From ‘the mind isolated with the body’ to ‘the mind being embodied’: Contemporary approaches to the philosophy of the body

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Abstract
In the interpretation of the body in the 20th century, philosophy placed less emphasis than before on its natural composition and sought to integrate value judgements from different perspectives. The philosophy of the body addresses the deepest essential problems of human society and culture, it generates a uniquely detailed analysis of human nature and its various roles and performances in social operations, and it reveals contemporary society’s operating mechanisms and deep internal contradictions. Accordingly, philosophy no longer gives the mind any priority or superiority in terms of cognition, and the focus of research has moved away from pure consciousness and towards the body. Contemporary philosophical exploration of the body covers both the concept of belongingness and the feasibility of bodily freedom. It not only foregrounds the impossibility of viewing the body and the mind as separate entities but also leads us to examine the connections between humans and the world, taking meaning, reason and the body as their basis. This paper explores the connections between body and thought in modern philosophy, traces the development of philosophy’s increasing concern with the body, elucidates the main contributions of representative figures in the field of philosophy of the body, and analyses the methodological significance and influence of the philosophy of the body as a contemporary philosophical trend.

Keywords
Body, thought, embodied mind, world, identity

Since the ancient Greeks, a binary opposition between the body and the soul has been a basic framework of Western philosophy. People tend to consider their bodies as matter without thoughts and as fundamentally different from their souls and minds. No matter what else ‘body’ might mean, it refers principally to a thing without comprehension, choice or judgement, contrary to self-determination and free will (Walter, 2011: 138). According to René Descartes, although there is a close interaction between the mind and the body, they are two beings with different essences. The body stands for sensibility, contingency and uncertainty, whereas the mind represents sense, truth, stability and certainty. Thus, for much of the history of Western thought, the body has been in a hidden and obscure state.

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Nevertheless, in the 19th century, Nietzsche not only treated reason, emotion, thought and will in a new way but also re-explored the relationship between the human body and spirit. He analysed the operation of power, especially power that produces knowledge and subjectivity by taking the body as an object. Subsequently, philosophers started to focus on the hidden ties between body and thought; they began to use the term ‘body’ to resist the arbitrariness of the philosophy of consciousness, and they contributed to a philosophical movement that was increasingly concerned about the body.

In the second half of the 20th century, the body became a popular research topic, as scholars moved away from the examined object and towards the subject of thoughts and behaviours. The body has since been a focus of sustained attention in the humanities and social sciences and a major topic in discussions about contemporary politics and culture (Slatman, 2014: 15–21).

1. The body, social symbols and value signs

Since Friedrich Nietzsche, the body has occupied an important position in philosophy. Although various theories have been advanced, their common focus is the inherent materiality of the body, by which it reaches a certain level of social practice; in this way, they combine the body and society and take the body as the starting point of the world. The disenchantment and secularization of the body runs throughout modern Western history, affecting considerations of how individuals make choices in the physical development strategies of life planning and who determines the disposition of the body’s products and parts. The body as an aspect of nature has been seen as a carrier of social and political significance. Gradually subjected to human interference or even domination, it has become a site of interaction, possession, repossession and linking of systematic expert knowledge. Comparing society to a body (unlike comparing it to a family) makes the authoritative order of society more inevitable and irreplaceable, and thus the body becomes a source of acute contradictions in ideology.

Most of Michel Foucault’s works are closely related to the body, which has long been a focus for examinations of phenomena such as psychosis, clinical medicine and prison systems. Foucault recognized that these issues, in order to become objects of study, must manifest themselves and that they can do that only in the human body. In his work on the archaeology of knowledge and the genealogy of power, Foucault attributed a variety of social events in different social and historical periods to the continuous process of reconstructing fractured relational networks based on differences in power, instead of to a specific, fixed historical structure. He believed that any original and continuous reconstruction process was closely related to the body in the flesh. None of these historical processes, no matter how brief, can be separated from the existence and operation of the body:

The flesh—and all the things embedding into it including food, climates and earth—is where the source is: just as the body generates desires, weaknesses, and faults . . . all the events in the past . . . are also linked in the flesh, and sometimes jostle against one another in the flesh. They would also dissolve, fight, and vanish with each other, and pursue the insurmountable conflicts . . . Therefore, genealogy, as the stream analysis, is in the link between the body and history. (Foucault, 2004a: 152–153)

The historical shaping of the body is both the physical archive of historical events and the material witness of those events.

However, the functions and operations of each part of the body have been affected and limited by sociocultural environments, and its modes of activity and the effects of its actions are presented in those environments directly. Accordingly, Foucault did not restrict himself to general discussions of the relationships between the body, the mind and thought. Instead, he explored how personal body conditions and modes of activity have been limited by social systems and regulations in different historical eras, how the body and social systems and regulations interact during the process of production, and how the functions of each part of the body are fulfilled through the relation between social normalization and personal subjectivation. He went on to explain how the demand and desire that are necessary for personal life are related to the maintenance and operation of the entire social system in
terms of the fundamental functions of the body, such as the basic operations of the digestive system and the sexual organs. Those functions appear to belong to the physical processes of life, but in fact they possess social morality and great cultural significance and in different eras have been socialized rigidly and symbolized culturally through institutions and rituals.

