

Visual perception and self-movement

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Moving Ourselves, Moving Others: Motion and emotion in intersubjectivity, consciousness and language

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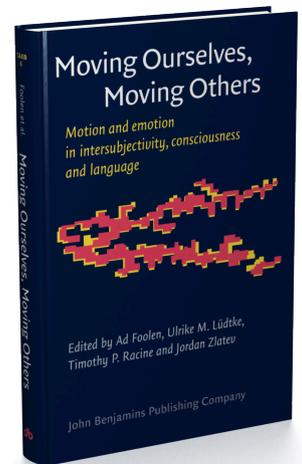
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Visual perception and self-movement

Another look

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[T]he eye is part of a dual organ, one of a pair of mobile eyes, and they are set in a head that can turn, attached to a body that can move from place to place.
(Gibson 1986: 53)

In this chapter, I argue for two claims. First, creatures that cannot understand themselves as *potentially* moving or being moved cannot have visual experiences of three-dimensional, spatial objects “out there” in the world beyond their skin. Whilst we might be unable to detect an outright contradiction in the notion of creatures without such understanding enjoying perceptual experiences indiscriminable from ours, it is, as I will attempt to show in the first part of the chapter, highly doubtful whether we can make full sense of their experience as an experience of three-dimensional objects “out there” in space. Second, we should nevertheless not endorse what Noë terms an “enactive” account of perception. In other words, the idea that a creature cannot have visual experiences of three-dimensional objects without experiencing itself (or having experienced itself) as *actively* moving does not stand up to closer scrutiny.

Keywords: perception; movement; perceptual presence; enactivism; Noë; Husserl

1. Introduction

Nobody seriously wants to contest the statements that I have chosen as a motto for this chapter. Certainly all parties to the debate I want to consider in the following pages agree that Gibson’s claims are correct as regards the vast majority of humans and animals. The dispute turns on whether there is any essential or necessary connection between self-movement and the capacity for visual perception. Phenomenologists such as Husserl (1997[1907]) and Merleau-Ponty (1962 [1945]),¹ and, more recently,

1. For two other (more recent) examples, see Sheets-Johnstone (1999: Chapters 3–5) and Gallagher and Zahavi (2008: Chapter 5).

defenders of the so-called “enactive” approach to perception such as Alva Noë (2004), have argued that there is.² These philosophers have all held that there is a sense in which an ability to move is a precondition for the ability to perceive a stable world of three-dimensional, spatial objects. Others, however, have disputed this claim. They have maintained that whereas it might be the case that all seeing animals that inhabit the planet Earth – or indeed all seeing creatures throughout the Universe – are able to move themselves, this, if true, is merely a contingent fact. There *could be* immobile creatures that were endowed with visual perceptions just like ours. There is, then, no *essential* link between self-movement and visual perception. Such claims have not only been advanced outside the phenomenological tradition (e.g. in G. Strawson 1994). Recently, in fact, philosophers otherwise sympathetic to Husserl’s take on perception, Peter Poellner and A.D. Smith, have argued that he ought to have abandoned the thesis of an essential link between visual perception and self-movement.³

I shall argue for two claims. First, creatures that cannot understand themselves as *potentially* moving or being moved cannot have visual experiences of three-dimensional, spatial objects “out there” in the world beyond their skin.⁴ My argument depends, in part, on a clarification of the point of a phenomenological elucidation of visual perception. I shall suggest that phenomenology attempts to make sense of perceptual experience “from within”. Whilst we might be unable to detect an outright contradiction in the notion of such “completely motionless creatures” enjoying perceptual experiences indiscriminable from ours, it is, as I will attempt to show, highly doubtful whether we can make full sense of their experience as an experience of three-dimensional objects “out there” in space.

My second main claim, however, is that we should nevertheless not endorse what Noë terms an “enactive” account of perception. In other words, the idea that a creature

2. For present purposes an “enactivist” is someone who holds that “perceiving is a way of acting” (Noë 2004:1), that is, that the ability to have perceptual experiences of spatiotemporal objects *essentially* depends on skilful, active movement. Could an enactivist, thus defined, also be a phenomenologist? An anonymous reviewer thinks not, but I disagree. Enactivism, as I understand it here, is a *thesis* about perception. Phenomenology, on the other hand, is a philosophical tradition loosely held together by particular *methodological* commitment – the commitment to let the *phenomena*, faithfully described, decide the fate of philosophical theory. There is no reason in principle why an enactivist could not accept that methodological commitment. In fact, I think Noë fits the bill. Perhaps Husserl does as well; he comes close, at any rate, to adopting the enactivist thesis.

3. For discussions of themes closely related to the topic of this chapter, see Ellis & Newton’s and Sheets-Johnstone’s contributions to the present volume.

4. I shall sometimes use the concept of “transcendence” to capture this notion of the perceived world as “external” to us.

cannot have the sort of understanding that the first part of my chapter argues is essential to visual experiences of three-dimensional objects without experiencing itself (or having experienced itself) as *actively* moving – this idea does not stand up to closer scrutiny. It is highly plausible, in my view, that the understanding in question must be derived from actual experiences of self-movement. But it is not obvious that among these experiences there *must* be experiences of active, self-initiated and self-controlled movement.

The former argument will be developed in the first part of this chapter. In the much shorter second part, I briefly, and somewhat tentatively, sketch my reservations vis-à-vis the “enactive” account of perceptual experience.

