

The Body and the Experience of Presence

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ABSTRACT: We experience our encounters with the world and others in different degrees of intensity – the presence of things and others is *gradual*. I introduce this kind of presence as a ubiquitous feature of every phenomenally conscious experience, as well as a key ingredient of our ‘feeling of being alive’, and distinguish explanatory agendas that might be relevant with regard to this phenomenon (1–3). My focus will be the role of the body-brain nexus in realizing these experiences and its treatment in recent accounts of the bodily constitution of experience. Specifically, I compare a sensorimotor approach to perceptual presence that focuses on properties of the *moving* body (O’Regan 2011; Noë 2012) with a more general enactivism that focuses on properties of the *living* body (Thompson 2007). First, I develop and discuss a theory of access derived from *sensorimotor theory* that might be suited to explain the phenomenon of gradual presence. This is a theory that sees the mastery of sensorimotor, bodily engagements with the world as key elements in setting up a phenomenal experience space. I object that in current versions of sensorimotor theory the correlation posited between presence and changes in the subject’s physical relation to the environment is too rigid. Nevertheless I defend the claim that gradual presence is constituted by our temporally extended engagement with the environment (4–7). Second, I consider some objections stemming from *enactivism* with regard to self-regulatory properties of the living body and the phenomenological claim that the organism’s value-laden relations with its environment have to be included in the theory. I will show that the latter is a necessary amendment to sensorimotor theory and its concept of gradual presence (8–10).

1. Introduction

Presence is a basic feature of our conscious life in at least two respects. There is, first of all, the general meaning of ‘presence’, that refers to the fact that something can be present to someone at all, that a world is present to the mind. In this sense one could say that presence is “the basic phenomenon of the whole domain of the mental” (Noë 2012, v). Second, ‘presence’ can denote an element or property that gives every conscious mental episode (or certain elements within such an episode) a specific vividness and strength such that its givenness to mind comes in degrees. As ‘forcefulness’, presence can be regarded as a central ele-

ment of what has throughout this volume been called ‘feelings of being alive’, inasmuch as it refers directly to the phenomenology of a lived experience and to the experience of things that more or less matter to us. The objects of experience do not pass by uniformly; we experience them in different modalities as well as in different intensities. In this paper I will focus on this phenomenon of intensity or vividness – which I name ‘*gradual presence*’.

Beyond the question of how phenomenologically best to describe such an experience of gradual presence, I will discuss two general options for how this phenomenal element might be realized in the human organism. These two options hint at two general descriptions or aspects of the body of the organism. There is, firstly, the concept of the *living* body and its vital processes (including its needs and drives) that can be said to underlie our lived experience. And there is, secondly, the experience of perceptual presence as mediated by the *moving* body and our exploratory engagement with the world. Both kinds of reference to the body play onto two prominent variants of the theory.

2. Two theories and two worries

The concept of life and of living systems is at the heart of *enactivism* and was already present in its original conception in *The Embodied Mind* (Varela et al. 1991). In the years since it also has been transformed into a general research program for the cognitive sciences (Thompson/Varela 2001; Thompson 2007; Stewart et al. 2010; Di Paolo et al. 2010). Despite also referring to the multifaceted role of the body and highlighting the different domains it enacts – their is nevertheless a focus on the integral concept of the living and needful body in enactivism as the main explanandum of sentience and presence in an organism. It claims that a “philosophy of mind needs to be rooted in a phenomenological philosophy of the living body” (Thompson 2007, 222).¹

In contrast to that, the *sensorimotor theory of perception* (O’Regan/Noë 2001 a,b) focuses on one specific domain of interaction with the envi-

¹ Though mindfulness was at the very heart of the original formulation of enactivism, it is fair to say that the problem of sentience and consciousness (and of what kind of bodies exhibit consciousness and how consciousness is modulated by the body) entered the enactive literature only after its original formulation in 1991 and have found their most extensive treatment in Thompson (2007).

ronment, namely the moving body and the access it gives us to the world and the way the world “makes itself available to the perceiver through physical movement and interaction” (Noë, 2004, 1).² The latter theory takes presence to be a function of certain kinds of bodily interactions that are related to motion.

Enactivism and sensorimotor theory thus both attribute a central role to the body in explaining mental phenomena. And more than that: they embrace a theory that extends the constituents of experience, the material vehicles of mental states, beyond the brain into the body of the perceiver. A comparison between the properties they attribute to the bodily states and processes in order to explain the unfolding of certain experiential states might help us to define more clearly how ‘embodiment’ could figure within a philosophy of mind, thereby clarifying a rather blurry concept.

Before looking into the details of the two concepts of bodily contributions to experience, I would like to fend off one possible objection to the fruitfulness of this comparison. One could argue that the difference between the two theories is simply one of scope: they do not aim at explaining the same phenomena and one might run into the danger of comparing apples and oranges. Sensorimotor theory first and foremost explains *perceptual* experience and *perceptual* presence, whereas enactivism tries to explain mindfulness and experience in general, thereby including also affective states, bodily feelings, and the like. Though there is some initial weight to this worry, it should not keep us from pursuing the comparison.

Why this is so becomes clear when one looks at how sensorimotor theory treats the different aspects and kinds of experience that should be covered by a general theory of phenomenal consciousness. *Either*, as in Noë’s work, it is a deliberate choice to treat consciousness as primarily world-presenting and to generalize it in a way mostly akin to perceptual

² In a sense, sensorimotor theory can be described as a narrower version of enactivism, subscribing only to a few claims of general enactivism’s paradigm. Alva Noë, too, has used the label ‘enactive’ (2004) and has acknowledged that there is a certain kinship between his theory and general enactivism, though without real theoretical overlap (2004, 233). The sensorimotor contingency theory of perception has been developed by O’Regan and Noë (2001a,b); see also Myin/O’Regan (2002). Although their paper deals mostly with conscious *visual* experience it is nevertheless the basis for further developments that will figure prominently in my paper: in Noë (2009; 2011; 2012) under the label of ‘actionism’, and in O’Regan (2011) under the original label.

experience of the world. In that case this treatment must prove itself to be comprehensive of the whole domain of phenomenal presence.³ Or, sensorimotor theory acknowledges other states (emotions, bodily feelings) as falling under the range of conscious phenomena to be covered, and attempts to explain the specific presence of such states also and explicitly along the lines of sensorimotor engagements, as it is done in O'Regan (2011).

Yet, a second worry might be worth noting. Enactivism and sensorimotor theory could be regarded as complementary and mutually supportive in generating explanations for the above-mentioned phenomena of presence. Enactivism also assigns the domain of sensorimotor interactions with the world a pivotal role in determining what we consciously experience (Thompson/Varela 2001, 424). As such, one could also argue that, if the two theories were so different in their understanding of the role of the body, it would be puzzling that neither has made much of an effort to prove the other wrong.⁴ In the second part of the present paper, after turning to the description of the phenomenon at hand and its sensorimotor explanation, I show that a different concept of the body is indeed at work in enactivism; a concept that also equips us with different explanatory means.

3. Aspects of consciousness

Sensorimotor theorists' focus on sensory and perceptual experience in their treatment of conscious states is not uncommon in philosophy of mind. Quite the contrary. Despite, for instance, the current widespread interest of cognitive science and philosophy in phenomena of affect and emotion, philosophers of mind often simply equate *phenomenal* consciousness with sensory experiences (of the world and the body), using, for example, color experience as the model case, when it comes to developing a theory of phenomenally conscious experience and its possible supervenience base in the brain/organism of the perceive-

3 Despite what the title of Alva Noë's most recent book – *Varieties of Presence* – suggests, he does not discuss affective states or emotions and claims that “the problem of consciousness, is the problem of the world's presence to mind” (2012, 131 f.).

