

## **I. Perception, Color, and the Mind-Body Problem**

# ***Consciousness and the Mind-Body Problem***

## ***Introduction***

After the long ascendancy of philosophical treatments of behavior and language, the problem of consciousness has once again become one of the predominant themes in philosophy. At least so it seems in analytic philosophy. Over the last ten years, hundreds of papers and books related to the problems of consciousness have been published, and it seems that the philosophy of mind has now created a huge philosophical industry. Here I cannot and have no desire to survey all the literature on consciousness in the philosophy of mind. Instead, in the following I would like to concentrate on and describe the problems about phenomenal consciousness or the so-called qualia or subjective aspects of sensations and perceptions, which are now considered to constitute the core of the problems of consciousness. Because I think that the qualia consciousness cannot be treated separately from other features of consciousness, such as intentionality and self-consciousness. I will also touch on these phenomena as necessary.

## ***1. Consciousness and qualia***

### **1) The Ignorabimus-thesis**

In 1872 at the 45th Assembly of Natural and Medical Scientists in Germany, Emil Du Bois-Reymond, one of the most famous physiolo-

gists of the nineteenth century, gave a lecture entitled “About the limits of the knowledge of nature.” In this lecture, and subsequently in a lecture called “Seven riddles of the world,” Du Bois-Reymond tried to show that there are riddles which continue to be unsolvable, to whatever extent our knowledge of natural science develops, and that, in particular, the most difficult one in those riddles is the existence of consciousness.

The astronomical knowledge about the brain, the highest knowledge which we could attain about the brain, reveals to us nothing but matter in motion in the brain. Through whatever arrangement and movement, we could not build a bridge to the kingdom of consciousness. (Du Bois-Reymond 1874, p. 70.)

With this thesis, the Ignorabimus-thesis, Du Bois-Reymond came out against the materialistic trend in the nineteenth century, arguing that the mind-body problem remains forever beyond the reach of the materialistic conception of the world. But Du Bois-Reymond was neither a naive dualist nor did he consider the existence of consciousness in general as an impediment to materialism. What he saw as difficult to explain within the scope of natural science was neither intentionality nor reflexive self-consciousness, but the sensory consciousness or consciousness of qualia.

The point is that the highest activity of mind is not more difficult to understand on the basis of the material conditions than the consciousness on the first level, i.e. sensation. With the first excitement of pleasure and pain, which the simplest creature received at the beginning phase of animal life on the earth, that is with the first perception of a quality, that unbridgeable abyss was opened up, and the world became since then twice as difficult to understand. (Du Bois-Reymond 1874, p. 66.)

Du Bois-Reymond was not a dualist. On the contrary, he even admitted that any psychological phenomena, whatever they are, could be produced from physical conditions. Thus, it is not because the connection or interaction between mind and body is incomprehensible, as the dualists assert, that we cannot solve the riddle of the existence of consciousness. Instead, it is precisely because consciousness is nothing more

than brain activity, which is to say an epiphenomenon within the scope of natural science, that the questions of how and why such a thing as consciousness exists remain fundamentally unanswerable.

Therefore the mind-processes, which go on in the brain beside material processes, lack “sufficient reason” to our understanding. They are outside the causal laws, and for this reason alone they are already as incomprehensible as a Mobile perpetuum (perpetual motion). (Du Bois-Reymond 1874, p. 70.)

## 2) Consciousness in the contemporary philosophy of mind

Today, more than one hundred years after the Ignorabimus-thesis of Du Bois-Reymond, the question about the existence of consciousness seems once again to have become a central topic of philosophy. In contemporary discussions about consciousness, it seems to have become not less but more difficult to answer the questions how and why such a thing as consciousness exists. We now have in the philosophy of mind not only the old naive materialistic conception of mind but several new models of mind as well. The paradigmatic view of mind in contemporary cognitive science, AI research, and philosophy of mind, is called functionalism. But it is precisely this functionalistic view which makes the questions more complicated.