2. The importance of self-movement

2.1 Making fully intelligible

The aim of Husserlian so-called “constitutive” or “transcendental” phenomenology is to make the life-world intelligible. More precisely, the task is to uncover the experiential structures that permit the world to be manifested or given to a subject. The aim of making the world transcendently intelligible in this way should not be confused with the idealist project of reducing the world to subjective or mental structures. As Husserl explains:

In advance there is the world, ever pregiven and undoubted in ontic certainty and self-verification. [...] There can be no stronger realism than this, if by this word nothing more is meant than: “I am certain of being a human being who lives in this world, etc. and I doubt it not in the least.” But the great problem is precisely to understand what is here so “obvious.” The method now requires that the ego, beginning with its concrete world-phenomenon, systematically inquire back, and thereby become acquainted with itself, the transcendental ego, in its concreteness, in the system of its constitutive levels and its incredibly intricate [patterns of] validity-founding. At the onset of the epoché the ego is given apodictically, but as a “mute concreteness.” It must be brought to exposition, to expression, through systematic intentional “analysis” which inquires back from the world-phenomenon. (Husserl 1970b: 186–187)

Two points need emphasizing here. First, the aim of Husserlian phenomenology is, as we might put it, a “hermeneutic” one. The point is not to prove, but to make intelligible. As Husserl writes, the phenomenologist is “unable to have any other scientific theme than that of transforming the universal obviousness [*Selbstverständlichkeit*] of the being of the world – for him the greatest of all enigmas – into something intelligible [*eine Verständlichkeit*]” (Husserl 1970b: 180). Second, this making-intelligible

proceeds via “intentional analysis”: we make the manifestation (or “being”) of the world intelligible by “inquiring back” from the world as manifested to the intentional experiences in which the world manifests itself. Ultimately, then, we will unveil structures of the “transcendental ego” – the subject to whom the world is manifested.

Obviously, this means there is a difference between the phenomenological idea of a condition of world-manifestation and the textbook notion of a “necessary condition”. To show that X is not a necessary condition of Y it is enough to produce a coherent example of Y without X. Thus, to show, for example, that believing that p is not a necessary condition of perceiving that p, we need only think of a case in which a person sees a pink rat running by; but, attributing the experience to the influence of alcohol or LSD, the person does not believe that a pink rat is running by. A condition for world-manifestation in the phenomenological sense, by contrast, is something in the absence of which we cannot make a world-manifesting experience “truly” or “fully intelligible to ourselves”, to borrow some useful phrases from P. F. Strawson (cf. P.F. Strawson 1966: 11, 49, 106, and *passim*). For a phenomenologist, therefore, there can be cases in which X without Y is *logically possible* – involving no “formal contradiction” – but in which we cannot make X *fully intelligible* without Y.⁵

In particular, as we shall see, there can be cases where we can coherently *imagine* that creatures, which lack a certain feature we have, experience the world just as we do; but where, due to the lack of the mentioned feature, we cannot make their having such experience truly or fully intelligible to ourselves. In such a case, the phenomenologist will hold that the feature in question is a condition for world-manifestation, notwithstanding the fact that it is not a necessary condition in the standard philosophical sense. Because the phenomenologist is in the business of making intelligible, she or he has a special interest in the former, broader notion.

2.2 The problem of perceptual presence

I am right now looking at my coffee-cup placed on my desk. The cup is uniformly white, except for some writing on one side. From my current viewing position, however, I do not actually see the writing. The side facing me is uniformly white. However, the “rear side” with the writing on it is not an experiential “nothing” to me in this experience. My experience somehow seems to concern the cup as such, complete with front sides and rear sides – and an interior possibly still containing coffee (though I cannot tell from here). Compare the perceptual givenness of the desk. The cup occludes parts of the desk – namely, the parts directly under and behind the cup. Yet I somehow sense

5. See Husserl (1983:108–9); and Overgaard and Grünbaum (2007).

the desk as present under and behind the cup, even though I do not actually see those parts of the desk. Generalizing from points such as these, Husserl writes:

The object is not actually given, it is not given wholly and entirely as that which it itself is. It is only given “from the front,” only “perspectively foreshortened and projected” etc. While many of its properties are illustrated in the core content of the perception, at least in the manner which the last expressions indicate, many others are not present in the perception in such illustrated form: to be sure, the elements of the invisible rear side, the interior etc. are co-intended [*mitgemeint*] in more or less definite fashion [...], but they are not themselves part of the intuitive, i.e. of the [strictly] perceptual or imaginative content, of the perception. (Husserl 1970a 712–13; translation slightly modified)

What are we to say about these co-intended rear-sides and interiors? Psychologists commonly speak of “amodal completion” – “amodal” because there is no sensory information regarding the parts of the table and the cup that are occluded. As at least the most enlightened psychologists emphasize, however, this does not mean that the phenomenon is not genuinely perceptual (e.g. Rock 1984: 120). It is no good saying, for example, that I somehow add the hidden and occluded features in thought or imagination. For, first of all, if I just glance absentmindedly at my desk, thinking of the text I am writing, is it at all *phenomenologically* plausible to claim that I add, in thought or imagination, any of the occluded features? Surely I do not. Yet no matter how absentminded I am, the various objects are somehow fully present to me as three-dimensional objects with occluded backsides and so on. Second, consider the sheer magnitude of the task of thinking about (or imagining) all occluded features of a scene as crowded with objects as my desk (full of books, papers, pens, and so on). Perhaps a powerful computer with the right sort of software might represent all these in a fraction of second; but it is hardly plausible to suggest that I might do so either consciously or unconsciously. Finally, consider the fact that when I imagine an object, I also imagine it as “presenting” itself from a certain perspective, with certain features “in view”, and thus as having certain other features that are not currently “presented”. (I cannot visualize an object seen from all perspectives at once.) We lose sight of this difference, however, if we say that the “unseen” features are imagined; because so, of course, are the “presented” features in this case (cf. Husserl 1997: 47).

Somehow, then, the presence of occluded features must be a “perceptual presence” (Husserl 1997: 43; Noë 2004: 60). We have a perceptual “sense” of their presence, even though they are not strictly *seen* or otherwise perceived. To a phenomenologist seeking an understanding of how our experience can present a world consisting of three-dimensional, material objects, this presents a problem, however. The problem is to make intelligible how we can have a perceptual sense of unseen features of a scene. How are we to understand their presence? Following Alva Noë,

whose take on this problem seems deeply influenced by Husserl,⁶ I shall call this “the problem of perceptual presence” (Noë 2004: 59).