4 One noteworthy exception is Thompson's (2005) criticism that Noë's theory lacks a proper grounding in the body with respect to the reflexive subjectivity of every conscious mental state.

er. Affective elements of experience – not to mention such ‘strange’ phenomena as background experiences – are omitted from the picture altogether. Consider this textbook introduction to the question of what states are constituted by ‘feels’:

Bodily sensations and perceptual experiences are prime examples of states for which there is something it is like to be in them. They have a phenomenal feel, a phenomenology, or, in a term sometimes used in psychology, raw feels. Cognitive states are prime examples of states for which there is *not* something it is like to be in them, of states that lack a phenomenology (Braddon-Mitchell/Jackson 2007, 129).

With regards to affects and emotions, the authors state that “desire *per se* has no special feel or phenomenology” and that emotions (130), though commonly linked with feelings, are not constituted by but rather simply associated with them.⁵

Such exclusive accounts of qualitative feels can be contrasted with rather inclusive theories such as William James' famous analysis of ‘fringe consciousness’ and the broad range of feels that he allows for. Those feels go beyond ‘sensations’, ‘images’, ‘percepts’ (or what he calls ‘substantive’ moments and states) and include transitive, fleeting elements of our “swift consciousnesses” (James 1950, 274). James thereby acknowledges the specific “felt tendencies” in thought and extends these feelings even to logical relations and particles: “we ought to say a feeling of *and*, a feeling of *if*, a feeling of *but*, [...] quite as readily as we say a feeling of *blue* or a feeling of *cold*” (James 1950, 245).⁶

Phenomenological theories of experience and contemporary versions of neurophenomenology (e.g. Lutz/Thompson 2003) also fall under such inclusive accounts. They allow for a wide range of felt states and processes, comprising different aspects of our ‘lived experience’ and explicitly include the affective, valence-based among the states with a specific feel. Also ‘existential feelings’ as discussed in the present volume are an example of this inclusiveness in contemporary phenomenology

5 When I speak of conscious states throughout this paper, I refer to *phenomenally* conscious states – states or episodes that have a specific feel to them or, to use Nagel's famous formulation, that there is *something it's like* to be in. There might be other ways of being conscious (see e.g. Block 1995) but I won't be concerned with these directly.

6 See also Dewey (1998). For a comprehensive account of contemporary approaches to the question whether there is a specific phenomenal element of thought and *reflective* consciousness proper, see the collection of papers in Bayne/Montague (2011).

(Ratcliffe; Stephan; Slaby, *this volume*). These are ways of world-disclosure whose instantiations are characterized as having a *felt* sense of belonging to the world. These feelings incorporate the possibilities that are integral to the sense of having a world, what is reminiscent of the concept of the horizon, as it has been employed in the phenomenological tradition (Husserl 1973; 2001; Merleau-Ponty 2012). Regardless of how these notions are cashed out, they are understood as having their own feels related to them.

For the purpose of this paper I remain neutral with regard to what kinds of states constitute *classes* of phenomenally conscious states, but I will allow a variety of experiences – beyond the basic sensory modalities – to be among them and consider their specific phenomenality something to be accounted for.⁷ I do this not by embracing an explicitly phenomenological position and methodology,⁸ but by referring to a sort of hetero-phenomenology. Subjects seem to be able to clearly distinguish different emotions (e. g. fear and disgust) along phenomenal lines, just as well as they are able to distinguish different sense modalities (e. g. vision and touch). In other words the *phenomenal* commonalities or differences between instances of this enlarged class of ‘modalities’ are strong enough that people can be fairly confident in their phenomenal judgment of under which class they fall. This way of parsing the field of possible phenomenally conscious states does not run the risk of over-diversifying it by, for example, allowing every kind of mental content to have its own feel. Yet it nevertheless acknowledges the distinctions people tend to make when referring to their experiences.

But more importantly, I suggest that we include *gradual presence*, the experience of vividness within one modality or emotion, as a feature of the phenomenality of conscious states. I will treat this gradual concept of presence as an essential element of the ‘feel’ of a conscious experience. This is to say that ‘what it is like’ to undergo an experience is deter-

7 This somewhat goes against the orthodoxy in the analytic philosophy of mind that considers the ‘what-it-is-likeness’ of experience to be tantamount to the sensory or perceptual. For a direct argument for the latter and that other feelings – when it comes to their phenomenality – rely on the processing of certain ‘perceptual structures’ in the brain, see Prinz (2007; forthcoming).

8 For enactivism, though, the methods stemming from the tradition of phenomenology have been key to the investigation of our mental lives. Thompson, for instance, has been explicit in his aim to bring philosophical phenomenology (i. e. the tradition of Husserl and Merleau-Ponty) and science (biology and neuroscience) together (Thompson 2011, 10 f.).

mined not only by the sensory modality (that we experience something as visual and not as tactile) but also by the peculiar forcefulness or vividness of the experience.⁹

Much more could be said about this general concept of phenomenality. For the sake of brevity I will help myself to a definition given by Charles S. Peirce that nicely exposes some aspects of the interrelation of vividness and phenomenal feel:

[T]he color sensation which you derive from looking at the red-lead has a certain hue, luminosity, and chroma which completely define the quality of the color. The *vividness*, however, is independent of all three of these elements; and it is very different in the memory of the color a quarter of a second after the actual sensation from what it is in the sensation itself, although this memory is conceivably perfectly true as to hue, luminosity, and chroma, which truth constitutes it an exact reproduction of the entire quality of the feeling. It follows that since the *vividness* of a feeling – which would be more accurately described as the vividness of a consciousness of the feeling – is independent of every component of the quality of that consciousness, and consequently is independent of the resultant of those components, which resultant quality is the feeling itself (CP I. 308 f.).

In Peirce’s understanding ‘hue, luminosity, and chroma’ are three elements that occur together in the immediate consciousness of the quality of a feeling, which means that they are inseparable and instantaneous in the experience. But there is also a vividness of the experience to be accounted for – something that he introduces as a comparative concept that relates feelings to each other.¹⁰ This vividness, and this is important, nevertheless *co-constitutes* the phenomenal feel of the conscious state itself. Qualia, according to Peirce, are what stand for themselves. But once we regard the phenomenal experience of them as being comprised in a feeling (i.e. an actually occurring mental state) we also have to include the vividness they exhibit as a central element of their phenomenology.

Based on this last point I would argue that gradual presence or vividness is a *felt* component in its own right making the kind of access we

9 This holds also for the different kinds of emotion we experience (anger, fear, jealousy, for instance): they come in different strengths. We also experience the actions of others as more or less enchanting or threatening, or the recall of an event in episodic memory as, e. g., forcefully occupying our thoughts.

10 Following Peirce’s terminology, quality determines the ‘firstness’ of an experience whereas the vividness is a ‘secondness’; yet both are elements of feelings: “Every feeling has a greater or less degree of vividness; but vividness results from a comparison of feelings” (1997, 141).

have, so to say, phenomenally experienceable. (It is therefore not just a part of the consciousness of the feeling as the passage cited above somewhat misleadingly suggests).