The purpose of Foucault’s research was to explain how power mechanisms relate directly to the human body, its many functions, and its physiological processes, feelings and enjoyment; far from obscuring the human body, those functions enable it to take its place in such an analysis. The relationship between biological nature and social nature becomes increasingly complex with the development of modern technologies of power, as opposed to being connected one after another, as depicted in traditional theories of sociology. Therefore, it is not the ‘spiritual history’ that attaches importance to the body in terms of how people endow it with significance and values but ‘the history of the body itself’ and the history of the methods that people use to surround physical and energetic things in bodies (Foucault, 2004b: 383).

Like Nietzsche, Gilles Deleuze regarded the body as an active, rising and positive productive force. Deleuze interpreted Nietzsche’s philosophy of the body in detail and developed it further, abstracting the body as a productive force or a huge desire machine. According to Deleuze, the body as desire is capable of growing, evolving and venturing forth endlessly. The production of desire is a contradictory process that has been suppressed both internally (a body without organs) and externally (society). A body without organs in this sense is not a *soma* without organs but a body without organization, an anti-structural body, a generative and variable body:

\[\ldots\text{a state that gets rid of its social connection, discipline, symbolism, and subjectivity, so as to become a body that is unrelated to, separated from, and decomposed of the society, therefore, \ldots} \text{is able to be reconstructed in a new way. (Best and Kellner, 2011: 118)}\]

A body without organs performs internal or external resistance in the form of persecution of organs internally or of agents externally (Deleuze, 2011: 112). Desire is interpreted as decentralized, fragmented and dynamic in nature. The movement of desire is not to find objects that it lacks and that can satisfy it but to seek new links and representations within the drive of its abundant energy. In short, the pursuit of desire stands for a trend in subjective theory that keeps modernity at a distance.

This change of attitude towards the body reflects the secularization of Western values. Whereas traditional Western values focused on abstinence and self-control, the consumer culture and fashion industry that arose in the 20th century emphasized control of the body’s surface. The recurrence and interpretative schema of realistic rationalism are regarded as frozen, rigidly coercive objects that impede creativity. ‘Culture’ in modern society has become a synonym of and figure for a series of operations of commercialized symbols. In this context, contrary to the traditional ethic of ‘the body serving the individual’, the modern ethic of ‘enabling the individual to serve his/her own body’ takes priority:

\[\text{Its ‘rediscovery’, in a spirit of physical and sexual liberation, after a millennial age of puritanism; its omnipresence (specifically the omnipresence of the female body, a fact we shall have to try to explain) in advertising, fashion and mass culture; the hygienic, dietetic, therapeutic cult which surrounds it, the obsession with youth, elegance, virility/femininity, treatments and regimes, and the sacrificial practices attaching to it all bear witness to the fact that the body has today become an object of salvation. It has literally taken over that moral and ideological function from the soul. (Baudrillard, 1998: 130)}\]

In other words, the body takes the place of the soul completely.

With the spread of consumerism, people have increasingly focused on the aesthetic qualities of the body. Body capital has become a standard of taste. Nevertheless, the basis for the body’s being occupied again is not the independent goal of the subject but a standardized principle of entertainment and hedonistic utility, a utilitarian constraint directly associated with a social coding rule for production and directed consumption. The ‘liberated body’ is therefore a representation, indicating only that an
ideology regarding souls has been replaced by a more functional ideology – that is, a spontaneous performance of the body has taken the place of the transcendence of the (completely internal) soul. However, this manifestation is false, as it takes the role of privileged spiritual pillar away from the soul only to give it to the body instead. Currently, the body has penetrated into production as its economic pillar, guiding psychological principles and political strategies that can be controlled; it has been reduced to an object of investment projects. The effects of such projects are even more profound than the alienation of the body in labour.

The body’s occupation of this central position in daily life is particularly evident in the importance of ‘habits’, since the impressions caused by body posture concern the external expressions that one is least likely to change deliberately. Pierre Bourdieu developed his view that the body accumulates differences between social power and social inequality on the basis of his study of the social habits of professional groups. The body, as a symbolic sign, is capital in itself. It can usually be displaced as economic capital and converted into cultural capital, the conversion being accomplished by particular practices of the body. Habits, or practical senses, are the ‘quasi somatization’ of the world. A practical belief is a physical state, not a psychological state or a belief in institutionalized doctrines and creeds determined by spiritual freedom; the original acquisition regards the body as a memorandum and as the place where the greatest value is stored (Bourdieu, 2012: 88, 101, 212). For instance, people attach importance to certain major collective ceremonies not only because ceremonious presentation is central to the style and features of a group but also for a less overt reason: it is through strict arrangement of practical activities and regular governance of the body, and especially bodily expression of emotions (such as laughter or tears), that thoughts are organized and emotions produced. Habits, as a kind of knowledge, are the memory of hands and bodies; when we cultivate habits, it is our bodies that ‘understand’. The body thus combines consciousness of social structures and world structures. The world structure enters the body through internalization, and body and mind are unified there. In this sense, practical sense is body sense.

