Philosophical Issues:

Phenomenology

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Abstract

Current scientific research on consciousness aims to understand how consciousness arises from the workings of the brain and body, as well as the relations between conscious experience and cognitive processing. Clearly, to make progress in these areas, researchers cannot avoid a range of conceptual issues about the nature and structure of consciousness, such as the following: What is the relation between intentionality and consciousness? What is the relation between self-awareness and consciousness? What is the temporal structure of conscious experience? What is it like to imagine or visualize something, and how is this type of experience different from perception? How is bodily experience related to self-consciousness? Such issues have been addressed in detail in the philosophical tradition of phenomenology, inaugurated by Edmund Husserl (1859-1938) and developed by numerous other philosophers throughout the 20th century. This chapter provides an introduction to this tradition and its way of approaching issues about consciousness. We first discuss some features of phenomenological methodology and then present some of the most important, influential, and enduring phenomenological proposals about various aspects of consciousness. These aspects include intentionality, self-awareness and the first-person perspective, time-consciousness, embodiment, and intersubjectivity. We also highlight a few ways of linking phenomenology and cognitive

* Order of authors was set alphabetically, and each author did equal work.

science in order to suggest some directions consciousness research could take in the years ahead.

Keywords

Phenomenology, intentionality, embodiment, time-consciousness, temporality, self-awareness, intersubjectivity, neurophenomenology

1. Introduction

Contemporary Continental perspectives on consciousness derive either whole or in part from Phenomenology, the philosophical tradition inaugurated by Edmund Husserl (1859-1938). This tradition stands as one of the dominant philosophical movements of the last century and includes major twentieth-century European philosophers, notably Martin Heidegger, Jean-Paul Sartre, and Maurice Merleau-Ponty, as well as important North American and Asian exponents (Moran, 2000). Considering that virtually all of the leading figures in twentieth-century German and French philosophy, including Adorno, Gadamer, Habermas, Derrida, and Foucault, have been influenced by phenomenology, and that phenomenology is both a decisive precondition and a constant interlocutor for a whole range of subsequent theories and approaches, including existentialism, hermeneutics, structuralism, deconstruction, and post-structuralism, phenomenology can be regarded as the cornerstone of what is often (but somewhat misleadingly) called 'Continental philosophy'.

The phenomenological tradition, like any other philosophical tradition, spans many different positions and perspectives. This point also holds true for its treatments and analyses of consciousness. Like analytic philosophy, phenomenology offers not one

but many accounts of consciousness. The following discussion, therefore, is by necessity selective. Husserl's analyses are the main reference point and the discussion focuses on what we believe to be some of the most important, influential, and enduring proposals about consciousness to have emerged from these analyses and their subsequent development in the phenomenological tradition.¹ Furthermore, in recent years a new current of phenomenological philosophy has emerged in Europe and North America, one that goes back to the source of phenomenology in Husserl's thought, but addresses issues of concern to contemporary analytic philosophy of mind, philosophy of psychology, and cognitive science (see Petitot, Varela, Pachoud & Roy, 1999, and the new journal Cognitive Sciences). This Phenomenology and the important phenomenological research also informs our discussion.² Accordingly, after introducing

¹ For a recent discussion of the unity of the phenomenological tradition, see Zahavi (2006).

An important forerunner of the current interest in the relation between phenomenology and cognitive science is the work of Hubert Dreyfus (1982). Dreyfus has been a pioneer in bringing the phenomenological tradition into the heartland of cognitive science through his important critique of artificial intelligence (Dreyfus, 1991) and his groundbreaking studies on skillful knowledge and action (Dreyfus, 2002; Dreyfus & Dreyfus, 1982). Yet this work is also marked by a peculiar (mis)interpretation and use of Husserl. Dreyfus presents Husserl's phenomenology as a form of representationalism that anticipates cognitivist and computational theories of mind. He then rehearses Heidegger's criticisms of Husserl thus understood and deploys them against cognitivism and artificial intelligence. Dreyfus reads Husserl largely through a combination of Heidegger's interpretation and a particular analytic philosophical (Fregean) reconstruction of one aspect of Husserl's thought (the representationalist interpretation of the noema: see Section 3 below). Thus, Husserlian phenomenology as Dreyfus presents it to the cognitive science and analytic philosophy of mind community is a problematic interpretive construct and should not be taken at face value. For a while Dreyfus's interpretation functioned as a received view in this community of Husserl's thought and its relation to cognitive science. This interpretation has since been

some features of the phenomenological method of investigation in Section 2, we focus in Sections 3-7 on the following topics relevant to cognitive science and the philosophy of mind: intentionality, self-awareness and the first-person perspective, time-consciousness, embodiment, and intersubjectivity.

2. Method

Phenomenology grows out of the recognition that we can adopt, in our own first-person case, different mental attitudes or stances towards the world, life, and experience. In everyday life we are usually straightforwardly immersed in various situations and projects, whether as specialists in one or another form of scientific, technical, or practical knowledge, or as colleagues, friends, and members of families and communities. Besides being directed towards more-or-less particular, 'thematic' matters, we are also overall directed towards the world as the unthematic horizon of all our activities (Husserl, 1970,

seriously challenged by a number of Husserl scholars and philosophers (see Zahavi, 2003a, 2004, for further discussion; see also Thompson, 2007). These studies have argued that (i) Husserl does not subscribe to a representational theory of mind; (ii) Husserl is not a methodological solipsist (see Section 2); (iii) Husserl does not assimilate all intentionality to object-directed intentionality (see Section 3); (iv) Husserl does not treat the 'background' of object-directed intentional experiences as simply a set of beliefs understood as mental representations (see Section 3); and (v) Husserl does not try to analyze the 'lifeworld' into a set of sedimented background assumptions or hypotheses (equivalent to a system of frames in artificial intelligence). In summary, although Dreyfus is to be credited for bringing Husserl into the purview of cognitive science, it is important to go beyond his interpretation and to reevaluate Husserl's relationship to cognitive science on the basis of a thorough assessment of his life's work. This reevaluation is already underway (see Petitot, Varela, Pachoud & Roy, 1999) and can be seen as part of a broader reappropriation of phenomenology in contemporary thought.

p. 281). Husserl calls this attitude of being straightforwardly immersed in the world 'the natural attitude', and he thinks it is characterized by a kind of unreflective 'positing' of the world as something existing 'out there' more or less independently of us. The 'phenomenological attitude', on the other hand, arises when we step back from the natural attitude, not to deny it, but in order to investigate the very experiences it comprises. If such an investigation is to be genuinely philosophical, then it must strive to be critical and not dogmatic, and therefore cannot take the naïve realism of the natural attitude for granted. Yet to deny this realistic attitude would be equally dogmatic. The realistic 'positing' of the natural attitude must rather be suspended, neutralized, or put to one side, so that it plays no role in the investigation. In this way, we can focus on the experiences that sustain and animate the natural attitude, but in an open and nondogmatic manner. We can investigate experience in the natural attitude without being prejudiced by the natural attitude's own unexamined view of things. This investigation should be critical and not dogmatic, shunning metaphysical and scientific prejudices. It should be guided by what is actually given to experience, rather than by what we expect to find given our theoretical commitments. Yet how exactly is such an investigation to proceed? What exactly are we supposed to investigate? Husserl's answer is deceptively simple: Our investigation should turn its attention toward the givenness or appearance of reality, that is, it should focus on the way in which reality is given to us in experience. We are to attend to the world strictly as it appears, the world as it is phenomenally manifest. Put another way, we should attend to the modes or ways in which things appear to us. We thereby attend to things strictly as correlates of our experience, and the focus of our investigation becomes the correlational structure of our subjectivity and the

appearance or disclosure of the world.³

The philosophical procedure by which this correlational structure is investigated is known as the *phenomenological reduction*. 'Reduction' in this context does not mean replacing or eliminating one theory or model in favour of another taken to be more fundamental. It signifies rather a 'leading back' (*re-ducere*) or redirection of thought away from its unreflective and unexamined immersion in experience of the world to the way in which the world manifests itself to us. To redirect our interest in this way does not mean we doubt the things before us or somehow try to turn away from the world to look elsewhere. Things remain before us, but we envisage them in a new way, namely, strictly as they appear to us. Thus, everyday things available to our perception are not doubted or considered as illusions when they are 'phenomenologically reduced', but instead are envisaged and examined simply and precisely *as perceived* (and similarly for remembered things as remembered, imagined things as imagined, and so on). In other words, once we adopt the phenomenological attitude, we are interested not in *what* things are in themselves, in some naïve, mind-independent or theory-independent sense, but rather in exactly *how* they appear, and thus as strict relational correlates of our

³ Does Husserl thereby succumb to the so-called 'philosophical myth of the given'? This is a difficult and complicated question and space prevents us from addressing it here. There is not one but several different notions of the 'given' in philosophy, and Husserl's thought developed considerably over the course of his life, such that he held different views at different times regarding what might be meant by the 'given'. Suffice it to say that it is mistaken to label Husserl as a philosopher of the 'given' in the sense originally targeted by Wilfrid Sellars, for two main reasons: First, the given in the phenomenological sense is not non-intentional sense-data, but the phenomenal world as disclosed by consciousness. Second, the phenomenality of the world is not understandable apart from the constitutive relation consciousness bears to it. For recent discussions of some of these issues see Botero (1999) and Roy (2003).

experience.