I have two reasons for this assessment. First, the strength of an experience is such a ubiquitous property of our phenomenology – one that is immediately intelligible to every feeling subject – that it should be attributed a pivotal role in a theory of qualitative feels. And second, the relative vividness of one episode compared to another does not simply amount to *more of* something else (e.g. a ‘more of content’)¹¹ and it is not the cognitive integration alone that is determined or indicated by it. This is what might convince us to treat it as a conscious element that constitutes an additional phenomenal feel (albeit always connected with a modality or emotional hue). In this sense, or so I argue, it constitutes a phenomenological building block that should be included in a theory of the lived subjectivity of embodied agents.

The way I want to account for this vividness of experience in the following is by linking it to contemporary explanations in philosophical accounts of the embodied, enactive mind of what constitutes the specific gradual presence of mental states. I therefore will first look into the naturalistic explanations given in sensorimotor theories of perception of the alleged bodily mechanisms that mediate the force or vividness of experience.

4. Sensorimotor theory

Sensorimotor theory is a theory about phenomenally conscious states. In this it exceeds the ecological approach to perception – as it has been developed by James J. Gibson – to which it otherwise owes many of its central paradigms, such as the focus on the role of movement (of the eye, the head, the body) in perception as well as the central claim that perceptual content is determined by certain invariants that hold between the sensory apparatus and elements in the environment (1979). In its original formulation as a theory of perception, sensorimotor theory claims that different phenomenal states within one sense modality (say vision) differ because the sensorimotor contingencies (the regularities

¹¹ This is to say that it *prima facie* seems plausible to experience the same, modality-specific content as more or less enticing or vivid without assuming that it has additional representational elements attributed to it.

of how an object changes with regard to the movements of the perceiver) are different with different objects; and it claims that the sense-modalities of experiences (say those of vision and touch) differ because they are governed by different laws of such sensorimotor dependencies – i.e. they are constituted by fundamentally different action-to-stimulation signatures. In vision, for example, we gather relative depth information about distal objects that are partially occluded by ways of moving (approaching and reproaching), a regularity that is not available in touch. “The experience of seeing occurs when the organism masters what we call the governing laws of sensorimotor contingency” (O’Regan/Noë 2001a, 939). It is the mastery of these laws that distinguishes visual experience from perception in other modalities.

A good example is the visual experience of shape. The authors cite a case where a patient, after having a congenital cataract removed, was surprised that a coin – a kind of object that he had been interacting with before through touch – when rotated should change so dramatically (from round to elliptical) in visual perception. This finding fits nicely into the picture of sensorimotor theory. As the theory suggests, the visual experience of shape is determined by the practical understanding of “the set of all potential distortions that the shape undergoes when it is moved relative to us, or when we move relative to it”, a practical understanding that the above described patient lacks and has to learn anew (O’Regan/Noë 2001a, 942). By making reference to bodily movements and sensorimotor dependencies in such cases, the aim is to explain “why sensations have a ‘feel’ and why ‘feels’ feel the way they do” (O’Regan/Noë 2001b, 1010). In the case of the patient ‘learning to see’: he fully experiences vision the way we do only after he has learned to integrate the sensory information into a skillful routine that makes the changes in input intelligible to him.¹²

¹² The most stunning examples in this respect are sensory substitution cases, where congenitally blind people learn to interact with the environment via a head-mounted camera that conveys its information on a vibrating array on the skin (or tongue) of the subjects. After having learned to interact with objects in the environment, those subjects report the emergence of an experientially new, distal sense with a special phenomenality related to it; a kind of experience that is, or so one could argue, akin to visual experience (Bach-y-Rita 1969; Bach-y-Rita et al. 1996).

5. O'Regan's phenomenality plot¹³

Beyond felt modality and content of perceptual states, sensorimotor theory also explains the experience of different strengths of sensory presence. According to the theory this is also determined by the kinds of bodily access we have to objects in perception. This access is broken down into purely functional and objectifiable terms. It is a relation of our body and sensory system to the environment that can be accounted for by the features of so-called 'bodiliness' and 'grabbiness'.

Your interactions with objects in your vicinity, as opposed to objects in the next room, exhibit these features. When you move your head, the profile of an object close to you will change (bodiliness). And your visual apparatus is set up such that when an object in your visual field changes, it will attract your attention and certain stimuli will provoke an immediate orienting behavior of the body (grabbiness).¹⁴

The interaction at work is a *temporally extended* one and thus cannot be understood statically, as a state that a person is in. In the slogan of sensorimotor theory: perception is not something that happens to us, it is something we *do*, and these doings take time. Yet the temporality of these interactions is not necessarily an experience of succession and the experienced quality does not have to mirror the bodily practices; the temporal aspects are transparent in experience while nonetheless determining the quality and content of what we experience. This point is also mirrored in another aspect of the theory: we do not have direct, conscious access to the sensorimotor laws and contingencies that govern

¹³ The phenomenality plot already figures in a paper co-authored by O'Regan, Myin and Noë (2005). Here and in the next subchapter I will attribute certain aspects of the sensorimotor theory to a single author, according to its specific usage in their most recent monographs (O'Regan 2011; Noë 2012).

¹⁴ O'Regan also adds the concepts of 'richness' (of the world we engage with) and '(partial) insubordinateness' as important factors in determining the sense of reality in seeing (2011, 31). Because they do not play an important role in the phenomenality plot, I will not be concerned with them. The way I see it, these concepts pose possible problems for the theory. For example, the concept of richness can also be accounted for by making reference to non-conceptual and not yet consciously accessed content that is coded in the brain, of which the conscious subject can only make limited use at a given time – hence the experience of abundance, or richness (see e.g. the concept of analogue content in Dretske 1981). But then there is no need to include – as O'Regan aspires to do – the body and sensorimotor interaction as central explanans of the feel that corresponds to this concept.

our interaction, i.e. the very laws that determine what we experience when we experience it.

The features of grabbiness and bodiliness have been used by Kevin O'Regan to explain beyond perceptual experiences also the presence of 'raw feels' and other kinds of experience. He explores the possibility that they might be a marker of phenomenality in general and that they constitute every phenomenal experience:

[...] if richness, bodiliness, insubordinateness, and grabbiness are the basis for 'what it's like' of sensory feels, then we can naturally ask whether these concepts can do more work for us. In particular we would like them to explain, in the case of other nonsensory types of experiences, the extent to which people will claim these have 'a something it's like' (O'Regan 2011, 165).

O'Regan goes on to develop a 'phenomenality plot', with bodiliness and grabbiness as its main axes (2011, 165–178). Only experiences that rank high on both measures exhibit a strong sensory presence.

Let's consider the feelings of hunger and thirst as examples along these lines. Both have very little bodiliness: "Moving parts of your body does not change the signals of hunger and thirst" (O'Regan 2011, 171). Yet, they plot relatively high on the grabbiness scale – they will set you in an alerted state with regard to food and beverage, and will themselves attract your attention and interfere with your thoughts – though not as high as sudden pains, because hunger and thirst are more phasic. Since such cravings are 'off' the main diagonal of the chart, they do not have the same sensory presence as the basic sensory modalities (that figure high in bodiliness *and* grabbiness) – a fact that can be used to explain the relative phenomenal 'dullness' of these feelings.

One prediction of O'Regan's theory is that mental states that plot zero on both axes would have no feel, no phenomenality at all. The claims involved here are: (i) For any state, in order for it to have a phenomenal feel *at all* it must score more than zero on one of the axes of the phenomenality plot. (ii) Strongly experienced presence is plotted by high scores on the axes. (iii) Scoring equally high on both axes makes a feeling more akin to perceptual experiences (being 'off' the main diagonal does the opposite). (iv) Scoring more than zero is defined by being directly influenced by bodily interactions. From (i) and (iv) it follows that having a phenomenal feel at all is a function of being directly

modulated by bodily interactions;¹⁵ and from (ii) and (iv), that gradual presence is determined by the amount of bodiliness and grabbiness. Especially the latter is worth noticing: presence is a direct function of measurable elements of bodiliness and grabbiness. So beyond the *structured* elements (the respective sensorimotor laws) that determine the modality-specific experience (e.g. visual or tactile) of sense perception, the phenomenality plot adds the *amount* of bodiliness and grabbiness (the amount of impact that changes in our body and changes in the environment have) in order to determine the strength of phenomenal presence.