2. Body, world and embodied mind

In the second half of the 20th century, all kinds of influences promoted the development from phenomenology to psychology. Maurice Merleau-Ponty’s phenomenology of the body was a psychology established on the basis of a philosophy in which Descartes’s cogito was replaced by the perceptual body-subject. The Cartesian definition of perception as the internal performance of given objects of the external world results in a dualism of subject/object and of all the relevant philosophical questions. According to Merleau-Ponty, such questions cannot be fully addressed within the framework of Cartesianism/mentalism, and perception must therefore be reconsidered in a fundamental way. This insight was the starting point of his analysis of the embodiedness of perception and the intentionality of the body.

Merleau-Ponty’s exposition and examination of issues such as time, space, the other, the natural world, freedom and intersubjectivity were all conducted through discussion of the body. In this approach, the body is the possessor of vision and touch, not merely their means; ‘eyes’ are visible ‘bodies’ and ‘minds’ are invisible ‘spirit’. The body provides conditions of conscious objects and meanings from perception. It watches everything and is able to watch itself. It is the visible and sensible object for itself. Since the body and everything else are made of the same materials, the vision of the body is formed in everything in a certain way, and the public visibility of things produces a secret visibility in the body (Merleau-Ponty, 2007: 36–37, 39). The body and the world are coexisting relations, and the world is presented to a person with all the parts of his or her body through a connection similar to that which exists between each part of the body. This is a living connection rather than a ‘natural geometry’. Understanding of the world starts from the understanding of the body, since the world is not an objective existence and cannot be exhausted by rational knowledge. Access to the world is experiencing and perceiving through the body. Merleau-Ponty’s later ontology, and in particular the system he began to develop in The Visible and the Invisible,
can be conceived of as a form of radical enactive cognition (Zavota, 2016).

This idea of perceiving the world through the body was further developed by George Lakoff and Mark Johnson at the end of the 20th century. They began by criticizing a range of erroneous objectivist claims about thinking that ignore an important feature of human cognition: namely, that the physiological structure and physical experience of humans have played a key role in the process of forming meaningful concepts and reasoning. On this basis, they claimed that the formation of the concept of space derives from our continuous spatial experience; this most fundamental concept results from the interaction between individuals and their natural environment (Lakoff and Johnson, 2015: 57–58). Cognition or mind is inseparable from direct physical experience, which is not simple but is obtained under the premise of a certain extensive and profound culture. Cultural assumptions, values and attitudes are not conceptual coverings that we can choose to impose (or not impose) on experience. Culture is implied in each experience itself as the way we experience the world that we live in. Through natural dimensions, our bodies and the essence of our natural and cultural environments give structure to our experience. Recurring experience leads to the creation of categories, which are experiential ‘gestalts’ with natural dimensions. Those gestalts define the coherence of experience. We understand experience directly when we depend on experience gestalts obtained directly from ourselves, our environment and our interaction in the environment, and when we believe that experience has coherent structures; we understand experience metaphorically when we use a gestalt of one domain of experience to structure our experience of another domain (Lakoff and Johnson, 2015: 201).

Merleau-Ponty’s writings have been cited as the theoretical foundation of embodied cognition theory, and in Structure of Behaviors he examined mutual regulations and choices between organisms and their environments:

. . . all the movements of [the] organism have always been restricted by external influences, if we are willing to, we can totally take actions as a result of the environment. But likewise, just as all the stimulation obtained by the organism can only be achieved by means of their previous movements (they are achieved by exposing sensory organs to external influences), we can say that behaviors are primary reasons of all the stimulation. The form of such stimulation is created by inherent methods of organism itself, presented to external functions . . . [The] body selects the stimulation it wants to feel in the physical world, according to the nature of the receptor, the thresholds of its nerve center and the movements of its organization. (Merleau-Ponty, 2010: 27–28)

Inspired by this, embodied cognition theory has advanced the following propositions: 1) cognition depends on types of experience that come from bodies with various sensory movements; and 2) the perception movement abilities of individuals are embedded in a broader biological, psychological and cultural context. Those propositions emphasize that perception and movement processes, and consciousness and action in nature, are inseparable in cognition because they are linked in the individual not purely or accidentally but through evolution and integration (Varela et al., 2017: 173).

A growing body of evidence confirms that cognition is embodied and grounded. Nonetheless, abstract concepts remain a significant theoretical challenge. Dove (2018) has argued that a successful account of how language augments cognition must emphasize its symbolic properties and incorporate a view of embodiment that recognizes the flexible, multimodal and task-related nature of action, emotion and perception systems. Allen and Friston (2018) have illustrated how the free energy principle can dissolve tensions between internalist and externalist accounts of cognition by providing a formal synthetic account of how internal representations arise from autopoietic self-organization. The free energy principle thus furnishes empirically productive process theories for guiding discovery through formal modelling of the embodied mind. As an alternative to representational approaches to the imagination, Medina (2013) has articulated an enactivist approach to examining how the enactive imagination works in animal cooperative behaviour and in animal communication. His approach indicates that an enactive imagination is a key component in a person’s cognitive, affective and moral learning. A question remains as to how, if at
all, emotions and subcortical contributions fit into this emerging picture. In this connection, Miller and Clark (2018) have proposed a tightly coordinated process of continuous reciprocal causation that weaves together bodily information and ‘top-down’ predictions, thereby generating a unified sense of what is out there and why it matters.