Note that this problem will be central to a phenomenological account of perceptual experience. For arguably, it is crucial to the perception of objects as spatial or three-dimensional that we can have various different perspectives on them. But this precisely means having certain aspects of them in view, while others are “co-intended”, as Husserl puts it. It is obvious that other, strictly “absent” aspects or profiles must be somehow present. For unless my first glance at an object already somehow anticipates other possible views of the same object, it is hard to see how any subsequent perception of the object from another perspective could count as a perception of *the same unchanged object*. That is, unless any perception of an opaque, three-dimensional object, already co-intends absent profiles of the same object, a continuous perceptual process revealing the object from other sides can hardly count as manifesting the same unaltered object. There must already be more to the object than what I currently see if any subsequent experience is to reveal new features of the same, unchanged object.

But why is it important that we can perceive the same unchanged object from varying perspectives? If all aspects of perceived objects are fully manifest, then perceived objects change whenever the sensory given changes. Suppose the sensory given of a particular experiential sequence is the same as I have when I first view my coffee cup from a position directly above it, and then slowly move my head back and down so that the cup is now in front of me. As we might put it, the sensory given at first involves a circular shape (corresponding to the circular shape the cup projects onto my retina), and then gradually more and more elliptical shapes. Unless we make room for an object to present different profiles to a viewer, then clearly the perceived object in our scenario changes. Every change in sensory content is a change in perceived object. But how, in this sort of scenario, could my visual experiences be experiences of something out there in the so-called “external” world? The perceived object collapses into the sensory given. That is, the perceptual experience would seem to absorb the object, so that there would be no difference between the perceived object and the experience (cf. Husserl 1997: 97–101). We only have a visual experience of a transcendent, physical object if it is possible for the sensory content of the experience to change while the object remains unaltered. And we can only have the latter in so far as other profiles of the same object can be “amodally” co-intended.⁷

6. Although I have only come across one single reference to Husserl in Noë’s writings (2004: 17), it is a reference to the volume that contains all the ideas I am outlining here.

7. What, though, about shadows? Shadows seem to be objects “out there” in the world, even if they are not genuinely material in the way that cups and tables are. But although it is true, of course, that shadows do not have “sides” the way material things do, we can nevertheless

This means that if we are to make intelligible the perceptual manifestation of three-dimensional objects we cannot ignore the problem of perceptual presence. From what was said above, it is not plausible that the key to this problem lies in the notion that we construct mental models or representations of the absent profiles. The task would be daunting, to say the least. And besides, the suggestion that we constantly engage in such internal-model building doesn't do justice to the phenomenology of experience. But if we do not represent them, what is the status of the absent profiles? Both Husserl and Noë, in their respective ways, make the intuitively plausible suggestion that the absent profiles are "present" as somehow *available*, as something to which we have *access* (Noë 2004: 63, 67). They are, as Husserl puts it, "freely at our disposal" (Husserl 2001: 47). In other words, in having one side of the coffee cup strictly presented to me, the multiple absent profiles of the cup also have a certain presence, namely as profiles that are available to be (strictly) perceived. This, however, cannot count as a satisfactory response to the problem of perceptual presence. Surely, before we can be said to have made perceptual presence fully intelligible to ourselves, we must understand what this availability of the absent profiles amounts to. This question takes us to the heart of the Husserlian proposal.

2.3 Movement and perceptual presence

The proposal is marvellously simple. According to both Husserl and the enactive account, the basis of the availability of absent profiles is found in what Husserl calls our "kinaesthetic capacity"⁸ and Noë refers to as "sensorimotor skills" (Noë 2004: 63).⁹ It is, in other words, because we are able to *move* and thereby change our perspective on things that we have a perceptual sense of the co-presence of absent profiles. Thus, for example, the

view the former from various perspectives, some of which may reveal features of the shadow that are not revealed from other perspectives (see Smith 2003: 70). Moreover, we can obviously have amodal completion of shadows. Not only can objects occlude other objects, or parts of them; they can also occlude their shadows, or parts of them.

8. Husserl (1970b: 162). Husserl coins the term *Vermöglichkeit* to capture this; see the German text of the *Crisis*: § 47; also Husserl (1973b: 284–5). *Vermögen* means ability or capacity, whereas *Möglichkeit* means possibility. A *Vermöglichkeit* is thus a possibility that I am able to realize.

9. An anonymous reviewer points out that "kinaesthetic capacity" and "sensorimotor skills" are two very different things. The former is an experiential notion, whereas the latter is a physiological one that "has no anchorage in actual experience". I think there is something to this point. In fact, I do believe Noë wants his sensorimotor skills to be understood as anchored in experience. Husserl and Noë, it seems to me, both want to claim that our awareness of absent profiles has to do with our ability to experience self-movement. But then here is the point: If that is what Noë wants, why the physiological vocabulary?

inside of my cup is available to me as something that would be (strictly) perceived if I view the cup from above; whilst the rear side is accessible as that which I would see if I moved around the cup (or picked it up and turned it around). All of this is perceptually present to me here and now because I have an implicit awareness of my potential (at least in principle) for moving, and of how such movement would produce ordered patterns of perceptual presentation. The “feeling of perceptual presence” we have of strictly absent profiles resides, as Noë puts it, “in the immediate accessibility, through control of one’s sense organs, of detail that is present there all along” (Noë 2001: 51).

Let me put some more flesh on this proposal. As Husserl likes to put it, the strictly or “properly” presented profile of an object such as a cup is embedded in a “horizon” of other profiles, which are not currently presented in the strict sense. And it is so embedded because my current “kinaesthetic” situation – my current bodily posture and position – is embedded in a “kinaesthetic horizon”, a horizon of “freely possible series of movement” (Husserl 2001: 52) and thus of other viewing positions which I might adopt by moving myself. I am implicitly aware of the two horizontal “systems” as correlated in such a way that *if* I were to engage in this or that particular series of movement, *then* such-and-such a sequence of object-profiles would be presented to me.