While there are many versions of what is termed functionalism, they maintain a core thesis, according to which a mental state is generally characterized as having a causal role which produces a certain output corresponding to a certain input. From this standpoint, there is no fundamental difference between the following relationships: the relationship between thought-activity and brain, computational activity and computer, digestion and stomach, and so on. Since any question inclusive of our riddle can and must be answered here from the functionalistic viewpoint, there is no difficulty in answering the questions of how and why such a thing as consciousness exists, if some determination of the functional or causal role of consciousness is given. Until now we have had several functionalistic answers; for example, consciousness is characterized as the ability to adapt oneself to the environment, or the ability to use a language, etc. But no functionalistic answer can escape from one fundamental difficulty.

If we are given any functionalistic answer, for example, the ability to use language, we could in principle make some computer or robot which realizes that ability. (The use and understanding of language is one of the main targets of AI research.) But even if we have some language usage programme in hand, we cannot say that our riddle has been solved with it, because our question can be repeated about the computer, which realizes this ability. Why must we say that the computer has consciousness, when it uses language as perfectly as possible? Can we not say instead that the computer need not and does not have consciousness, when it uses language perfectly? The point is not that we human beings need and have consciousness in using language while a computer does not. On the contrary, from the functionalistic view, it is exactly when we become “unconscious” of how we must use language that we are considered to use it in a competent way. It is indeed when we cannot use language smoothly, that we are conscious of it, just as it is when our stomach and brain do not function smoothly that we are conscious of the digestion and thinking processes, which means we suffer from a stomach ache or a headache.

Since the goal of AI research does not lie in making computers which cannot function well and suffer from adverse circumstances, the functionalistic view of consciousness makes the question about the existence of consciousness purposeless and in that sense fundamentally unanswerable. The question is whether this characterization of functionalism shows that its view of the existence of consciousness has already answered all the sensible questions, or whether it shows that functionalism has a fundamental defect.

Critics of functionalism use a strategy like that of Du Bois-Reymond and insist that a quale phenomenon such as the feeling of pain or the experience of a color appearance is a fundamental stumbling block for functionalism because they have no function at all. Even if an intentional state such as belief or desire could be explained in a functional way, it seems to remain impossible to reduce qualia-experience to some function.

The main representative of this line of thought, Thomas Nagel, declares the following:

But no matter how the form may vary, the fact that an organism has

conscious experience at all means, basically, that there is something it is like to be that organism ... We may call this the subjective character of experience. It is not captured by any of the familiar, recently devised reductive analyses of the mental, for all of them are logically compatible with its absence. It is not analysable in terms of any explanatory system of functional status, or intentional status, since these could be ascribed to robots or automata that behaved like people though they experienced nothing. (Nagel 1979, p. 166.)

But it is exactly the fact that the qualia experience cannot be reduced which boomerangs on the critics. Why should such things as qualia exist, if they have neither a causal nor a functional role at all? The proponent of the “reductive” direction, D. Dennett, insists that, after he has explained all conceivable functions of qualia, “... contrary to what seems obvious at first blush, there simply are no qualia at all” (Dennett 1990, p. 544).

In this way we now have in the philosophy of mind a spectrum of various positions concerning the status of consciousness, from the eliminativists, who want not only to explain but explain *away* consciousness with physiological and functional theory, in the same way scientists eliminated phlogiston from the theory of combustion, to “principled agnostics” or “new mysteriologists” (Flanagan 1992, p. 1ff.), who see in consciousness a limit in principle to any scientific understanding. In the middle are located several “liberal” positions, one representative of which is Flanagan’s position of “reflective equilibrium among the phenomenological, psychological, and neuroscientific levels” (Flanagan 1992).

If we search for the origin of this problem, we come back to the emergence phase of modern natural science in the seventeenth century, when scientists and philosophers thought that in the objective world which is the theme of natural science there exist only primary qualities, such as growth, form, number, movement, and that other secondary qualities such as color and sound are subjective phenomena and can exist only in the mind.

Under this world picture, qualia such as pain, color, and sound are excluded from the themes of natural science, and considered to be something which is very peculiar, for example, diaphanous or ineffable. If

we presuppose this kind of interpretation of qualia, there is no room for compromise between friends and foes of qualia, and phenomenology and brain science remain incompatible. But it is just in the tradition of phenomenology itself that such a Cartesian interpretation of qualia and consciousness has long been called into question, and alternative ways of seeing qualia and consciousness have been proposed.