In the exploration of cognition, we cannot avoid such logical implications, as any scientific description (of either biological or mental phenomena) must be a product of the structure of our cognitive system. We necessarily implement such reflective behaviours against the given background of biological, social and cultural beliefs and practices. Our assumptions about that background are simply the things that we do, and we adopt the schema as a whole, including the background we are exposed to. The basic cyclical shaft is the embodiment of experience and cognition, including the active body both as a structure of experience and as a cognitive mechanism. Understanding is not a state inside the head but one that criss-crosses brain, body and world. In this regard, extended cognition can be regarded as emphasizing the crucial role played in our cognitive processes by tools, material representations and the wider environment (Toon, 2015). Bodily interaction with the world and the accompanying subconscious processing can change subjects’ dispositions to apply their concepts in ways that are not rationally accessible to them (even given a complete description of that interaction), and it does not constitute a change in the content of the concepts involved (Rupert, 2016).

Embodied cognition research draws on phenomenology’s elimination of both entity dualism and attribute dualism. If the mind is not an independent entity separated from the body, and if it is not an epiphenomenon unrelated to behaviour, then can we establish a theoretical conception of ‘the mind in the body’? The core conception of the mind in the body is that the mind is not merely an entity or attribute that is separate from the body but is essentially an act or physical activity, and any mental activity is rooted in physical activity. If we can refer to the mind governed by dualism as the mind of entity and of epiphenomenon, then we can refer to the mind in the body as the body–mind of embodied mind, or simply as physical mind. The concept of body–mind does not consist of two related entities or properties of the body and the mind. The purpose of connecting the words ‘body’ and ‘mind’ with a dash is to show that the mind is the body and that they are integral and inseparable. However, the integration of the body and the mind is not equivalent to the reduction of traditional psychosomatic theory to physical and physiological states of the brain in which the mind is equal to the active body. Indeed, a large body of evidence suggests that our concepts are often embodied and grounded in sensorimotor systems, and this speaks against standard forms of the phenomenal concept strategy (PCS). According to the PCS, thinking about the connection between mental facts and physical facts involves the exercise of both physical and phenomenal concepts. Nevertheless, it is possible to formulate a new version of the PCS that is more in keeping with embodied cognition, focuses on the features of physical concepts and adequately explains the appearance of contingency (Dove and Elpidorou, 2016).

In the process of exploring the mind and of criticizing Cartesian dualism, the philosophy of the body denies the supposed priority and superiority of the mind in cognition. That denial has moved the focus of research away from consciousness and towards the body, and subsequent explorations take account of both the concept of belongingness and the feasibility of bodily freedom. This leads us to recognize not only the impossibility of regarding the body and mind as separate entities but also the real associations between people and the world, with meaning, sense and the body as their basis. This reconstruction of cognitive activities and reinterpretation of the idea of the mind open up a wide expanse of road to us, even if we have so far taken only our first few steps along it.

3. Resorting to the ‘embodied mind’

In the 1970s, following these developments in psychology, the cognitivist or symbolic approach dominated research into cognition, particularly in the form of connectionism, which took neural network processing as its theoretical basis, supposing it to be analogous to human cognitive activities through the biological activities of the brain. In the AI
intelligence) community, consciousness is regarded as a method of information processing in the human brain. This raises the question of how the brain represents and processes information, for which there are two main proposals: module theory, which implies a transcendental viewpoint, and distribution theory, which is more or less empirical.

In terms of modules (analogies of ontology and faith), symbolism regards human brains as symbolic operation systems and human thinking as essentially a form of symbolic processing; in this view, intelligence can be modelled by static, sequential digital calculation models. In connectionism, the cognitive functions and features of human brains are integrated on the basis of neurophysiology, in that information is converted and sub-symbols are parallel-processed by means of digital features (instead of logical rules) (Garnham, 2009: 99–110). Undistributed systems are often directed by a single command, and commands are published centrally. Each network layer consists of a serial relationship, while the distributed system has multiple organizations to issue commands. (Since no unified command organization behaves asynchronously, asynchronous contents are obviously included here.) The distributed system is therefore characterized by good levels of fault tolerance, self-learning abilities, the generation of associations and speed.

It should be noted that the elements in the pattern of intense excitement that characterizes consciousness usually occur one at a time. In other words, consciousness activities are serial, but the brain is a parallel information-processing system. Understanding this requires an acknowledgement that consciousness reflects the most important event being processed by the brain at any given time. A variety of conscious and unconscious neural activities take place in the brain, which is a parallel information-processing system that takes consciousness as its serial centre (Sharkey and Sharkey, 2009: 180–191). The module theory and the distribution theory, as two paradigms of mutual opposition and competition, can explain some of the existing findings. The module theory is effective in illustrating phenomena such as interference, generalization and ratings in the process of cognition psychology; for example, some types of language failures in patients with brain injuries support the module theory of language structures, and parallel calculation is widespread in the nervous system. In contrast, the distributed theory is more successful in simulating relatively simple cognitive processes.

