Concern and the Structure of Action: The Integration of Affect and Understanding

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ABSTRACT

I develop a theory of action inspired by a Heideggerian conception of concern, in particular for phenomenologically-inspired Embodied Cognition (Noë 2004; Wheeler 2008; Rietveld 2008; Chemero 2009; Rietveld and Kiverstein 2014). I proceed in three steps. First, I provide an analysis that identifies four central aspects of action and show that phenomenologically-inspired Embodied Cognition does not adequately account for them. Second, I provide a descriptive phenomenological analysis of everyday action and show that concern is the best candidate for an explanation of action. Third, I show that concern, understood as the integration of affect and embodied understanding, allows us to explain the different aspects of action sufficiently.

1. Introduction

Action is central to human being; a circumstance that has been in particular emphasized by phenomenologists (Husserl 1913/1976; Heidegger 1927/2006; Merleau-Ponty 1945/2012). In accord with their work and inspired by their insight, proponents of phenomenologically-inspired Embodied Cognition (henceforth simply "Embodied Cognition") have put action center stage and made it central to explanations of diverse philosophical phenomena such as cognition and perception (Noë 2004, 2012, 2015; Wheeler 2008; Rietveld 2008; Chemero 2009; Rietveld and Kiverstein 2014; Bruineberg, Chemero and Rietveld 2018).

What these authors have in common, is that they argue that agents are not confronted with a world in which they have no interest, but with a world that is reflective of agents' bodily abilities to act; a world that is thereby non-deliberatively inviting possiblities for action. Perception and cognition have to

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be structured so that an agent is not presented with a world of properties that do not matter to her, but with a world that consists of situations that offer possibilities for action. In order to understand the world as a place of possible actions, cognition, and accordingly understanding, have to be embodied, i.e. they have to be receptive to the material structure of the world in relation to the bodily abilities for action of an agent. This becomes particularly clear in Chemero's (2009) and Rietveld's and Kiverstein's (2014) work. According to them, the recognition of possibilities for action is based on affordances. And affordances are relations between the body of an agent, her embodied abilities, including the embodied understanding that controls bodily abilities, and the physical structure of the material world.

Even though well-known theoretical disparities exist between proponents of Embodied Cognition (Clark 2008; Gallagher 2011; Alsmith and de Vignemont 2012; Vörös, Froese and Riegler 2016; Jeuk 2017b), it can be easily stated that they accept that action is not only the purpose of perception and cognition, but further, that action is the theoretical unit through which other phenomena of philosophical interest can be explained. For instance, in order to understand cognition, we have to understand which structure embodied understanding has to exhibit so that it can control action. Noë, who has come to call his own approach "Actionism", claims further that perception itself is an activity the purpose of which is to guide action and that perception can only be understood through the lens of action (Noë 2015).

However, despite the efforts of proponents of Embodied Cognition to explain the environmental and bodily constituents of motor behavior, such as motor control, the body schema, skill, affordances, and sensorimotor knowledge and despite the explanatory importance of action for the research program, little attention has been paid to the phenomenon of action itself. McGann goes as far as claiming that Embodied Cognition lacks a theory of action: "Though exalting action, researchers and writers within these new ways of thinking (Embodied Cognition) have tended to gloss over just what they mean by the term" (McGann 2007, 464, brackets added).

In the following, in section 2, I identify the basic structure of action. With the help of this structure, I show that proponents of embodied cognition have focused on several important aspects of action, however, have failed to

¹ Similar concerns have been voiced by Dotov and Chemero (2014) with regard to Ecological Psychology.

account for the complexity of action and in that sense have failed to account for action simpliciter. In particular, they have failed to account for the structural conditions that motivate action. In section 3 I introduce concern as that what explains action. Concern is a complex phenomenon, but we can describe it here preliminarily as based on the integration of affect and embodied understanding, as that which motivates action in the first place and as that which allows us to conceive of the world as consisting of possibilities for action. In section 4 I show through an analysis of everyday actions that concern centrally characterizes action. In section 5 I delve deeper into the structure of concern. I show that concern is co-constituted by the integration of affect and embodied understanding. I demonstrate that this integration makes it possible to want to act in the first place.

2. The Four-Fold Structure of Action and Embodied Cognition

An adequate conception of action has to conceive of action, as Dreyfus and Taylor remind us, "as that of an engaged agent, determining the significances from out of its aims, needs, purposes, desires. These significances arise out of a combination of spontaneity and receptivity, constraint and striving, they are the ways the world must be taken in for a being, defined by certain goals or needs to make sense of it" (Dreyfus and Taylor 2015, 69). Dreyfus and Taylor identify correctly what is missing from an adequate conception of action in embodied terms: An account that shows a) how the understanding that informs action, i.e. the understanding that is receptive to the structure of the body and the environment in order to bring about successful action, is both spontaneous and receptive and that further demonstrates b) how our behavior itself is both spontaneously ("striving") directed at the world and at the same time receptively-passively "constrained" by the world, our own life-projects and long-term interests.