As is well known, the direction of bodily movement and muscle tension are greatly influenced by various color experiences, especially in the case of patients with cerebellar injury. On the grounds of such phenomena, Merleau-Ponty has emphasized that qualia experience is influenced by and influences various types of behavior, and qualia are always experienced in connection with biological, psychological, and social meanings (Merleau-Ponty 1962/1945, p. 209f/p. 241ff). This means that qualia cannot be seen as having some intrinsic feature but must be seen as having some “relational” and “intentional” feature (Harman 1990), or that qualia are not something diaphanous, but have “depth and hidden structure” (Flanagan 1992, p. 62). In the next section I would like to follow this direction one step further.

## 2. *Qualia and intentionality*

### 1) A phenomenological model of qualia consciousness

Descartes, who is one of the founders of a dualistic world picture of the seventeenth century, wrote an interesting comment, which indicates the peculiar “unity” of mind and body in the qualia experience.

Nature teaches through these sensations of pain, of hunger, of thirst, etc., that I am not only present in my body as a sailor is present in a ship, but that I am very tightly joined to it and as if mixed through so as to compose one thing with it. For otherwise, when the body is injured, I, who am nothing but a thinking thing, would not feel pain on that account, but would perceive this injury by the pure understanding, as a sailor perceives by sight if something in the ship is broken; and when the body needs food or drink, I would have an explicit understanding of this fact. (Descartes 1973, p. 81.)

For example, when I burn my hand, I do not become conscious of it in the same way that the sailor becomes conscious of the ship which is burning. In both cases an emergency occurs, life becomes endangered, and both I and the sailor cope with these accidents in a similar way, but the ways in which these affairs are conscious are fundamentally different. While the sailor knows the danger without feeling pain or some qualia, I not only know the danger but also feel it with pain. According to Descartes, having the “qualia” of pain shows that I and my body are “so tightly joined and mixed through as to compose one thing,” and that this “proximity” is not understandable in the domain of “understanding.”

I would like to interpret this comment of Descartes phenomenologically instead of invoking his dualistic ontology. Then we could understand that through this thought-experiment Descartes has contrasted two modes of the intentional structure of experience concerning one’s own body. On the one hand, we can examine the bodily state of the injury and give it some treatment. In this case the body is an object of cognition and action. We treat our own body just like another person’s body, and in this dimension it is irrelevant whether we ourselves feel pain or not. On the other hand, while we feel pain, the body is not objectively experienced but, with the words of phenomenologists, it is “preobjectively” experienced and “lived.” In this sense, the essence of qualia lies not in the being in the mind separated from the body, but lies in this intimate, lived relationship to the body. Sometimes, it is thought that the phenomenological analysis of the “lived body” and scientific analysis of the objective body can be carried out separately, as if there were two bodies. But it is the character of the body that can be considered neither purely subjective nor purely objective. Merleau-Ponty has called its way of being “ambiguous.” It means not only that we take two attitudes towards our bodies, but that we also *experience* the process of the change of these two ways of being of our bodies.

Merleau-Ponty has given famous examples of the extension of the “lived body” through artefacts, for example, the car of a skilled driver, a feather in the hat of a woman, or a blind man’s stick, and describes the switch of aspects from objective being to the embodied being of these artefacts. These phenomena in “the phenomenological garden” (Dennett 1991, p. 47) seem to have now become trivialities for philosophers, but I will quote a frequently cited passage from Merleau-Ponty:

The blind man's stick has ceased to be an object for him and is no longer perceived for itself; its point has become an area of sensitivity extending the scope and active radius of touch and providing a parallel to sight. In the exploration of things, the length of the stick does not enter expressly as a middle term: the blind man is rather aware of it through the position of objects than of the position of objects through it. The position of things is immediately given through the extent of the reach which carries him to it, which comprises, besides the arm's reach, the stick's range of action. (Merleau-Ponty 1962/1945, p.143/p. 167.)