With its rich experimental results, cognitive psychology has changed the face of psychology, but it has also been heavily criticized, not least at the level of methodology. Research in cognitive psychology has focused on individual cognitive phenomena to the neglect of interactions between individuals, interactions between individuals and culture, and the essence of social structures in which individuals are members. Traditionally, cognitive psychologists adopted computer metaphors to explain mental activities. Programmers, on this analogy, do not need to know about hardware, and cognitive psychologists therefore work at the level of behavioural analysis. Nowadays, however, a growing number of psychologists acknowledge that the role of human information processing in almost every important aspect of its functioning is importantly different from that of a standard digital computer.

The basis of contemporary cognitive psychology is mental representation and computation theory. Representation theory regards cognition as reproduction of the object world, whereas computation theory regards it as a process of computing information or manipulating symbols according to limited formal systems or algorithmic rules. Either way, what is revealed is the computational mind, which is at a considerable distance from the experiential mind, although complete human cognition must include both aspects at the same time (Jackendoff, 2002). The riddle of consciousness has not been solved, but at least we have gained the methodological insight that the solution will require the integration of multiple disciplines. Over the past 30 years, a welcome trend in cognitive psychology has been a focus on the occurrence and development of psychological phenomena in daily life, in an attempt to establish a cognitive model that is consistent with the human experience of consciousness and that will reveal cognitive activities through the characteristics of human intuitive experience.

Since the results of quantitative research on psychological phenomena are specific and precise, theories in almost all fields of modern cognition can be tested under standard laboratory conditions. However,
there are many respects in which laboratory studies do not adequately represent the realities of daily life. In a psychological experiment, the response of the subject is not caused by the stimulation directly but by the stimulation as a clue to the experimenter’s subjective response. This interference with independent variables may affect the subject’s understanding of the experimental scenario and their own role within it, and the motivational directions taken by the subject. In other words, subjects tend to behave according to the so-called Hawthorn effect, presenting demand characteristics in response to the experimenter’s assumptions (Pickel, 2008: 441). The existence of such experimental effects is enough to show that there is a difference between the experimental scenario and the ‘real’ world; because the former is a transient, artificial and abnormal situation formed by interaction between subjects and experimenters, extending the results of any experiment to a larger group is problematic.

Another prominent aspect of laboratory research is the so-called decoupling problem. With the development of research expertise, it has been noted that the scope of experimental methods is very limited. Research into interests, necessities, emotions and hopes involves a large number of unrelated variables, and experimental methods are often unsuited to controlling them. The unnatural environment of the experiment therefore affects the individual’s psychological and behavioural responses, bringing the validity of the test into question. For moral reasons, some studies do not control subjects, instead tailoring the study environment to the individual. In this connection, Neisser (1999: 255–256) has noted that the study of information-processing approaches has yet to explore any aspect of human nature beyond laboratory limitations, and its basic assumptions have not gone beyond the computer models on which it relies. The human mind is not a general-purpose computer, and it is only the organ that is very sensitive to external stimulation. Eysenck and Keane’s (2010: 4–5) warning is therefore unsurprising:

> . . . from the perspective that the discovery of new phenomena leads to a surprising number of related sub-phenomena, the more scientific the study of memories, the further it is away from the goals it should have.

Although that view is somewhat pessimistic, it is useful to remain alert to the qualitative impacts of changes in motivation and mood in internal cognitive activity. A focus on inner psychological processes under strict control that fails to take account of the main features of perception and memory that occur in daily life will lead cognitive psychology to repeat the mistakes of behaviourism, thus becoming a narrow and specialized field without broader significance.

These considerations are not intended to illustrate that purely descriptive scientific concepts and methods should not be applied in psychology; nor do they deny the importance of distinguishing between purely physical experience and spiritual matters. For present purposes, it is important to maintain a critical awareness of the preconceptions of the physics of modern psychology. On the one hand, it criticizes the use of empirical concepts to guide description when those concepts have not been analysed sufficiently carefully; on the other hand, it criticizes the way in which descriptive and explanatory sciences are juxtaposed and regarded as similar interpretations.

Phenomenology examines people’s sense of reality (the way the world presents itself to the individual). For the phenomenologist, human psychology is dominated by subjective feelings rather than by the objective world. What we perceive is not necessarily the same as the objective existence of the outside world, and our behaviour depends on how the objective object appears. Edmund Husserl believed that feelings brought us direct knowledge about the world in its original appearance but that the purpose of our perception can distort that authenticity. The distortion can take many forms, from simple visual illusion to racial prejudice. Perception is often distorted because our minds are mixtures of opinions, assumptions and expectations:

> . . . it is impossible for the science of the mind to act according to the natural sciences, to learn from natural science in method, even in the schema where description is opposed to explanation . . . only derived from the intuitiveness given by reality itself . . . from the experience of the original living world . . . from the inherent nature of mental things. (Husserl, 2001: 190–191, 268)