There is thus a certain systematic structure to the relation between the kinaesthetic horizon and the horizon of visual profiles. A movement of my head to one side will result in a “movement” of the visual profile in the opposite direction. If there is no such (quasi-)movement, then the object will not seem stationary, but will appear to move. A linear movement such as walking up to an object will be accompanied by a continuous quasi-expansion of the visual profile of the object. If not, the object is seen to change: either its position, by moving away, or its size (shrinking). Moving around an object will lead to a continuous revelation of new profiles of the object; again, if not, then the object will seem to be turning. And of course, the continuity of the visual appearances is crucial here. It is the gapless, continuous flow of visual appearances corresponding to the continuous movement around the object that gives me an experience of the “closedness” of the three-dimensional surface of the object (Husserl 1997: 175).

So, when I cast a glance at my coffee cup on the table, the whole three-dimensional cup is present to me perceptually because the strictly presented profile is encompassed by a multitude of absent profiles perceptually “present” as *available* but not presented. And this availability refers back to my implicit awareness of my own potential for bodily movement. My perceptual experience of the cup is an experience of it from a particular viewing position out of a multitude of possible viewing positions – positions that are, at least in principle, realizable via bodily movement. I am tacitly aware of the current distribution of (strict) presence and absence as one that is the result of my having realized this particular kinaesthetic situation out of an open-ended horizon of kinaesthetic possibilities.

It must be emphasized that the Husserlian claim is not that people who have become completely paralysed are unable to see transcendent, spatial objects. The crucial thing is that a subject has some (implicit) understanding of how visual appearances *would change if* such-and-such kinaesthetic capacities were exercised. A subject, that is, need not *actually* be able to exercise the skill in question. All he or she needs is an implicit understanding of the dependence of sensory appearances on self-movement. It might, however, be hard to see how a subject could acquire such understanding without at least at some point having had experiences of self-movement. This seems plausible to me, and I shall assume the truth of this claim in what follows; but I shall not attempt to defend it.

The Husserlian approach, as I understand it, will thus include the following claim:

- (1) Having an implicit understanding of oneself as potentially moving or being moved is a condition for the possibility of perceiving transcendent spatial objects.

Via the (I think plausible) idea that such an understanding can only be derived from actual experience of self-movement, we reach the further claim:

- (2) Having had experience of self-movement is a condition for the possibility of perceiving transcendent spatial objects.

The enactive approach, however, as suggested by its name, goes on to make a stronger claim. Perceiving, in Noë's words, "is a way of acting" (Noë 2004: 1). "Perception is not something that happens to us, or in us. It is something we do" (ibid.). And again, "perceptual experience" is "a form of active engagement with the environment" (Noë 2001: 50). Note that the suggestion is not merely the plausible one that *in fact* perception is (mostly or generally) "something we do". Rather, to say that perceiving as such is a way of acting, or a form of active engagement, is to advance a claim about the *essential* features of perception.

A similar emphasis on active movement is found in Husserl.¹⁰ In the *Crisis*, for example, Husserl stresses that visual appearances have the character of profiles or aspects of spatial objects "only through the fact that they are those aspects continually required by the kinestheses" (Husserl 1970b: 106). He goes on to say: "Thus sensibility, the ego's *active* functioning of the living body or the bodily organs, belongs in a fundamental, essential way to all experience of bodies" (ibid., my emphasis).¹¹

10. Although he was not oblivious to the importance of passive movement of the self (cf. Husserl 1997: 240–5).

11. "Bodies" here translates the German *Körper*, meaning spatial, physical objects.

We are now in a position to formulate a third claim, which I shall call the “enactive” claim. The claim is as follows:

- (3) Having had experience of *active* self-movement is a condition for the possibility of perceiving transcendent spatial objects.

One might hold (1) without holding either (2) or (3). Thus, for example, someone who thinks that an understanding of self-movement could be innate will regard the argument I shall advance as missing an important piece. For anyone attracted to an empiricist outlook, however, I think the transition from (1) to something like (2) will not seem outrageous. In any case, as already indicated, I shall assume that this transition is not in dispute here. My discussion will therefore focus on (1) and (3). It is possible to hold that no (implicit) understanding of oneself as possibly moving is necessary for the perception of spatial, three-dimensional objects with absent profiles – that is, to deny (1). It is, however, also possible to accept it along with (2), but to deny the specifically “enactive” claim (3). On this view, *some* self-movement *is* a necessary condition for perceptual experiences of transcendent objects. But there is no reason to think it *must* be *active* self-movement.¹²

2.4 Recent criticism

The most straightforward way to prove the Husserlian thesis false is to provide a counter example: an example, that is, of some creature that is able to have visual perception of transcendent objects in just the way we do, but is incapable of any movement whatsoever, and has no understanding of itself as potentially moving either. Galen Strawson has offered an example that at least in part answers to this description. He claims we can imagine a sort of creatures – which he calls the “Weather Watchers” – that are “rooted”, like trees, and completely unable to move. Nevertheless, the mental life of a Weather Watcher is strikingly similar to ours. In particular, such a creature is fully capable of visual perception:

A Weather Watcher lives the rooted life, but there are many respects in which its mental life is like ours. It sees the sky and hopes the clouds are bringing rain. It watches a seed lodge in a gap between two rocks by the edge of the river. It forms the belief that a tree may grow there before long, and hopes that it will.

(G. Strawson 1994: 255)

12. This would seem to be the position advocated in Smith (2002: 146–7). However, Smith goes on to suggest (at p. 149) that the idea of a wholly inert subject who has visual perceptual experiences as of objects distributed in three-dimensional space is a metaphysical possibility. His position would thus seem closer to the one discussed in the following sections.

Strawson thinks that unless we can prove that the idea of Weather Watchers is incoherent, the idea that there is a necessary connection between the ability to move oneself and the ability to see three-dimensional, spatial objects, has been shown to be false. Whilst it may well be that all seeing creatures that inhabit our planet are capable of some degree of self-movement, the fact that we can coherently *imagine* creatures for which this is not the case, means that the connection is merely contingent.