The problem with the phenomenality plot, as O'Regan presents it, is that it is either too ambitious or not ambitious enough with regard to its explanatory scope. At times it seems that the *specific* position on the plot (and the respective properties of bodily engagement that determines this position) is supposed to explain the *specific* presence – or at least the presence relative to the sense modality – that is determinative of a feel and describes it sufficiently (ii, iii). Basic sense modalities, as an exception, are determined in their experienced type of phenomenality by the *structure* of the interactions underlying them additionally to their *amount* of bodiliness and grabbiness (on the phenomenality plot they hold almost the same position), yet this does not hold for other experiences such as cravings, emotion, and the like. Their experienced quality is supposed to be determined exclusively by positioning them on the phenomenality plot. It is important to remember that this plot is 'leveled' out with regards to the standard of the sense-modalities that are high on the main diagonal. So all other feelings are assessed in relation to these sense modalities and the extent to which bodily changes influence their experience.

Yet if O'Regan wants to do that, it will be problematic that he allows different feels to occupy the same spot on the plot without being

15 A short insertion: this is not the same as explaining *why* we have phenomenal experiences at all – although O'Regan would also like to argue in that direction and sees his theory as a way of dealing with the 'hard problem of consciousness' (Chalmers 1996). At the moment I do not see sensorimotor theory making any headway in closing the proposed explanatory gaps (regardless of whether one thinks that the gap persists because the right concepts are not within the reach of contemporary theory, or one thinks that the way the gap is conceived makes it unbridgeable). And to be sure, what has been said above does not amount to a sufficient condition of consciousness within O'Regan's theory, either. Therefore the cognitive access of the experiencing subject to those feelings has to be taken into account, as well.

experienced as phenomenally similar. Tickling, small pains and itching all have roughly the same bodiliness and grabbiness according to O'Regan (2011, 172–174) and they cannot additionally be differentiated by reference to differences in the corresponding mastery of sensorimotor contingency (as, for example, the basic sense modalities can). Here it is quite telling that O'Regan acknowledges the problem but solves it by going beyond the scheme of his phenomenality plot. He claims that tickles and hurts have the same sensory presence but that accounting for pain requires an additional non-phenomenal, evaluative concept: for O'Regan the 'hurt' of pain is not a phenomenally experienced element. From this it should also be clear that he takes the relative position in the phenomenality plot otherwise and in most cases to be determinative of the feel of these experiences. Or else he would not need to introduce this extra-bodily, evaluative element in the case of tickles and pains.

What we gain by positing this evaluative element in pain is a new way of describing differences in feelings, yet one that O'Regan sees as extra-phenomenal. This renders the above claims and the phenomenality plot to some extent uninformative and inevitable weakens his theory because it excludes differences among feelings that are ordinarily conceived as phenomenal differences (such as the experiences difference between a small pain and a tickle). The problem consists, in my view, in the rigidity of the correlation between presence and bodily modulation, in O'Regan's account. A correlation that at the same time constitutes also the attraction of his theory because it enables one to directly correlate phenomenal differences in presence to bodily changes and to make them available for scientific studies. We will see shortly that a slightly different approach to the phenomenon circumvents the aforementioned problem. There the correlation between 'physical characteristics' and experienced 'feels' – while nevertheless playing an important role – is not as direct.

6. Noë's access space

The philosopher Alva Noë extends the insights of sensorimotor theory towards a general theory of what is available to us: "skills, know-how, knowledge, and understanding – these are the ground of our access to what there is; these mark out the extent of consciousness" (2012, 32). He therefore calls what is necessary for perceptual experiences "sensor-

inmotor understanding” (Noë 2012, 24) but also allows other forms of understanding to contribute to our ways of world-disclosure. Based on this, we can experience perceptual presence of more things than we had previously thought.

Consider, first, the backside of a tomato that is hidden from view and what has been labeled ‘the problem of perceptual presence’ (Noë 2004, chap. 2). Noë argues that to some extent we visually sense the backside as present, because we know how to make contact with it.¹⁶ The gradual presence of occluded features is experienced because we implicitly know how to make them ‘directly’ visible and the scope of our understanding determines what we are conscious of. In a weaker sense also the tomato next door (an object that we may have perceived earlier) is present even when we only think about it: we know how to get there. Noë contends that we have a quasi-perceptual relation to this physically existing object that ensures that we are to some extent phenomenally conscious of it. He introduces the notion of ‘presence in absence’ as one inherent in every phenomenally conscious state. Nothing in consciousness is completely absorbed and present: everything we experience is in a sense ‘virtual’ since we are always engaged in the exploration of further not yet attended features of the perceived object or scene. Perception is “virtual all the way in” (Noë 2004, 193).¹⁷

Noë suggests that a subject’s physical relation to an object *and* the mastery of skills that gets him into contact with it determines the degree and intensity of presence. So at this point one could argue that presence also can be directly elicited by changes in one of these two conditions alone, for instance via changes related to the mastery of a skill. New knowledge gained about ways of getting in contact with an object (or about the object itself) could change the vividness in the presence. In

16 Noë’s main point is slightly different in his assessment of the phenomenon. He argues that we visually experience the *whole* tomato as opposed to only the front of it that is in plain sight.

17 One consequence of such a concept of consciousness might be that there are no first-person-perspective, directly given, *simple* qualities. Whatever is a candidate for conscious experience has to be further explored in order to gain this status. In other words: it can only occur and persist via changes. Yet nothing said so far rules out the conceptual possibility that there be something of which we might be instantaneously conscious at a certain time (what in philosophical jargon has sometimes been called ‘qualia’). Even if this is possible, the descriptions and explanations of the way our conscious lives unfold – which is the topic of my paper – would not be informed by such a concept.

that case, not only sensitivity to perturbations through movement but also socio-linguistic practices can have an immediate impact on the experience of presence. Here nothing changes per se in the physical relation to the object; there are no alterations in its proximity or its existence. This is a rendering of the theory that Noë only explores in passing but I would argue that also direct influences on the knowledge of ‘how-to-get-into-contact’ *alone* could be used to explain how an object of experience can figure more or less forcefully in experience.

The aforementioned thought about a tomato next door (where the difference in presence as compared to the backside of the tomato is only one in degree, both constituting quasi-perceptual cases) exemplifies what I just said.¹⁸ Once Noë allows such cases, in which non-perceptual changes in the bodily relation to an object (as e.g. when the tomato is moved one room *further* away) can influence the experienced presence, we do not have to stop short of the conclusion that absent objects – even ones that we have not yet perceived – can become phenomenally present in quasi-perceptual ways. Here it is not the physical or bodily relation to the object whose changes become vivid but ‘evocations’ or new informations given by our surroundings and peer that might change the relation to the object.¹⁹

Such a line of reasoning becomes possible because of Noë’s emphasis on the continuity of perception and thought (2009, 479–82). Both are skillful relations to the world and both are ‘conceptual’ under a certain description: we do not experience raw sense data but always elements mediated by the respective skillful relation (sensorimotor or other) to the object. Also in thoughts and intentional acts the kind of relation we bear to the relevant object, the kind of access we have to it, figures as a constituent of that act. Access might change in light of new information or via encounters with others in the social realm (others might, for example, have better information regarding the objects of a

18 For reasons of simplicity I stick to the tomato example; in recent writings Noë uses the example of his friend ‘Dominic’ who is in another country but can get in contact with him, e.g., via phone (2009; 2012).