According to psychology, the mind is revealed by what it does; according to phenomenology, the mind is revealed in the way it feels.
Scholars who emphasize the importance of phenomenology in psychology argue that scientific research requires supplementation by detailed phenomenological research from human experience. The basis of their argument is that psychology is very different from the natural or biological sciences in that it studies people, who are self-conscious and thus different from other organisms. Human experience is alive and can be expressed clearly in the first person, and consciousness is a uniquely important thing that psychologists care about. This concern requires special research techniques different from those used in traditional science, which are more appropriate for behavioural research (Zahavi, 2009: 247–262). Phenomenology has provided psychologists with a way to solve a series of special problems. ‘Phenomenological suspension’ can be seen as a move away from reflection on inner intentionality towards explanations of the inner process that are free of artificial restrictions.

Some common themes have emerged from research in this area. First, psychologists should be concerned with the functioning of the entire person instead of considering people in terms of isolated processes (such as learning and memory). Second, within certain limits, people have freedom to choose what to do; consciousness is the basic process of human beings, and research into consciousness is inseparable from the study of human beings. Third, psychologists should be concerned with the needs and problems of real life and people’s motivations, not just with what is under study in the laboratory. Given the uniqueness of their subject matter, psychologists should design methods that are appropriate for that subject matter; simple reliance on traditional scientific techniques amounts to an evasion of the responsibility to make meaningful judgements. Finally, psychologists should concern themselves with helping people to understand themselves, rather than simply predicting and controlling human behaviours (Smith, 2016: 15–33).

4. Ecological validity and mind evolution

Experimental psychologists have focused on understanding phenomena such as memory and forgetting and have sought a fundamental understanding of brains and sensory organs, which they regard as systems capable of selecting, organizing, storing and retrieving information. They believe that this understanding must be based on experiments under simulated conditions that are designed to provide a high degree of control. Thus, during memory experiments, subjects are usually presented with two groups of materials: oral and non-oral. The oral materials may consist of a series of proper nouns, adjectives, verbs, fragments of prose, poetry and stories; the non-verbal materials generally include geometric figures, pictures of people, still lifes and landscapes. In order to describe and classify the performances of their subjects, cognitive psychologists place them in an experimental context with the aim of eliminating specific cultural content. Their research emphasizes and explores the existence and universality of basic cognitive structures. They seek to identify ‘infrastructure’, ‘initial processes’, ‘general phenomena’ and the universal mental functions that are indispensable to human nature.

In contrast, the ecological paradigm of cognitive research emphasizes that cognitive activities are rooted in cultural backgrounds. We acknowledge, for example, that in most cultures the memories of men and women will be different because of education and career differences; similarly, we observe that witnesses from very different cultural backgrounds have different recollections of the same events, especially complex events that are recounted orally.

Over the past two decades, ecological validity has attracted increasing attention, winning wide acceptance from psychologists and becoming an important reference point for experimental research and design. Ecological validity is the extent to which the results of psychological research extend to real-life situations. This concept emphasizes research on naturally occurring psychological processes and psychological phenomena with functional significance. It is used to evaluate whether a theory or an experimental result is of practical value, and it sees applicability to different groups of people, tasks and stimulations as a prerequisite of external validity (Galotti, 2008: 19, 29–30). In other words, if a study lacks ecological validity, it yields only the psychological and behavioural responses of the subjects in the particular study, not their actual representation in daily life.

Take memory studies as an example. The early cognitive psychologist Hermann Ebbinghaus used
meaningless syllables as memory materials in order to simplify the stimuli and isolate responses. As a result, he arrived at the well-known Ebbinghaus memory curve. This kind of formalized research seldom involves behaviour with daily significance. Nevertheless, it has a number of advantages. It is based in the daily lives of its subjects; it shows that the memory materials for descriptive recall patterns are different from those for meaningless syllables; it requires no special observation or recall methods; and it dispenses with time limits.

In the middle of the 20th century, Frederic Bartlett realized that the development of psychological theory depends on research that solves practical problems. His work narrowed the gap between basic psychology and practical psychology, providing psychological research with a more realistic focus. He rejected Ebbinghaus’s use of meaningless syllables divorced from reality and began to study memory in environments similar to real life. His materials were pictures and stories connected to everyday experience, incorporated into what he characterized as the descriptive method, the hieroglyph method, the series reproduction method and the diary method, and he used them to examine the whole process of memory, as well as to study his own autobiographical memory.

In Bartlett’s (1932: 227–238) view, mental processes tend to be contained in memory terms in a realistic way; that is, as they actually occur in a normal individual, within or outside a social group. The purpose of his methods, in addition to considering the correctness of the recall, was to analyse the free descriptions of the subjects and their thoughts when answering the experimenters’ test questions, thus examining the naturally occurring behaviours of the subjects rather than the behaviours prompted by the psychologists. Although Bartlett’s theory contains many speculative components and never gained wide acceptance, his research prompted many people to think about the nature and dynamics of memories from a completely different perspective.

