1. Galilean Science and the Life-World

In Part I of *The Crisis of European Sciences* (1931), as we noted in section 3 of our Introduction, Husserl considers the nature of what he took to be a (then) contemporary cultural crisis: the collapse of faith in the sciences, and the flight into various forms of irrationalism. He offers a diagnosis for this crisis by sketching its origins in the historical development of philosophy and its relationship to the empirical sciences.

At the time of the Renaissance, claims Husserl, there had re-emerged in Europe an ancient Greek ideal of philosophy as a universal science, which was based on a view of humans as rational and autonomous beings, and according to which

\[
\text{Sciences in the plural, all those sciences ever to be established or already under construction, are but dependent branches of the One Philosophy. (}\text{CES, p. 8}\text{)}
\]

But this ideal was never to be realized. Instead, says Husserl, the concept of science - of genuine, rationally grounded human knowledge - came increasingly to he identified only with the empirical sciences: with physics, chemistry, psychology, sociology, and so on.1 These ‘positive’ sciences restrict themselves to ‘establishing what the world, the physical as well as the spiritual world, is in fact’; and

\[
\text{(}\text{CES, p. 8}\text{)}
\]
their rigorous scientific character requires, we are told, that the scholar carefully exclude all evaluative positions, all questions of the reason or unreason of their human subject matter and its cultural configurations. \(CES, \) p. 6

Yet these normative, evaluative questions still demand answers. The empirical sciences could not provide them. So, given the identification of rational human knowledge with these sciences, recourse could be had only to irrationalist solutions - hence, the cultural crisis.

According to Husserl, the first and crucial episode in this historical failure of the Renaissance ideal of a universal philosophy was the emergence of ‘modern’, Galilean science - or rather, the philosophical misunderstanding of the implications of this science, a misunderstanding to which Galileo himself, and then Descartes, significantly contributed. It is this thesis which Husserl is concerned to establish in Part II of \textit{The Crisis}. Galileo’s great achievement, he says, was both to conceive and to implement ‘the completely new idea of \textit{mathematical natural science}’ \(CES, \) pp. 22-3). Such a science aims to discover laws of nature which can be expressed in the form of mathematically specified functional relationships between measurable variables, such as the laws for pendular motion and the free fall of bodies. But Galileo’s equally great mistake, argues Husserl, was to claim that the only real properties of objects were those which could be directly represented by those variables, namely shape, size, position, and so on. All other properties, such as colour, taste and smell, were only apparent: they were the subjective effects of the real properties of things acting upon the perceiver’s senses.

Husserl rejects this identification of the ‘real’ world with the mathematized nature of Galilean science, and the consequent relegation of what he calls the ‘life-world’ (‘\textit{Lebenswelt}’ - the world as it is experienced in everyday, pre scientific, life) to the status of mere subjective appearance.\(^2\) He argues that the main reason for Galileo’s philosophical error here - which was soon to be reproduced and amplified in Descartes’ dualism of body and mind - was his failure to recognize that the concepts employed in the new science were themselves formed through abstraction and idealization from the life-world. As such, in Husserl’s view, they should properly be regarded only as conceptual devices, by means of which more refined and successful predictions about that world can be made. Instead, Galileo both reified these conceptual constructs, and subjectivized the life-world. Husserl describes this error as involving

the surreptitious substitution of the mathematically substructed world of idealities for the only real world, the one that is actually given through perception, that is ever experienced and experienceable -our everyday life-world. \(CES, \) pp. 48-49
In thus affirming the ‘reality’ of the life-world, however, and its ontological primacy with respect to
the scientific world, Husserl is not abandoning the transcendental standpoint of his earliest work. He
is not, that is, defending some form of common-sense realism against scientific realism. That this is so
becomes clear in Part III, where Husserl provides an extensive introduction to transcendental
phenomenology, including reference to its eidetic stage (cf. Chapter Three, sections 2 and 3). But in
the light of his preceding criticisms of the philosophical misinterpretation on Galilean science, he is
especially concerned to ensure that, before performing the transcendental reduction, one has arrived
first at a proper characterization of the life-world. In particular, one must carefully avoid the
assumption that the concepts of the empirical sciences describe it correctly: for example, those of
orthodox psychology with its prejudices of Cartesian dualism. Only when the scientific
conceptualization of the world has, in a certain sense, been ‘suspended’, and its origins through
abstraction from the life-world identified, can the transcendental reduction of the latter proceed (see
especially CES, sections 34-41).

