with a *meish* quality?... [D]o we need *mineness* to explain whether an experience is experienced as mine?... [I]t is not obvious that we do. If an experience is *co-conscious* with my other experiences does it not clearly and unambiguously belong to me? What else is required?... Any sense I have that a typical experience is *experienced by a subject* when it occurs is due to the fact that this experience is co-conscious with certain other experiences, namely those comprising the inner component of the phenomenal background. (Dainton, 2008, pp. 242–3)

We side with Dainton in his claim that mineness is not a *meish* quality of experience; but we do think that ‘mineness’ is a useful concept. When ‘mineness’ refers to the simple fact that an experience is unmistakably mine, we agree that it is provided for by that experience being embedded in and cohering with a background or network of other experiences that contribute to my psychological life. Given such a background, in normal cases, the question of whether or not an experience has the *quality* of mineness is an empty question.² (More on this in the next section.)

[2] Dainton notes that the coherentist account of mineness is, to a certain extent, a ‘Parfitian’ account: ‘Parfit advocates a reductionist view of what we are: the existence of a self requires nothing more than the existence of a brain and a body and a collection of interrelated physical and mental events. Even if this form of reductionism were mistaken, a reductionist view of our *sense of self* might still be correct’ (Dainton, 2008, p. 243).

On Dainton's view, the background is described as an 'inner phenomenal background' which consists primarily of 'unnoticed experiences' or experiences without conscious awareness of them (Dainton, 2006, p. 31). Many bodily feelings go unnoticed, as well as one's current mood and emotional state, but also the humming of a refrigerator or the distant play of children outside. Dainton also describes a more 'elusive' aspect (Dainton, 2008, p. 240) of the phenomenal background, which he characterizes as our sense of self, or the what-it's-likeness of the conscious being that we are. The phenomenal background, Dainton claims, has a 'familiar feel' and can 'reasonably be construed as contributing to (and perhaps constituting) the feeling of what it is typically like to be *me* (or *you*)' (*ibid.*). There is, he says, 'something that it feels like to be oneself, and this is *part of the overall phenomenal background*, and is *constantly present* along with the other components — the feel of one's body and the presence of the surrounding world' (Dainton, 2006, p. 32, emphases added).

The coherentist account of mineness that we would like to propose differs from Dainton (and phenomenologists who think like him) in three respects. First of all, the background as Dainton describes it is a background of synchronously co-occurring mental states. As we shall outline in this section, we think that there is a crucial diachronic component to this background as well. Secondly, Dainton's background consists exclusively of pre-reflective body-based experiences. We would like to include biographical memories, implicit and explicit beliefs about oneself, ongoing trains of thought, recurring thoughts, habits — both of action and of thought — and many more types of psychological states. Thirdly, Dainton seems to agree with minimal self theorists that there is a distinct experiential aspect to the mineness of experience. In the next section we shall argue that this is wrong-headed.

What we propose is a coherentist account of mineness, according to which the mineness of an experience consists in the coherence of that experience with a large, diachronic context of earlier thoughts, experiences, memories, etc. rather than mere co-consciousness with certain other experiences. The underlying idea, which is worked out in detail elsewhere (Schechtman, 1990; Slors, 1998; 2001a,b), is that a person's mental states are almost never isolated mental 'atoms'; instead they are almost always connected in meaningful ways with other mental states. These connections occur at all levels of complexity or abstractness. Given the fact that our psychological lives consist of intricately interlinked mental states, we propose that very many of our experiences will in fact only make sense in their proper psychological

context. Mineness, we suggest, thus results from coherence with a diachronic background which is (i) subjectively embodied, (ii) objectively embodied, and (iii) biographical. Before exploring the phenomenological dimension of mineness (or, in fact, the lack thereof) according to our proposal, let us first discuss these components and their interrelation.