Note, however, that the Strawsonian story so far does not involve a rejection of (1). His weather watchers *might*, for all we have been told, understand themselves as potentially moving around – even though in fact they are unable to move.¹³ However, others have advocated stronger claims that do involve a rejection of (1). Such points have recently been raised from within the tradition of Husserlian phenomenology. Peter Poellner, in particular, has invoked the possibility of Strawsonian creatures in direct criticism of Husserl:

Why should a subject only be able to think of, or perceive, an object as having other, currently unperceived, aspects which could be perceived from other perspectives, if it can also understand itself, practically or otherwise, as potentially *moving* to take up those other perspectives? This does not seem to be an a priori truth. There might conceivably be subjects who, while embodied, are paralysed from birth and cannot experience or think of themselves as actively moving through space at all, and who might yet take their surrounding world to consist of spatial particulars with aspects unperceived by them, but perceivable from somewhere else. (Poellner 2007: 443)

Poellner clearly accepts that in order to have perceptual experiences as of transcendent, spatial objects, a subject must have a perceptual “sense” of absent profiles. What he rejects is the notion that in order to have this sense one needs to be able to move. In fact, Poellner rejects the weaker notion that one needs to understand oneself as *potentially* moving to take up positions from where these profiles would be visually presented. If so, his perspective cannot be reconciled with the Husserlian one.

In a footnote, Poellner makes it clear that he is committed to the strong claim that I am attributing to him: his target is the very idea that *self-movement* is essential to perceptual experiences as of spatial objects. As he writes, “Even if one accepts that a grasp of the possibility of *movement* is essential for perceiving a spatial object as having aspects currently occluded or outwith focal attention, why should this have to include

13. Indeed, Strawson offers a genetic story that he calls the “rooting story”, according to which the natural course of development of a weather watcher takes it from “an active, mobile youth to a state of immobility” (G. Strawson 1994: 254). Given this story, of course, it is entirely reasonable to assume that weather watchers – despite their immobility – are able to understand themselves as potentially moving around.

self-movement, rather than merely movement of the object [...]?” (Poellner 2007: 443, Note 44). Thus, Poellner thinks (1) must be rejected. It is enough that a subject should understand an object as potentially moving or being moved, for that subject to have visual experiences of spatial objects. Indeed, Poellner *seems* to think that not even this is strictly required. Perhaps no movement of any sort has any essential role to play in a subject’s perception of spatial objects.

Poellner offers the following analogy to substantiate his criticism of Husserl:

After all, in the parallel temporal case, we can uncontroversially think of events having objective *temporal* properties (e.g. Napoleon studying his maps for one hour on the eve of the battle of Jena) which we can neither directly witness, nor gain any clear conception of what it would be to “move ourselves” to a temporal position from which we could witness them. The claim about the role of bodily self-movement thus seems to be one instance where Husserl does not so much analyse the constitutive conditions for *any* subject’s having representations of a certain (here: spatial) type, but rather the way in which certain kinds of subjects, namely humans, in fact represent the world [...]. (Poellner 2007: 443)

In other words, past events have aspects that we cannot understand ourselves as “moving” ourselves in relation to, in such a way as to be able to “witness” them. Why, then, should we not be able to perceive objects as having absent aspects or profiles, even if we had no understanding of ourselves as moving into a position from which we could perceive them?

2.5 Must all absent profiles be perceivable?

In response to this criticism, the first point to consider is the force of Poellner’s analogy with past events. Is the Husserlian phenomenologist committed to the claim that all types of “absent profiles” are available or accessible in the sense that one can conceive of oneself as “moving” (whether literally or metaphorically) into a position from which they can be “witnessed”? This is a rather large question, which opens up wider issues about Husserl’s transcendental idealism – issues that cannot be adequately addressed in the present paper.¹⁴ Nevertheless, I think it is fairly easy to see that the phenomenologist has no problem allowing for absent profiles with respect to which we can make no sense of the notions of “moving closer” and “witnessing”. The transcendent *par excellence*, as Husserl never tires of emphasizing, are other subjectivities (cf. Husserl 1959: 495). Another subject is someone who in principle cannot be directly presented to me the way she or he is “given” to herself (Husserl 1973a: 362, 438). To encounter another subjectivity is thus to encounter something (or rather, someone) that simply

14. For two very different perspectives on this question, see Smith (2003) and Zahavi (2003).

cannot be presented to me “in its own self”. This makes the perception of the other, as Husserl conceives of it, very different from the perception of mere spatial objects: the “improperly perceived” dimension of the other subject “makes possible no fulfilling perception, the way all anticipating moments within the perception of spatial things do” (Husserl 1959:63).

In other words, here we have a clear case in which our experience implicates absent “profiles” that we cannot picture ourselves as possibly witnessing. And, closely connected with this, we cannot make sense of the notion of “moving closer” to these absent “profiles”. There are, of course, important questions to be asked about the status these “profiles” have for us. They cannot, for example, be “available” or “to our disposition”; so how *do* they figure in our experience? However, it is not the task of this chapter to answer the phenomenological question concerning our experience of other subjects.¹⁵ The only point we need to note is that there is no reason to think a Husserlian phenomenologist would have trouble accepting the notion of absent profiles which we cannot bring ourselves in a position to witness.

Having established this, what is to prevent us from granting that it is essential to something’s being a *past* event that there is no such thing as “going back” to witness the unfolding of the event? We can obviously imagine ourselves witnessing Napoleon studying his maps before the battle of Jena. Indeed, we know what it would take for us to “move” into such a position: we would have to place ourselves in Jena in October 1806, for a start. However, we certainly have no idea how to bring such “movement” about.¹⁶ But this is not a problem for the phenomenologist. On the contrary, there is no reason why she or he should not be prepared to accept that this is part of what it means that an event is a *past* event.

So what does the temporal analogy tell us about the perceptual case? Not much, it seems to me. For surely, it would be absurd to suggest that the absent profiles of the perceived object are *past* profiles – or indeed that they are strictly inaccessible, as are the absent “profiles” of other subjects. Of course they are neither of those things. In principle, I can bring them into view whenever I want. In the perceptual case, we sense the absent profiles as belonging to the *present* perceived scene. The absent profiles are “co-meant” as co-present”, as Husserl puts it (Husserl 2001:40) – which is indeed why the problem we are discussing can be called the “problem of perceptual presence”.