The phenomenological reduction, in its full sense, is a rich mode of analysis comprising many steps. Two main ones are crucial. The first leads back from the natural attitude to the phenomenological attitude by neutralizing the realistic positing of the natural attitude and then orienting attention toward the disclosure or appearance of reality to us. The second leads from this phenomenological attitude to a more radical kind of philosophical attitude. Put another way, this step leads from phenomenology as an empirical, psychological attitude (phenomenological psychology) to phenomenology as a 'transcendental' philosophical attitude (transcendental phenomenology).

'Transcendental' is used here in its Kantian sense to mean an investigation concerned with the *modes or ways in which objects are experienced and known*, and the a priori conditions for the possibility of such experience and knowledge. Husserl casts these two aspects of transcendental inquiry in a specific form, which is clearly related to but nonetheless different from Kant's (see Steinbock, 1995, pp. 12-15). Two points are important here. First, transcendental phenomenology focuses not on *what things are*, but on the *ways in which things are given*. For Husserl, this means focusing on phenomena (appearances) and the senses or meanings they have for us, and asking how these meaningful phenomena are 'constituted'. 'Constitution' does not mean fabrication or creation; the mind does not fabricate the world. To constitute, in the technical phenomenological sense, means to bring to awareness, to present, or to disclose. The mind brings things to awareness; it discloses and presents the world. Stated in a classical phenomenological way, the idea is that objects are disclosed or made available to experience in the ways they are thanks to how consciousness is structured. Things show up, as it were, having the features they do, because of how they are disclosed and brought

to awareness, given the structure of consciousness. Such constitution is not apparent to us in everyday life, but requires systematic analysis to discern. Consider, for example, our experience of time. Our sense of the present moment as both simultaneously opening into the immediate future and slipping away into the immediate past depends on the formal structure of our consciousness of time. The present moment manifests as having temporal breadth, as a zone or span of actuality, instead of as an instantaneous flash, thanks to the way our consciousness is structured. Second, to address this constitutional problem of how meaningful phenomena are brought to awareness or disclosed, transcendental phenomenology tries to uncover the invariant formal principles by which experience necessarily operates in order to be constitutive. A fundamental example of this type of principle is the 'retentional-protentional' structure of time-consciousness, which we discuss in Section 5.

The purpose of the phenomenological reduction, therefore, contrary to many misunderstandings, is neither to exclude the world from consideration nor to commit one to some form of methodological solipsism. Rather, its purpose is to enable one to explore and describe the spatiotemporal world as it is given. For Husserl, the phenomenological reduction is meant as a way of maintaining this radical difference between philosophical reflection on phenomenality and other modes of thought.

Henceforth, we are no longer to consider the worldly object naïvely; rather, we are to focus on it precisely as a correlate of experience. If we restrict ourselves to that which shows itself (whether in straightforward perception or a scientific experiment), and if we focus specifically on that which tends to be ignored in daily life (because it is so familiar), namely, on phenomenal manifestation as such, the sheer appearances of things, then we cannot avoid being led back (*re-ducere*) to subjectivity. Insofar as we are

confronted with the appearance of an object, that is, with an object as presented, perceived, judged, or evaluated, we are led back to the intentional structures to which these modes of appearance are correlated. We are led to the intentional acts of presentation, perception, judgement, and evaluation, and thereby to the subject (or subjects), in relation to whom the object as appearing must necessarily be understood. Through the phenomenological attitude we thus become aware of the givenness of the object. Yet the aim is not simply to focus on the object exactly as it is given, but also on the subjective side of consciousness. We thereby become aware of our subjective accomplishments, specifically the kinds of intentionality that must be in play in order for anything to appear as it does. When we investigate appearing objects in this way, we also disclose ourselves as 'datives of manifestation' (Sokolowski, 2000), as those to whom objects appear.

As a procedure of working back, as it were, from the objects of experience—as given to perception, memory, imagination, and so on—to the acts whereby one is aware of these objects—acts of perceiving, remembering, imagining, and so on—the phenomenological reduction has to be performed in the first person. As with any such procedure, it is one thing to describe its general theoretical character and another to describe it pragmatically, the concrete steps by which it is carried out. The main methodical step crucial for the phenomenological reduction Husserl calls the *epoché*. This term comes originally from Greek skepticism, where it means to refrain from judgement, but Husserl adopted it as a term for the 'suspension', 'neutralization', or 'bracketing' of both our natural 'positing' attitude (see above) and our theoretical beliefs or assertions (scientific or philosophical) about 'objective reality'. From a more concrete and situated first-person perspective, however, the epoché can be seen as a practiced

mental gesture of shifting one's attention to how the object appears and thus to one's experiencing of the object: "Literally, the epoché corresponds to a gesture of suspension with regard to the habitual course of one's thoughts, brought about by an interruption of their continuous flowing... As soon as a mental activity, a thought anchored to the perceived object alone, turns me away from the observation of the perceptual act to reengage me in the perception of the object, I bracket it" (Depraz, 1999, pp. 97-98). The aim of this bracketing is to return one's attention to the act of experiencing correlated to the object, thereby sustaining the phenomenological reduction: "in order that the reduction should always be a living act whose freshness is a function of its incessant renewal in me, and never a simple and sedimented habitual state, the reflective conversion [of attention] has to be operative at every instant and at the same time permanently sustained by the radical and vigilant gesture of the *epoché*" (Depraz, 1999, p. 100).

One can discern a certain ambivalence in the phenomenological tradition regarding the theoretical and practical or existential dimensions of the epoché. On the one hand, Husserl's great concern was to establish phenomenology as a new philosophical foundation for science, and so the epoché in his hands served largely as a critical tool of theoretical reason.⁴ On the other hand, because Husserl's theoretical project was based on

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⁴ This sense of the epoché is well put by the noted North American and Indian phenomenologist J. N. Mohanty (1989, pp. 12-13): "I need not emphasize how relevant and, in fact, necessary is the method of phenomenological epoche for the very possibility of genuine description in philosophy. It was Husserl's genius that he both revitalized the descriptive method for philosophy and brought to the forefront the method of epoche, without which one cannot really get down to the job. The preconceptions have to be placed within brackets, beliefs suspended, before philosophy can begin to confront phenomena as

a radical reappraisal of experience as the source of meaning and knowledge, it necessitated a constant return to the patient, analytic description of lived experience through the phenomenological reduction. This impulse generated a huge corpus of careful phenomenological analyses of numerous different dimensions and aspects of human experience—the perceptual experience of space (Husserl, 1997), kinesthesis and the experience of one's own body (Husserl, 1989, 1997), time-consciousness (Husserl, 1991), affect (Husserl, 2001), judgement (Husserl, 1975), imagination and memory (Husserl, 2006), and intersubjectivity (Husserl, 1973), to name just a few. Nevertheless, the epoché as a practical procedure—as a situated practice carried out in the first-person by the phenomenologist—has remained strangely neglected in the phenomenological literature, even by so-called existential phenomenologists such as Heidegger and Merleau-Ponty, who took up and then recast in their own ways the method of the phenomenological reduction (see Heidegger, 1982, pp. 19-23; Merleau-Ponty, 1962, pp. xi-xiv). For this reason, one new current in phenomenology aims to develop more explicitly the pragmatics of the epoché as a 'first-person method' for investigating consciousness (Depraz, 1999; Depraz, Varela & Vermersch, 2003; Varela & Shear 1999). This pragmatic approach has also compared the epoché to first-person methods in other domains, such as contemplative practice (Depraz, Varela & Vermersch, 2003), and explored the relevance of first-person methods for producing more refined first-person

phenomena. This again is not an instantaneous act of suspending belief in the world or of directing one's glance towards the phenomena as phenomena, but involves a strenuous effort at recognizing preconceptions as preconceptions, at unraveling sedimented interpretations, at getting at presuppositions which may pretend to be self-evident truths, and through such processes aiming asymptotically at the prereflective experience."

reports in experimental psychology and cognitive neuroscience (Varela, 1996; Lutz & Thompson, 2003). This latter endeavour is central to the research programme known as 'neurophenomenology', introduced by Francisco Varela (1996, 1999) and developed by other researchers (Lloyd, 2002, 2003; Lutz & Thompson, 2003; Rainville, 2005; Thompson, 2007; Thompson, Lutz, and Cosmelli, 2005; see also Cosmelli, Lachaux, & Thompson, this volume; and Lutz, Dunne & Davidson, this volume).