Suppose I want to hammer a nail in order to hang a picture. In order to do so I need to understand what a hammer does and how to use it. This understanding has to be both spontaneous and receptive. Without my embodied abilities and my *interest in the results of potential actions* that I can achieve with hammers—the "work", in Heidegger's words—I could not understand what a

hammer is and how to use it.² Yet, without being receptive to the physical and spatiotemporal properties of hammers—their material structure—I could not understand what a hammer is and how to use it either. Further, without the world showing up as a passive-receptive horizon for the realization of the concerns that motivate my behavior I *could not want to* hammer in the first place.³

So far I have merely listed aspects of action that allow me to understand how to use a hammer. This understanding, in combination with the presence of, say, a hammer, a nail, a wall and a picture is not yet sufficient to account for my action of hanging a picture. The action requires that I *want* to hammer a nail to hang a picture—it requires me to have concern for the outcome of the action in the particular situation in which I am. Additionally, this situational concern is embedded into a background of life-projects and long-term interests. I will only actualize the action of hammering a nail if I am not constrained by a wider set of long-term concerns of mine. If I am giving a lecture about Heidegger's conception of readiness-to-hand, and have brought a hammer to my lecture to exemplify this existential mode of engagement, I will not engage in hammering just because a hammer is present. The context of the lecture, in which I pursue one of my life-projects, being a professor, does not permit the action to occur.

An adequate conception of action needs to account for at least the following four aspects of action that I have identified above: 1) The spontaneous aspect of behavior (striving), 2) the receptive aspect of behavior (constraint), 3) the spontaneous aspect of understanding, and, finally, 4) the receptive-passive

² Embodied abilities are the abilities and skills that are necessary to perform various forms of sensory and motor behavior, which renders embodied abilities instrumental for action. Embodied abilities range from the ability to move one's legs in rhythm in order to enable walking, to the ability to move one's eyes so that one can read, to the motoric and auditory abilities that are necessary to produce speech. But embodied abilities also scale up, as Rietveld and Kiverstein (2014) have convincingly argued, to complex social abilities, as those of architects and musicians—even though they remain properly grounded in more basic embodied abilities.

³ I use "receptive" with regard to understanding in two different senses in this paper. The first sense is about how the mere physical environment contributes to our understanding of the world. The second sense is about how understanding functions as a passive background or horizon for action. If I use it in the first sense, I merely write "receptive". If I use it in the latter sense, I write "passive-receptive". Importantly, the passive-receptive aspect of understanding does not correspond symmetrically to the spontaneous aspect of understanding that I also describe in this paper. This spontaneous aspect is about what we contribute to our understanding of the world and it is only important for this paper in so far it is about how concern, as that what is a necessary condition for having interests and motivation, is a co-originary contribution of ours to the passive-receptive background for action, i.e. understanding.

aspect of understanding. In the following I describe these aspects in more detail and show that different proponents of Embodied Cognition attempt to account for only some of them.

1) The spontaneous aspect of behavior (striving). This aspect determines the direction of an action and is about the ways in which I situationally direct my behavior towards the world. If I were not motivated to behave in a certain way, my embodied abilities and the presence of objects would not dispose me to act. I am not merely receptive to what is *given* to me by the material structure of the environment in relation to my embodied abilities—rather I need to want to act in accord with my concerns.

This spontaneous aspect of behavior has been stressed by Rietveld (2008a,b) and to a lesser degree by Noë (2016). Both authors emphasize the importance of motivational factors for action and suggest that concern is central to them. But, Rietveld and Noë leave the exact nature of concern open—in particular, they do not provide an analysis of the conditions of the possibility of action in terms of concern. Further, for Rietveld (2008a,b) the role of concern for action boils down to an affective learning mechanism that enables agents to internalize social practices. To circumvent these shortcoming, I will show in section 4 how affect, as part of a Heidegger-inspired concern structure, determines the direction and manner of an action. And in section 5, I will discuss how the integration of affect and understanding makes it possible to want to engage into an action in the first place.

Importantly, embodied understanding, merely understood as a set of embodied abilities or sensorimotor knowledge, is not sufficient to account for the spontaneous aspect of behavior, as Noë (2004) and Chemero (2009) seem to claim. Even though I understand, for instance, an apple relationally through the structure of the environment, thereby receptively, and through my embodied abilities, *thereby spontaneously*, the mere presence of an apple is not sufficient to account for the spontaneous action of apple eating. Rather, in order to act I further need to spontaneously behave in accordance with my interests—I need to have concern for eating apples or not eating apples.⁴

At this point, it might seem unlikely that so many proponents of Embodied Cognition have overlooked the spontaneous aspect of behavior in the

⁴ Importantly, we do not have to be consciously aware of these interests when we act spontaneously; we merely have to act according to them. Consequently, spontaneous action must not be confused with deliberative action, but rather is a form of autonomous action, where autonomy is determined by acting according to one's interests.

form of interest or motivation. But, it seems that their "oversight" is motivated by the following two reasons. First, many proponents of Embodied Cognition are anti-representationalists when it comes to everyday action and experience. Accordingly, they seek to shun reference to goals, desires, beliefs, and intentions, which they deem representational states. Second, many proponents of Embodied Cognition seek to account for action, via recourse to phenomenology, and claim that the world itself is intrinsically significant and soliciting options for action.