First, lived or ‘subjective’ embodiment includes one’s interoceptions, proprioceptions, one’s sense of agency and ownership, and one’s body image and body schema (Gallagher, 2005a; Gallagher and Zahavi, 2008, pp. 144–5). It is, as William James put it, ‘the feeling of the same old body always there’ (James, 1890, p. 242). According to James, ‘our own bodily position, attitude, condition, is one of the things of which some awareness, however inattentive, invariably accompanies the knowledge of whatever else we know’ (*ibid.*). One’s body schema, for instance, is responsible for the — implicit — integration of different sense modalities into one coherent experience of the ‘outside’ world, whereas one’s body image is responsible for being able to think of one’s body as an object. If one were to lose one’s body schema (as happened to Ian Waterman, for instance; see e.g. Gallagher and Cole, 1995; Gallagher, 2005a, pp. 43–5), one loses a very important and intuitive way of making sense of one’s actions, limbs, and perceptions.

There is, however, another dimension to our embodiment that is usually stressed by neo-Kantian philosophers and that may be labelled ‘objective embodiment’ (see also Strawson, 1966; McDowell, 1997; Cassam, 1999; Slors, 1998; 2001a,b). This involves understanding that ‘the first person is also a third person, an element in the objective world’ (McDowell, 1998, p. 134). Implicit reckoning with this fact constrains and structures our experiences in various ways, without itself being an experiential dimension. Simple sensory perceptions cohere in virtue of the fact that consecutive sense perceptions ‘tell the story’ of one body’s whereabouts in physical space in conjunction with the physical features of that body’s environment. Such coherence is often cross-modal: approaching the source of a sound, say a loud-speaker, coincides with the sound growing louder; tactile sensations in one’s fingertips will be connected with visual information about the touched surfaces; visual information about what is on one’s plate will inform the taste sensation once one starts eating, and one’s current experience of looking down at one’s shoes will cohere with the proprioceptive experience of turning one’s head towards one’s shoes. Our body constantly contributes to the coherence of experience in this

way: one's consecutive experiences are the subjective counterpart of an objective body moving through space.

The third element is what we refer to as the 'biographical' component, which is the largest component of the background of our experiences. The way in which personal-biographical elements can become part of the background has been emphasized in particular by narrative accounts of the self (e.g. MacIntyre, 1981; Taylor, 1989; Schechtman, 1990; Wollheim, 1986). Marya Schechtman, for instance, emphasizes that we do not 'typically experience what happens to us completely without context', and that 'experience comes to us as a basically coherent part of the ongoing story of our lives' (Schechtman, 2009, p. 81). Richard Wollheim makes a similar point:

...consider a perceptual experience: that I see the trees bending in the wind is made possible for me by a large network of commonsense beliefs about nature which constitute the background to the experience. They don't however figure in the experience. (Wollheim, 1986, pp. 51–2)

As will be clear from this quote, we do not restrict the use of 'biographical' to elements of a personal nature: *all* biographical events with a psychological dimension, including acquiring common sense beliefs about the world, count as biographical on our use of the term. The biographical background also includes, among other things, knowledge of one's feelings, memories, intentions, and whereabouts (and therefore often comes together with lived embodiment). At a minimum, it involves being able to answer 'Anscombean' questions, i.e. answering general what- and why-questions about oneself.

The biographical component also includes the affective dimension of one's moods and emotions, as well as one's dispositional-behavioural profile, personality traits, one's self-conception or self-narrative. These narrative elements contribute crucially to what makes our experiences 'ours'. For example, whether one thinks of oneself as a devoted surfer, or thinks of oneself as suffering from aquaphobia, will have a great impact on how one perceives the waves crashing in on the shore. The impact of one's self-understanding of perceptions is akin to the theory-ladenness of perception: just as one sees a particular X-ray *as* a fracture, say, one may see the waves *as* 'surfable' or *as* 'potential hazards'. There are numerous examples that illustrate the way in which one's identity contributes to the content of our experiences. A drug-dealer will see a particular alleyway where he has set up to meet with someone in quite a different way than someone on his way home late at night; a mother who has just given birth will experience the

crying of a baby differently than a nurse; the walkway towards the airplane will be experienced in a different way by someone who is trying to get over his fear of flying than by the banker making her hundredth flight, etc.