3. Intentionality

Implicit in the foregoing treatment of phenomenological method is the phenomenological concept of *intentionality*. According to Husserlian phenomenology, consciousness is intentional, in the sense that it 'aims toward' or 'intends' something beyond itself. This sense of 'intentional' should not be confused with the more familiar sense of having a purpose in mind when one acts, which is only one kind of intentionality in the phenomenological sense. Rather, 'intentionality' is a generic term for the pointing-beyond-itself proper to consciousness (from the Latin *intendere*, which once referred to drawing a bow and aiming at a target).

Phenomenologists distinguish different types of intentionality. In a narrow sense, intentionality is defined as object-directedness. In a broader sense, which covers what Husserl (2001, p. 206) and Merleau-Ponty (1962, p. xviii) called 'operative intentionality' (see below), intentionality is defined as openness toward otherness (or 'alterity'). In both cases, the emphasis is on denying that consciousness is self-enclosed.

Object-directedness characterizes almost all of our experiences, in the sense that in having them we are exactly conscious *of* something. We do not merely love, fear, see, or judge; we love, fear, see, or judge *something*. Regardless of whether we consider a

perception, a thought, a judgement, a fantasy, a doubt, an expectation, a recollection, and so on, these diverse forms of consciousness are all characterized by the intending of an object. In other words, they cannot be analyzed properly without a look at their objective correlates, that is, the perceived, the doubted, the expected, and so forth. The converse is also true: The intentional object cannot be analyzed properly without a look at its subjective correlate, the intentional act. Neither the intentional object nor the mental act that intends it can be understood apart from the other.

Phenomenologists call this act-object relation the 'correlational structure of intentionality'. 'Correlational' does not mean the constant conjunction of two terms that could be imagined to exist apart, but the necessary structural relation of mental act and intended object. Object-directed intentional experiences necessarily comprise these two inseparable poles. In Husserlian phenomenological language these two poles are known as the 'noema' (the object as experienced) and the 'noesis' (the mental act that intends the object).

There has been a huge amount of scholarly discussion about the proper way to interpret the Husserlian notion of the noema (see Drummond, 2003, for an overview). The discussion concerns the relation between the *object-as-intended* (the noema) and the *object-that-is-intended* (the object itself)—the wine bottle-as-perceived (as felt and seen) and the bottle itself. According to the representationalist interpretation, the noema is a type of representational entity, an ideal sense or meaning, that mediates the intentional relation between the mental act and the object. On this view, consciousness is directed toward the object by means of the noema, and thus achieves its openness to the world only in virtue of the representational noema. According to the rival nonrepresentationalist interpretation, the noema is not any intermediate, representational entity; the noema is the

object itself, but the object considered phenomenologically, that is, precisely as experienced. In other words, *the object-as-intended is the object-that-is-intended*, abstractly and phenomenologically considered, namely, in abstraction from the realistic positing of the natural attitude and strictly as experientially given. The noema is thus graspable only in a phenomenological or transcendental attitude. This view rejects the representationalism of the former view. Consciousness is intrinsically self-transcending, and accordingly does not achieve reference to the world in virtue of intermediate ideal entities that bestow intentionality upon it. Experiences are intrinsically intentional (see Searle, 1983, for a comparable claim in the analytic tradition). Their being is constituted by being *of* something else. It would take us too far afield to review the twists and turns of this debate, so we shall simply state for the record that for a variety of reasons we think the representationalist interpretation of the noema is mistaken and the nonrepresentationalist interpretation is correct (see Zahavi, 2003a, pp. 53-68; Zahavi, 2004).

We have been considering object-directed intentionality, but many experiences are not object-directed—for example, feelings of pain and nausea, and moods such as anxiety, depression, and boredom. Philosophers whose conception of intentionality is limited to object-directedness deny that such experiences are intentional (e.g., Searle, 1983). Phenomenologists, however, in distinguishing between intentionality as object-directedness and intentionality as openness, have a broader conception. It is true that pervasive moods such as sadness, boredom, nostalgia, and anxiety must be distinguished from intentional feelings such as the desire for an apple or the admiration for a particular person. Nevertheless, moods are not without a reference to the world. They do not enclose us within ourselves, but are lived through as pervasive atmospheres that deeply

influence the way the world is disclosed to us. Moods such as curiosity, nervousness, or happiness disclose our embeddedness in the world and articulate or modify our existential possibilities. As Heidegger argued, moods, rather then being merely attendant phenomena, are fundamental forms of disclosure: "Mood has always already disclosed being-in-the-world as a whole and first makes possible directing oneself toward something" (Heidegger, 1996, p. 129).

What about pain? Sartre's classic analysis in *Being and Nothingness* is illuminating in this case. Imagine that you are sitting late a night trying to finish reading a book. You have been reading most of the day and your eyes hurt. How does this pain originally manifest itself? According to Sartre, not initially as a thematic object of reflection, but by influencing the way in which you perceive the world. You might become restless, irritated, and have difficulties in focusing and concentrating. The words on the page might tremble and quiver. The pain is not yet apprehended as an intentional object, but that does not mean that it is either cognitively absent or unconscious. It is not yet reflected-upon as a psychic object, but given rather as a vision-in-pain, as an affective atmosphere that influences your intentional interaction with the world (Sartre 1956, pp. 332-333).

Another important part of the phenomenological account of intentionality is the distinction among signitive (linguistic), pictorial, and perceptual intentionalities (Husserl, 2000). I can talk about a withering oak; I can see a detailed drawing of the oak; and I can perceive the oak myself. These different ways to intend an object are not unrelated. According to Husserl, there is a strict hierarchical relation between them, in the sense that they can be ranked according to their ability to give us the object as directly, originally, and optimally as possible. The object can be given more or less directly, that is, it can be

more or less present. One can also speak of different epistemic levels. The lowest and most empty way in which the object can appear is in the signitive acts. These (linguistic) acts certainly have a reference, but apart from that the object is not given in any fleshed-out manner. The pictorial acts have a certain intuitive content, but like the signitive acts, they intend the object indirectly. Whereas the signitive acts intend the object via a contingent representation (a linguistic sign), the pictorial acts intend the object via a representation (picture) that bears a certain similarity or projective relation to the object. It is only the perception that gives us the object directly. This is the only type of intention that presents the object in its bodily presence (*leibhaftig*).

Recollection and imagination are two other important forms of object-directed intentionality (empathy is a third: see Section 7). These types are mediated, that is, they intend their objects by way of other, intermediate mental activities, rather than directly, as does perception. In recollection, I remember the withering oak (the object itself) by means of re-presenting (reproducing or reenacting) a past perception of the oak. In imagination, I can either imagine the withering oak (the actual tree) or I can imagine a non-existent oak in the sense of freely fantasizing a different world. Either way imagination involves re-presenting to myself a possible perceptual experience of the oak. Yet, in imagination, the assertoric or 'positing' character of this (re-presented) perceptual experience posits its object as actually there (regardless of whether the experience is veridical), imagination does not. In recollection, by contrast, this assertoric or positing feature of the experience is not neutralized, but remains in play, because the perception reproduced in the memory is represented as having actually occurred in the past. Husserl thus describes perception and recollection as positional (assertoric) acts, whereas imagination is non-

positional (non-assertoric) (see Husserl, 2006, and Bernet, Kern, & Marbach, 1993, for an overview).

We thus arrive at another crucial distinction, the distinction between intentional acts of *presentation* (*Gegenwärtigung*) and of *re-presentation* (*Vergegenwärtigung*). According to standard usage in analytic philosophy of mind and cognitive science, the term 'representation' applies to any kind of mental state that has intentional content ('intentional content' and 'representational content' being used synonymously). In phenomenological parlance, on the other hand, 're-presentation' applies only to those types of mental acts that refer to their objects by way of intermediate mental activity, as in remembrance, imagination (imaging and fantasy), and pictorial consciousness (looking at a picture). Perception, by contrast, is not re-presentational, but presentational, because the object-as-experienced (the intentional object or objective correlate of the act) is 'bodily present' or there 'in flesh and blood' (regardless of whether the perceptual experience turns out to be veridical or not).

Perceptual intentionality can be further differentiated into, on the one hand, a thematic, explicit, or focal, object-directed mode of consciousness, and on the other hand, a non-reflective, tacit sensibility, which constitutes our primary openness to the world. This tacit sensibility, called 'operative [fungierende] intentionality', functions pre-reflectively, anonymously, and passively, without being engaged in any explicit cognitive acquisition. In this context it is important to distinguish between activity and passivity. One can be actively taking a position in acts of comparing, differentiating, judging, valuing, wishing, and so on. As Husserl (2001) points out, however, whenever one is active, one is also passive, because to be active is to react to something that has affected one. Every kind of active position-taking presupposes a prior and passive being affected.