19 To give a simple example, consider my ability to evoke the presence of Aristotle in you. If I were to tell you now that Aristotle is at the door and will knock in a few seconds, I will already have changed his experienced presence. The effect of the suggestion is as astonishing as the event conjured up is unlikely to occur: by coming up with such a scenario I appeal to your knowledge of Aristotle (maybe evoke depictions you have seen) as well as your knowledge of how somebody at the door would affect your perceptual apparatus.

thought). So objects of thought are also susceptible to changes in availability through encounters with thought-changing events. Changes in the knowledge of the relation therefore co-determine the experienced presence of the objects of thought.

Yet Noë also sometimes treats thought presence and perceptual presence as portraying very different kinds of access to the world and he is adamant in his claim that perceptual experience of presence requires the existence of an object to which the organism relates: “Existence is a condition of availability or access”, he writes, and “[w]hen there is no object, there is, at best, something misleadingly like perceptual consciousness going on” (Noë 2009, 478 f.). And in passages where he is anxious to avoid the possible conclusion that we are perceptually conscious of any spatio-temporally located thing (regardless how close or distant it is) he is quite clear that – in order to experience perceptual presence – we have to be in a relation to an object where movement-dependence and object-dependence (or bodiliness and grabbiness) conditions hold. In other words, some kind of physical proximity, which makes objects influencing these conditions, has to be given.

I would argue that this move unduly limits him in his assessment of the phenomenology of gradual presence and contradicts other passages in his writing. Also thought elements can become present without changes in the body-object relation eliciting them by – in a sense – piggybacking on the practical knowledge involved in sensorimotor encounters with the objects.²⁰ This possibility should at least be considered more seriously in a theory that aims at displaying the different influencing factors on our phenomenal experience. I would argue further that presence, understood as gradual, can be seen as a *modality of availability*, beyond and besides the basic sense modalities, making such a presence a feature of every conscious experienced state. It can thus provide a link from the phenomenality of perceptual cases to other mental states.

To sum up: perceptual presence in Noë’s account remains largely a feature of our causal relation to the world. Yet his focus on the broader notion of skill also allows more elements to influence the way the world

²⁰ This kind of hijacking of perceptual structures is also at work in cases of sleep or hallucinations. One could argue that in dreams the brain is also under the impression that further information about the dream scene could be gained through various actions – thus what is hijacked is the entire expectancy system. So what might be necessary here is not a matter of evoking a complex and detailed representation of a scene but rather the activation of the ‘access system’ of the brain.

can act upon us (or our sensitivity to the world), and the skillful ways we can gain access to it. Noë highlights this by showing to what extent our access is an achievement of the understanding. In the last paragraphs I tried to unpack this by focusing on additional elements that might influence the access-relation directly and thereby modulate the experienced presence of mental states.

One worry might be that I thereby have somehow lost the focus on the *moving* body (that was more explicit in O’Regan’s phenomenality plot) in favor of a more intellectualist or cognitivist theory of presence. Indeed, the role of the body is now a more *indirect* one. Before moving on to the notion of the *living* body, I will consider a criticism of the way the body figures in sensorimotor theory that directly relates to this point.

7. Brain and body

There is a tension in sensorimotor theory between, on the one hand, the role it ascribes to the *activity* of the body in perception (and the *existence* of the object the organism interacts with) and, on the other hand, the role *knowledge* or understanding play in the constitution of experience through the element of skill. The philosopher Ned Block has criticized the theory on the basis of this tension (2005, O’Regan/Block 2012). He says that as long as the theory claims that conscious experience is a bodily activity, it will have a hard time accounting for the phenomenal experience in imagination, visual hallucinations or dreams where no such activity is in place. The possible move towards a more cognitive explanation of what realizes these experiences,²¹ on the other hand, is in his view tantamount to giving up the strong claim that activity is constitutive of experience: “[e]ven if perceptual experience *depends* causally or counterfactually on movement or another form of activity, it does not follow that perceptual experience *constitutively* involves movement” (Block 2005, 265). He then links the question of activity vs. cognition directly to the question of the vehicles of perceptual experience. Block sees no grounds for upholding the claim that consciousness is a property of (or simply *is*) bodily interaction and not just a property of a brain

²¹ Namely towards the knowledge and the expectancies of what stimulations would be received upon motion in a certain direction. This line of thinking is already apparent in the author’s responses of the original paper (O’Regan/Noë 2001b, 1015).

state. To his mind, the body is not part of the minimal supervenience base of experiences.

It should be apparent from what has been said so far that there is indeed a certain asymmetry at work in sensorimotor theory. Whereas the brain is always involved in conscious experience, bodily action seems not to be necessary for every instance of it. According to Noë perception at least requires sensorimotor knowledge, “[b]ut neither the possession nor the exercise of such knowledge requires movement” (2010, 247). If this is so, then all that the activity comes down to is the ‘exercise’ of this knowledge (since ‘possession’ is not a plausible candidate for activity). Along these lines, Noë retreats in recent writings to the position that what has to be given for experience is an *activity of understanding*: “[p]erception is active, according to the actionist, in the same way that thought is active” (ibid.). Thus Noë does not want to give up the activity claim: experience is determined by actual practice – the capacity to perform actions is not by itself enough. Yet such actual practices do not have to involve movement.²² But what the minimal requisite activity would be remains somewhat unspecified.

I would like to hint very briefly at a way of maintaining bodily activity in the account (and to resolving the tension Block refers to) by putting two strands of argumentation together: first, by introducing a slightly less rigid constitution claim and, second, by calling attention to an important feature of the concept of gradual presence: the underlying comparative, temporal element.

The constitution claim, first of all. Sensorimotor theory argues that the brain does play its role and has developed the specific connections and circuitry that underlie perception because it has been recruited by world-engaging loops of the organism.²³ If one takes the ontogenetic

22 The way I want to sketch this position falls between what has been labeled the strong and the weak claim of sensorimotor theory (Shapiro 2011, 168). According to the weak claim, *exercise* of sensorimotor knowledge consist in the potential to act; according to the strong claim, exercise requires actual movement, e. g. saccades of the eye to test sensorimotor contingencies.

23 See O’Regan (2011, 65) on the imminent role of the brain and the need to refrain from taking it to be the sole realizer of such experiences: “Each of these facts about the mode of interaction we call ‘seeing’ is a consequence of the way we are built and the way our brains are wired up. To explain what it’s like to see, we need to look in the brain for the mechanisms that enable each of these properties of visual interaction. We should not try to find particular neural structures in the brain that *generate* the experience of seeing.”

development of an organism into consideration, one can convincingly argue that without these interactions the physical structures underlying phenomenal states would not *develop* nor *persist*.²⁴ Block acknowledges this but discards such dependencies as causal. Yet, in my view, these are enabling conditions in a strong sense – especially since the structures underlying the experiences in question would immediately start to be recruited by other tasks of the organism *if* the bodily interactions underlying the respective experiences were not further available to the subject. So even though this might not exhibit an immediate *experienced* effect (a lack of experience itself hardly would count as an experiential effect), the effect on the underlying structure would be consistent given the adaptivity and plasticity of our brain.