How do these elements hang together; how do they form the larger background (much larger than Dainton's phenomenal background) with which experiences must cohere for mineness to occur on our account? Briefly put (for more detail see Slors, 2001a, chapter 4), the idea is as follows. Subjective embodiment explains the synchronic coherence of sense impressions, proprioceptions, and interoceptions. The body schema plays a crucial role here. Objective embodiment explains the diachronic sense of one's body moving through space-time. The notion of one's body as an objective continuant is the 'organizing principle' that make our sense perceptions, as well as our proprioceptions and interoceptions, portray the 'story' (more on this term below) of the consecutive whereabouts of one's body and its consecutive interactions with its environment. Together they form one thread through a person's psychological life; the bodily backbone of a person's stream of consciousness.

In view of the reasons for rejecting a minimal self account of mineness outlined at the end of Section 2, it is crucial to stress here that interruption of consciousness — e.g. due to deep sleep — does not yield the breakdown of continuity here. Usually we wake up where we went to sleep, so that we can pick up the thread of the 'story' of our body's whereabouts and interactions with its environment where we left it. But in the exceptional cases where we wake up somewhere else, we actively fill in the unconscious parts of the 'biography of our bodies', either through knowledge that is gained beforehand (as when, say, going to sleep on a train) or afterwards (say, when being told that one has been abducted in one's sleep), or through conjecture. Thus, the body-biography runs from birth to death.

The body-biography is what connects the various other aspects of our biographies. That is, all biographical events — whether really remembered, confabulated, or forgotten — are 'located' on the timescale of the body-biography. We may get the order of these events wrong afterwards, but the timescale provides a definite format for ordering, if only because it disallows most events to occur simultaneously. Of course there are many other constraints on the ordering of biographical memories — many events presuppose earlier ones. But the main point here is that even though a person's biography may consist of various relatively unrelated 'threads', the fact that these threads succeed each other or run parallel against the background of the very

same biography of one body connects them into what we shall label one ‘embodied biography’.

We claim that the coherence of an experience with aspects of the embodied biography it is a part of constitutes the mineness of that experience. This proposal is similar to Dainton’s view on the coherence of an experience with its phenomenal background. But the difference is that an embodied biography contains many more different kinds of mental state for an experience (broadly conceived) to cohere with than mere synchronously occurring body-based sensations. A visual experience can be mine because it fits neatly into a sequence of perceptions (that in turn fits into the larger embodied biography). But a thought that pops up out of the blue may also be mine, for instance because it is connected to a problem that I’ve been wrestling with for some time. An emotion can be mine when it coheres with a place, an encounter with a person, or with a memory that plays a specific role in one’s life.

In order to highlight the difference between our account of mineness and minimal self accounts, it may be good to be clear on the extent to which an embodied biography is narrative. For, as indicated above, on Zahavi and Gallagher’s account, the minimal self is a precondition for but not necessarily a part of narrative selfhood. The reason for this is that a self-narrative requires a subject of experience, a narrator in possession of a first-person perspective. There can be no narrative self, on this account, without a minimal self. Our account reverses the roles: we claim that mineness is the product of the coherence of an experience with an embodied biography. So if the biography is narrative, it appears as if we are run afoul of Zahavi and Gallagher’s observation that narratives presuppose minimal selves. If our embodied biographies are narratives, then who does the narrating? Who experiences a sequence of experiences as a narrative if not a minimal self?

Unsurprisingly our answer is ‘no one’. Though we find much to disagree with in Dennett’s account of the narrative self, we do agree with him when he states that ‘our tales are spun, but for the most part we don’t spin them; they spin us. Our human consciousness, and our narrative selfhood, is their product, not their source’ (Dennett, 1991, p. 418). This has consequences for the extent to which our embodied biographies can be considered narratives. We do want to claim that there is an element of narrativity in at least many sequences of mental events (on various levels, from perceptual states to interpretations of one’s social roles) that make up a person’s embodied biography. However, on our account this often concerns *implicit* narrativity.