15. For an attempt to answer the question, see Overgaard (2007).

16. Indeed, perhaps the very notion that it is possible to draw parallels between spatial movement and “movement in time” depends on our tendency to use spatial language to describe temporal matters. This tendency, as Jordan Zlatev has pointed out to me, is not found in all cultures. See Sinha et al. (2011).

2.6 Making sense of absent profiles

Having dealt with Poellner's analogy, we can move on to consider the case of the creatures he pictures. If we can make such creatures intelligible to ourselves as perceiving objects with absent profiles just as we do, then theses (1) and (3) must be false. It is, however, not at all clear that we can make sense of these creatures having such perceptual experiences. At least, it is so far entirely unclear what sort of response to the problem of perceptual presence Poellner is proposing.

Call creatures that cannot conceive of themselves as possibly moving or being moved "completely motionless creatures".¹⁷ The question we would like answered is the question concerning the status of absent profiles for such creatures. Poellner has suggested (in personal correspondence) that it is possible to tell a story about the possible function such co-intending of absent profiles could have for completely motionless creatures. It might be important for the latter to be able to predict the movement of objects relative to themselves, so as to enable them to prepare mentally for possible impacts, for example.

The problem with this suggestion, however, is that it does not seem to address the right question. We can imagine all kinds of *functions* for the co-intending of absent profiles to serve, but what we want here is to make sense of the *perceptual experience* of such creatures – and make sense of it "from the inside", as it were. Noë and Husserl have given us plausible stories about the status of such profiles for us, in our perceptual experiences. The perceptual "co-presence" of the profiles is cashed out in terms of their being "available" to us; and that availability, in turn, is made sense of in terms of our kinaesthetic (Husserl) or sensorimotor (Noë) understanding. How are we to understand the co-presence of absent profiles in the experiences of completely motionless creatures? As we will see, the answer that they are "available" creates trouble. For it immediately invites the question of how that availability would be cashed out.

One of the quotes from Poellner suggests that he might attempt to cash it out in terms of the movement of perceived objects. In other words the absent profiles of, say, my cup would then not correspond to the profiles that would be strictly perceived if *I* were to move (or be moved) in such-and-such a way; but those *I* would perceive if *the cup* moved or was moved in such-and-such a way. The question is, however, why would such cases not be cases of objects changing their intrinsic features, as opposed to unchanged objects moving so as to reveal aspects that they had to begin with? It is the possession of absent profiles *ab initio* that we are trying to make sense of here.

17. I have been unable to think of a more accurate name that would not become intolerably long and inelegant. That the name is, however, awkward and inaccurate can be seen from the fact that Strawsonian weather watchers – insofar as they are immobile, yet capable of conceiving of themselves as moving – would not be completely motionless creatures.

And it does not seem that we can do so by reference to the movement of perceived objects. Rather, for a creature to be able to experience an object as moving in such a way as to reveal different aspects, the object must *already* be experienced as having other aspects to reveal. For only then can the case where initially absent profiles become fully perceptually present be distinguished from cases where objects change, either by losing the features they had, or by developing new features in addition to the ones they had.

Thus, for example, a case in which the sensory material first includes a circular shape and then gradually more and more elliptical shapes is ambiguous between a number of different scenarios.¹⁸ It could be the object (say, the rim of my coffee cup) is changing shape; it could be it is being gradually tilted away from me; or it could be that I am changing my position vis-à-vis the object. It seems to me that not only are Poellner's completely immobile creatures unable to distinguish between the first two of these scenarios. More problematically, insofar as they cannot understand themselves as *potentially* moving into a position that would (or would not) result in the reintroduction of the original, circular visual appearance, such a distinction can hardly even make sense to them. But this precisely means that their visual experience cannot be a visual experience as of a transcendent, spatial object in anything like our sense.

The appeal to the movements of objects, therefore, is not going to give the critic of the enactive approach what he or she needs. Another suggestion that Poellner hints at is this. A completely motionless creature might form an idea of absent profiles as potentially present to *other* perceiving subjects.¹⁹ It might have no notion whatsoever of itself moving or being moved into a position from which these profiles might be perceived; nevertheless, so the present suggestion goes, such absent profiles could figure in its perceptual experiences as profiles possibly given to (possible) other perceivers. The trouble with this suggestion, however, is that it puts the cart before the horse. We have not yet made sense of the notion that there could be "more to see" for this

18. An interesting question – which I shall not discuss here – is whether there is a sense in which the plate, when it projects an elliptical shape on to my retina, *looks* elliptical. Noë (2004:78) thinks there is, but see Overgaard (2010) for a critique of this view.

19. Poellner says his creatures might understand their world as containing "spatial particulars with aspects unperceived by them, but perceivable from somewhere else" (Poellner 2007:443). It seems to me that the notion that these aspects might count as perceivable from somewhere else tacitly invokes the idea of another (possible) perceiver whose position is such that she can perceive those aspects. Also, in addition to what I point out in the text, I think there might be another vicious circularity present in Poellner's suggestion insofar as it isn't clear how his creatures could have the sort of full-fledged understanding of space that would allow them to conceive of those other positions from which the unseen aspects would be perceivable. But I shall not pursue this line of criticism.

creature than what is currently presented to it. Once such an understanding is firmly in place, we may appeal to the idea that this “more” could be understood as something given to other perceivers. However, it is entirely unclear what would motivate our completely motionless creature to form such an idea of there being more to the world than its current experience. We cannot solve this problem by helping ourselves to the notion of intersubjectivity. On the contrary, if there are to be other subjects for the motionless creatures, they must be presented to it in its experience. And before we have a basic understanding of how a transcendent, spatial object could be so presented, it is hard to see how we could make any progress with the task of explicating how other subjects might be presented in such a creature’s experience.

Perhaps, finally, it could be maintained that there is no logically compelling reason why the notion of objects as being three-dimensional, and thus as possibly possessing unseen aspects, cannot be innate. Well, maybe this is true. To say this, however, would not be to answer the problem of perceptual presence; it would be a refusal to offer any answer. It would be a simple dismissal of all questions concerning the status that absent profiles may have in the experiences of completely motionless creatures. For a phenomenologist, however, the task is to try to make such experience fully intelligible. From this perspective, to renounce all such attempts is only marginally different from admitting that the task cannot be completed.