We shall now examine in more detail Husserl’s discussion of Galilean science in Part II of The Crisis.
In constructing the new mathematical physics, says Husserl, Galileo took over from the Greeks their
development of a ‘pure geometry of shapes’: ‘pure’ in the sense that it dealt, not with the actual,
concrete shapes of things which one encounters in the everyday world, but rather with various
idealized forms of these - ‘perfectly’ straight lines, circles, squares, and so on (CES, pp. 22-8).
Further, this pure geometry was soon to be greatly extended in scope with the development of
analytical geometry. In this, algebraic equations could be formulated to specify all possible pure
geometrical shapes, unlike the pre-algebraic geometry, which could deal only with a small subset of
these.

What Galileo ignored, argues Husserl, was that the concepts of this pure geometry had themselves
been initially constructed by a process of idealization from the shapes experienced in the life-world.
One never actually encounters, for example, a ‘perfect’ or ‘ideal’ circle, but only objects which are, as
it were, more or less circular. Galileo likewise ignored the fact that this pure geometry, with its
idealized shapes, had itself been developed in specific practical contexts: in particular, as an aid to
such activities as building and surveying. This pure geometry provided a set of conceptual techniques
and methods for dealing more effectively with the everyday world: its idealized concepts had an
exclusively instrumental status. Yet Galileo failed to recognize this, and instead believed that nature
itself was characterized by these pure mathematically representable properties.

But a more significant mistake was to come, says Husserl. The objects encountered in the life-world
possess not only the properties of (impure) shape, the so-called primary properties, with respect to
which the pure shapes of geometry are idealizations; but also the ‘secondary’ properties, such as
colour, sound, taste, warmth, coldness, and so on. Husserl refers to these as the ‘specific sense-qualities’ (e.g. CES, p. 54). The latter properties could not, it seemed to Galileo, be directly mathematized. In the case, for instance, of colours, there was no equivalent to the geometry of pure shapes which could stand in the same relationship to ‘impure colours’ as geometry stood in relation to impure shapes. Nonetheless, suggested Galileo, these properties could be indirectly mathematized, by hypothesizing that they are in some way systematically related to the primary properties:

everything which manifests itself as real through the specific sense-qualities [secondary properties] must have its mathematical index in events belonging to the sphere of shapes [primary properties] - which is, of course, already thought of as idealized. (CES, p. 37)

What Galileo proposed, then, according to Husserl, was the existence of systematic relationships between primary and secondary properties, such that the latter could be explained by reference to the former, and hence by a mathematical physics which was itself couched exclusively in terms of the geometrical properties of pure shapes. The actual nature of these relationships was not yet known: their discovery was to form part of science’s future programme. But Galileo did not doubt that success would be forthcoming; and in a certain way, says Husserl, he was right. For one now accepts quite easily such claims as the following:

What we experienced, in pre-scientific life, as colours, tones, warmth and weight belonging to the things themselves . . . indicates in terms of physics, of course, tone-vibrations, warmth-vibrations, i.e. pure events in the world of shapes. (CES, p. 36)

Husserl has no objection to such scientific hypotheses, provided that their philosophical status and implications are properly understood. He would not wish to deny, for example (ours, not his), that it may be possible to ‘explain’ colour-perception by reference to the mathematically specifiable properties of light waves. But he insists that any such explanation must only be regarded as providing a conceptual technique or method for making predictions about the perception of colour; and hence that such explanations provide no grounds for denying the reality of colour itself as a feature of objects in the life-world.