This does not merely mean that embodied biographies, or parts thereof, are ‘narratable’ (to use a phrase of Fischer’s, 2012). Though it is certainly true that some of our embodied experiences ‘lend themselves to narration’ (Menary, 2008, n. 8; see also Meyers, 2014), we want to suggest narrativity often goes a lot deeper than *post hoc* reconstruction of our embodied experiences. What is ‘implicit’ about narrativity is that — with the possible exception of some ‘basic’ experiences of, for example, pain or thirst — the contents of our embodied experiences are co-determined by implicit self-narratives (Jongepier, forthcoming). Even paradigmatic cases of supposedly ‘non-narrative’ experiences, such as being hit on the arm by a cricket ball (Menary, 2008, p. 73), typically do not involve a ‘simple’ experience of the minimal, embodied self, but involve the experience of a person situated in a particular biographical context (compare: was it just a friendly game or an important match to win the cup; was being hit the result of an accident or was it done on purpose?)

4. Coherence of Experience Does Not Imply the Experience of Coherence

So far we have claimed that what it means to say that a thought, perception, or emotion is experienced as mine need not be understood in terms of these mental states being ‘had’ by a minimal self; rather it can be understood in terms of these thoughts, perceptions, or emotions cohering with a large, primarily non-conscious background of mental states that we have described as our embodied biography. It is important to stress that though our alternative for a minimal self account of mineness may provide restrictions on possible neural mechanisms underlying mineness (compare, for example, Hohwy, 2007) our account is not intended as providing such a mechanism. More importantly, we have not yet said much about the *experience* of mineness. Mineness may consist in coherence with a largely non-phenomenal embodied biography, but what is it like to experience such coherence? What specific experiential dimension is correlated with the coherence of an experience with the embodied biography it is a part of?

The claim we wish to defend in this section is that there is no specific experience correlated with the coherence of an experience with the embodied biography it is a part of, and that it is precisely this absence of further thought that signifies an intimate familiarity with the given thought or perception that is the mark of mineness. We oppose the idea that mineness is an identifiable component of experience, an ‘aspect of the self that remains when one abstracts away from

the experience of temporally extended, “narrative” personal identity’ (Gallagher, 2000). We will first indicate why coherence of an experience with an embodied biographical background manifests itself precisely through the absence of further conscious thought. Then we will proceed to argue that the resulting view on the ‘minimal’ phenomenology of mineness is not as counter-intuitive as it may seem at first and in fact it is not too far removed from some phenomenological accounts of mineness.

Our main consideration in favour of the idea that the coherence of an experience with its background is manifested by the lack of further thought builds on what appears to be a near-consensus among scientific consciousness researchers. This near-consensus does not so much concern the nature of consciousness or its neural underpinnings, but one of its functions. According to a striking amount of scientists, consciousness serves the purpose of integrating information. Morsella (2005) even speaks of an ‘integration consensus’. According to this consensus, the function of consciousness (we shall be more precise about the kind of consciousness that is intended below) is bringing together diverse forms of information. This idea goes back at least to Sherrington (1906). The suggestion is that for most cognitive purposes consciousness is not required; it only arises in cases of cognitive conflict.

Baumeister and Masicampo (2010) refer to eminent researchers such as Baars, Crick, Edelman, and Dehaene to stress that ‘phenomenal awareness and conscious thought, enable the different parts of the mind and brain to share information with each other... Consciousness has been seen by almost all theorists as helping to integrate information’ (*ibid.*, p. 949). Morsella refers to a much longer list of theories on the function of consciousness when he speaks of ‘the integration consensus’. Conscious processes ‘integrate neural activities and information processing structures that would otherwise be independent... Many of these theories speak of a central information exchange, where dominant information is distributed globally’ (Morsella, 2005, pp. 1001–2). This integration consensus has now resurfaced in diverse areas of research (Clark, 2002; Damasio, 1989; Dehaene and Naccache, 2001; Freeman, 1991; Llinas and Ribary, 2001; Ortinski and Meador, 2004; Sergent and Dehaene, 2004; Tononi and Edelman, 1988; Varela *et al.*, 2001; Zeki and Bartels, 1999).