This is exactly a description of the transformation of intentionality, that is, the transformation from the "sailor-ship" relation to the "I-my body" relation. So long as the stick remains an object, the thing touched with the stick can be known only indirectly through inference or computation and cannot be felt with special qualia. In contrast, if the stick becomes a part of the extended body and "lived through," the thing touched with the stick can be felt directly with some special qualia. Here is the remarkable structure of the appearance and disappearance of qualia concerning the thing touched through the stick. This change can be seen as a process of an emergence of new qualia, and in this sense as a quasi-model of the process from consciousness without qualia to consciousness with qualia.

So long as the physical status of the stick remains the same through the change from the objective being to the lived being, we could say that the change lies in its functional status. But this "function" is, if we may use the word, a "phenomenological" function, by which something which was hidden is made to appear and vice versa: it is not simply a causal function, which plays the role within the domain of what is already present.

The more radical extension of the lived body and the emergence of new qualia can be found in the case of a so-called TVSS (tactile visual substitute system) or prosthetic vision. A blind person equipped with a television camera on the side of the head and a device which converts the visual image produced by the camera into an isomorphic cutaneous display in the form of a pattern of vibration on the back or the stomach comes to be able to "see" things after some training. "After a brief train-

ing period, their awareness of the tingles on their skin dropped out; the pad of pixels became transparent, one might say, and the subjects' point of view shifted to the point of view of the camera, mounted to the side of the heads" (Dennett 1991, p. 341; see also Guarniero 1974).

As is indicated by these phenomenological descriptions of the transformation of intentionality, this change is considered to be a change in the way of being of the "lived body." So if there is some scientific approach to the being and the "phenomenological" function of this "lived body," it would give us some scientific description of an essential character of qualia consciousness. Is it possible to formulate a scientific theory about a functional system which corresponds to the "lived body"?

## 2) The lived body and the perceptual system

Probably the most promising candidate corresponding to the concept of a lived body is J. J. Gibson's concept of a "perceptual system." Gibson's perceptual systems are senses considered in a new way "as active rather than passive, as systems rather than channels, and interrelated rather than mutually exclusive" (Gibson 1966, p. 47). In this perspective the brain is not a substitute for a Cartesian theatre in which everything mental and conscious is situated, but is simply one organ in the whole system.

Vision is a whole perceptual system, not a channel of sense... One sees the environment not with the eyes but with the eye-in-the-head-on-the-body-resting-on-the-ground. Vision does not have a seat in the body in the way that the mind has been thought to be seated in the brain. (Gibson 1979, p. 205.)

In this perspective the traditional concept of "special sense" is criticized and the concept of attention, closely connected with the concept of intentional consciousness, is also liberated from the centre to the whole system.

In the case of a special sense the process of attention occurs at centers with the nervous system, whereas in the case of a perceptual system attention pervades the whole input-output loop. In the first case attention is a consciousness that can be focused; in the second case it is a skill that can be educated. (Gibson 1979, p. 246.)

More than twenty years ago there was a lively controversy between cognitivists/computationalists and Gibsonians/ecologists concerning the central question about perceptual cognition: the question concerned whether perceptual cognition is to be considered as information processing or information pick-up (in other words, “resonating” to information) (Fodor and Pylyshyn 1981; Turvey *et al.* 1981). Whatever the consequence of this controversy may be, it seems that the Gibsonian approach is not neglected but taken into consideration in some way or other (for example, in the designing of “artificial creatures”) in contemporary cognitive science.

In any case, we could say that there is the possibility of building a bridge between the phenomenological world of consciousness and the scientific world with the help of the concepts of the “lived body” and “perceptual system.” Indeed, this possibility remains very limited so long as the Gibsonian approach is regarded as unorthodox in contemporary cognitive science. But it shows at least that phenomenology and the science of mind and brain are not incompatible, and that a way is open for a critical dialogue between them.