This would not convince critics focusing on the minimal supervenience base of such experiences. In their view, as long as some form of phenomenal consciousness can be realized without changes in the body and its interactions the *minimal* base does not have to be extended beyond the brain. Yet one could argue that especially a *full* phenomenal experience – including gradual presence – is in fact constituted by bodily interactions. Here simply referring to the realization in the brain might not be sufficient to determine the properties of the mental states because the experience of gradual presence decreases already on the short term, when there is no actuation of the bodily interaction patterns with the world.

Consider the case where presence is induced through verbal suggestion and hijacks the knowledge and the sensorimotor expectancies involved in normal perception. The fact that this knowledge does not become actualized after it has been evoked (because the perceptual follow-up does not occur) has an effect on the experienced vividness, for instance when it is evoked a second or third time without a bodily actualization of the perceptual relation.²⁵ So besides the long-term diachronic element of contact with the world that sets up the sensorimotor knowledge system, the *extent to which* mental states become gradually present is already determined by interactions on a short time scale.

24 This point refers to the astonishing plasticity of the brain in early development as well as during learning in adulthood. The most convincing cases for this are in my view the sensory substitution cases that I referred to in footnote 12.

25 In this sense, the third or fourth time I would try to evoke the thought that Aristotle is about to knock on the door it will probably not get you excited anymore.

What should be clear from that is that it is only for a theorist looking to hold a minimal model of realization *as well as* a minimal model of the components of phenomenal experience that Block's argument can exert its power. Once vividness of presence is included as a key feature of phenomenally conscious states (as a comparative concept in the sense we discussed it in the passage from Peirce *and* as one 'set up' through bodily interactions) and especially if its relational, temporally extended nature is acknowledged the argument loses its force. The latter can be extended to a more general point. The structure of experience includes elements that remain in our consciousness and elements yet to be perceived (the phenomenological tradition has e.g. argued that an 'appearance' includes a sense of the view just had and a sense of a view you are about to have). This holds even the more so for gradual presence, which in each of its instances might be realized in relation to previously, concurrently or subsequently actualized bodily or skillful behavior.

What so far constituted the attraction of sensorimotor theory and its concept of the *moving* body, was that within the theory "objective physical characteristics of sensorimotor interaction [...] can be *linked directly* to the kinds of things people will tend to say about their feels" (O'Regan 2011, 176, emphasis added). Different profiles of bodily engagement, beyond mere reference to neural states, were meant to provide insights that make the phenomenally experienced differences intelligible as well as investigable. This works for differences in sense-modalities, and it works to some extent also for differences in gradual presence – albeit, as I have tried to show, in a slightly less direct way, because other mental states, i.e. the influences on the knowledge regarding the access to an object here have to be taken into account as well. After having developed some elements of this extended version of the role of the body in sensorimotor theory I will look now into the general concept of the body in enactivism in order to disclose further bodily properties that might constitute our sense of gradual presence.

8. The body in the enactive approach

In *Action in Perception*, Noë has argued that to perceive like us "you must have a body like ours" and therefore fended off positions in cognitive science and philosophy of mind that aim at an autonomous, independent level (e.g. the algorithmic level in Marr's Theory of vision) to explain the relevant, mindful capacities without making reference to the

lower level properties of the realizing system (2004, 25). In this sense our very body matters for the theory. Yet, sensorimotor theory – as well as the just introduced extensions of the theory toward other feelings (O'Regan) or a more general theory of understanding (Noë) – does not attribute distinctive properties to the organismic body, nor does it have a general concept of what it consists of. Instead it focuses on sensorimotor interactions and skillful relations that are structured by our bodies (i.e. by its morphology and the movement it enables). It accounts for the differences between modalities of experience by highlighting different modes of bodily interaction, it explains the richness of the content of experience by showing that it includes what is available to us through sensorimotor skills (and not only what is represented in the brain), and it shows how bodily and object-related changes influence the experienced vividness or gradual presence. This is why I referred to it as a theory of the *moving* body.

Although sensorimotor theory of perception and its philosophical treatment is often seen as an outcome and at least as compatible with the more general enactive approach it is clear that the latter outstrips the explanatory scope of the former. This is especially so with regard to a more profound concept of the organism, its living body and its properties, as well as with regard to what follows from this concept, namely the inseparability of emotional and cognitive processes based on a general theory of the *value-laden* interaction of the organism with its environment.

Here are two claims that one can derive from enactivism with respect to the body. Claim (1) that it is the *living* body as an autonomous, adaptive system that realizes cognition. It is only with regard to such a system that we can explain the sensorimotor understanding we undergo, because it makes intelligible the ways in that we are 'sense-making' agents in the first place.²⁶

And the phenomenological claim (2) that there is a felt agency that has to be accounted for, in the sense that things that are consciously present matter to us. The latter refers to the concept of a *lived* body that underlies all our experiences and that constitutes an intransitive sense of experiencing, a concept that enactivism has imported from the phenomenological tradition (see the concepts of 'kinaesthetic expe-

26 For a brief introduction into basic concepts of the enactive approach (autonomy, autopoiesis, adaptivity, sense-making) see Thompson (2005, 407–409) and Thompson/Stapleton (2009).

rience' and 'Leib' in Husserl 1989 or 'phenomenal body' in Merleau-Ponty 2012).

Both claims are related, as we will see shortly, and can be seen as constituting challenges for sensorimotor theory. Jointly they also provide means to explain the occurrences of gradual presence in alternative ways.

9. The living body

I deal with the foundational claim (1) first. It captures nicely some basic assumptions about the relation of life and mind in enactive theories. Enactivism argues that every organism plays an active role in the generation and bringing forth of an 'Umwelt'; i. e. a living being *enacts* a milieu that is already marked by valence for this being. This holds for simple as well as for complex organisms: even single cell organisms have a 'perspective' in the sense that encounters with the world have significance for them (e. g. the detection of a sugar gradient in the environment). Despite the fact that their interactions with the environment are basic one could argue that they embody some form of mindfulness.²⁷ The prerequisite is that the autopoietic and adaptive system exhibits sensitivity to environmental conditions. "Cognition requires a natural centre of activity on the world as well as a natural perspective on it" (di Paolo 2005, 12). This is what triggers the enactive project to naturalize sense-making.

Without going into details, two elements that characterize more complex organisms are of interest to us. First, complex systems have mechanisms or abilities to monitor not only states in the environment but also their own interactions with the environment – a fact that is sometimes related to cognition *proper* in enactive theories. Second, this monitoring of interactions is even more crucial for animals that

²⁷ Enactivism stresses that the behavior of mindful animals and humans is on a continuum with other forms of life. Hans Jonas – who reckoned that a philosophy of life should constitute a centrepiece of 20th century philosophy – made a classic statement of this view in *The Phenomenon of Life*: "the organic even in its lowest forms prefigures mind, and [...] mind even on its highest reaches remains part of the organic" (Jonas 2001, 1). The foundations of this claim and the promises and pitfalls of a 'strong life and mind continuity thesis' will not be investigated in depth in this paper, nor will I address the question at what level consciousness arises. My focus will be the complex system capable of locomotion and equipped with a nervous system, or in other words: animal life.

have the means of locomotion and thus engage in complex search or flight behaviors. It has been argued that the development of the nervous system might be correlated to the requirement to deal with these kinds of demanding behaviors. These interactions of complex systems are also acknowledged as significant with regard to a general concept of presence and of the 'feeling of being' as it is understood in Thompson's treatment of the topic under the heading of 'sentience':

Animal life is thus marked by a distinctive sensorimotor way of being in the world. This sensorimotor way of being, in its full extent, comprises locomotion and perception, emotion and feeling, and a sense of agency and self – in a word, sentience (2007, 221).