It is important to stress that this integration consensus concerns a specific kind of consciousness. People are conscious of a given thought, perception, or emotion in the sense that is intended when these thoughts, perceptions, and emotions are really in the forefronts

of their minds, i.e. when they are the focus of attention. Baumeister and Masicampo (2010, p. 949) give the following paradigmatic description: 'In ordinary experience, people think about some topic by holding the central thought (e.g., an upcoming trip) in the conscious mind, and other associated thoughts (e.g., what needs to be packed) pop into awareness.' Very often, the kind of cognitive conflict management that this type of consciousness is supposed to perform is directed at arriving at a stable course of action. Morsella (2005) in fact thinks that this is what sets conscious cognitive conflict management apart from various forms of unconscious cognitive conflict management.³ The central idea of the integration consensus is that thoughts, perceptions, emotions, etc. become the focus of conscious attention when there is a cognitive conflict to be solved. It may be that consciously focusing on, say, a thought, which means global broadcasting throughout the brain, suffices to solve a conflict; but it may also be that further conscious pondering is required.

For our purposes two things are important to note. One is that there are other kinds of consciousness than being in the full spotlight of active conscious attention. Most perceptions and emotions, and at least a fair amount of our thoughts, occur more or less passively without being actively highlighted. A large number of linguistic means have been employed to mark the difference between these kinds of consciousness, but for our purposes it is not important to stick to labels (such as, for example, consciousness vs. awareness). We merely wish to emphasize that the ordinary perceptions, thoughts, and emotions that I consider as mine, rather than yours or no one's, are usually simply passively given. It would be absurdly taxing for us to actively focus conscious attention on every perception, thought, feeling, etc. that we consider to be ours.

The second thing to note is that the integration consensus implies that when information is non-conflicting, there is no need to invoke the active spotlight of conscious attention. This suggests that the coherence of a given perception or thought with its background embodied biography manifests itself precisely in the *lack* of further active conscious attention. Hence our hypothesis that the mineness of ordinary day-to-day thoughts, perceptions, emotions, etc. which on our account consists of their coherence with the background of an

[3] The ventriloquist effect, for instance, is a largely unconscious form of cognitive conflict management in which the sound that is made by a ventriloquist is coupled with the movements of a puppet's mouth (Vroomen and de Gelder, 2003). Also, in so-called 'binocular rivalry' non-matching visual information is integrated at an unconscious level (Logothetis and Schall, 1989).

embodied biography, manifests itself in the absence of any further thought. The ‘naturalness’ of their occurrence, the fact that their occurrence makes perfect sense, given other earlier and co-temporal thoughts and perceptions, is what endows them with mineness, and this is precisely witnessed by the fact that there is no need for further conscious thought.⁴

Our claim that for most ordinary perceptions and thoughts mineness is witnessed precisely by the absence of any further thought may seem counter-intuitive and strange. Yet we think that the kind of minimal phenomenology of mineness we propose is not too far removed from what phenomenologists have in mind. For instance, even though they argue in favour of a minimal self view, Cermolacce *et al.* (2007) gloss their position in a way that we are in complete agreement with, arguing that people experience their lived world as something that ‘always contains a ubiquitously implicit sense of a unique familiarity’ (*ibid.*, p. 706). As far as we are concerned that is exactly right: mineness is a unique familiarity with our own experience (see Sections 2 and 3) of which we only have an *implicit* sense (this section) which is nevertheless ubiquitous.

The point is that it is very hard, if not impossible, to describe an implicit sense of something in positive terms. So rather than providing a description, let us give a few parallel examples that may help to get the idea. Think for instance of walking through your own house. The interior of your house is not usually the focus of active conscious attention when you are at home. You know where everything is and everything looks as expected which is why no further conscious focus is evoked. The match between expected states of affairs and sensory feedback on this is salient, for example, when you are running down a flight of stairs while unconsciously anticipating the number of steps, or when you are automatically reaching for and feeling the lightswitch in a familiar room. These experiences are typically not accompanied by reflective consciousness guiding one’s actions. The idea here is not that walking through one’s own house is a paradigmatic example of experiences of mineness. Rather, the idea is that the intimate famili-

[4] Sometimes, however, mineness needs to be achieved actively. When the coherence of a given thought or perception with its context of an embodied biography is less than obvious, the integration consensus would predict that it will become the focus of conscious attention. Thus, for instance, the having of an uncharacteristically violent thought will ‘pop up’ in the spotlight of one’s conscious attention, precisely because it is uncharacteristic of and unconnected to recent biographical events. Such attention may possibly re-establish mineness when one finds ways of weaving the thought into an ongoing embodied biographical narrative. But such attempts may also fail, in which case one may experience the thought as ‘alien’ (see Section 6).

arity of one's own house, resulting in a match between expected and experienced states of affairs, is witnessed at the phenomenological level by the absence of further reflection. This, we suggest, is exactly what goes on with the intimate familiarity we feel with experiences that neatly fit into one's embodied biography.