I am quietist about the question of representationalism. I side with Noë (2012) in that I also believe that it is uncritically rationalist to believe that everyday phenomena such as motivation require rationalistic conceptions of representation as an explanation. And I believe that it are those rationalistic conceptions of representation that are alien to the endeavor of embodied cognition (Jeuk 2017a,b) because their function it to "mirror the world", so to speak, without representing the world through the lens of the embodiment of the representing agent. Yet, since concern requires, as we will see in section 5, the integration of affect and embodied understanding, such a rationalistic conception of representation cannot account for concern and accordingly proponents of Embodied Cognition should not worry about potential rationalistic representationalist ramifications of concern.⁵

With regard to the second point mentioned above, most phenomenologists would agree that it is not the physical world—or the animal-environment system for that—that is intrinsically significant. It is the "human world" (Dreyfus 2007b, 255), we might also say, "the living world" or "the possible horizon for action", that is intrinsically significant. And we will see in section four of this paper, that this possible horizon for action requires concern.

2) A further aspect of action for which a sufficient theory of action has to account is the receptive aspect of behavior (constraint). This aspect pertains to the manner of an action and is about the ways in which my wider set of concerns constrains my disposition to behave in a situation. I do not just engage

⁵ Some readers might wonder in which ways concern differs from desire. First, concern is wider in scope than desire, since it does not only function as an explanation of intentions to act, but also as that what structures our living world in tandem with understanding so that the world is upon-actable for us in the first place, as descried in section 5 of the paper. Second, concern can function as such an ontological structure because it does not separate between belief and desire states, but presupposes an integration between understanding and affect, also as described in chapter 5. In that sense concern is not only a psychological entity such as desire, but also an ontological structure that gives agents a world, i.e. their living world.

in any kind of action, but primarily in those actions that are in accord with my overall life-projects and interests. For instance, if I am very hungry and surrounded by a table with delicious foods, I might still not eat any of these foods, if I am interested in my health and if I am therefore fasting at the moment. Section 4 of this paper describes how concerns are the basis for this receptive aspect of behavior. Rietveld and Kiverstein (2014) attempt to account for this aspect of action with their concept of a "form of life". According to them, a human form of life is based on social practices that constrain the actions that are possible for an agent in a situation. I will discuss their account briefly below in section 3 and show that it is only complementary to an account of action based on concern.

3) The spontaneous aspect of understanding is about what I bring to bear on the world so that the world can be, 4), a horizon of possible actions *for me*—the receptive-passive aspect of understanding (section 5). For instance, if my understanding of hammers were not structured spontaneously by my embodied abilities that allow me to grasp and move a hammer, I could not understand a hammer as a thing that I could use for certain actions that require certain bodily behaviors such as moving and grasping. And accordingly I could not want to engage in the action of hammering in the first place, since in order to act I presuppose an understanding of the movements necessary to achieve what I aim at. In particular, Noë (2004) and Chemero (2009) have accounted for this spontaneous aspect of action. Both authors have argued that our understanding of possibilities for action is co-constituted by embodied abilities of an agent and the material structure of the environment.

Yet, proponents of Embodied Cognition have widely neglected that my interests have to be part of what I spontaneously bring to bear on the world so that the world can show up as a passive-receptive horizon for action. As Ratcliffe correctly states: "the world can only show up as it does in so far as things matter to us" (Ratcliffe 2010, 128). However, embodied abilities do not constitute what matters to us—teaching a lecture does not matter to me, because I have the ability to do so, but because I have concern to do so. A conception of motivation, interest or relevance that goes beyond embodied abilities is needed here. ⁶ We

⁶ It seems as if Autopoietic Enactivism (Thompson and Stapleton 2009) provides a treatment of action that is similar to mine in two senses. First, it is similar in that the autonomy of organisms from their environment is emphasized, which is comparable to my emphasis on the spontaneous aspect of behavior. It is further similar, second, in that sense-making, a major theoretical theme of

will see in section 5 of this paper, that I cannot want to engage in an action if I do not already receptively-passively understand the world as a place of things that realize my interests. I will argue that concern is necessary for this receptive-passive understanding too.