3. The importance of active movement

So far, I have only discussed the prospects of denying (1). But the enactive theorist maintains something stronger, namely that “perceiving is a kind of skillful bodily activity” (Noë 2004: 2). More precisely, our ability to perceive depends on our having an implicit understanding of systematic relations between self-movement and sensory appearances, which is derived from experience of *active* self-movement. Above, this was formulated as follows:

- (3) Having had experience of *active* self-movement is a condition for the possibility of perceiving transcendent spatial objects.

In this brief second part of my chapter I will argue that it is highly doubtful whether this “enactive” claim can be maintained. I will consider, and reject, three reasons for thinking that experience of active, self-initiated and self-controlled movement is necessary.

First, it might be thought that if a self-movement is not self-initiated, then we cannot be subjectively aware of it as a self-movement; in particular, we cannot distinguish self-movement from object-movement. As Jeannerod and Pacherie (2004: 114) put it, “if we were only passively moved through space, we wouldn’t be in a position

to distinguish between changes in our experiences that are simply a consequence of our having changed places – position-changes – and changes in our experience corresponding to actual changes in the world – state changes”.²⁰ This, however, is wrong. Through the so-called somatosensory system we can be directly aware of the movements and positions of our limbs, even if they are not self-generated. Husserl himself speaks of two different kinds of kinaesthetic sensations besides the active, “free” kinaesthesia: passive, but “allowed” kinaesthesia such as my breathing (which I *could* hold back, if I wanted to); and “foreign” or “compulsory” kinaesthesia, as I have when someone pushes my head or arm (cf. Husserl 1973a: 447). In addition, the vestibular system informs us of the acceleration of our whole body through space, as we know from cases where the vehicle in which we are sitting speeds up or slows down.

Moreover, as Gibson has emphasized, when we are passively moved (e.g. in a vehicle), the flow of visual appearances itself is typically such as to specify this as a case of self-movement as opposed to object-movement.²¹ Think of the case of looking at a landscape from a moving train. All features of the landscape are moving past you in a characteristic fashion.²² When you are driving in your car, the landscape continuously flows towards you from the horizon, and so on. When an object or several objects are moving in relation to you, on the other hand, there is no similar transformation across the visual field as a whole. We may hence speak of a fourth sort of kinaesthesia, namely what Gibson calls “visual kinesthesia” (Gibson 1986: 125).²³

There is thus no good reason to think that passive self-movement could not be distinguished from object-movement. So there is no obstacle to thinking that a creature incapable of self-initiated movement could experience itself being passively moved through an environment, and distinguish its own passive movement from changes in visual stimulation. However, and this is the second point that can be introduced in favour of the enactive thesis, it could be suggested that the “if-then” structure – the systematic relation between kinaestheses and visual appearances – collapses if a

20. For a similar claim, see Overgaard and Grünbaum (2007: 21–2).

21. Eye-movements, it should be noted, are a special case. When one’s eyes are moved passively, the scene before one’s eyes seems to move. One can confirm this by closing one eye, and gently pushing the other eyeball with a finger. See Gregory (1998: 102).

22. The closer objects race past you, while more distant things move more slowly. This is known as “motion parallax” – an important cue to distance.

23. It does not, of course, give infallible information. We are all familiar with the illusion of the moving train. It is only when the adjoining train has passed, and we can see other features of the environment (e.g. the station building) that we realize that it wasn’t our train that was moving.

perceiving subject has no experience of active, self-initiated movement.²⁴ A subject with experience of passive movement only “would not be able to experience a *systematic relation* between her own movements and the appearances of things in space” (Overgaard & Grünbaum 2007:22). Rather, she or he would, at most, experience “an arbitrary relation between the dynamic structure of the visual field and the structure of the actual kinaesthetic sequence as it is actualised in this particular situation, but she or he would have no experiential grounds on which to relate it to other possible sequences and thereby to other possible appearances” (ibid.).

There are, it seems to me, two different issues here that should be held apart. The first is the question of the relation between self-movements and the flow of visual appearances. The second concerns the wider context (or “horizon”) of possible movements and the associated “horizon” of visual appearances. As for the first, it is not clear why passive movements could not be related to visual appearances in the relevant systematic way. In other words, there is no obvious reason why experiences of passive movement could not lead to an implicit understanding of relations of the following sort: If I were to be moved to such-and-such a position, then such-and-such visual appearances would result. Any reason to think this will not work must hinge on the second point: that whatever movement is (passively) realized, this cannot be related to other possible movements. It cannot, as Husserl would put it, lead to the formation of a kinaesthetic “horizon”. If this is right, then it would follow that the actual visual appearance cannot be understood as one profile out of a multitude of absent but “available” profiles of the same, unchanged object. And then, indeed, we would have made it impossible to conceive of perceptual experiences of transcendent, spatial objects.

However, the force of this argument depends on the idea that we cannot make sense of an open-ended kinaesthetic “horizon” for such a passive subject. It seems to me that we *can* make sense of the latter notion. When one such creature is moved, say in a linear fashion, it will surely form implicit expectations (what Husserl calls “protentions”) as to what is coming next. And when the movement stops, or changes direction, such a protention will be disappointed; the creature will experience some degree of surprise that the movement did not continue. Surely, this is completely independent of the fact that the creature did not itself have anything to do with initiating or performing the movement. Yet, given such protentions, it is surely understandable that the creature might form some idea of this linear movement continuing (even though in fact the movement did not continue in this fashion). So here we see how the creature

24. This suggestion is again found in Overgaard and Grünbaum (2007:22). As should be evident, I am no longer convinced of the truth of some of the stronger claims advanced in that paper.

would be able to conceive of series of *possible* self-movements beyond the movements that actually occurred.