Husserl, in effect, adopts here what is often called an ‘instrumentalist’ view of the status of science’s theoretical concepts and laws, and criticizes Galileo for failing to do so. Instead, Galileo not only ascribed reality to the idealized geometrical concepts of pure shape, but maintained that the only properties which genuinely belonged to nature were those represented by the laws of mathematical physics. Hence, as we noted earlier, Husserl accuses Galileo of substituting ‘the mathematically substructed world of idealities for the only real world’ (CES, pp. 48-49); and he characterizes this
error as one in which

we take for true being what is actually a method — a method which is designed for the purpose of progressively improving, in infinitum, through ‘scientific’ predictions, those rough predictions which are the only ones originally possible within the sphere of what is actually experienced and experienceable in the life-world. (CES, pp. 51-52)

Having denied the reality of secondary properties on the grounds that they do not belong to the mathematized view of nature in his new science, says Husserl, Galileo was forced to give them an alternative philosophical status. He did so by relocating them within the mind of the human perceiver: colour, taste, and so on, were merely subjective experiences, the effects in the perceiver’s mind of the real world of physical bodies operating upon the human sense-organs. But it was soon realized by other philosophers, continues Husserl, that there was no good reason to restrict this subjectivization to the secondary properties alone. Rather, it could easily be extended in the form of a more general dichotomy between ‘inner experience’ – including all perceptual experience, whether of primary or secondary properties – and the ‘outer world’ of material objects, as depicted by the physical sciences.4

What resulted, then, from this Galilean trajectory was a duality of subjective experience and objective nature, the empirical sciences having a privileged position in identifying the character of the latter, which could then be used to explain the former. The reality of the life-world was thus displaced by that of the scientific world, and transformed into a dependent realm of psychological experience, of mere ‘phenomena’ or ‘appearances’. According to this view, says Husserl:

The phenomena are only in the subjects: they are there only as causal results of events taking place in true nature, which events exist only with mathematical properties. If the intuited world of our life is merely subjective, then all the truths of pre- and extra-scientific life which have to do with its factual being are deprived of value. They have meaning only insofar as they, while themselves false, vaguely indicate an in-itself which lies behind this world of possible experience and is transcendent in respect to it. (CES, p. 54)

Thus:

The world splits, as it were, into two worlds: nature and the psychic world, although the latter, because of the way in which it is related to nature [i.e. exclusively as its effect], does not achieve the status of an independent world. (CES, p. 60)
This split between nature and the psychic world, says Husserl, found a particularly clear and historically influential expression in Descartes’ philosophy. The dichotomy between *res cogitans* and *res extensa* served both to separate humans, as conscious beings, from the rest of the world, and to provide a dualistic picture of each human being as a union of mind and body. In the following section we shall compare Husserl’s view of Descartes in *The Crisis*, with his earlier view of him in the *Cartesian Meditations* (see Chapter One, section 4). This will then enable us to explore the significance of *The Crisis* for Merleau-Ponty’s relationship to Husserl.

2. Cartesian Dualism and the Galilean Body

In the *Cartesian Meditations*, Descartes is criticized primarily for his realism: for failing to follow through the supposedly transcendentalist implications of his self-reflective philosophical method, and instead identifying the meditating Ego with the ‘worldly’ *res cogitans*. In *The Crisis*, this criticism of Descartes is repeated in much the same terms (*CES*, sections 17-19). What is distinctive about Husserl’s later treatment of Descartes is not that his previous objections disappear, but that there is now an additional set of objections, not to be found in the *Cartesian Meditations*. In effect, this further criticism is addressed to the specific form of Descartes’ supposed realism, namely as (Galilean) scientific realism; and in Husserl’s view this gives rise, amongst other things, to a mischaracterization of the human body. Descartes, he argues, wrongly assumed that this is the physical ‘body’ of Galilean science. But the human body belongs to the life-world, which for Husserl differs significantly from the scientific ‘world’.