3. Concern and Social Practices

Even though different Embodied Cognition approaches identify the importance of one or the other of the aspects of action described above, we lack an overarching explanation of how these aspects are integrated with each other so that action can come about. As an overarching background structure in this sense, I propose a conception of concern that is inspired by Martin Heidegger's work in *Being and Time*. Obviously, Heidegger's analysis of *Dasein* and the role that concern ("care") plays in it is highly complex. Importantly, I draw on certain of Heidegger's insights, in so far as they are relevant for the present analysis of action. Further, the argument in the following does not depend on the conclusiveness of Heidegger's analysis, nor does it draw the same

Autopoietic Enactivism, is an affective and understanding-based process, which is comparable to my claim that concern contributes spontaneously to an understanding of the world. Yet, there are also deep discontinuities between my approach and those of Autopoietic Enactivists, which are the reason why I do not discuss Autopoietic Enactivism in this paper. First, instead of conceptually characterizing the relations between the various aspects of action, autopoietic enactivists assert that all these aspects are interacting in complex and dynamic ways. This emphasis on complexity might be desirable, if we want to explain action biologically, but it also leaves the exact nature of the relationship between, among others, affect and understanding open. Second, and more important, whereas my approach is primarily phenomenological, Autopoietic Enactivists use simultaneously phenomenological, psychological and biological terms. Whereas I seek to establish the conditions that make action possible, Autopoietic Enactivists treat action and purposes as positive phenomena. I do not want to engage into the meta-philosophical and methodological ramifications of this difference here (though see Jeuk 2017b), but rather want to confine myself to the statement that these differences make it difficult to discuss both approaches at the same level of analysis.

⁷ I translate in the following Heidegger's concept "Sorge" (Heidegger 1927/2006) with "concern" rather than with the term used in the "standard" English translation, "care" (Heidegger 1927/1962). "Concern" seems to be the more fitting term to capture the positive as well as negative connotation of the German term as well as the motivational force that "Sorge" expresses. Further, the standard English translation uses for the terms "besorgt" and "besorgen", which derive from Sorge, the terms "concernful" and "concerned". For reasons of conceptual consistency, it seems therefore more advisable to use the term "concern" instead of "care".

conclusions. Yet, it agrees with Heidegger on the centrality of the integration of affect and understanding, in the form of concern, for the explanation of action.

Heidegger identifies four structural parts (*Strukturmomente*) that constitute concern equiprimordially (*gleichursprünglich*). Affect (*Befindlichkeit*), which is commonly translated as affectedness, attunement or state-of-mind; understanding (*Verstehen*); falling (*Verfallen*); and discourse (*Rede*) (Dreyfus 1991; Ratcliffe 2002; Crowell 2007).

Care has been characterized with regard to its temporal meaning, but only *in its basic features* (...): understanding, state-of-mind, falling, and discourse. (Heidegger 1927/1962, 384-385, italics added)

In the following I will only focus on the first two of these four structural parts of concern, understanding and affect, which I deem sufficient for the constitution of action.⁸

Some readers might be surprised, as I already suggested above, that I do not also account for discourse, or at least language, given their social implications. This might seem particularly surprising, given the popularity of linguistically-mediated social practices among proponents of Embodied Cognition (Rietveld 2008a,b; Rietveld and Kiverstein 2014; Bruineberg, Chemero and Rietveld 2018). My reasons for omitting language and social practices from my discussion of action are the following. This paper is concerned with the conditions that make action possible. This means that the exclusive focus of the paper is only on the fundamental, invariant conditions of action. And it seems that we can make a good point that social practices and language are not such fundamental, invariant conditions. For instance, we can

⁸ Discourse ("*Rede*") is characterized by Heidegger as "the existential-ontological foundation of language" (Heidegger 1927/1962, 203). That means that discourse relates to understanding, affect and falling in such a way as that it allows to structure what we encounter in the world through them as linguistically meaningful. Discourse might be for Heidegger also the structure that creates a network of meaningfulness ("*Bedeutungsganzes*") between those things that we can affectively understand. Falling ("*Verfallen*") characterizes humans' attentional and temporal presentness in the world; their unreflective immersion into concernful dealings. Even though I do not seek to engage into a Heideggerian project here, I swiftly want to clarify why I omitted discourse and falling from my analysis. First, discourse and falling are merely functionally defining what affect and understanding do. Accordingly, I believe they can be subsumed under affect and understanding; i.e. I believe they are functional predicates of affect and understanding and not on the same ontological level as affect and understanding. Second, discourse and falling seem to fulfill ad hoc functions in the wider transcendental project of Heidegger's work; particularly when it comes to grounding concern/care in temporality. This transcendental project does not need to concern us here and accordingly we do not have to deal with the ad hoc ramifications of it.

easily imagine a person being born in a non-social situation and not being able to produce speech, but who is still perfectly able to act. That is so, or so I argue in the following, because action is at a fundamental level co-constituted by affect and understanding, i.e. concern. Affect and understanding are invariant features that people possess even in a non-social situation as the one imagined above.

Importantly, social practices and language are not on the same ontological level as affect and understanding. Social practices and instantiations of language are actions themselves (Austin 1962). Even though, for instance, a certain speech act of mine might have a significant effect on somebody else's action as well as on her concerns, my speech act is itself an action that requires an explanation in more foundational terms. For these reasons, the subsequent considerations confine themselves to affect and understanding only.

In the following, the concept of concern will be developed functionally, by an analysis of ordinary action—or, as Heidegger would say, by establishing the conditions of possibility of action by an analysis of the "everydayness" (*Alltäglichkeit*) of *Dasein* (here: the embodied human agent). Accordingly, I will discuss concern, its structural parts, and how the here presented conception of concern relates to Heidegger's conception of concern, as the argument unfolds.