Following Husserl one step further in his analysis, we can distinguish between *receptivity* and *affectivity*. Receptivity is taken to be the first, lowest, and most primitive type of intentional activity; it consists in responding to or paying attention to that which is affecting us passively. Even receptivity understood as a mere 'I notice' presupposes a prior 'affection' (meaning one's being *affectively influenced* or *perturbed*, not a feeling of fondness). Whatever becomes thematized (even as a mere noticing) must have been already affecting and stimulating one in an unheeded manner. Affectivity, however, is not a matter of being affected by an isolated, undifferentiated sense impression. If something is to affect us, impose itself on us, and arouse our attention, it must be sufficiently strong. It must be more conspicuous than its surroundings, and it must stand out in some way through contrast, heterogeneity, and difference. Thus, receptivity emerges from within a passively organized and structured field of affectivity.⁵

In summary, explicit, object-directed intentional experience arises against the background of a pre-cognitive, operative intentionality, which involves a dynamic interplay of affectivity and receptivity, and constitutes our most fundamental way of being open to the world.

4. Phenomenal Consciousness and Self-awareness

In contemporary philosophy of mind the term 'phenomenal consciousness' refers to mental states that have a subjective and experiential character. In Nagel's words, for a mental state to be (phenomenally) conscious is for there to be something it is like for the

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⁵ We can discern here another reason for not interpreting Husserl as a philosopher who relies on any simple or straightforward notion of an uninterrupted given in experience: Passive affection is not the reception of simple and unanalyzable sense impressions, but has a field structure.

subject to be in that state (Nagel, 1979). Various notions are employed to describe the properties characteristic of phenomenal consciousness—qualia, sensational properties, phenomenal properties, and the subjective character of experience—and there is considerable debate about the relation between these properties and other properties of mental states, such as their representational content or their being cognitively accessible to thought and verbal report ('access consciousness'). The examples used in these discussions are usually bodily sensations, such as pain, or perceptual experiences, such as the visual experience of colour. Much less frequently does one find discussion of the subjective character of emotion (feelings, affective valences, moods), to say nothing of memory, mental imagery, or thought.

According to Husserl, however, the phenomenal aspect of experience is not limited to sensory or even emotional states, but also characterizes conscious thought. In his *Logical Investigations*, Husserl (2000) argues that conscious thoughts have experiential qualities and that episodes of conscious thought are experiential episodes. Every intentional experience possesses two different, but inseparable 'moments' (i.e., dependent aspects or ingredients): (i) Every intentional experience is an experience of a specific type, be it an experience of judging, hoping, desiring, regretting, remembering, affirming, doubting, wondering, fearing, and so on. Husserl calls this aspect the *intentional quality* of the experience. (ii) Every intentional experience is also directed at or about something. He calls this aspect the *intentional matter* of the experience. Clearly, the same quality can be combined with different matters, and the same matter can be combined with different qualities. It is possible to doubt that 'the inflation will continue', doubt that 'the election was fair', or doubt that 'one's next book will be an international bestseller', precisely as it is possible to deny that 'the lily is white', to judge that 'the lily

is white', or to question whether 'the lily is white'. Husserl's distinction between the intentional matter and the intentional quality thus bears a certain resemblance to the contemporary distinction between propositional content and propositional attitudes (though it is important to emphasize that Husserl by no means took all intentional experiences to be propositional in nature; see Husserl, 1975). Nevertheless—and this is the central point—Husserl considered these cognitive differences to be also experiential differences. Each of the different intentional qualities has its own phenomenal character. There is an experiential difference between affirming and denying that Hegel was the greatest of the German idealists, as there is an experiential difference between expecting and doubting that Denmark will win the 2010 FIFA World Cup. What it is like to be in one type of intentional state is different from what it is like to be in another type of intentional state. Similarly, each of the different intentional matters has its own phenomenal character. To put it differently, a change in the intentional matter will entail a change in what it is like to undergo the experience in question. (This does not entail, however, that two experiences differing in what it is like to undergo them cannot intend the same object, nor that two experiences alike in this respect must necessarily intend the same object.) These experiential differences, Husserl argues, are not simply sensory differences.6

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⁶ When we think a certain thought, the thinking will often be accompanied by a non-vocalized utterance or aural imagery of the very string of words used to express the thought. At the same time, the thought will also frequently evoke certain mental images. It could be argued that the phenomenal qualities encountered in abstract thought are constituted by such imagery. Husserl makes clear in his *Logical Investigations*, however, that this attempt to deny that thought has any distinct phenomenality beyond such sensorial and imagistic phenomenality is problematic. There is a marked difference between what it is like to imagine

aurally a certain string of meaningless noise, and what it is like to imagine aurally the very same string while understanding and meaning something by it (Husserl 2000, I., pp. 193-194, II., p. 105). Because the phenomenality of the sensory content is the same in both cases, the phenomenal difference must be located elsewhere, namely, in the thinking itself. The case of homonyms and synonyms also demonstrate that the phenomenality of thinking and the phenomenality of aural imagery can vary independently of each other. As for the attempt to identify the phenomenal quality of thought with the phenomenal quality of visualization, a similar argument can be employed. Two different thoughts, say, 'Paris is the capital of France', and 'Parisians regularly consume baguettes' might be accompanied by the same visualization of baguettes, but what it is like to think the two thoughts remains different. Having demonstrated this much, Husserl then proceeds to criticize the view according to which the imagery actually constitutes the very meaning of the thought—that to understand what is being thought is to have the appropriate 'mental image' before one's inner eye (Husserl 2000, I., pp. 206-209). The arguments he employs bear striking resemblance to some of the ideas that were subsequently used by Wittgenstein (1999) in his Philosophical *Investigations*: (i) From time to time, the thoughts we are thinking, for instance 'every algebraic equation of uneven grade has at least one real root', will in fact not be accompanied by any imagery whatsoever. If the meaning were actually located in the 'mental images', the thoughts in question would be meaningless, but this is not the case. (ii) Frequently, our thoughts, for instance 'the horrors of World War I had a decisive impact on post-war painting', will in fact evoke certain visualizations, but visualizations of quite unrelated matters. To suggest that the meanings of the thoughts are to be located in such images is absurd. (iii) Furthermore, the fact that the meaning of a thought can remain the same although the accompanying imagery varies also precludes any straightforward identification. (iv) An absurd thought, like the thought of a square circle, is not meaningless, but cannot be accompanied by a matching image (a visualization of a square circle being impossible in principle). (v) Finally, referring to Descartes's famous example in the Meditations, Husserl points out that we can easily distinguish thoughts like 'a chiliagon is a many sided polygon', and 'a myriagon is a many sided polygon', although the imagery that accompanies both thoughts might be indistinguishable. Thus, as Husserl concludes, although imagery might function as an aid to the understanding, it is not what is understood; it does not constitute the meaning of the thought (Husserl 2000, I., p. 208).

In summary, every phenomenally conscious state, be it a perception, an emotion, a recollection, an abstract belief, and so forth, has a certain subjective character, a certain phenomenal quality, corresponding to what it is like to live through or undergo that state. This is what makes the mental state in question phenomenally conscious.

This experiential quality of conscious mental states, however, calls for further elucidation. Let us take perceptual experience as our starting point. Whereas the *object* of my perceptual experience is intersubjectively (publicly) accessible, in the sense that it can in principle be given to others in the same way it is given to me, the case is different with *my perceptual experience itself*. Whereas you and I can both perceive one and the same cherry, each of us has his own distinct perception of it, and we cannot share these perceptions, precisely as we cannot share each other's pains. You might certainly realize that I am in pain, and even empathize with me, but you cannot actually feel the pain the same way I do. This point can be formulated more precisely by saying that you have no access to the *first-personal givenness* of my experience. This first-personal quality of experience leads to the issue of self and self-awareness.

