

Dimensions of bodily subjectivity

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There has been a recent resurgence of interest in the body both within philosophical as well as cognitive scientific approaches to consciousness and cognition. An abundance of body-centric alliterative characterizations now abound throughout the literature. It is widely argued, for instance, that mind is only to be understood once we take seriously its fundamentally *ecological*, or situated, character. From this general orientation, we then encounter further claims: mind is *embodied*, *embedded*, *enacted*, and, most radically of all, *extended*. However, at the heart of these approaches lies the embodiment thesis. In its leanest formulation, this is the thesis that mental activity depends essentially not just on the brain but on the body as well. There is an emerging consensus that philosophical and empirical investigations of cognition must therefore begin with a consideration of the contribution of the body to our interactions with the world. But what sort of body are we talking about, exactly? If mind is essentially embodied, how are we to understand the nature of this “body” and its central role in driving mental activity? There are multiple ways of approaching this question.

For instance, one may talk about the *physiological* body, while another may be interested in the *experiential* body; one may consider the *functional* body while

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another would insist on a strictly *biological* conception of the body; one may be interested in the relation between the *anatomical* body and the *experiential* body, while another may focus on the *represented* body; one may be interested in *bodily self-consciousness*, while another may insist on the priority of *intersubjective* bodily encounter; one may intend to determine our bodily power of constituting our world transcendently, thereby rejecting the view of the body as being in the midst of things out there in the world, while others may have a more realist understanding of the body as our primary mode of being-in-the-world.

The purpose of this special issue is not to provide *the* comprehensive definition of the body. This is certainly a fruitless aspiration. For the body, as the papers below make quite clear, is indeed a many-splendored thing. Thus, approaching the body as though it were a singular entity is a non-starter. The body is plural; it harbors multiple dimensions. And the goal of this special issue is therefore to participate in the development of a fine-grained description of the body in its rich multidimensionality. Thanks to careful conceptual analysis, and informed by empirical data from cognitive psychology and neurosciences, as well as clinical data from neurology, the authors represented here all investigate the body in a way that honors its physiological and experiential complexity. In doing so, they stretch the boundaries of what is commonly called “body”.

Gunnar Declerck and Olivier Gapenne argue that the actual state of one’s body does not exhaust the complexity of the body’s relation to its world: one also needs to consider bodily *possibilities*. Declerck and Gapenne consider how such possibilities are available in different kinds of world-directed actions. By relying on empirical data, they argue that the perception of the spatial structure of one’s environment is determined not only by the perceiver’s action but, moreover, by the perceiver’s possibilities for action. Thereby, the world appears perceptually to the bodily agent as a meaning-laden environment, that is, as a world affording possible actions. Stretching the boundary of the body as classically defined, the authors here defend a view of the body as defined by its practical engagement with the world.

Helena De Preester and Manos Tsakiris tackle the body–world engagement at the point where it reaches its limit: when an element of the world becomes a part of one’s body. More specifically, they discuss the distinction between two forms of body modulation: body *extension* (e.g., with prostheses) and *incorporation* of non-corporeal items into the body (e.g., tools). De Preester and Tsakiris argue that such modulations are possibilities inherent to bodily subjectivity. These possibilities characterize human beings as embodied beings whose boundaries are not fixed but rather plastic and vulnerable. On this basis, the authors rely on recent empirical findings (mostly on the so-called Rubber Hand Illusion) to argue for three theses: (1) incorporation involves body-ownership over the incorporated item, while body extension would not involve such experience; (2) body-ownership is determined both by bottom-up multisensory integration and top-down body representation; and (3) body plasticity is limited according to this pre-existing and normative body representation.

The first two papers affirm that bodily experience is a dynamically plastic and, at times, open-ended affair. But there are constraints on bodily experience. For, while wearing prostheses can involve the incorporation of non-bodily objects into one’s body, and while a rubber hand stimulated simultaneously with one’s own may be felt

as if it were, in fact, one's own hand, it nevertheless remains the case that, paradigmatically, we recognize our own body *as our own* and another's body *as theirs*—and we do this without confusing one for the other. When I shake another person's hand, for example, I immediately know which hand is mine. Jenny Slatman explores this phenomenon of bodily self-recognition by summoning conceptual resources from both Husserl and Merleau-Ponty's phenomenological analyses of embodiment. Slatman characterizes bodily self-recognition as involving a direct experience of one's *lived* body together with one's mediated experience of one's physical body as objective. This intersection of the subjective and physical dimensions of one's body, in other words, is what explains the fact that we see *ourselves* in a mirror—and not merely an alien image. Slatman thus characterizes the self as involving both a “here” (i.e., the point where my body anchors my experiential perspective on the world) and a “there” (i.e., the point where I can see my body in the midst of the world). On the other hand, others would be recognized as being merely “there” in a world that we share.