Further aspects of behavior and understanding are important to understand action, but are not discussed here. For instance, the sense of agency, the body schema, skill acquisition and learning. I do not engage with these phenomena for two reasons. First, they have been well-explained already elsewhere (Dreyfus 2002; Gallagher 2005). Second, as Dreyfus (2002) correctly points out, most of these phenomena relate to the "phenomenological"—or rather experiential—but not "logical"—or rather ontological—requirement for a behavior counting as an action. And it is this logical, or rather, in Heideggerian terms, ontological or phenomenological structure of action—the structural conditions that make action possible—which I seek to identify and explain.

The next section, section 4, provides an analysis of the spontaneous and receptive aspects of behavior. I will establish that concern is that which specifies both aspects of behavior in the form of the direction and the manner of an action. I will further discuss the affective nature of concern in this section. In section four I will show that our understanding of the world has to be concernful so that the world can show up as a receptive-passive horizon for our actions, which is the precondition for the possibility of engaging in an action in the first place.

4. Motivated Behavior: The Direction and Manner of an Action

In this section, I show that the spontaneous and receptive aspect of behavior requires concern. As we will see, concern allows us to coherently explain how situational interests and long-term life-projects motivate, generate and constrain our actions.

Let us begin our analysis of action with the example of the action of cleaning a carpet. If I perform the action of cleaning a carpet, my behavior is structured by concern in two ways. I) My behavior is *directed* at transforming the environment into a state that I *have concern for*, e.g. transforming a dusty floor into a tidy floor, because I have concern for inhabiting a tidy home. Differently put, I spontaneously strive for such a home in the particular situation in which I act. I) My behavior is also structured in a *manner* for which I have concern. Concerns that structure the manner of my behavior are concerns like time-efficiency and comfort. This is why I perform the action with a vacuum cleaner rather than with a toothbrush or my bare hands, which would be more uncomfortable and time-consuming. In this sense, my action is receptively constrained by my concerns.

An analysis of the action of cooking reveals the same background structure. If I want to perform the action called "cooking", I) I *direct* my behavior towards a state in the world for which I have concern. This can be a healthy meal or a quick snack. The choice depends on whether I have concern for my health, or whether I have concern for being successful at work.

I will further engage in cooking behavior in, II) a particular *manner*, which is also structured by my concerns. For instance, I might want to cook energy efficiently because I might have concern for the environment. Accordingly, I will cook with a stove that offers me to act in a particular manner, such as cooking my meal on a low flame. Alternatively, I might rather have concern for the efficient use of my time because I have concern for achieving important life-projects swiftly. This is why I might either use a slow cooker or a microwave oven, which are an integral material part of the structure of my cooking action, depending on my concerns.

⁹ As it is apparent from this description of the structure of action and the examples above, the direction of an action is directed towards something that is not present yet (a similar future-directedness is hinted at with the term "horizon for action"). Therefore, a complete explanation of the structure of action will require an account of anticipation, which is beyond the scope of this paper. This future directedness of action and concern is apparent in Heidegger's (1927/1962) own work, where he seeks to ground concern in future-oriented temporality.

One might object, that contrary to the actions that I analyzed in these examples, it seems that certain actions might not be subject to an analysis in terms of concern; for instance, "actions" like sitting, grasping, touching, seeing, running, walking, lying or standing. When I walk, not every aspect of my walking seems to be determined by a particular concern, but rather by my embodied ability to walk and the walkability offered by the material structure of the path that I walk. It seems as if these types of actions can be exclusively analyzed in terms of embodied abilities in relation to the structure of the environment, without reference to spontaneous concern of an agent (Haugeland 1998; Chemero 2009).

Yet, embodied abilities are not sufficient to explain action as long as we do not conceive of "*mere* sensings" and "*mere* movings", i.e. mere behaviors, as actions. An ability is not sufficient to count as an action—an ability is *literally* an ability to do something; not the doing of the something itself. For instance, eating an apple might require under normal circumstances the embodied abilities to be able to focus on an apple, to grasp it, to chew it and to swallow it. But as long as I do not have concern for apple eating—e.g. satisfying hunger, appreciation of apple taste, being on an apple diet—an apple's presence and my sensorimotor ability to eat it, are not sufficient to account for the action of apple eating.