The point is that this kind of intimate familiarity is not something we can focus on. As soon as we focus on it — as soon as we shine the spotlight of conscious attention on the coherence between an experience and its diachronic and synchronic phenomenal context — the intimate familiarity of mineness fades. For the natural, *subjective* 'fit' of the experience with its context is objectified. Again, a comparison might help. Many children discover the strange phenomenon that when one utters a familiar word repeatedly for some time, its familiarity fades. Words become objectified, detached from their immediate, familiar association with their meanings. And this makes them sound funny. But without receiving such an objectifying treatment, when used in ordinary speech the familiarity we feel with the sounds of these words is simply marked by the absence of further wonder. Like the Mona Lisa smile it is gone when we make it the object of attention.

Does this mean that there is no positive phenomenology of mineness on our account? Not exactly. It means that all we can say about that phenomenology is that it is marked by something that is the opposite of conscious attention.

5. The Comparator Model

In the previous section we indicated that our account of mineness, when it comes to the phenomenology of it, is not too far removed from the views of some phenomenologists. Still, the difference remains that mineness of experience is not due, on our account, to the internal subject-experience-object structure of experience (as phenomenologists would have it), but to the external structure of experience, that is, the ways in which the experiences making up a stream of consciousness are interrelated. In this section we argue that some of the neuroscientific evidence and theory that is used by phenomenologists to support their views on (minimal) self consciousness and mineness in fact provides *more* support for the position we outlined in the last two sections. The neuroscientific view we have in mind is the so-called 'comparator model', developed by Chris Frith (Frith, 1992; Blake-more, Wolpert and Frith, 2002) and used by, for example, Gallagher to account for the phenomenological difference between the sense of agency that accompanies self-produced movements and the sense of

ownership, i.e. movements of one's own body that are not self-produced (Gallagher, 2000). The model is also used to explain the sense that one produces one's own thoughts, as well as pathologies in this area such as the delusion of thought insertion (see next section). The model is now hotly debated, specifically when it comes to thought insertion (Vosgerau and Newen, 2008; Vicente, 2013). For this reason and for the sake of simplicity we will only focus on the comparator model as explanation for our sense of agency. There are various versions of this model (*cf.* Pacherie *et al.*, 2006; Synofzik *et al.*, 2008; see, however, also Carruthers, 2010), but again for the sake of not complicating our discussion unnecessarily we shall focus on the original idea.

The basic idea behind the view is simple. A so-called 'forward model' of one's actions contained in the 'efference copy' of the motor commands behind one's actions is compared, in a specific area of the brain, with the proprioceptive and perceptual feedback of the actions that are produced by these commands. When the feedback matches the predicted action our actions are said to be experienced as produced by ourselves. When the prediction does not match the feedback, such as when there is feedback but no motor command, e.g. when someone else moved your hand, the movement is experienced as not self-induced. This proposal is presented as a way in which phenomenological insights into the self and self-experience can be put to use by cognitive neuroscience (Gallagher, 2000; Gallagher and Zahavi, 2008).

We argue, however, that the proposed model is an excellent example of the coherentist account of mineness we presented. Moreover, we claim that it strongly supports the idea that the phenomenology of mineness does not consist in a specific 'feeling' of mineness, or a specific 'first-personal givenness' of our experienced agency, as phenomenologists would have it, but rather (in line with our argument in the previous section) in the *absence* of any further thought or conscious attention when we act. Let us discuss these claims.

First, the comparator mechanism in the model — the mechanism that actually checks whether the proprioceptive and perceptual feedback of a certain movement fits the motor command that caused that movement — does nothing other than check the coherence of one's proprioceptions and perceptions of actions with a crucial part of one's embodied biography, i.e. a specific motor command. (Of course on our account the motor command should also cohere with other aspects of one's embodied biography, but we shall leave that aside here.) If there is indeed coherence, then we agree that this results in what is

called a ‘sense of agency’ (it is important to note here, in line with what is said at the end of Section 3, that this coherence does not involve active narrativizing). A ‘sense’ of agency is what marks actions as being intended and produced by oneself; it is the mineness of actions. Mineness consists in coherence with a (limited) part of ones embodied biography, then, on this model, exactly as we argued in Section 3.