Until recently, cognitive research has been dominated by the computational-representational understanding of mind (CRUM). In CRUM terms, representation is the way that information is presented and recorded in the human brain. Cognitivism and connectionism both regard cognition as representations; cognitivism regards symbol processing as the appropriate carrier of representation, whereas connectionism regards the entire emergent representation as the representation of the world (Thagard, 2012: 11–13). The concept of representations is based in part on foundationalism and essentialism – the view that information and significance (or the essence, law or truth of things) are expressed through phenomena and that symbols are carriers for revealing information or significance.

The generative view refuses to take representations as the Archimedean standpoint of cognitive science, instead regarding cognition as an embodied action. It emphasizes that cognition is the joint enactment of the mind and the world on the basis of all kinds of activities that human beings engage in. It is the history of structural coupling and a reflection of real human life experience in the process of ‘generation’ (Bergen and Feldman, 2008: 315–318). Other scholars believe that human cognition has no structures and no rules; since at any given time there is an information exchange in a continuously changing state between the brain and the environment, cognition is the interaction between the cognitive subject and the environment. They interpret cognition as a dynamic system that includes anything that changes over time. In their view, symbolism and connectionism overlook the role of time in the cognitive picture.

In fact, the state of the brain is constantly changing, as the state space in a non-computational dynamic system (how the subject of cognition deals with information from the environment) is constantly developing. It follows that, as long as we know the changing process of mental state at different times, we can solve the mystery of the mind (Eliasmith, 2003). Thus, by focusing on how agency distinguishes mere ‘thrashing about’ from meaningful movement, Merritt (2015) strengthens the position of radical enactivism from the unique perspective of the dance of sense-making. Similarly, using the concept of cognitive niche, Werner (2020) unpacks ideas that are crucial for the enactivist movement, particularly in its original formulation by Francisco Varela, Evan Thompson and Eleanor Rosch. The work of those researchers has undoubtedly provided a naturalistic explanation for the continuity of cognitive behaviours in the time dimension. If a refusal to accept psychological representation as authoritative dispels the so-called foundation of the external world, then the
negation of cognitive structures and rules points towards a more thorough anti-foundationalism.

The psychological value of phenomenology lies in its emphasis on the unity of people and the world. The object that exists in consciousness is different from that of nature, and spirit is independent, self-contained existence. The experience and the significance presented through experience can become the object of psychological research. It should be noted that phenomenology does not exclude empirical methods, and phenomenological and empirical methods are in fact interdependent (Yoshimi, 2016: 287–304). Certain substantive questions have to be faced. For instance, how can we ensure that a convincing framework for psychological development is constructed through phenomenology? How can real-life experience be included in a psychology that continues to use scientific research methods? Until those problems are addressed, the status of phenomenological psychology as a non-mainstream psychology remains uncertain.

5. Body image, self-identity and body metaphor

The return to the body creates a new quest for self-identity. Under the conditions of high modernity, the relationship between the body and the self is far more intimate than it was in premodern times. In the 1920s, psychology and sociology communities opened up research into body image – the depiction of one’s own body in one’s own mind, or how an individual thinks of his/her body. Body image is not only a cognition structure but also includes the attitudes of others and interaction with others as sources of somatotype perception changes, feelings of being too light or too heavy, and influences on interpersonal interaction (Waintrater, 2015: 49–53). The concept has been used to explore individuals’ awareness and experience of their own bodies.

Over the past 10 years, in particular, both academics and the general public have begun to pay attention to the issue of body image, prompting Bryan Turner to characterize contemporary society as the ‘somatic society’. Psychologists, too, have explored the psychological factors that affect individuals’ satisfaction or dissatisfaction with their own bodies. Grogan (2007: 40, 135, 190) defined body image as perceptions, thoughts and feelings about one’s body and its elements, including a speculative estimate of the size of the body, an assessment of its attractiveness and a sense of one’s own somatotype. Body dissatisfaction involves negative thoughts and feelings of the individual about his/her body. This self-perception of the body is not limited to the individual’s subjective sense of experience; since it is influenced by experiences of social interaction, it is also a product of social construction.

Central to body image is the self-identity of the body. The embedding of the body in daily interactions is a fundamental way of maintaining a coherent sense of self-identity. In order to maintain a ‘normal’ appearance and at the same time be convinced of their continuity beyond time and space, individuals must maintain stable behaviours over changing interactive scenes and must effectively integrate their behaviours into a personalized narrative.

The work of Goffman (2008: 41–47) has shown the tightness and complexity of the control that individuals are expected to maintain over their bodies in all social interactions. Regular control of the body is a fundamental means of preserving the personal experience of self-identity; meanwhile, the self is ceaselessly ‘presented’ in front of others according to its incarnation. Routine control of the body constitutes the active nature and the acceptance (trust) of others as an intrinsic part of the existence and essence of competence. The consistent expressions required for role performance in everyday life mark a crucial difference between our humanized selves and our socialized selves. As human beings, we may be animals driven by capricious emotions and unpredictable energy, but in our social role we must maintain relatively stable states, not allowing our high-level social activities to change as our perceptions and body consciousness follow our body states. Self-monitoring and the reactions of others remind people continually of the gap between the ideal body and the body in the mirror, and people use that self-monitoring to detect and try to correct that distance.