Another reason for reservation about my analysis might be that not every aspect of, say, my cooking seems to be guided by my concerns. Many different ways of behaving might fulfill my concerns. And the variations that fulfill my concerns might be primarily explainable by the material structure of the environment and my embodied abilities. For instance, I can cook with pans of different sizes, sit or stand while cooking, use my left or my right hand for stirring and so forth. ¹⁰ But that does not change the fact that the varying behavioral patterns are part of my cooking action because my behavior is

¹⁰ Anthony Chemero (in conversation) pointed out that he sees the explanation of the plethora of varying ways in which environmental, behaviorally fine-grained and non-experiential factors structure our actions, as one (among many) important contribution of an affordance-based approach to the explanation of action. And indeed, these aspects cannot be explained by a phenomenological or conceptual approach and are best explained by models from Ecological Psychology. Yet, as much as such an account enriches our understanding of the behavioral aspects of action, it is not sufficient to explain action, because it does not account for concern.

directed towards a state for which I have concern, in a manner for which I have concern—a particular meal that I create in a particular fashion.¹¹

Importantly, simple behavioral movements are, with the exception of reflex behaviors and basic biological processes, never done for their own sake. Rather, walking is done to think, to relax, to exercise, or to get from place A to B, all of which are things for which I have concern. Similarly, I do not sit simpliciter, but I sit to rest, to meditate, to look out of the window, to participate in a meeting or to work with my laptop. "Sitting" denotes in these cases the state change of my body, brought about by movement and sensing, that is necessary to engage in something for which I have concern. But this bodily state change does not exhaust my action. ¹² Actions, other than mere behavior, can therefore not be understood just in terms of embodied abilities, exploratory behavior and the structure of the environment, as many proponents of Embodied Cognition claim (Haugeland 1998; Noë 2004; Chemero 2009), but require reference to concern.

Heidegger puts this point in the following way: "That with which our everyday dealings proximally dwell is not the tools themselves [die Werkzeuge selbst]. On the contrary, that with which we concern ourselves primarily is the work - that which is to be produced at the time (...)" (Heidegger 1927/1962; 99, italics added). And the work, at which our behavior is directed, is something for which we spontaneously have concern in a situation.

The previous considerations can be summarized in the following way. An action A is a bodily behavior that is *directed* towards a state for which the

¹¹ There is a strong linguistic arbitrariness in at least English and German as to what counts as an action and what does not count as an action or rather counts as part of another action. For instance, we would not say that sleeping is comprised by two actions: lying and something we could call "dormating". Rather we would just say that we sleep, independent of whether we lie, sit or stand. In a similar fashion it is unclear what constitutes drinking. Is grabbing the water bottle, from which I drink, part of the action of drinking or is only bringing the bottle directly to my mouth, combined with the synchronized swallowing, part of my drinking? What about the walking that I have to do to get the bottle; does this walking fall under the action of "getting something to drink" or should it rather be part of the drinking action itself? It seems as if there would not be an interesting answer to these questions other than that much of this is arbitrary. What ontologically matters though in all these cases is that concern unites these different behaviors to meaningful actions.

¹² The question might emerge whether any behavior that we perform is a non-action, given that most of our daily dealings are part of some concern or other. A general answer to this question is that every aspect of our behavior that is not fulfilling a concern is a non-action. Therefore, for instance, reflex based behavior will count in most cases as a non-action.

agent of A has concern and is performed in a particular *manner* for which the agent of A also has concern. The way in which my behavior is directed is spontaneous in that it is not solely forced by the environment, but also generated by *my* autonomous concerns. ¹³ Still, my action is receptive in that I normally engage only in behaviors that I non-deliberatively understand to be achievable by my embodied abilities and to be in accord with the concerns that structure the manner of my action.

The manner of an action is normally structured by "wide" concerns, concerns we might call "existential". These are the concerns on which Heidegger (1927/1962) focused in *Being and Time* in his analysis of human being in terms of concern (care). Such concerns are, for instance, the concern for the efficient use of the time at one's disposal, concern for comfort, concern for survival (fear of death), or concern for the self-realization of one's individual life-projects. As much as wide concerns constrain our actions receptively, they allow us at the same time to spontaneously have concern for particular actions in the first place. For instance, if I did not have wide concern for being healthy, as part of my wider concern "fear of death", I would probably not be disposed to direct a concrete action spontaneously at broccoli eating rather than on an infinite number of other possible actions that I could engage in at any particular moment.

These wide concerns structure nearly all actions to a certain degree. From this we see that we are seldom aware of our concerns; they structure our actions in a holistic background fashion of which we often cannot be aware. Contrary to that, the direction of an action towards a worldly state is characterized by more situational, fine-grained concerns, which are often derivative of wide concerns. These fine-grained concerns show up against the backdrop of concrete environmental situations. And in these situations we sometimes consciously present these concerns deliberatively as "goals" or other intentional states to ourselves.

I stated above that concern is constituted by the integration of affect and understanding. The affective aspect of concern renders the objects and outcomes of actions as attractive or repelling, as valenced in a particular way; i.e. as something I have concern for.

¹³ "Spontaneous" expresses that the embodiment of an agent is contributing structures to her understanding of the environment, i.e. she is not merely receptively mirroring the environment.