What we would call the mineness of an action is described by Gallagher and Zahavi as the ‘*sense of agency*’, the ‘*sense that I intended or caused the movement*’ (Gallagher and Zahavi, 2008, p. 39, italics ours). This makes it sound as if there is a specific experiential aspect to actions that are self-produced that would be lacking in cases where one feels one’s body move without having caused or intended that — cases in which there is no sense of agency but merely a ‘sense of ownership’. We think this is somewhat misleading.

On our view, the ‘sense’ of agency consists precisely in the absence of any further conscious thought or attention. This is in line with the ‘integration consensus’ discussed in the previous section: if consciousness arises when there is a lack of coherence of information in the brain and hence the need to integrate information, a match between an efference copy of a motor command with proprioceptive/perceptual feedback should not result in further conscious attention. This is indeed the case. What we have in mind here is neatly captured by Ludwig Wittgenstein’s observation that ‘voluntary movement is marked by the absence of surprise’ (Wittgenstein, 1953, §628).

In the case of a ‘mere’ sense of ownership, however — perceiving/proprioceiving a bodily movement without there being an efference copy of a motor command — there *should* be conscious attention, because the feedback does not cohere with a specific part of one’s embodied biography. And that is indeed also the case. For good evolutionary reasons, we startle when we note movements of our bodies that are caused not by ourselves but, for example, by someone pushing us. Conscious attention is evoked by a mismatch between bodily feedback and an absent motor command.

On the account of the mineness of actions or our ‘sense of agency’ provided by the comparator model, then, mineness is in fact defined in terms of coherence with one’s embodied biography. Moreover, from the point of view of the integration consensus, the comparator model would predict a lack of further conscious attention in the case of a self-initiated action — intentional agency — and added conscious attention in the case of other-initiated bodily movements — mere ownership. This is in line with our contentions in Section 4 and borne

out by experience. For these reasons we believe that the comparator model provides better support for our coherentist account of mineness than for the phenomenological account grounded in the notion of a minimal self.

6. Thought Insertion as a Pathology of Mineness

The comparator model is also used by Gallagher and Zahavi as an inspiration for their account of psychopathologies such as thought insertion or delusions of alien control in schizophrenia. As noted above, this use of the comparator model is controversial. Since Zahavi's and Gallagher's account of thought insertion is not dependent on this use of the comparator model, we shall leave the model aside. Instead, our aim in this last section is to contrast the minimal self-based account of mineness and our coherentist account of mineness in their respective characterizations of thought insertion. We argue that our coherentist account characterizes thought insertion as a pathology of mineness. Zahavi's account cannot agree with this. We argue that a characterization of alien control and thought insertion as pathologies of mineness is both intuitive and conceptually clearer than Zahavi's alternative.

People suffering from thought insertion typically report that some (occurrent) conscious thought is not 'theirs' but someone else's.⁵ *Prima facie* this may be taken as a pathology of mineness: a thought occurring in my stream of consciousness is experienced as *not mine*. This characterization, however intuitive, is incompatible with minimal self-based accounts of mineness. For when mineness is given with the internal structure of experiencing a thought, involving its first-personal givenness, then even 'alien' thoughts cannot fail to be experienced as 'mine'. This is, indeed, what Zahavi contends:

Even if the inserted thoughts are felt as intrusive and strange, they cannot completely lack the quality of mineness and first-personal mode of givenness, since the afflicted subject is quite aware that it is he, himself, rather than somebody else, who is experiencing the alien thoughts. (Zahavi, 2005a, p. 144)

Zahavi's characterization, we think, is right in so far as it accommodates the fact that people undergoing experiences of thought insertion are ordinarily well aware that these thoughts are occurring in *their*

[5] Consider, for example, 'Thoughts are put into my mind like "Kill God"'. It's just like my mind working, but it isn't. They come from this chap, Chris. They're his thoughts' (Frith, 1992, p. 66).

mind.⁶ We want to resist referring to this dimension of subjectivity or ownership as the presence of mineness, however. For it sounds contradictory to say that such thoughts belong to someone else yet are experienced as ‘mine’. Mineness, in other words, is a ‘thicker’ notion than pure subjectivity, or the plain fact that these experiences are had in one’s own mind or stream of consciousness.