Let us consider this additional line of criticism in more detail. In the *Cartesian Meditations*, Husserl implicitly accepts that both the empirical sciences and everyday life relate directly to one and the same world (*CM*, section 7: see Chapter One, section 3, above). Thus the phenomenological epoché suspends ‘at a single stroke’ the existence-assumptions of both, since they are taken to be the same. In *The Crisis*, by contrast, the relationship between the life-world and the scientific ‘world’ becomes problematized; and the phenomenological epoché comes into operation upon the life-world only after a preceding stage of analysis in which it has been rescued from scientific misrepresentation.

Descartes’ dualistic ontology, argues Husserl, was based not on a proper description of the life-world, but rather on a philosophically illicit endorsement of the conception of nature provided by modern science. Thus, in identifying the reflecting Ego with the *res cogitans*, a double error was committed. Not only was the Ego’s transcendental status denied; but it was also assigned to an ontological category – that of the mental – which had been constructed partly to accommodate what had wrongly been removed from the life-world. Correspondingly, the body with which this mind was said to be united was not the body as actually experienced in everyday life, but the ‘scientific’ body of Galileo’s
mathematized nature.

The ‘bodies’ which one encounters in the life-world, says Husserl, are of a number of different kinds. They include, for example (ours, not his), inorganic entities such as rocks or stones; human artefacts such as buildings or tools; and the bodies of various organic entities, such as animals and human beings. Whilst all such bodies may have in common the properties of Galilean bodies (albeit, as noted earlier, in an ‘impure’ form), their full range of properties consists by no means exclusively of these. Furthermore, he argues, each human being has an especially significant and distinctive acquaintance with their own body, which displays features entirely ignored in Descartes’ assumption that the human body is, like any other, Galilean.

Husserl marks the distinction between the physical-geometrical body and the body of an animal or human by his respective use of the two terms ‘Korper’ and ‘Leib’ (the latter related to ‘Leben’, to live). This distinction is initially alluded to in Part II (CES, p. 50), and then explored more fully in Part III (especially sections 28 and 62). In particular, he attends to the kinds of experience one has of one’s own body, and its significant role in one’s engagement with the life-world. Amongst many claims here, the following may be noted.

First, Husserl says that, in perceiving things by sight, hearing, touch, and so on, one’s body is essentially involved not merely by virtue of using one’s eyes, ears, hands, and so on, but also through the so-called kinaesthetic experiences one has of its own ‘motility’: the sense of one’s body’s position, movement, weight, muscular tension, and suchlike (CES, pp. 106-7). Second, he says that, in explicating the various kinds of ‘habituality’ that are always implicitly involved in one’s experience of the world, consideration must be given to those which concern one’s body and its kinaesthetic activities. Thus he talks of the ego, through its ‘kinaesthetically functioning living body’, as operating with ‘a peculiar sort of activity and habituality’ (CES, pp. 106-7). In effect, Husserl adds here a bodily dimension to the account of passive synthesis in the Cartesian Meditations (see Chapter Three, section 3).

Third, Husserl emphasizes the importance of bodily movements, and their accompanying kinaesthetic experiences, in the various practical activities of everyday life. In such activities, he says, one’s body ‘holds sway’ (‘walten’) over the objects of the life-world:

Through bodily ‘holding-sway’ in the form of striking, lifting, resisting, and the like, I act as ego across distances, primarily on the corporeal aspects of objects in the world. (CES, p. 217)
Finally, he maintains that there is some process of ‘analogizing apperception’ through which one can understand that there are other egos who, like oneself, have bodies which are distinctively ‘their own’. Thus:

Only through my own originally experienced holding-sway, which is the sole original experience of living-bodiliness as such, can I understand another physical body in which another ‘I’ is embodied and holds sway. (CES, p. 217)

As will he seen later in this chapter, there are important continuities between these claims about the human body in The Crisis and Merleau Ponty’s account in Part One of the Phenomenology of Perception. But for the moment we shall focus upon the more general relationship between these two works, and their respective conceptions of phenomenology. We shall do this by considering Merleau-Ponty’s attitude towards Husserl’s position in The Crisis. He endorses Husserl’s view of the primacy of the life-world with respect to that of the empirical sciences; the insistence upon careful, detailed description of the former; and the concern to avoid its misrepresentation through scientific prejudices. But Merleau-Ponty does not accept the second and equally significant stage in the programme for phenomenology in The Crisis, the transcendental reduction of the life-world. This, he believes, has too much in common with Kant’s transcendental idealism, despite Husserl’s attempts — which he partly accepts — to distinguish the two (see Chapter Three, section 5).

We can now examine these points of agreement and disagreement in more detail. In the Preface to the Phenomenology of Perception, one finds Merleau-Ponty echoing Husserl’s view of the relationship between empirical science and the life-world. For example:

The whole universe of science is built upon the world as directly experienced, and if we want to subject science itself to rigorous scrutiny and arrive at a precise assessment of its meaning and scope, we must begin by re-awakening the basic experience of the world of which science is the second-order expression. (PP, p. viii)

And likewise:

To return to things themselves is to return to that world which precedes knowledge, of which knowledge always speaks, and in relation to which every scientific schematization is an abstract and derivative sign-language, as is geography in relation to the countryside in which we have learnt beforehand what a forest, a prairie or a river is. (PP, p. ix)
There are also a number of parallels between Husserl’s characterization of the ‘world’ of modern science and Merleau-Ponty’s conception of the ‘universe’ of objective thought; and both writers are equally concerned to deny these any straightforward, let alone privileged, ontological status. Nonetheless there are also certain differences here, which make Merleau-Ponty’s critique of the ‘universe’ of objective thought in some respects more wide-ranging in its implications than Husserl’s of the scientific ‘world’. This is partly because, as we noted in the previous chapter, Merleau-Ponty does not restrict the concept of objectivism to distinctively scientific theories of what the world is like: he includes also (dogmatic) ‘common-sense’. But it is also because the central features of the objectivist’s universe are more broadly defined than those of Husserl’s mathematized nature. For Merleau-Ponty, what is wrong with objective thought is not just the idealized ‘purity’ of the primary properties and the absence of the secondary ones. It is also the assumed determinacy of all properties and objects, and the supposed externality of the relations between them (see Chapter Five, section 2).

Furthermore, Merleau-Ponty denies the possibility of a transcendental reduction of the life-world which, as we have seen, is still advocated by Husserl in *The Crisis*, and which marks the essential continuity of this work with the *Cartesian Meditations*. As the full title of *The Crisis* indicates, it is transcendental phenomenology which is somehow to resolve ‘the crisis of European sciences’; and Husserl makes it clear that, as in the *Cartesian Meditations*, there is to be an eidetic stage of the reduction, which will give to phenomenology the status of a genuine (though of course non-empirical) science:

> the full concrete facticity of universal transcendental subjectivity can nevertheless he scientifically grasped in another good sense [i.e. not in the sense of empirical science], precisely because, truly through an eidetic method, the great task can and must he undertaken of investigating the essential form of the transcendental accomplishments in all their types of individual and intersubjective accomplishments. (*CES*, p. 178)

Phenomenology aims, then, as Husserl often puts it in *The Crisis*, to explicate ‘the a priori of the life-world’ (see, e.g. *CES*, section 36). This a priori will differ from Kant’s, not only for the reasons adduced in the *Cartesian Meditations* (see Chapter Three, section 5, above), but also because Kant failed to understand the relationship between the life-world and the scientific ‘world’. This additional criticism of Kant, in *The Crisis* (see sections 26-32), parallels the additional criticism of Descartes which we have already noted. Kant is congratulated for his transcendentalism, for having pursued, unlike Descartes, what Husserl terms ‘the motif of inquiring back into the ultimate source of all the formations of knowledge’, namely the ‘I’, the ‘ego’ (*CES*, pp. 97-8). But he is criticized for having ignored the life-world, and for instead concentrating his attention upon the conditions for the
possibility of knowing the world as depicted by modern science.