For instance, drinking lemonade is in many situations attractive, though it can be repelling if I had too much of it and my concern for the taste of lemonade stands back behind my concern for feeling "not too full". I agree with Heidegger that this attraction or repulsion is best explained by the affective component of concern. As Heidegger states, "mood has already disclosed, in every case, Being-in-the-world as a whole, and makes it possible first of all to direct oneself towards something" (1927/1962, 176). ¹⁴

But, affect has not only a directive, motivational role, as I suggested in this section. Rather, it is the precondition for things showing up as the objects with which I perform an action or for which I perform an action. Affect makes this possible, by being integrated with understanding. As Heidegger states, "every understanding has its mood. Every state-of-mind (affect) is one in which one understands" (Heidegger 1927/1962, 385, brackets added). In the following I will spell this claim out and show how the integration of affect and understanding is a precondition for the possibility of action.

5. The World as the Horizon for Action: Concernful Understanding

In order to act, I require an understanding of a horizon of possible actions, i.e. a living world that is populated with opportunities for action. Concretely, in order

¹⁴ Importantly, "Stimmung" ("mood") does not mean the same as the English term "mood". Rather, "Stimmung" has a wider, affective component. As Dreyfus (1991, 169) states, "Stimmung has a broader range than "mood". Fear, for example, is a Stimmung for Heidegger, but it is clearly an affect, not a mood. Stimmung seems to name any of the ways Dasein can be affected". There are plenty other examples of *Stimmung* that Heidegger discusses next to fear, which are indicative of Heidegger's wide conception of *Stimmung*, such as *Erschrecken* (alarm), Grauen (dread), Entsetzen (terror), Schüchternheit (timidity), Scheu (shyness), Bangigkeit (misgiving), Stutzigwerden (becoming startled) (Heidegger 1927/2006, 142, Heidegger 1927/1962, 181). Further, Heidegger uses the German term "Affektion" ("affection" or "affect") in the same sense as "Befindlichkeit" ("affect") (Heidegger 1927/2006, 137). And finally, Heidegger uses "Stimmung" and "Befindlichkeit" interchangeably, as the following example shows: "Jedes Verstehen hat eine Stimmung. Jede Befindlichkeit ist verstehend" (Heidegger 1927/2006, 335), which we can translate as "Every understanding has its mood, every affect has its understanding". Given all this evidence, we can make a good case that Heidegger uses "Stimmung" ("mood") and "Befindlichkeit" ("affect") in a wide, theoretically underdetermined (i.e. "everyday"), affective sense and not merely in a narrow sense, as the English translation of "Stimmung" seemingly suggests to some authors (Ratcliffe 2008; Guignon 2009).

to act, I need to passively-receptively *understand the world as a place in which I* can realize my concerns at which my actions are directed.¹⁵

In the following I argue that understanding, at least the kind that is guiding action, has to be intrinsically affective. Affective understanding, or understanding affect, if you will, is a condition for the possibility of action. Importantly, the relationship between affect and understanding is not merely causal, but co-originary. As Heidegger states, "to any state-of-mind (affect) or mood, understanding belongs equiprimordially" (Heidegger 1927/1962, 315, brackets added) ¹⁶ and "understanding always has its mood" (Heidegger 1927/1962, 182). This means for Embodied Cognition and cognate approaches, that embodied abilities (Chemero 2009), sensorimotor knowledge (Noë 2004) or motor intentionality (Kelly 2000) are not sufficient to account for the understanding component of action, since they do not integrate affect with understanding.

If I want to perform an action, I need to understand in advance that the objects and situations, on which or with which I perform an action, will produce not just any result, but exactly the result that I want to achieve, i.e. the result for which I have concern. To engage in an action, already requires an understanding of the affect-satisfying properties that are offered by objects or situations because objects or situations are constitutive for having particular concerns and are thereby constitutive for the generation of a concernful action. Concern, as the integration of understanding and affect, functions as a passive-receptive horizon that enables me to understand which things allow me to fulfill my concerns—the aims of my action—which enables me to want to act in the first place. As Ratcliffe states: "Care (concern) is the condition for the possibility of apprehending the world as a significant whole, as an arena of possible projects, goals and purposes" (Ratcliffe 2002, 289, brackets added).

¹⁵ The point that the world needs to show up as concernful or significant has also been stressed by a variety of contemporary philosophers, most of them phenomenologists, that are working in proximity to Cognitive Science and Embodied Cognition (Taylor 1982; Kelly 2000; Dreyfus 2002, 2007b; Wrathall 2005). Yet, these authors do not focus on the role that affect, especially integrated with understanding, has for concern or significance, nor do they spell out how our understanding has to be concernful so that we can want to engage into an action.

¹⁶ The German original is: "Zur Befindlichkeit (Stimmung) gehört gleichursprünglich das Verstehen" (Heidegger 1927/2006, 270). Importantly, Heidegger uses, contrary to the translation, "Stimmung" in brackets after "Befindlichkeit", which is again an indicator for the circumstance that Heidegger uses the terms interchangeably.

Understanding concernfully what a vacuum cleaner is, is constitutive of the state I have concern for, i.e. the state that directs and motivates my action of carpet cleaning. I want a carpet that is as clean as only a vacuum cleaner can achieve it in a time-efficient and comfortable manner—compared to removing dust from my carpet with my bare hands, for instance. Therefore, *in order to even want to perform the action of carpet cleaning*, I have to understand that a vacuum cleaner is a thing with which I can satisfy this concern. Therefore, I need to understand the vacuum cleaner concernfully; not merely qua its sensorimotor affordances.