Now, it may well be that for systematic relations of the proper sort to be set up between an open-ended horizon of possible movements and a similar horizon of possible visual appearances, a creature needs to have had experiences with a fairly extensive variety of passive movements. For example, it is plausible that experiences of being moved in a linear way towards an object and away from it will not, by themselves, yield a sufficiently rich kinaesthetic horizon for fully-fledged three-dimensional objects to be perceived. For it is not clear, for example, that a creature with such limited experience would be able to form a notion of “cyclic” movement, a movement *around* an object. In fact, it seems it would rather be the *experience* of cyclic movement and the visual appearances accompanying it that would give rise to the *notion* of a three-dimensional object as something that *can* be moved around. However, a variety of experiences of being moved around would seem sufficient to equip our creature with a kinaesthetic horizon: a horizon of possible (passive) self-movement. In fact, given a sufficiently rich inventory of experiences of passive movement, our passive creature would surely be able to experience an (in principle) *open-ended* kinaesthetic horizon much as we do. And then it seems plausible to assume that the rich inventory of experiences of characteristic changes in visual stimulation corresponding to this inventory of passive movement would enable the creature to forge a link between the kinaesthetic horizon and a horizon of visual stimulation. But surely, this means we have all the ingredients needed to make sense of our passive creature as co-intending absent profiles.²⁵

However, here we can introduce the third, and final, objection. Briefly stated, this objection consists in the observation that we have no adequate response to the problem of perceptual presence for passive creatures such as the ones discussed here. It is not clear, after all, that absent profiles could count as “available” to our passive creatures. In particular, the absent profiles could hardly figure in these creatures’ experience as “freely at their disposal”. The creatures have no way of bringing the profiles into view. This is because, for these creatures, unlike for us, the kinaesthetic horizon would not be “a horizon of freedom” (Husserl 2001: 52). Surely, it must be conceded that there would be a major difference between the experiences of the imagined creatures and

25. Research comparing the perceptual development of kittens being moved around passively with kittens moving around actively seems to suggest that the former are perceptually impaired (see Held & Hein 1963). However, Gregory (1998: 143) suggests reasons to be sceptical of this conclusion. Besides, here we are concerned with “essential” matters, not factual matters.

our experience. The answer to the problem of perceptual presence cannot be identical in the two cases.

The crucial question, however, is whether an answer to the problem *can* be given in the case of our passive creatures. And clearly it would be question-begging to simply assume that because absent profiles could not be *freely* at the disposal of passive creatures the problem of perceptual presence cannot be satisfactorily resolved. Whether it can or not is precisely the issue under dispute. I think it is clear that at least a beginning of an answer can be given. Absent profiles could figure in their experiences as “accessible” in some sense. For if and when fortune so decides, these profiles *are* presented to the passive creatures.

Consider also the example discussed above, in which (to put this in purely third-person terms) the rim of my cup first projects a circular shape onto my retina, and then projects gradually more elliptical shapes. I said that the series of visual appearances this gives rise to is ambiguous between three different scenarios. It could be the object is changing shape; it could be it is being gradually tilted away from me; or it could be that I am changing my position vis-à-vis the object. Now, given “visual kinaesthesia”, our passive creatures would be able, in principle, to rule out the last scenario. And the distinction between the other two would certainly make sense to them. In fact, on occasion, they might be able to detect the nature of the case. For example, they could be moved immediately after the event into a position that, on the hypothesis that the cup was tilted away, would result in the reappearance of a circular sensory profile. Based on the actually resulting appearance, the ambiguity could be resolved.

To be sure, the visual experiences of such creatures would generally be marred by ambiguities. It would be only very occasionally that such ambiguities were resolved for them, and when this happened it would be nothing but a pure stroke of luck. Here we may catch a first glimpse of the enormous difference between their life-world and ours. However, to begin to gauge this difference is to begin to make sense of their visual experiences. It is to begin to appreciate what their experience might be like, “from the inside”. And it does seem that, despite enormous differences, this experience might, like ours, include a co-intending of absent profiles. These would not be “available to the creatures”, but they might have some measure of “accessibility”.

Perhaps – and with this suggestion I will bring the present discussion to a close – the “accessibility” conclusion could be buttressed by reference to the possible presence of other perceiving subjects. If the experience of being moved about passively can give rise to some conception of the world extending beyond what is currently given to them, then there is no obstacle in principle to them forming an idea of themselves as placed in a world of three-dimensional, transcendent objects. Although a story would have to be told about how they would be able to identify certain particulars within that world as other subjects of experience, there is no reason in principle to think such

a story could not be told.²⁶ And then it becomes possible for the passive creatures to conceive of what is currently unavailable to their visual perception as something that is currently available to someone else's visual perception.

4. Concluding remarks

In the preceding pages, I have discussed two theses concerning the connection between self-movement and visual perception.

First, I have argued that creatures that cannot conceive of themselves as potentially moving (or being moved) cannot have visual experiences of transcendent, three-dimensional objects. The attempt to claim otherwise fails to give a satisfactory answer to the problem of perceptual presence. For anyone who goes down that route faces a choice. Either they must concede that somehow absent profiles are co-present as available or accessible. But then we need an account of that availability; and none of the suggestions discussed seemed very promising. Or else they must claim that absent profiles are co-intended as having some other status (e.g. "accessible to others"). But then this story must be fleshed out convincingly. I have suggested that it is hard to see how one could offer a convincing story along either of these lines.

Second, I have argued that we should nevertheless stop short of adopting the "enactivist" perspective. For it seems there is no good reason to think one could not develop the required understanding of oneself as potentially moving (or moved) on the basis of a (sufficiently rich) inventory of experiences of being moved passively. There are, as I have suggested, a number of things we could say about the visual experiences of an imaginary class of passive creatures – enough, perhaps, to make their experiences "fully intelligible to ourselves". Of course, I have come nowhere near completing the latter task here. But I have shown that popular reasons for thinking that the task cannot be completed do not stand up to closer scrutiny. At the very least, this shifts the onus of proof onto the enactivist.

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26. The passive creatures could, for example, observe that certain other particulars in the surroundings were moved around from time to time, and find themselves compelled to view these as other perceiving subjects.

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