Note that sentience here is not yet directly related to what I have called gradual presence but rather to the general occurrence of conscious mental states.

But not only sensorimotor interaction has to be considered when it comes to explaining 'mindful' behavior and the phenomenology of the lived body. Thompson has argued that three modes of ongoing bodily activity determine our mental life (Thompson et al. 2001; 2005):

- (a) the body as involved in self-regulation
- (b) the body as engaged in sensorimotor coupling with the world
- (c) the body as engaged in intersubjective interactions with other bodies

The first mode especially concerns the processes that ensure that a system is alive and sentient in a basic sense, and that might determine basic cravings, strivings and e. g. experienced needs such as hunger. The second form of bodily interaction has been our focus throughout this paper and "is expressed in perception, emotion, and action" (Thompson 2007, 243). At this level the organism exhibits a special kind of sense-making (through movement, controlled sensory input, and the nervous system) that is directed towards objects and includes, for instance, a perceptual background-foreground structure and the temporal integration of information.²⁸

It is tempting to see each of these bodily interactions as referring to both an objectifiable form of living and a phenomenally experienced

²⁸ I won't address the third mode of bodily interaction in enactivism because nothing in the present paper hinges on it. It marks an important addition, though, and relates to what I have called socio-linguistic practice but also to the level of interacting bodies in processes of shared sense-making. See e. g. the concept of 'participatory sense-making' in De Jaegher et al. (2007).

form of living or, in short, a lived experience. Different forms of organization bring forth their own domains of interaction and determine different kinds of identities of organisms (Varela 1997; di Paolo et al. 2010). Yet this depiction is in my view misleading; rather one has to think that all three bodily engagements *together* constitute us as complex, conscious human beings and determine our cognitive lives and our lived phenomenal experience.

The foundational claim (1) is thus both a metaphysical and an epistemological claim. Metaphysically the properties of the other bodily levels (b) and (c) cannot exist without the life-regulating body (a); nor can the mindful states we want to attribute to a human organism, states that emerge from the different forms of bodily processes. And epistemologically we cannot gain full understanding of what determines our experiences if we do not take the living body into account; understanding cognition and consciousness therefore requires understanding life as an autonomous system under precarious conditions. What enactivism offers is a theory of the biological requirements for the kind of consciousness we exhibit, based on but not restricted to the self-regulating body (a).²⁹

The way I see it, even if one holds the claim that what directly determines our perceptual consciousness for the most part is the sensorimotor body (b) – which also defines a new mode of interaction with the environment – enactivism encourages us, in order to gain a full understanding of the experiences an organism undergoes, to include the ‘other’ bodies as well and avoid the pitfall of equating conscious experience with only one level of organization.

That enactivism indeed places the self-regulating body (a) at the heart also of our *phenomenally conscious* experience can be seen in the way it deals with ‘minimal supervenience base’-challenges like the ones Block raised against sensorimotor theory. Thompson, for instance, has argued that the way consciousness unfolds is inextricably linked with the life-regulation processes of the body, and that if this is so, then a purportedly disembodied brain could not exhibit conscious experience (Cosmelli/Thompson 2010; Thompson/Cosmelli, forthcoming). Here it becomes clear that, for enactivism, a richer biological theory including

29 Once again: this does not denote sufficient conditions for phenomenal consciousness, here at least something like access (which does not always have to be cognitive access) has to be given for the system or the ability “to form intentions to act in relation to it” (Thompson 2007, 162).

e.g. properties of bodily sustainability and regulation is central. The minimal realizing system for creature consciousness is thus not the brain but the whole living organism.³⁰

So far, these claims relate mostly to the general occurrence of consciousness in a system. But what pertains there also figures among the central explainers of specific states of consciousness and their unfoldings. For the remainder of this paper I will focus on the question whether properties of the living body might also be related to *specific* phenomenal elements of experience, i.e. to different states of consciousness and to the phenomenon of gradual presence. Several questions spring to mind here, but I will focus on one: the question whether the value-based relation to the ‘Umwelt’ should also be reflected in the account of our phenomenally conscious experiences and the specific presence they exhibit.

10. Value-based states and lived experience

In enactivism, sentience is based on processes of the self-regulating body. What ‘matters about matter’ is therefore not limited to mechanical laws (as it is to some extent in sensorimotor theory where parts of the body play a functional role in sensorimotor interactions) but extends to the needful body and the precarious circumstances an organism finds itself in. Within this paradigm, consciously experienced subjectivity emerges from the interplay of processes of the living organism – making the biologically realized interiority of organisms rather than the physical properties of matter the theoretical center of a philosophy of mind.³¹

30 The distinction between *creature* and *state* consciousness has been introduced by Rosenthal (1990; 1997). The distinction becomes clear when looking at studies done in cognitive neuroscience with respect to either concept. Creature-based studies focus on general occurrence or absence of consciousness in an organism (e.g. during sleep, in coma, or in locked-in-syndrome). State-based studies instead contrast different reportable phenomenal contents (e.g. a visual as opposed to a tactile experience) or a reportable as opposed to a subliminally perceived stimulus (Bayne 2007).

31 The question of *experienced subjectivity* is an important one (albeit one I largely disregard in favor of the question of the value-based stance of enactivism). The enactivist’s claim against sensorimotor theory is that the knowledge of sensorimotor contingencies as the theory develops it, is merely imposed on the system and not original to it. This is because the body is not conceived as a self-maintaining system that controls its own boundary conditions (body a). That the to-

This approach – despite having its own pitfalls and caveats – holds a lot of promise by providing biologically enriched substrates that might be correlated also with psychological and phenomenally experienced states.

The concern-based approach of enactivism seems – in a very basic way – to be better suited to explain what made gradual presence a point of interest and what related it to feelings of being alive in the first place: the experienced presence as a way of letting things or events matter to us. In enactivist theory this point is sometimes also reflected in the insistence that there should be no general separation of emotional and cognitive processes (Colombetti/Thompson 2005; 2007; Thompson 2007) since cognition – conceived as organism’s sense-making – always includes an emotive-evaluative element. Enactivism argues that the integration of cognition and emotion is also reflected at the level of the interdependencies of the neural activities related to the respective processes as well as on the psychological and phenomenal level (Thompson/Stapleton 2009).

A thorough treatment of the issue would require more space (and would involve looking into the interactions of different subsystems in the brain related to homeostatic, affective and perceptual processing)³² but the basic idea is that gradual presence could also be a marker of

mato is accessible to me is something that has presence because it matters to *me*, and this is the reason why one might have to add the concept of selfhood or agency (Thompson 2007, 260) and of pre-reflective bodily self-consciousness (261 f.). Yet a certain concept of self might also be intelligible at the level of sensorimotor interactions (without having to make reference to the self-sustaining body) in the sense that information about the self always accompanies information about the environment and might be co-constituted at this level of interaction: “One perceives the environment and coperceives oneself” (Gibson 1979, 126). See also Hurley (1998).