First, though, let us see why and how Zahavi is able to resist a contradiction between alienation and mineness. His account of the alienation some of us might feel towards thoughts they experience is not in terms of a lack of mineness (for that is inevitably secured through the subjectivity involving internal structure of thought and experience on his account) but in terms of a mistaken *origin* of the thought or experiences a person feels alienated from. Zahavi (and Gallagher) explain thought insertion by arguing that people who suffer from it think they do not *author* the thought; they think they are not the source of the thought, they merely experience it.

This explanation of alienation suggests that it is the alleged alien origin of the thought that makes for its strangeness, not its content. But that cannot be completely true. If alienation is not due to the content of experiences and wholly due to a mistaken origin — me thinking that someone else produced the thoughts I experience — then that raises the following question: would it be possible to experience a thought that completely fits one’s embodied biography as being authored by someone else? If alienation is merely due to mistaking the origin of a thought this must be possible in principle. The literature on thought insertion, however, is entirely silent about such cases. In fact, there are well documented cases that would objectively come close to ‘alien-authorship’ of thoughts that are nevertheless *not* experienced as such because they are entirely in line with the person’s embodied biography. Michael Gazzaniga describes a case in which one of his split-brain subjects is given the command ‘walk’ which is only available to his (non-speaking) right hemisphere, in response to which the subject (or rather, his left hemisphere) confabulated that he is getting up to get a drink (Gazzaniga, 1998, p. 133). In such cases, no reports are made about alienation or lack of mineness, in spite of the fact that there is — at least for the left hemisphere — an alien origin of thought.

There are no cases in which thoughts or intentions that fit a persons embodied biography are experienced as alien. Why should this be?

[6] Consider, for example, ‘I look out of the window and I think that the garden looks nice and the grass looks cool, but the thoughts of Eamonn Andrews come into my mind. There are no other thoughts there, only his... *He treats my mind like a screen and flashes his thoughts onto it like you flash a picture*’ (Mellor, 1970, p. 17, emphasis added).

The most obvious explanation for the absence of such cases is that it is the aberrant content of allegedly inserted thoughts or intentions that triggers the notion that someone else authored it. This explanation is supported by the split-brain cases in which ‘alien’ produced thoughts and intentions that fit a person’s embodied biography are not experienced as alien. We conclude, then, that alienation cannot merely be a matter of mistaken origin, but is the result of thoughts and experiences not coherently *fitting in* with (what one perceives to be) one’s stream of consciousness, one’s biography, or one’s character. As Stephens and Grahams put it: ‘Mary [a subject having an experience of alienation] experiences her thoughts as “personal” (intelligently composed by someone), but not as expressive of her own person’ (2000, p. 174).

Alienation, we argue, is due to incoherence of a thought or intention with a person’s embodied biography. This incoherence may be expressed, explained, or rationalized in terms of a lack of authorship (see also so-called ‘explanationist’ models of thought insertion, e.g. Blakemore, Wolpert and Frith, 2002; Coltheart, 2005; Synofzik *et al.*, 2008; Vosgerau and Newen, 2008). Since the root of alienation is incoherence, on our account alienation is incompatible with mineness. This, we think, implies an intuitive usage of terms. ‘Mineness’ and ‘alienation’ are — especially in common parlance — contrasting terms. It also implies a clearer division of concepts. We agree with Zahavi that alien thoughts are endowed with a first-personal givenness — how can they fail to be? But on our account ‘mineness’ is a somewhat ‘thicker’ notion than pure subjectivity. Whereas the latter is connected with the internal structure of experience, mineness is tied to the external structure of experiences. Distinguishing mineness and subjective first-personal givenness, as we propose, allows for a more intuitive and clearer conceptualization of thought insertion. Thought insertion is a pathology of mineness.

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