With the emergence of a high degree of modernity, an important element of self-identity is a more durable form of self-reflection that also extends to the body. Reflective monitoring of the body is in fact reflection on the ‘system of life’, and constant
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concern for the ‘body’ means choosing and adopting an ideal system of life in line with bodily changes.

Giddens (1998: 65) has examined the phenomenon of self-identity through the internal reference system of the self and the body, making use of Jean-Claude Kaufmann’s concept of ‘normal appearance’ – a (closely monitored) physical behaviour in which individuals actively reproduce protective shells in a ‘normal’ situation. A normal appearance allows individuals to continue their current activities without having to pay much attention to the stability of the environment. Most of the time, however, people are still anxious, because physical appearances are not consistent with selves or self-identity. This is the separation of physical action and self-identity, which directly affects self-identity and generates ‘existential anxiety’. The reason why the body plays such an important role in selves and self-identity is that it is a form of expression for obtaining what might be termed a sense of ontological security, and people monitor their bodies closely in order to obtain it. Physical exile can be felt in the tensions of everyday life when everyone’s ontological safety is disrupted, but this is usually a temporary reaction rather than a permanent separation. Once the separation becomes permanent, self-distorting or mental division results. The difference between a person with schizophrenia and one without is that maintaining a normal appearance is a terrible burden for the former. In such situations, the self-identity narrative leads individuals to view physical activities with alienation, hatred or cynicism.

Recognition of the self also depends on the self being free from the body’s experience, and diseases are often seen as a form of self-trial or self-betrayal. In terms of body image, if health is a state in which each organ is at peace, then disease is a rebellion by some organs. Disease is a language spoken by the body and a will expressed by the body.

Sontag (2001: 8–12) examined how disease (especially malignant tumours and infectious diseases such as tuberculosis, leprosy, syphilis and AIDS) is metaphorized step by step, transformed from ‘just’ a disease of the body into a moral judgement or a political attitude. Tuberculosis, cancers and AIDS have been given very different meanings, stamped with the brands of the eras of aristocratic society, industrial society and contemporary society, respectively. Tuberculosis used to be a relatively common fatal disease, but its association with elegance, thinness and intense emotion made it a romantic disease in the 19th century. The metaphor of the disease increased the spiritual status and value of those who suffered from it.

In contrast, cancer is regarded as easily contracted by people who are frustrated, angry or depressed in ways that lead to lack of prudence or an unhealthy lifestyle. For example, oesophageal cancers are associated with alcoholism, and lung cancers are associated with smoking. Myths about certain behaviours (overconsumption, lack of exercise) that are seen as problematic can have the effect of ‘punishing’ those with cancer and may prevent them from seeking appropriate treatment.

AIDS has been stigmatized to an even greater degree than cancer. It has been considered as a disease of indecency or misconduct resulting from weakness or unsafe behaviour, and as applying specifically to groups regarded as ‘dangerous’ or ‘untouchable’. Sontag (2001: 92–99) identified two prevalent metaphors for the micro-process and mode of transmission of AIDS: invasion and pollution. In addition, she found that AIDS is described as an invasive disease. Viruses can live in it, and even occupy the territory. It is imagined as an alien ‘otherness’ that first occurred in underdeveloped areas and then spread to the United States and Europe, replacing the plague as a retribution to society for its supposed licentiousness.

Above all, the interpretation of the body in the 20th century has placed less emphasis on its natural composition and has sought to integrate value judgements of different visual thresholds. The philosophy of the body involves the deepest essential questions of human society and culture, and it can provide original and detailed analysis of human nature and its roles and performances in social operations, revealing the operating mechanisms and internal contradictions of contemporary Western society.

In terms of methodology, the philosophy of the body abandons the idea of a binary opposition between the body and mind. However, research into the body still finds it difficult to rid itself of certain basic patterns of thought about the relationship of the individual to society, about nature and culture, or essentialism and constructivism. The ontology of the body usually follows the path of fundamentalism or anti-foundationalism; the former understands the
living experience from the perspective of physical phenomenology and attempts to analyse the complex interactions between the bodily system, the cultural framework and the social process; the latter conceptualizes the body as a discourse about the nature of social relations or as a metaphor for a symbolic system or a social structure. Particularly with regard to its problems (and the accompanying truth questions), the body is negotiated and confirmed – a product of the legitimate discourses of which it is constructed. If we take the embodied milieu as both precondition and result of our theoretical and practical activities, then that challenges the traditional sense of the word ‘social’ and, in turn, the basic purposes of a social philosophy of science (Stoliarova, 2016).

In terms of epistemology, the main debate is between social constructivists, who believe that the body is constructed socially by discourse practice, and anti-constructivists, who regard the body as independent of the discourse forms that represent it (Turner, 2008: 12–16). It is necessary to break the binary opposition between the epistemology and the ontology of body studies, between the noumenon of the body and its representations and discourses. A truly phenomenological approach not only cares about how the body is shaped in society but also reveals how society itself is constructed in the affairs of the body, thus taking full account of the complexity of the body as a special historical connection.

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