Dreyfus, in his interpretation of Heidegger's work, makes this point clear too: "Things are always encountered in some specific way, as attractive, threatening, interesting, boring frustrating, etc. Possible actions are always enticing, frightening, intriguing, etc. We care when a piece of equipment breaks down and whether or not we achieve our goals. Affectedness is the condition of the possibility of specific things showing up as mattering" (Dreyfus 1991, 175). Yet, importantly, we do not merely encounter things as attractive, frightening and so forth. Rather, we understand things as significant for the achievement of our concerns and thereby our actions.

Mind that understanding has to be intrinsically affective—and affect has to be intrinsically understanding. Both stand in a co-constituting relationship. For instance, vacuum cleaning requires an understanding of the concern fulfilling aspects of the object. If I would understand a vacuum cleaner merely relative to my embodied abilities, i.e. based on those abilities that allow me to grasp, move, turn off and on a vacuum cleaner and to perceive the effects of its use, I would understand a vacuum cleaner as a plethora of possibilities for mere moving and mere sensing. If merely embodied abilities, motor intentionality or sensorimotor knowledge would govern action, I would not understand a vacuum cleaner as a particular cleaning thing, but merely as a noisy thing, a thing that is located in a particular place, or a thing of a particular color.

Yet, if that were the case, I could not want to engage into an action, because, as we said, engaging into an action already requires to understand the objects of my action concernfully. I need to be able to understand that an object on and with which I act can satisfy the concern that motivates my action. But, if affect stood merely in a causal relationship to understanding, this would not be possible. A similar point has been made by Gallagher and Bower: "Schemata of sensorimotor contingencies give an agent the how of perception, a tacit knowledge of potential sensorimotor engagements, without giving its why,

which depends on latent valences that push or pull in one direction or another for attention and for potential sensory-motor engagement, reflecting, for example, a degree of desirability" (Gallagher and Bower 2014, 234).

Accordingly, both, affect and understanding need to be understood as integrated with each other, in order to make sense of action. As Heidegger states, understanding is always already based on a "towards-which" or "what-for" that is directly based on concern. "The work which we chiefly encounter in our *concernful dealings* (...) has a usability which *belongs to it essentially*; in this usability it lets us encounter already the "towards-which" for which it is usable." (Heidegger, 1927/1962; 99, italics added). This usability is not "added" to understanding after an affective interpretation—rather, it is intrinsic to it—it "belongs to it essentially." Therefore, concernful understanding is the very ground for the generation of action. ¹⁷

6. Conclusion

In this paper I argued that concern is what unites the various aspects of action and explains them in embodied terms. It spontaneously *directs* behavior towards something that we want to achieve—towards which we strive. It also constrains our behavior against the backdrop of our long-term projects and interests, and determines the *manner* of our actions receptively. Further, concern provides a receptive-passive horizon for possible actions that confines the scope of actions at our disposal, while it is at the same time the ground for the possibility of action. The account that I have provided certainly allows for refinement. In particular, it will be important to address the question how concern for particular things and long-term projects is acquired, given the virtuously circular nature of concern that oscillates between understanding and affect. Kiverstein and Rietveld (Kiverstein and Rietveld 2015), based on the work of Merleau-Ponty, suggest to ground concern in a more basic form of bodily equilibrium and

¹⁷ Matthew Ratcliffe reviews interesting cases from psychiatric research that seem in accord with my claims about the centrality of affect for understanding. He describes cases in which schizophrenic patients lose an understanding of the significance of objects (of the what-ness of objects) (Ratcliffe 2015, 166-167), which might even yield the result that certain objects are not usable for certain patients anymore (Ratcliffe 2015, 54). Importantly, he suggests that these symptoms are not merely based on a loss of motivation, but on a loss of practical significance of the patients' understanding of objects (Ratcliffe 2015, 170-171); a result of the disturbance of the affective part of concern, which he calls "existential feelings".

disequilibrium. Such an account might provide an important insight into the acquisition of particular concerns.

It will be further interesting to explore the possibilities for mutual enrichment between the here presented account of concern, that is entirely based on phenomenological and conceptual grounds, on the one hand, and naturalistic approaches, on the other hand. In particular, the work of Luiz Pessoa and Lisa Feldman Barrett might be of interest in this respect. Both argue for integrative accounts of understanding and affect. For instance, Pessoa (2015, 18, italics added): "(...) emotion and cognition are *functionally integrated systems* (...) they continuously impact each other's operations." Similarly, Feldman Barrett: "Emotion-cognition-perception distinctions are phenomenological and are not respected by the brain" (Barret et al. 2015, 85).

Finally, we can conclude with Heidegger (1927/1962, 275) that, "the totality of Being-in-the-world as a structural whole has revealed itself as care. In care the Being of Dasein is included." Concern—care—is central to the constitution of action. And action is most central to human being.

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