When one is directly and non-inferentially conscious of one's own occurrent thoughts, perceptions, feelings, or pains, they are characterized by a first-personal givenness that immediately reveals them as one's own. This first-personal givenness of experiential phenomena is not something incidental to their being, a mere varnish the experiences could lack without ceasing to be experiences. On the contrary, it is their first-personal givenness that makes the experiences *subjective*. To put it differently, their first-personal givenness entails a built-in self-reference, a primitive experiential self-referentiality. When I am aware of an occurrent pain, perception, or thought from the first-person perspective, the experience in question is given immediately and non-

inferentially as mine. I do not first scrutinize a specific perception or feeling of pain, and then identify it as mine. Accordingly, self-awareness cannot be equated with reflective (explicit, thematic, introspective) self-awareness, as claimed by some philosophers and cognitive scientists. On the contrary, reflective self-awareness presupposes a prereflective (implicit, tacit) self-awareness. Self-awareness is not something that comes about only at the moment I realize that I am (say) perceiving the Empire State Building, or realize that I am the bearer of private mental states, or refer to myself using the firstperson pronoun. Rather, it is legitimate to speak of a primitive but basic type of selfawareness whenever I am acquainted with an experience from a first-person perspective. If the experience in question, be it a feeling of joy, a burning thirst, or a perception of a sunset, is given in a first-personal mode of presentation to me, it is (at least tacitly) given as my experience, and can therefore count as a case of self-awareness. To be aware of one self is consequently not to apprehend a pure self apart from the experience, but to be acquainted with an experience in its first-personal mode of presentation, that is, from 'within'. Thus, the subject or self referred to is not something standing opposed to, apart from, or beyond experience, but is rather a feature or function of its givenness. Or to phrase it differently, it is this first-personal givenness of the experience that constitutes the most basic form of selfhood (Zahavi, 1999, 2005).

In summary, any (object-directed) conscious experience, in addition to being of or about its intentional object is pre-reflectively manifest to itself. To use another formulation, transitive phenomenal consciousness (consciousness-of) is also intransitive self-consciousness (see Kriegel, this volume). Intransitive self-consciousness is a primitive form of self-consciousness in the sense that (i) it does not require any subsequent act of reflection or introspection, but occurs simultaneously with awareness of

the object; (ii) does not consist in forming a belief or making a judgement; and (iii) is passive in the sense of being spontaneous and involuntary. According to some phenomenologists (e.g., Merleau-Ponty, 1962), this tacit self-awareness involves a form of non-objective bodily self-awareness, an awareness of one's lived body (*Leib*) or embodied subjectivity, correlative to experience of the object (see Section 6). The roots of such pre-reflective bodily self-awareness sink to the passive and anonymous level of the interplay between receptivity and affectivity constitutive of 'operative intentionality' (see Section 3).

Phenomenology thus corroborates certain proposals about consciousness coming from neuroscience. Theorists such as Panksepp (1999ba, 1998b) and Damasio (1999) have argued that neuroscience needs to explain both how the brain enables us to experience the world outside us and how it "also creates a sense of self in the act of knowing... how each of us has a sense of 'me'" (Parvizi and Damasio, 2001, pp. 136-137). In phenomenological terms, this second issue concerns the primitive sense of 'Inness' belonging to consciousness, known as 'ipseity' (see also Lutz, Dunne, and Davidson, this volume). As a number of cognitive scientists have emphasized, this core of self-awareness in consciousness is fundamentally linked to bodily processes of life-regulation, emotion, and affect, such that cognition and intentional action are emotive (Damasio, 1999; Panksepp 1998a, 1998b; Freeman, 2000). A promising line of collaboration between phenomenology and affective-cognitive neuroscience could therefore centre on the lived body as a way of deepening our understanding of subjectivity and consciousness (Thompson, 2007).

5. Temporality and Inner Time-consciousness

Why must an investigation of consciousness inevitably confront the issue of time? There are many reasons, of course, but in this section we will focus on two main ones. Firstly, experiences do not occur in isolation. The stream of consciousness comprises an ensemble of experiences that is unified both at any given time (synchronically) and over time (diachronically); therefore, we need to account for this temporal unity and continuity. In addition, we are able not only to recollect earlier experiences and recognize them as our own, but also to perceive enduring (i.e., temporally extended) objects and events; hence, we need to account for how consciousness must be structured in order for there to be such experiences of coherence and identity over time. Secondly, our present cognitive activities are shaped and influenced conjointly by both our past experiences and our future plans and expectations. Thus, if we are to do justice to the dynamic character of cognition, we cannot ignore the role of time.

In a phenomenological context, the term 'temporality' does not refer to objective, cosmic time, measured by an atomic clock, or to a merely subjective sense of the passage of time, although it is intimately related to the latter. Temporality, or 'inner time-consciousness', refers to the most fundamental, formal structure of the stream of consciousness (Husserl, 1991).

To introduce this idea, we can consider what phenomenologists call 'syntheses of identity' in the flow of experience. If I move around a tree in order to gain a fuller appreciation of it, then the tree's different profiles—its front, sides, and back—do not appear as disjointed fragments, but as integrated features belonging to one and the same treee. The synthesis that is a precondition for this integration is temporal in nature. Thus, time-consciousness must be regarded as a formal condition of possibility for the

perception of any object. Yet how must this experiential process be structured for identity or unity over time to be possible?

Phenomenological analyses point to the 'width' or 'depth' of the 'living present' of consciousness: Our experience of temporal enduring objects and events, as well as our experience of change and succession, would be impossible were we conscious only of that which is given in a punctual now, and were our stream of consciousness composed of a series of isolated now-points, like a string of pearls. According to Husserl (1991), the basic unit of temporality is not a 'knife-edge' present, but a 'duration-block' (to borrow William James's words; see James, 1981, p. 574), i.e., a temporal field that comprises all three temporal modes of present, past, and future. Just as there is no spatial object without a background, there is no experience without a temporal horizon. We cannot experience anything except on the background of what it succeeds and what we anticipate will succeed it. We can no more conceive of an experience empty of future than one empty of past. Three technical terms describe this temporal form of consciousness. There is (i) a 'primal impression' narrowly directed toward the now-phase of the object. The primal impression never appears in isolation and is an abstract component that by itself cannot provide us with a perception of a temporal object. The primal impression is accompanied by (ii) a 'retention', which provides us with a consciousness of the just-elapsed phase of the object, and by (iii) a 'protention', which in a more-or-less indefinite way intends the phase of the object about to occur. The role of the protention is evident in our implicit and unreflective anticipation of what is about to happen as experience progresses. That such anticipation belongs to experience is illustrated by the fact that we would be surprised if (say) the wax-figure suddenly moved or if the door we opened hid a stonewall. It makes sense to speak of surprise only in light of anticipation, and because

we can always be surprised, we always have a horizon of anticipation. The concrete and full structure of all lived experience is thus *primal impression-retention-protention*. Although the specific experiential contents of this structure from moment to moment progressively change, at any given moment this threefold structure is present (synchronically) as a unified whole. This analysis provides an account of the notion of the specious present that improves on that found in William James, C.D. Broad, and others (see Gallagher, 1998).

It is important to distinguish retention and protention, which are structural features of any conscious act, from recollection and expectation, understood as specific types of mental acts. There is a clear difference between, on the one hand, retaining notes that have just sounded and protending notes about to sound while listening to a melody, and on the other hand, remembering a past holiday or looking forward to the next vacation. Whereas recollection and expectation presuppose the work of retention and protention, protention and retention are intrinsic components of any occurrent experience one might have. Unlike recollection and expectation, they are passive (involuntary) and automatic processes that take place without our active or deliberate contribution. Finally, they are invariant structural features that make possible the temporal flow of consciousness as we know and experience it. In other words, they are a priori conditions of possibility of there being 'syntheses of identity' in experience at all.

Husserl's analysis of the structure of inner time-consciousness serves a double purpose. It is not only meant to explain how we can be aware of objects with temporal extension, but also how we can be aware of our own stream of experiences. To put it differently, Husserl's investigation is not only meant to explain how we can be aware of temporally extended units, but also how consciousness unifies itself across time.

Like bodily self-awareness, temporality and time-consciousness are rich in potential for collaborative study by phenomenology and cognitive science. Work by Francisco Varela (1999) in particular has shown that phenomenological analyses of time-consciousness can be profitably linked to neurodynamical accounts of the brain processes associated with the temporal flow of conscious experience (see also Cosmelli, Lachaux, & Thompson, this volume; and Thompson, 2007). This linkage between phenomenology and neurodynamics is central to the research programme of neurophenomenology, mentioned above.

6. Embodiment and Perception

Conscious experience involves one's body. Yet what exactly is the relationship between the two? It is obvious that we can perceive our own body by (say) visually inspecting our hands. It is less obvious that our bodily being constitutes our subjectivity and the correlative modes or ways in which objects are given to us.

The phenomenological approach to the role of the body in its constitution of subjective life is closely linked to the analysis of perception. Two basic points about perception are important here: (i) the intentional objects of perceptual experience are public spatiotemporal objects (not private mental images or sense-data); and (ii) such objects are always given only partially to perception and can never present themselves in their totality. On the one hand, perception purports to give us experience of public things, not private mental images. On the other hand, whatever we perceive is always perceived in certain ways and from a certain perspective. We see things, for instance, as having various spatial forms and visible qualities (lightness, colour, etc.), and we are able to distinguish between constancy and variation in appearance (the grass looks uniformly

green, but the shaded part looks dark, whereas the part in direct sunlight looks light). We see only one profile of a thing at any given moment, yet we do not see things as mere façades, for we are aware of the presence of the other sides we do not see directly. We do not perceive things in isolation; we see them in contexts or situations, in which they relate to and depend on each other and on dimensions of the environment in multifarious ways.