The body clearly plays a central role in shaping our social encounters. Jonathan Cole explores this bodily basis of intersubjectivity. By chronicling the narratives of individuals with different sorts of bodily (dis)abilities, Cole affirms the centrality of the body as agent for social and personal expression and self-esteem. In particular, he considers the double impact of several neurological impairments. These impairments affect not only the way one deals with and experiences one's body. They also affect the way that one can or cannot encounter others and live in a society where one's bodily (dis)abilities are marginalized or misunderstood. Cole examines the experiences of people suffering from impairment of movement and sensation, deafferentation, severe spinal cord injury, and Möbius syndrome (the congenital absence of facial expression). Cole finds that a recurrent issue for them all is the struggle to cope with their body in a way that manages to open an inclusive social space—a space where they can express, experience, and share with others (‘able bodies’) in mutually satisfying ways. Cole also finds that whether one's bodily impairment is lived positively or not depends not only on one's relation to one's body per se (e.g., whether one manages to cope with or compensate for the impairment), but also—and crucially on one's relation to others through each other's body. Cole's paper thus affirms both the bodily and dialectical nature of our social life.

Being essentially social through bodily encounters with others, one must rely on the constant understanding of others as being not only *bodies* but *subjects*. Cole's paper vividly shows the social difficulties encountered by people suffering from bodily impairments. John Stins and Steven Laureys tackle a different but related difficulty. They ask: when confronted with a brain-damaged body, deprived of any means of communication, can we detect signs of conscious mental life? How, if at all, can we communicate with unresponsive patients? If a body is perceptually accessible only in its physicality, how can we detect its simultaneous subjectivity? Stins and Laureys describe the standard clinical approach to determine whether or not a patient is conscious as being an equivalent of the Turing test: the aim is to establish whether or not there is mental life behind the behavioral responses to external probing (questions, commands, tests). Facing patients suffering from coma, vegetative state, or locked-in syndrome, however, Stins and Laureys cannot rely on any potential motor responsiveness. Since they are unable to ask the patients to give

reports about their mental states, they turn instead to the brain and take a new look at brain signals. These signals are not read as putative signatures of mental states per se; rather, they are treated as behavioral responses, in that they suggest that the patient's brain is reactive to verbal instructions in a coherent, stable, and fine-grained manner. On this basis, Stins and Laureys report the possibility to develop brain–computer interfaces which would be usable as communication devices by brain-damaged people.

The confrontation with pathological cases, and the difficulty of interpreting them accurately, poses important methodological problems. The consequences of such problems are clinical and ethical, as Stins and Laureys report. And they are also conceptual, as Rasmus Thybo Jensen shows in his paper. Thybo Jensen focuses on Merleau-Ponty's interpretation and use of the so-called Schneider case. He uncovers a shortcoming in Merleau-Ponty's report of the case, and a potential ambiguity in its use: indeed, when compared to normal subjects, one and the same case is interpreted as involving either the preservation or the impairment of motor intentionality. While seemingly contradictory at first glance, these two interpretations in fact complete each other. In particular, Thybo Jensen argues that Schneider's condition is best characterized by a disintegration of two intentional attitudes that normally modulate one another: the *concrete* (which informs habitual, context-bound actions like swatting away a mosquito or removing and lighting a match), and the *abstract* (bending and straightening a finger upon request, describing the position of one's body). Schneider's case in particular, according to Thybo Jensen, thus sheds light on the general difficulty of interpreting pathological cases with the aim of better understanding normal functioning. For, beyond the mere dichotomy of preservation and impairment, there is room for a consideration of some pathologies as involving a *reorganization* of the system at stake, a variation of the total bodily being of the subject.

While phenomenology often uses pathological cases as a window on the variability of experiences, the use of expert cases is less common. Dorothee Legrand and Susanne Ravn argue, however, that relying on bodily expertise potentially opens up new understandings of bodily self-consciousness. Legrand and Ravn consider the experience of different groups of dancers. They investigate how such “body experts” may experience the subjectivity of their own body by paying attention to objectified elements such as a visual image of themselves, or to non-bodily elements such as music that guides their dancing. The possibility of such “subjective perception” of one's body is revealing, the authors argue. For, it discloses important lessons about the very nature of the body: far from being divided as classical phenomenology assumes, the body's subjective and physical dimensions are united in one's bodily self-consciousness.

Rather than offering up sweeping conclusions or far-reaching generalizations, this special issue on *Dimensions of Bodily Subjectivity* hopes instead simply to continue the momentum behind many recent developments in this protean enterprise of “embodied cognition”. Given the rapid growth of this field—and as the different perspectives represented in these papers collectively affirm—working toward a better understanding of the complexity of the body itself is indeed a timely project. For, while researchers of all stripes are eager to embrace an “embodied” approach—or conversely, to mount challenges against the perceived excesses of embodied

views of cognition—there has often been little effort to define what sort of body is under consideration. Conceptual clarification is thus sorely needed if progress is to be made in this dynamic field. It is the hope of the editors that this special issue meaningfully contributes to this project.

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