- 32 For instance one could look into brain structures that modulate homeostasis and action-tendencies, as it is done in ‘affective neuroscience’. Jaak Panksepp has argued that the cognitive, information-processing forms of perceptual consciousness are secondary and that “[a]ll forms of consciousness may remain tethered to that solid neural platform that constitutes primary-process emotional actions and affective experience” (2007, 115). His argument is one from evolution and he refers primarily to animal studies: basic heuristics common to all mammalian life forms are based in evolutionarily older subsystems which are very robust and thus constitute the platform for other more recent systems subserving conscious states. These basic structures consume most of the cerebral energy (Shulman et al. 2004) and are more related to contextual background activities of the brain than to securing and constructing the specific contents of consciousness.

the general state a subject finds itself in. The overall well-being does not have to show up as a content of experience – it hardly ever does so – but rather determines the way in which a specific content (one already determined by modality or emotion-specific qualitative feel) becomes more or less vivid. Enactivism’s focus on the living body (including but not restricted to the sensorimotor body) is to a large extent driven by the same hope that also Noë and O’Regan voiced, namely to relate changes on the phenomenal level to changes in the overall bodily or organismic conditions. Yet enactivism goes one step further in claiming that “the lived body *is* the living body; it is a condition of the living body” (Thompson 2007, 237). With its enlarged notion of the physical (as living and not just as moving) enactivism seems better equipped to explain what kind of processes might constitute the supervenience base also for certain phenomenological elements of experience.³³

The link of the kind of process to the kind of experience enabled by this process is in this sense more direct than it was in sensorimotor theory. Sensorimotor theory claims that we are not aware of the temporal, moving structure of our bodily interactions *as* temporally extended and *as* including certain sensorimotor laws. Their mode of presentation, so to say, is rather simply the modality we experience; it indicates the underlying structure without mirroring it.

Although, value-based relations in a sense also play a role in sensorimotor theory via the concept of perceived ‘affordances’, it is clear that these relations do not gain the same phenomenological emphasis that concern-based relations might receive in enactivism.³⁴ Affordances are offerings in the environment that are available to animals (Gibson 1979, 127). Animals perceive a branch of a tree, for instance, as ‘climbable’, a fruit as ‘edible,’ and so on. In order to argue for the existence of such elements Gibson had to assume that these features of objects in the environment were ones that had proven useful for the animal to detect and he shows that our perceptual apparatus is tuned to such properties

33 The ontological claim of enactivism goes beyond a theory of supervenience, though: the lived body constitutes a kind of autonomous system in itself that emerges from processes of the living body and reciprocally constrains them (Thompson 2007, 236 f.).

34 It should be noted that sensorimotor theory to a certain extent takes issue with the concept of affordances (but see Noë 2012, 120–125) and emphasizes the role of the organism in adjusting to the environment (in representing it a certain way) rather than that of complex environmental properties that are directly perceived by it. For the sake of brevity I skip this debate.

rather than to ‘neutral’ properties of objects (like color and shape independently of what they afford the organism). In this latter sense organism–affordance relations are value-laden. They reflect what is of use to the animal given its particular abilities and skills. Yet the set-up of the system is already ‘in sync’ with such properties and they do not show up *as* useful, *as* valuable to the organism.

I have introduced the concept of affordances in order to show how the value-based processes in enactivism are different from perceptual processes as conceived in sensorimotor theories. Whereas they, on the one hand, assume a relation between abilities or skills and features in the environment (and also refers to the moving body that realizes these interactions), enactivism, on the other hand, is able to implement the element of general well-being or need into an account of gradual presence. These additional properties of bodily processes and the possible experiences that emerge from these processes are relevant for my account of presence on two different levels.

First, by adopting the enactivist stance on the living body one could develop a theory of gradual presence in which phenomenal states with more vividness – at least in some cases – directly ‘mark’ vital changes in the overall states of the organism. In this case phenomenal experience of vitality is not restricted to the perceptual. And second, if gradual presence is determined and modulated by relations *between* mental states and one accepts also additional non-perceptual states among the states that can constitute *relata* in these cases, then it stands to reason that those affective experiences should be assigned an important status in modulating gradual presence.³⁵ In the latter sense these processes and the very idea of a self-regulating body that is the heart of the account also might amend what we have taken from sensorimotor theory without refuting its insights.

The claim that one could derive from enactivism with regard to the former point (and against sensorimotor theory) is that the phenomenal experience of gradual presence might not be constituted by the processes underlying sense-modalities alone. Resting on that one could construe an *argument from perceptual insufficiency* based on a phenomenal shortcoming: not all phenomenal properties of conscious states are

35 This reiterates to some extent the point I made with regard to social interaction and changes in knowledge with regard to access conditions and the modulation of presence in the subchapter on Noë’s theory of access.

traceable along perceptual lines.³⁶ Therefore we also have to include ‘mechanisms’ other than those underlying perception in order to understand what modulates these states. A larger enactivism can offer both: Making explicit further properties of the living body beyond its sensorimotor engagements (i.e. elements of concern and value as intrinsic to the basic organismic modes of being) that might subserve our conscious experiences. *And* providing a sensitivity to additional aspects of our phenomenology that are related to those additional properties and that should be covered by a comprehensive disclosure of our lived experience – an experience that includes vividness among its key phenomenal features.

11. Conclusion

The question in this paper was how the experience of vividness or gradual presence – which was identified as a ubiquitous feature of phenomenal experiences – could figure within two branches of the embodied, enactive philosophy of mind. Two issues have thereby driven this paper. First of all, the question of what properties and what kind of bodily processes each theory identifies as underlying our phenomenally conscious experience. And, second, in what ways the different theories assess the experiential vividness or gradual presence that I have introduced as a central building block of our phenomenology.

Sensorimotor contingency theory has a rather clear-cut concept of vividness in perceptual presence, which I outlined by reference to recent developments of the theory. It associates gradual presence with temporally extended bodily interactions based on specific sensorimotor contingencies that also underlie our sense-modalities and seek to identify what kind of changes in bodily relations are correlated with the force of presence in experience. As I showed in the main part of the paper,

36 This move towards a phenomenologically broader theory of consciousness beyond the transitive consciousness of perception has been a central point in Jonas (1994). In his assessment of major developments in 20th century philosophy, he refers to the publication of Heidegger’s *Being and Time* in 1927 as an earthquake that “shattered the entire quasi-optical model of a primarily cognitive consciousness, focusing instead on the wilful, striving, feeble, and mortal ego” (1994, 817), bringing the basic needs and cravings in the purview of a philosophy of mind. Yet, Jonas also remarks that the body *proper* did not enter Heidegger’s analysis and that he unduly neglected the living body “with all its crass and demanding materiality” (Jonas 1994, 820).

the direct link to the physical relations of 'bodiliness' and 'grabbiness' as main determinants of presence proves too tight. Even if the perceptual mechanisms that are set up by bodily interactions are involved in the mediation of vividness, one has to extend the theory to include additional elements that determine our skillful access.

And more generally: if one accepts – as I have suggested – that incorporating the vividness of experience as part of our phenomenology is tantamount to introducing a *relational* element into it, it is only a small step to acknowledging that such phenomenal presence is not only modulated with regard to the sense modalities (the moving body) and generally changes in our access conditions but also in relation to basic needs and cravings and the overall well-doing of the organism (the living body).

Enactivism offers a theory that embeds our sensorimotor interactions in a concept of the living body, whose properties make a concern-based approach also a promising starting point for naturalizing the phenomenology of presence. I have only tentatively touched on this last point. In order to assess the fecundity of the theory it would be necessary to correlate changes in those body-related, life-regulating elements with changes in vividness of experience more directly (e.g. by looking into the relations between the associated subsystems in the brain), as it is for instance done with respect to changes in bodily relations in sensorimotor theory. The present paper had a more basic aim, however. It tried to show that once a theory incorporates the introduced concept of gradual presence, the focus on the moving body *alone* falls short of providing the necessary explanatory means to tackle the phenomenon.

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