These invariant characteristics of perception presuppose what phenomenologists call the *lived body (Leib)*. Things are perceptually situated in virtue of the orientation they have to our perceiving and moving bodies. To listen to a string quartet by Schubert is to enjoy it from a certain perspective and standpoint, be it from the street, in the gallery, or in the first row. If something appears perspectivally, then the subject to whom it appears must be spatially related to it. To be spatially related to something requires that one be embodied. To say that we perceive only one profile of something while being aware of other possible profiles means that any profile we perceive points beyond itself to further possible profiles. Yet this reference of a given profile beyond itself is equally a reference to our ability to exchange this profile for another through our own free movement (tilting our head, manipulating an object in our hands, walking around something, etc.). Co-given with any profile and through any sequence of profiles is one's lived body as the 'zero point' or absolute indexical 'here', in relation to which any appearing object is oriented. One's lived body is not co-given as an intentional object, however, but as an implicit and practical 'I can' of movement and perception. We thus rejoin the point made earlier (Section 4) that any object-directed (transitive) intentional experience involves a non-object-directed (intransitive) self-awareness, here an intransitive bodily self-awareness. In short, every object-experience carries with it a tacit form of self-experience.

The role of bodily self-experience in perception can be phenomenologically described in much greater detail. One important topic is the role it plays in the constitution (i.e., the bringing to awareness or disclosure) of both objects and space for perception. Perspectival appearances of the object bear a certain relation to kinaesthetic situations of the body. When I watch a bird in flight, the bird is given in conjunction with a sensing of my eye and head movements; when I touch the computer keys, the keys are given in conjunction with a sensing of my finger movements. Husserl's 1907 lectures on Thing and Space (Husserl, 1997) discuss how this relation between perception and kinaesthesis (including proprioception) is important for the constitution of objects and space. To perceive an object from a certain perspective is to be aware (tacitly or prereflectively) that there are other co-existing but absent profiles of the object. These absent profiles stand in certain sensorimotor relations to the present profile: They can be made present if one carries out certain movements. In other words, the profiles are correlated with kinaesthetic systems of possible bodily movements and positions. If one moves this way, then that aspect of the object becomes visible; if one moves that way, then this aspect becomes visible. In Husserl's terminology, every perspectival appearance is kinaesthetically motivated. In the simple case of a motionless object, for instance, if the kinaesthetic experience (K_1) remains constant, then the perceptual appearance (A_1) remains constant. If the kinaesthetic experience changes (K_1) becomes K_2 , then the perceptual appearance changes in correlation with it $(A_1 \text{ becomes } A_2)$. There is thus an interdependency between kinaesthetic experiences and perceptual appearances: a given appearance (A_1) is not always correlated with the same kinaesthetic experience (e.g., K_1), but it must be correlated with some kinaesthetic experience or other. Turning now to the case of perceptual space, Husserl argues that different kinaesthetic systems of the body imply different perceptual achievements with regard to the constitution of space. One needs to distinguish among the oculomotor systems of one eye alone and of two eyes together, the cephalomotor system of head movements, and the system of the whole body as it moves towards, away from, and around things. These kinaesthetic systems are hierarchically ordered in relation to the visual field: The cephalomotor visual field contains a continuous multiplicity of oculomotor fields; the egocentric field of the body as a whole contains a continuous multiplicity of cephalomotor fields. This hierarchy also reflects a progressive disclosure of visual space: the eyes alone give only a two-dimensional continuum; head movements expand the field into a spherical plane at a fixed distance (like a planetarium); and movement of the body as a whole introduces distance, depth, and three-dimensional structure. It is the linkage between the kinaesthetic system of whole-body movements (approaching, retreating, and circling) and the corresponding perceptual manifold of profiles or perspectival appearances that fully discloses the three-dimensional space of visual perception.

Insofar as the body functions as the zero-point for perception and action, i.e., considered in its function as a bodily first-person perspective, the body recedes from experience in favour of the world. My body supplies me with my perspective on the world, and thus is first and foremost not an object on which I have a perspective. In other words, bodily awareness in perception is not in the first instance a type of object-consciousness, but a type of non-transitive self-awareness (see Section 4, and Kriegel, this volume). Although one can certainly experience one's body as an object (e.g., in a mirror), bodily self-awareness is more fundamentally an experience of one's body as a unified subjective field of perception and action. A full account of bodily experience thus reveals the body's double or ambiguous character as both a subjectively lived body (*Leib*)

and a physical (spatiotemporal) objective body (*Körper*).

The phenomenological analyses of embodiment and perception summarized in this section are relevant to current trends in cognitive science. In recent years cognitive scientists have increasingly challenged the classical view that perception and action are separate systems. Although phenomenologists have long emphasized the constitutive role of motor action in perceptual experience, cognitive scientists often seem unaware of this important body of research (but see Rizzolatti et al., 1997, for an exception). For example, neuropsychologists Milner and Goodale write in their influential book, The Visual Brain in Action: "For most investigators, the study of vision is seen as an enterprise that can be conducted without any reference whatsoever to the relationship between visual inputs and motor outputs. This research tradition stems directly from phenomenological intuitions that regard vision purely as a perceptual phenomenon" (Milner & Goodale 1995, p. 13). It can be seen from our discussion in this section, however, that it is important to distinguish between uncritical commonsensical intuitions and the critical examination of perceptual experience found in the phenomenological tradition. The intuitions Milner and Goodale target do not belong to phenomenology. On the contrary, Husserl's and Merleau-Ponty's analyses of the relation between perception and kinaesthesis clearly indicate that perception is also a motor phenomenon. Indeed, these analyses anticipate the so-called 'dynamic sensorimotor approach' to perception (Hurley, 1998; O'Regan & Noë, 2001; Hurley & Noë, 2003; Noë, 2004). Rather than looking to the intrinsic properties of neural activity in order to understand perceptual experience, this approach looks to the dynamic sensorimotor relations among neural activity, the body, and the world. This approach has so far focused mainly on the phenomenal qualities of perceptual experience, but has yet to tackle the perceptual constitution of space, intransitive bodily self-awareness, or the relationship between perception and affectively motivated attention, all longstanding topics in phenomenology. Further development of the dynamic sensorimotor approach might therefore benefit from the integration of phenomenological analyses of embodiment and perception (see Thompson, 2007).

7. Intersubjectivity

For many philosophers, the issue of intersubjectivity is equated with the 'problem of other minds': How can one know the mental states of others, or even that there are any other minds at all (see Dancy, 1985, pp. 67-68)? One classical attempt to deal with this problem takes the form of trying to justify our belief in other minds on the basis of the following argument from analogy: The only mind I have direct access to is my own. My access to the mind of another is always mediated by my perception of the other's bodily movements, which I interpret as intentional behaviour (i.e., as behaviour resulting from internal mental states). But what justifies me in this interpretation? How can the perception of another person's bodily movements provide me with information about his mind, such that I am justified in viewing his movements as intentional behaviour? In my own case, I can observe that I have experiences when my body is causally influenced, and that these experiences frequently bring about certain actions. I observe that other bodies are influenced and act in similar manners, and I therefore infer by analogy that the behaviour of foreign bodies are associated with experiences similar to those I have myself Although this inference does not provide me with indubitable knowledge about others, it gives me reason to believe in their existence and to interpret their bodily movements as meaningful behaviour.

This way of conceptualizing self and other can also be discerned, to varying degrees, in certain approaches to social cognition in cognitive science. Thus, both certain versions of the 'theory-theory' (e.g., Gopnik, 1993) and the 'simulation-theory' (e.g., Goldman, 2000) have crucial features in common with the traditional argument from analogy. According to the theory-theory, normal human adults possess a commonsense or folk-psychological 'theory of mind' that they employ to explain and predict human behaviour. Advocates of the theory-theory consider this folk-psychological body of knowledge to be basically equivalent to a scientific theory: Mental states are unobservable entities (like quarks), and our attribution of them to each other involves causal-explanatory generalizations (comparable in form to those of empirical science) that relate mental states to each other and to observable behaviour. According to the simulation-theory, on the other hand, 'mind-reading' depends not on the possession of a tacit psychological theory, but on the ability to mentally 'simulate' another person—to use the resources of one's own mind to create a model of another person and thereby identify with that person, projecting oneself imaginatively into his or her situation (Goldman, 2000). In either case, intersubjectivity is conceptualized as a cognitively mediated relation between two otherwise isolated subjects. Both theories take intersubjective understanding to be a matter of how one represents unobservable, inner mental states on the basis of outward behaviour (what they disagree about is the nature of the representations involved). Thus, both theories foster a conception of the mental as an inner realm essentially different from outward behaviour.