### 3) Consequences of the phenomenological model

Several points should be noted here. First, when the blind person becomes accustomed to the stick and is able to touch the thing directly through it, we could say that the stick becomes “transparent.” But the way the thing touched through the stick appears is not exactly the same as the way it appears without the stick, however accustomed one becomes. When we talk with someone through a telephone, we hear the voice of the other directly, but the extension of hearing corresponds to a change in the situation of a conversation, for example, with the loss of the face-to-face situation. In this sense the stick of the blind person does not become perfectly transparent, instead the using of the stick shows itself in the way the thing appears. In other words, the qualia we experience show not only how the thing appears, but also how it appears *through* a certain thing each time: through a normal body, through a body plus a stick, through a body plus a telephone, or through a body minus some part of the body (when paralysed). In the qualia *we experience not only the object of experience* but also at the same time we experience how we experience. That means that the qualia experience can

be considered “self-referential.” This self-referentiality is not an explicit, reflective self-consciousness, but can be seen as the most primitive “self-consciousness” of our experience. The self in this case is not the thinking self but the “bodily self” (Merleau-Ponty 1962/1945) or the “ecological self” (Neisser 1988). If we have intentionality and qualia, we have already reached the first step of “self-consciousness” without the higher-order thinking process.

The Gibsonian concept of “awareness” (Gibson 1979, p. 250) or “egoreption” (Gibson 1979, p. 205) can also be reinterpreted and considered to belong to this level of “self-consciousness.” Against the often-made criticism that the Gibsonian theory of perception neglects the dimension of experience in perception, this interpretation makes it possible to understand the Gibsonian theory of perceptual *cognition* as a theory of perceptual *consciousness*, supporting our interpretation of the relation between the lived body and the perceptual system presented above.

Second, when the problem of intentionality of consciousness is discussed in the philosophy classroom, it has become almost a formality for the teacher to ask the question “what kind of experience is thinkable as an experience without intentionality?” The answer is “pain.” Those who are accustomed to such a formality would find a fundamental defect in my above discussion which extends the examples of Descartes to Merleau-Ponty. For, while in the first example what matters is pain, thirst, and hunger, that is, typical bodily sensations without intentionality, in the second example what matters is touch, that is, an intentional tactile perception. But can we really regard a difference between pain sensation and tactile perception as being such a fundamental difference as that between experience without intentionality and that with intentionality?

When I put my finger on the desk and touch the surface, I feel several qualities of the surface. But if I push my finger on the desk a little more strongly, I feel not only a surface but also the pressure from the desk in my finger, and if I push even more strongly, I begin to feel pain. I can find in this process only a gradual difference. I don’t know exactly how physiologists explain this process and there may be a “phenomenological fallacy” in this experience, but it is hard to imagine that a tactile sensory system and a pain sensory system function indifferently (Iggo 1987). What is more interesting is that one of the proposers of a physiological

hypothesis about pain emphasizes that the pain is essentially connected with many factors and has multidimensional qualities.

Recent evidence, however, shows that pain is not simply a function of the amount of bodily damage alone, but is influenced by attention, anxiety, suggestion, prior experience, and other psychological variables ... Pain is a complex perceptual and affective experience determined by the unique past history of the individual, by the meaning to him of the injurious agent or situation, and by his "state of mind" at the moment, as well as by the sensory nerve patterns evoked by physical stimulation (Melzack 1987, p. 574.)

If we take this into consideration, the discussion about pain by philosophers, for example the discussion about whether pain is identical with the firing of C-fibres or not, seems to be very naive and abstract. It is so naive that it seems to be almost a (Ryleian) category mistake, i.e. a mistake which one makes when, asked what the University is, one answers only by pointing to the library building, the college building, or anything else.

Third, if the pain experience is essentially intentional and at least in the phenomenological perspective only different from the tactile experience in degree, it must be possible that we feel pain not only in our body but also at the tip of the stick through the extension of the lived body. Is it possible to feel pain outside our body? Why not?

In the well-known phenomenon of phantom limb one feels pain outside of one's "real" body. There is no more mystery or contradiction here than the stick in the water which appears to be bent visually. There is a contradiction between the pain experience of a phantom limb and the visual and the tactile experience. This makes the lived body and the felt pain abnormal, making the situation of the patient very complex and difficult, as many examples of patients with anosognosia show, but in the fact that the pain is experienced outside the "real" body itself there is no contradiction.