For Merleau-Ponty, by contrast, no form of transcendental idealism is acceptable, whether it addresses the scientific ‘world’ or the life-world. And although he is always keen to emphasize his allegiance to Husserl, he does at times acknowledge Husserl’s continued commitment to the programme of transcendental phenomenology, and his own rejection of it. For example, in the following passage he presents an account of what is recognizably Husserl’s conception of phenomenology in The Crisis:

The process of making explicit, which had laid bare the lived-through’ world which is prior to the objective one, is put into operation upon the ‘lived-through’ world itself, thus revealing, prior to the phenomenal field, the transcendental field. The system ‘self—others—world’ [i.e. the basic structure of the lived world] is in its turn taken as an object of analysis and it is now a matter of awakening the thoughts which constitute other people, myself as an individual subject and the world as the pole of my perception. This new ‘reduction’ would then recognize only one true subject, the thinking Ego.... Such is the ordinary perspective of a transcendental philosophy, and also, to all appearances at least, the programme of a transcendental phenomenology. (PP, p. 60)

And in a footnote he adds: ‘it is set forth in these terms in most of Husserl’s work, even in those published during his last period’ (PP, p. 60).

But, Merleau-Ponty argues, the lived world is such that it cannot he fully explicated and reconstructed in the manner required by a transcendental reduction: the intellectualist project, and with it any form of transcendental idealism, is rendered impossible by - amongst other things - the non-determinacy of the lived world. Further, he claims, the ‘true subject’ which emerges from phenomenological description is not ‘the thinking Ego’, but a body-subject which is ‘always already in-the-world’. So we turn now to his discussion of bodily action in Part One of the Phenomenology of Perception.

3. The Peculiarities of one’s Own Body

Merleau-Ponty’s discussion of the human body in Part One of the Phenomenology of Perception has three main aims. The first is to show that the body is not an ‘object’ in the sense given to this term by objective thought (see Chapter Five, section 2). Its properties are not determinate; its activities defy the empiricist attempt to provide causal explanations which depend upon scientifically testable claims about external relationships; and its spatiality is that of situation, rather than location. The second is to undermine the idealist’s conception of the subject, by criticizing the intellectualist account of purposive bodily action to which, according to Merleau-Ponty, the idealist is committed. The third is to establish that it is the body that is the subject of action, a claim which is central to his overall
project of replacing the idealist’s subject by the body-subject. (This project is continued in Part Two, where he argues that the body is likewise the subject of perception: see Chapter Seven, below.) But in ascribing this new status to the body, Merleau-Ponty is also revising and reinterpreting the nature of the powers traditionally ascribed to the subject by idealists. In particular, he argues that, whilst ‘knowledge’ and ‘intentionality’ are possessed by the body-subject, these must be understood as essentially practical and pre-conscious in character, unlike their idealist counterparts.