Phenomenologists do not frame the issue of intersubjectivity in this way, for they reject the presuppositions built into the problem of other minds (see Zahavi, 2001a, 2001b). Two presuppositions in particular are called into question. The first is that one's

own mind is given to one as a solitary and internal consciousness. The problem with this assumption is that our initial self-acquaintance is not with a purely internal, mental self, for we are embodied and experience our own exteriority, including our bodily presence to the other. The second assumption is that, in perceiving the other, all we ever have direct access to is the other's bodily movements. The problem with this assumption is that what we directly perceive is intentional or meaningful behaviour—expression, gesture, and action—not mere physical movement that gets interpreted as intentional action as a result of inference. Thus, on the one hand, one's own subjectivity is not disclosed to oneself as a purely internal phenomenon, and on the other hand, the other's body is not disclosed as a purely external phenomenon. Put another way, both the traditional problem of other minds and certain cognitive-scientific conceptions of 'mind-reading' rest on a deeply problematic conception of the mind as essentially inner, the body as essentially outer, and intentional behaviour as arising from a purely contingent and causal connection between these two spheres.

Phenomenological treatments of intersubjectivity start from the recognition that, in the encounter with the other, one is faced neither with a mere body nor a hidden psyche, but with a unified whole. This unified whole is constituted by the *expressive* relation between mental states and behaviour, a relation that is stronger than that of a mere contingent, causal connection, but weaker than that of identity (for clearly not every mental state need be overtly expressed). In other words, expression must be more than simply a bridge supposed to close the gap between inner mental states and external bodily behaviour; it must be a direct manifestation of the subjective life of the mind (see Merleau-Ponty, 1962, Part One, Chapter 6). Thus, one aspect of the phenomenological problem of intersubjectivity is to understand how such manifestation is possible.

Phenomenologists insist that we need to begin from the recognition that the body of the other presents itself as radically different from any other physical entity, and accordingly that our perception of the other's bodily presence is unlike our perception of physical things. The other is given in its bodily presence as a *lived body* according to a distinctive mode of consciousness called *empathy* (see Husserl, 1989; Stein, 1989). Empathy is a unique form of intentionality, in which one is directed towards the other's lived experiences. Thus, any intentional act that discloses or presents the other's subjectivity from the second-person perspective counts as empathy. Although empathy, so understood, is based on perception (of the other's bodily presence) and can involve inference in difficult or problematic situations (where one has to work out how another person feels about something), it is not reducible to some additive combination of perception and inference. The phenomenological conception of empathy thus stands opposed to any theory according to which our primary mode of understanding others is by perceiving their bodily behaviour and then inferring or hypothesizing that their behaviour is caused by experiences or inner mental states similar to those that apparently cause similar behaviour in us. Rather, in empathy, we experience the other directly as a person, as an intentional being whose bodily gestures and actions are expressive of his or her experiences or states of mind (for further discussion, see Thompson, 2001, 2005, 2007).

Phenomenological investigations of intersubjectivity go beyond intentional analyses of empathy, however, in a variety of ways (see Zahavi, 2001b). Another approach acknowledges the existence of empathy, but insists that our ability to encounter others cannot simply be taken as a brute fact. Rather, it is conditioned by a form of alterity (otherness) internal to the embodied self. When my left hand touches my right, or

when I perceive another part of my body, I experience myself in a manner that anticipates both the way in which an other would experience me and the way in which I would experience an other. My bodily self-exploration thus permits me to confront my own exteriority. According to Husserl (1989), this experience is a crucial precondition for empathy: It is precisely the unique subject-object status of the body, the remarkable interplay between ipseity (I-ness) and alterity characterizing body-awareness, that provides me with the means of recognizing other embodied subjects.

Still another line of analysis goes one step further by denying that intersubjectivity can be reduced to any factual encounter between two individuals, such as the face-to-face encounter (see Zahavi, 2001a, 2001b). Rather, such concrete encounters presuppose the existence of another, more fundamental form of intersubjectivity that is rooted a priori in the very relation between subjectivity and world. Heidegger's (1996) way of making this point is to describe how one always lives in a world permeated by references to others and already furnished with meaning by others. Husserl (1973) and Merleau-Ponty (1962) focus on the public nature of perceptual objects. The subject is intentionally directed towards objects whose perspectival appearances bear witness to other possible subjects. My perceptual objects are not exhausted in their appearance for me; each object always possesses a horizon of coexisting profiles, which although momentarily inaccessible to me, could be perceived by other subjects. The perceptual object as such, through its perspectival givenness, refers, as it were, to other possible subjects, and is for that very reason already intersubjective. Consequently, prior to any concrete perceptual encounter with another subject, intersubjectivity is already present as co-subjectivity in the very structure of perception.

Finally, there is a deep relation between intersubjectivity so understood and

objectivity. My experience of the world as objective is mediated by my experience of and interaction with other world-engaged subjects. Only insofar as I experience that others experience the same objects as myself, do I really experience these objects as objective and real. To put this point in phenomenological language, the objectivity of the world is intersubjectively constituted (i.e., brought to awareness or disclosed). This is an idea not foreign to Anglo-American philosophy, as the following remark by Donald Davidson indicates: "A community of minds is the basis of knowledge; it provides the measure of all things. It makes no sense to question the adequacy of this measure, or to seek a more ultimate standard" (Davidson 2001, p. 218).

8. Conclusion

Phenomenology and analytic philosophy are the two most influential philosophical movements of the twentieth century. Unfortunately, their relationship in the past was not one of fruitful cooperation and exchange, but ranged from disregard to outright hostility. To the extent that cognitive science (especially in North America) has been informed by analytic philosophy of mind, this attitude was at times perpetuated between phenomenology and cognitive science.

In recent years, however, this state of affairs has begun to change and is rapidly coming to seem outdated, as this volume itself indicates. Conferences on consciousness (such as the biannual 'Towards a Science of Consciousness' conference held in Tucson, Arizona, and the annual meetings of the Association for the Scientific Study of Consciousness) now routinely include colloquia informed by phenomenology alongside cognitive science and analytic philosophy. In 2001 there appeared a new journal, *Phenomenology and the Cognitive Sciences*. Other journals, such as *Consciousness and*

Cognition and the Journal of Consciousness Studies, include articles integrating phenomenological, cognitive-scientific, and analytic approaches to consciousness. Given these developments, the prospects for cooperation and exchange among these traditions in the study of consciousness now look very promising. To this end, in this chapter we have called attention to a number of related areas in which there is significant potential for collaborative research—intentionality, self-awareness, temporality, embodiment and perception, and intersubjectivity. We have also sketched a few ways of linking phenomenology and cognitive science in these areas in order to suggest some directions such research could take in the years ahead.

References

- Bernet, R. Kern, I. and Marbach, E. (1993). *An Introduction to Husserlian Phenomenology*. Evanston, IL: Northwestern University Press.
- Botero, J.-J. 1999. The immediately given as ground and background. In J. Petitot, F.J. Varela, B. Pachoud, and J.-M. Roy (eds.), *Naturalizing Phenomenology: Issues in Contemporary Phenomenology and Cognitive Science*, pp. 440-463. Stanford, CA: Stanford University Press.
- Damasio, A.R. 1999. The Feeling of What Happens: Body and Emotion in the Making of Consciousness. New York: Harcourt Brace.
- Dancy, J. 1985. An Introduction to Contemporary Epistemology. Oxford: Basil Blackwell.
- Davidson, D. 2001. *Subjective, intersubjective, objective*. Oxford: Oxford University Press.
- Depraz, N. 1999. The phenomenological reduction as praxis. *Journal of Consciousness*

- Studies 6: 95-110.
- Depraz, N., Varela, F.J., and Vermersch, P. 2003. *On Becoming Aware: A Pragmatics of Experiencing*. Amsterdam and Philadelphia, PA: John Benjamins Press.
- Dreyfus, H. 1982. Introduction. In H. Dreyfus and H. Harrison (eds.), *Husserl, Intentionality and Cognitive Science*. Cambridge, MA: The MIT Press.
- Dreyfus, H. 1991. What Computers Still Can't Do. Cambridge, MA: The MIT Press.
- Dreyfus, H. 2002. Intelligence without representation—Merleau-Ponty's critique of mental representation. *Phenomenology and the Cognitive Sciences* 1: 367-383.
- Dreyfus, H. and Dreyfus, S. 1982. *Mind over Machine*. New York: Free Press.
- Drummond, J.J. (2003). The structure of intentionality. In D. Welton, ed., *The New Husserl: A Critical Reader*, pp. 65-92. Bloomington and Indianapolis: Indiana University Press.
- Freeman, W.J. 2000. Emotion is essential to all intentional behaviors. In M.D. Lewis and I. Granic (eds.), *Emotion, Development, and Self-Organization. Dynamic Systems Approaches to Emotional Development*, pp. 209-235. Cambridge: Cambridge University Press.
- Gallagher, S. 1998, *The Inordinance of Time*. Evanston, IL: Northwestern University Press.
- Goldman, A.I. 2000. Folk psychology and mental concepts. *Protosociology* 14: 4-25.
- Gopnik, A. 1993. How we know our minds: The illusion of first-person knowledge of intentionality. *Behavioral and Brain Sciences* 16: 1-14.
- Heidegger, M. 1982. *The Basic Problems of Phenomenology*. Trans. A. Hofstadter. Bloomington, IN: Indiana University Press.
- Heidegger, M. 1996. Being and Time. Trans. J. Stambaugh. Albany, NY: State University

- of New York Press.
- Hurley, S.L. 1998. Consciousness in Action. Cambridge, MA: Harvard University Press.
- Hurley, S.L. and Noë, A. 2003. Neural plasticity and consciousness. *Biology and Philosophy* 18: 131-168.
- Husserl, E. 1973. Zur Phänomenologie der Intersubjektivität, Dreiter Teil: 1929-1935.