If one still finds difficulty here, one must find greater difficulty in distal visual perception in general. According to the typical explanation of visual experience, the causal chain begins from the object which is seen, goes through reflected light, the eyes, finally ending in the visual cortex

in the brain. Even though there is no additional backward causal chain from the brain to the object, we see objects neither in the brain nor in the "mind" which is connected to the brain, but directly outside our bodies, where the object exists. Someone who sees here an explanatory gap may invoke the notorious "projection" by the brain. But nowadays few people accept such an act of "projection" (as does, for example, Velmans 1990).

The easiest way to show that projection is unnecessary, I think, is to imagine a situation in which I take my brain out of my head and look at it. My brain appears in the centre of my visual field: in this case there is no gap between the beginning and the end of the causal chain, and therefore my brain can be seen without a "projection." This is not so special a situation. Seeing my own brain is not so different from touching my own head or seeing other parts of my body. In any case, if we think we do not need a "projection" to see something outside our body, neither need we find any special difficulty in having a pain outside our bodies.

Fourth, while pain as consciousness without intentionality has long been a cliché in classroom philosophy, intentionality without consciousness has become a new widespread concept, as the functionalistic view has become dominant in the philosophy of mind. The case of blind sight is sometimes considered to be a paradigmatic example.

The case of blind sight is sometimes interpreted as demonstrating the division between "automatic unmonitored acts and those acts that are effectively monitored" (Weiskrantz 1987, p. 112). I am not in the position to say anything definitive here, but I think that it is not necessary to interpret the case as showing the difference between an act accompanied by monitoring and one not. For the case of blind sight could be interpreted as the case of an intentional act without qualia or with a very low degree of qualia. If we could interpret it in this way, the intentional structure of blind sight is not to be considered as remaining the same, but as becoming fundamentally modified. The modified intentionality without qualia could be compared with the "empty" intentionality which we experience when we have "a word on the tip of the tongue." In this case we "know" the object in a sense, but we can only "guess" what it is. At any rate, we must be careful to characterize such pathological cases simply as cases of unconscious intentionality, as if the intentionality and

consciousness can be separated without serious modification. The process from conscious state to unconscious state and vice versa is not such a simple process as, for example, some thing sinking into water and re-emerging. In this sense the cases of unconscious intentionality do not give direct evidence for the functionalistic view of consciousness but present problems for it, like the case of Freudian unconscious intentionality, which remains problematical to this day.

### 3. *Intentionality and self-consciousness*

When it comes to the essence of the conscious state, it was not the qualia experience but mainly reflexive self-consciousness that has been treated in traditional philosophy. Descartes located the essential feature of spirit in the self-consciousness of “I think,” and found the ability to think reflectively that I sense, I imagine, or I will, and so on to be the essence of the rational spirit. Kant maintained, as is well known, that “‘that I think’ must be able to accompany all my representations; for, if not, something that could not be thought at all would be represented in me, which means just as well as that the representation would be either impossible or at least nothing for me” (Kant 1956, B 131f).

It is exactly this concept of mind and self-consciousness that was reversed in the view of contemporary cognitivism. Not that mental states become possible by being the objects of self-consciousness, but that self-consciousness only becomes possible after much unconscious mental processing has been worked out. Now that the view of mind and self-consciousness is reversed, the concept of self-consciousness is itself brought into question. If many things and perhaps everything could be realized without it, what is its function?

One of the appropriate ways of thinking about this question is, I think, to imagine such a person who has “conscious” states but completely lacks reflexive self-consciousness. Koffka called the consciousness of such a person “consciousness without insight” and described it in the following way:

This person would be surrounded by objects and feel himself approaching one, avoiding another, having pleasure in one set of conditions and

being angry in another. But that would be all. He would, let us say, feel thirsty and drink a glass of water, and then feel his thirst quenched, but he would not know that he drank the water *because* he was thirsty, nor that his thirst vanished *because* of the drink. He would see a beautiful woman, would approach her, hear himself make the most clever and alluring speeches, find himself in flower shops ordering bunches of long-stemmed red roses addressed to that lady, he might even hear himself propose, be accepted, become married, but in the words of the baron in Gorki's *Lower Depths*, “Why? No notion?” (Koffka 1935, p. 383f.)

In contrast to such a person, we, who are considered to have self-consciousness, can understand and answer such “why” questions, and thus the most obvious function of self-consciousness could be found in the ability to understand the “why” of one's behavior and mental states. But we must note that here the question “why” has at least two meanings.

One meaning is related to causal explanation. Let's take a simple example: I drink water because I feel thirsty. In order to understand my behavior, I must at least identify a motive which caused it. Perhaps at the same time I felt hungry, but thirst, not hunger, was the cause of my behavior. I could be mistaken in identifying the cause of my behavior. It is possible that the cause was not the thirst but some repressed “unconscious” desire, or that my behavior was only a “slip.” We could begin scientific studies in search of the genuine cause and try to explain the detailed process of my behavior and mental states with the help of psychological, functional, and physiological theories, and data. In this sense there is nothing special in the explanatory function of self-consciousness. But when I identify a motive for my behavior, it is not only considered as a cause but also as a “reason.” That means that the relation between motive and behavior is considered not only as causal but also as rational and intentional. As its rationality is closely connected with its normativity, the behavior is sometimes described in saying that I have done it but I should not have done it. A person without such a consciousness of rationality lacks a most important ability for living with others in a society. We could not, for example, make a promise to such a person. The function of self-consciousness in this sense, therefore, can be found in the ability to live together in a society. This kind of ability cannot be acquired through scientific studies, however detailed its causal analysis may be. One must learn

to understand which behavior is rational and which is not through various interactions and communications with others through one's life.

In this way we can find in the functions of self-consciousness the well-known contrast between explaining (Erklären) and understanding (Verstehen), which corresponds to the methodological contrast between natural and human science.

Sometimes these two "functions" are considered to be mutually exclusive and therefore mutually irrelevant, but, as the above considerations have already indicated, the situation is to the contrary.

On the one hand, even if we try to explain behavior causally, the possibility of understanding it in the rational sense must be presupposed. Without this presupposition from the beginning the object of research cannot be regarded as behavior.

On the other hand, that our self-understanding of our own behavior is sometimes mistaken has already been demonstrated in various ways (Nisbett and Wilson 1977). Introspection itself is, so to speak, "theory laden."

The traditional belief that introspection is transparent is itself perhaps a construct based on a "folk psychological" theory. If our understanding of self and other is produced through ascribing this psychological theory to each other, it may be that our social life is not constituted by mutual understanding, but is full of "misunderstanding." Then the traditional belief concerning self-understanding and introspection itself must be explained and criticized scientifically. Explanation and understanding, methods of natural science and human science are, far from being mutually exclusive and irrelevant, instead complementary.

The traditional conception of self-consciousness as transparent or infallible has now been persuasively falsified. But this does not mean that the asymmetry of the first person and third person points of view will completely disappear and the most "mysterious" characteristic (or function?) of self-consciousness will vanish. Instead, exactly at this level of self-consciousness, that is, at the level on which the self can be explained and understood objectively and intersubjectively, the asymmetry becomes clearly conscious and problematical.

In order to indicate this feature I would like to bring to mind the well-known discussion about consciousness and reflexivity in traditional philosophy. If we try to analyse consciousness with the reflexive act of the

second level, by which the intentional state of the first level becomes conscious, then the problem repeats itself concerning the second level act, whether it is itself conscious or not. And so we must either presuppose consciousness itself from the beginning or we cannot but fall into an infinite regress. If the above-mentioned self-consciousness is really self-consciousness, not only the ability to understand but also the more immediate and primitive level of consciousness must be presupposed. And it is entirely possible to think that the qualia experience takes the role of this primitive consciousness, for all explanation and understanding are founded on perceptual experience, in which various qualia are experienced. Because of this connection between self-consciousness and qualia consciousness, the self is not only explained and understood but also *experienced* with various qualia on the background of the objectivity and intersubjectivity, which makes the first and third person perspective inevitably asymmetrical. And it is this asymmetry that sometimes makes of something objectively thoroughly understandable something totally incomprehensible, for example, my death. As a biological and social event nothing is more certain than that everyone dies. But what is it like to experience my death, that is outside my understanding.