 Husserliana, vol. 15. The Hague: Martinus Nijhoff.
- Husserl, E. 1975. *Experience and Judgment*. Trans. J.S. Churchill. Evanston, IL: Northwestern University Press.
- Husserl, E. 1987. *Aufsätze und Vorträge* (1911-1921. Husserliana XXV. Dordrecht: Martinus Nijhoff.
- Husserl, E. 1989. *Ideas Pertaining to a Pure Phenomenological Philosophy and to a Phenomenological Philosophy, Second Book*, trans. R. Rojcewicz and A. Schuwer. Dordrecht: Kluwer Academic Publishers.
- Husserl, E. 1991. On the Phenomenology of the Consciousness of Internal Time (1893-1917), trans. J.B. Brough. Dordrecht: Kluwer Academic Publishers.
- Husserl, E. 1997. *Thing and Space: Lectures of 1907*. Trans. R. Rojcewicz. Dordrecht: Kluwer Academic Publishers.
- Husserl, E. 2000. *Logical Investigations I-II*. Trans. J. N. Findley. London: Routledge Press.
- Husserl, E. 2001. Analyses Concerning Passive and Active Synthesis. Lectures on Transcendental Logic, trans. A.J. Steinbock. Dordrecht: Kluwer Academic Publishers.
- Husserl, E. 2006. *Phantasy, Image Consciousness, and Memory* (1898-1925). Trans. J. B. Brough. Springer.

- James, W. 1981. *The Principles of Psychology*. Cambridge, MA: Harvard University Press.
- Lloyd, D. 2002. Functional MRI and the study of human consciousness. *Journal of Cognitive Neuroscience*, 14: 818-831.
- Lloyd, D. 2003. *Radiant Cool. A Novel Theory of Consciousness*. Cambridge, MA: The MIT Press/A Bradford Book.
- Lutz, A. and Thompson, E. 2003. Neurophenomenology: integrating subjective experience and brain dynamics in the neuroscience of consciousness. *Journal of Consciousness Studies* 10: 31-52.
- Merleau-Ponty, M. 1962. *Phenomenology of Perception*. Trans Colin Smith. London: Routledge Press.
- Milner, A.D. and Goodale, M.A. 1995. *The Visual Brain in Action*. New York: Oxford University Press.
- Mohanty, J.N. 1989. Transcendental Phenomenology. Oxford: Basil Blackwell.
- Moran, D. 2000. *Introduction to Phenomenology*. London: Routledge Press.
- Nagel, T. 1979. What is it like to be a bat? In T. Nagel, *Mortal Questions*, pp. 165-180. New York: Cambridge University Press.
- Noë, A. 2004. Action in Perception. Cambridge, MA: The MIT Press. Forthcoming.
- O'Regan, J.K. and Noë, A. 2001. A sensorimotor account of vision and visual consciousness. *Behavioral and Brain Sciences* 24: 939-1031.
- Panskepp, J. 1998a. Affective Neuroscience: The Foundations of Human and Animal Emotions. Oxford and New York: Oxford University Press.
- Panskepp, J. 1998b. The periconscious substrates of consciousness: affective states and the evolutionary origins of self. *Journal of Consciousness Studies* 5: 566-582.

- Parvizi, J. and Damasio, A. 2001. Consciousness and the brainstem. *Cognition* 79: 135-159.
- Petitot, J., Varela, F.J., Pachoud, B., and Roy, J.-M. 1999. *Naturalizing Phenomenology: Issues in Contemporary Phenomenology and Cognitive Science*. Stanford, CA:

 Stanford University Press.
- Rainville, P. 2005. Neurophénoménologie des états et des contenus de conscience dans l'hypnose et l'analgésie hypnotique. *Théologique* 12: 15-38.
- Rizzolatti, G., L. Fadiga, L., Fogassi, L., and Gallese, V. 1997. The space around us. Science 277: 190-191.
- Roy, J.-M. 2003. Phenomenological claims and the myth of the given. In E. Thompson, ed., *The Problem of Consciousness: New Essays in Phenomenological Philosophy of Mind. Canadian Journal of Philosophy*, supplementary volume 29, pp. 1-32. Calgary, AL: University of Alberta Press.
- Sartre, J.-P. 1956. *Being and Nothingness*. Translated by Hazel Barnes. New York: Philosophical Library.
- Searle, J.R. 1983. *Intentionality: An Essay in the Philosophy of Mind*. Cambridge: Cambridge University Press.
- Stein, E. 1989. *On the Problem of Empathy*, trans. Waltraut Stein. Washington, DC: ICS Publications.
- Steinbock, A. 1995. *Home and Beyond: Generative Phenomenology After Husserl*. Evanston, IL: Northwestern University Press.
- Stern, D.N. 1985/2000. *The Interpersonal World of the Intant*. Second edition. New York: Basic Books.
- Sokolowski, R. 2000. An Introduction to Phenomenology. Cambridge: Cambridge

- University Press.
- Thompson, E. 2001. Empathy and consciousness. In E. Thompson, ed., *Between Ourselves: Second-Person Issues in the Study of Consciousness*, pp. 1-32. Thorverton, UK: Imprint Academic. Also published in *Journal of Consciousness Studies* 8 (2001): 1-32.
- Thompson, E. 2005. Empathy and human experience. In J.D. Proctor, ed., *Science, Religion, and the Human Experience*, pp. 261-285. New York: Oxford University Press.
- Thompson, E. 2007. *Mind in Life: Biology, Phenomenology, and the Sciences of Mind.*Cambridge, MA: Harvard University Press.
- Thompson, E., Lutz, A., and Cosmelli, D. 2005. Neurophenomenology: an introduction for neurophilosophers. In A. Brook and K. Akins, eds., *Cognition and the Brain: The Philosophy and Neuroscience Movement*, pp. 40-97. New York and Cambridge: Cambridge University Press.
- Varela, F.J. 1996. Neurophenomenology: a methodological remedy for the hard problem. *Journal of Consciousness Studies* 3: 330-350.
- Varela, F.J. 1999. The specious present: a neurophenomenology of time consciousness.
 In J. Petitot, F.J. Varela, B. Pachoud, and J.-M. Roy (eds.), *Naturalizing Phenomenology: Issues in Contemporary Phenomenology and Cognitive Science*, pp. 266-314. Stanford, CA: Stanford University Press.
- Varela, F.J. and Shear, J. 1999. *The View from Within. First-Person Approaches to the Study of Consciousness*. Thorverton, UK: Imprint Academic.
- Wittgenstein, L. 1999. *Philosophical Investigations*. Third Edition. Trans. G.E.M. Anscombe. New Jersey: Prentice Hall.

- Zahavi, D. 1999. Self-awareness and Alterity. A Phenomenological Investigation. Studies in Phenomenology & Existential Philosophy. Northwestern University Press. Evanston
- Zahavi, D. 2001a. *Husserl and transcendental Intersubjectivity*. Series in Continental Thought 29. Ohio University Press. Athens.
- Zahavi, D. 2001b. Beyond empathy. phenomenological approaches to intersubjectivity. *Journal of Consciousness Studies* 8/5-7, 2001, 151-167.
- Zahavi, D. 2003a. Husserl's Phenomenology. Stanford, CA: Stanford University Press.
- Zahavi, D. 2004. Husserl's noema and the internalism-externalism debate. *Inquiry* 47: 42-66.
- Zahavi, D. 2005. Subjectivity and Selfhood: Investigating the First-Person Perspective.

 Cambridge, MA: The MIT Press/A Bradford Book.
- Zahavi, D. 2006. *The Phenomenological Tradition*. In D. Moran (ed.), Routledge Companion to Twentieth-Century Philosophy. London: Routledge.