At the outset of Part One, Merleau-Ponty announces that he will

> take objective thought on its own terms and not ask it any questions which it does not ask itself. . . . Let us consider it then at work in the constitution of our body as an object, since this is a crucial moment in the genesis of the objective world. It will be seen that one’s own body evades, even within science itself, the treatment to which it is intended to subject it. (PP, p 72)

Adopting this procedure, whose rationale we explored at the end of the previous chapter, he examines in some detail a wide range of scientific literature, and criticizes both empiricist and intellectualist approaches, with their shared objectivist conception of the body. We shall concentrate on what is arguably the central (third) chapter of Part One, ‘The Spatiality of One’s Own Body and Motility’. This consists largely of an extended analysis of the case of a brain-damaged veteran of the First World War, named Schneider. But first we shall look briefly at the two preceding chapters, to get some initial idea of what Merleau-Ponty means by ‘one’s own body’ (‘le corps propre’), and of how it ‘evades’ objective thought.7

In the first of these he considers a number of accounts offered for the apparently strange medical condition known as the ‘phantom limb’. Patients who have suffered the loss of one of their limbs, either through accident or surgery, may sometimes continue to experience sensations such as pain ‘in’ the missing limb, and to act in ways that apparently indicate a continuing sense of the limb’s presence: for example, trying to walk with a missing leg, or to scratch a missing arm. From the standpoint of objective thought, says Merleau-Ponty, it is clearly the case that the limb is missing, that it is no longer a part of the patient’s real body. The problem, therefore, is taken to be that of trying to account for the essentially illusory sensations and mental images which nonetheless clearly do occur.8

Merleau-Ponty starts by criticizing various theories advanced by empiricist psychologists and physiologists in attempting to explain these phenomena. He argues that none of these causal explanations, whether couched in exclusively psychological or physiological terms, or in some combination of the two, actually succeed in meeting empiricism’s own requirements for a satisfactory
scientific explanation. We shall not discuss his specific arguments here, since we shall later be examining the equivalent arguments in the case of Schneider. Merleau-Ponty then goes on to consider the intellectualist alternative to these empiricist theories, which, instead of trying to identify causal determinants, attributes the phenomena to some specific project or decision on the part of the subject concerned. For example, he says, it may he claimed that what is basically involved here is a ‘refusal of the mutilation’: a decision not to accept what has happened to the limb, and to continue living as if it were still there.

Merleau-Ponty regards this intellectualist analysis as a distinct improvement on empiricism, but argues that it needs to be revised so as to remove its depiction of the subject as a conscious and disembodied decision-maker.

Taking the case of the phantom limb along with the similar phenomenon of anosognosia, in which someone with a diseased or injured limb ‘attempts to ignore it’, he comments as follows:

> The refusal of mutilation in the case of the phantom limb, or the refusal of disablement in anosognosia, are not deliberate decisions, and do not take place at the level of positing consciousness which takes up its position explicitly after considering various possibilities. The will to have a sound body or the rejection of an infirm one arc not formulated for themselves; and the awareness of the amputated arm as present or of the disabled arm as absent is not of the kind: ‘I think that . . . ’ (PP, P 81)

But if ‘the refusal of mutilation’ is not like this, what exactly is it? Merleau-Ponty’s answer is that it is primarily a matter of the person’s continuing to maintain the repertoire of bodily actions that was in operation before the loss of the limb; and that, whilst this repertoire must itself be described in intentional, purposive terms, this does not involve the ascription to the agent of consciously formulated plans or decisions. Thus, as he puts it:

> To have a phantom arm is to remain open to all the actions of which the arm alone is capable; it is to retain the practical field which one enjoyed before mutilation. The body is the vehicle of being in the world, and having a body is, for a living creature, to be interested in a definite environment, to identify oneself with certain projects and be continually committed to them. (PP, pp. 81—2)

Hence to have a phantom limb is to continue to act in a certain way: or rather, to attempt to do so, since, for example, when someone with a phantom leg tries to walk, they will fall. What this means, says Merleau-Ponty, is that, for the person concerned, this limb is both present and absent. That is, it is not a matter of the limb really being absent, but being imagined to be present, i.e. some kind of
illusion. Rather, there is a genuine ambiguity in the situation; and one cannot, as the objectivist requires, give a determinate answer to the question ‘is the limb present or absent?’ (cf. Chapter Five, section 2). It is, as it were, both and neither:

The consciousness of the phantom limb remains, then, itself unclear. The man with one leg feels the missing limb in the same way that I feel keenly the existence of a friend who is, nonetheless, not before my eyes; he has not lost it because he continues to allow for it. The phantom arm is not a representation of the arm [i.e. an illusory representation], but the ambivalent presence of an arm. (PP, p. 81)

Thus Merleau-Ponty’s discussion of the phantom limb is intended to show how ‘one’s own body’ cannot be described in the categories of objective thought, shared by empiricists and intellectualists; and also to indicate what is wrong with the intellectualist’s conception of the subject as a disembodied consciousness. One might be tempted to respond to this by doubting whether any such general conclusions could be drawn from so bizarre and abnormal an example. We shall consider Merleau-Ponty’s rationale for using such cases later on in this chapter. But certainly he wishes to argue that this particular example does indeed illustrate a characteristic and mistaken tendency on the part of advocates of objective thought: faced with any apparent divergence between features of ‘one’s own body’ and the body as conceived by objective thought, the problematic features are ‘psychologized’ - that is, reinterpreted as purely mental phenomena, such as sensations, images, representations, and so on. The phantom limb can then be regarded as no more than an illusory mental representation.

It is this general tendency to ‘psychologize’ any non-objective features of the body which Merleau-Ponty criticizes in the second chapter of Part One. Psychologists, he says, have often drawn attention to a number of ‘peculiarities’ of one’s own body, including various ways in which one’s experience of it differs from one’s experience of other bodies, whether animate or inanimate. They have noted, for example, that, when touching a part of one’s body with another part, one experiences what they call ‘double sensations’, i.e. in both the touching and the touched parts; and that, whereas one is aware of the movement of other bodies only through ‘external’ perception, the movement of one’s own is indicated also by what they term ‘internal’ perception, including kinesthetic sensations.

But, claims Merleau-Ponty, these psychologistic characterizations of the peculiarities of one’s own body can be shown to be inadequate. We shall not examine Merleau-Ponty’s specific arguments here, but merely note how, in a manner which parallels Husserl’s in The Crisis, he criticizes empiricist psychologists for invoking a form of Cartesian dualism so as to enable them to retain their commitment to an objectivist conception of the body. Thus:
For the living subject his own body might well be different from all external objects; the fact remains that for the unsituated thought of the psychologist the experience of the living subject became itself an object and, far from requiring a fresh definition of being, took its place in universal being [i.e. the ‘universe’ of objective thought]. It was the life of the ‘psyche’ which stood in opposition to the real, but which was treated as a second reality, as an object of scientific investigation to he brought under a set of laws. (*PP*, p. 94)

What objective thought thereby fails to recognize, says Merleau-Ponty, is the active, purposive nature of one’s own body, its practical orientation towards various tasks and goals, its ‘attitude’ towards the world. It is to these features that one must attend, if one is to provide an adequate phenomenological description of ‘one’s own body’. We can best see what this involves by turning now to Merleau-Ponty’s analysis of Schneider’s case in Chapter 3 of Part One. We will first present an outline of the main stages in this rather complex discussion, before examining them in detail in the following sections.

After some opening remarks about the ways in which the concept of a ‘body-image’ has been interpreted by empiricists and intellectualists, and the respective defects of these (pp. 98-102), Merleau-Ponty presents the main features of this case, which had been investigated and analysed by the neuropsychologists Kurt Goldstein and Adhemar Gelb (pp. 103-112).10 Schneider, a veteran of the First World War, had suffered a brain injury from a shell-splinter penetrating the back of his skull (the occipital region). This had caused damage to the visual cortex, an area of the brain within which the processing of visual data is generally believed to take place; and consequently his sight was defective, in ways which we shall describe later.11

But Merleau-Ponty’s main interest is in the defective character of Schneider’s repertoire of bodily movements and sense of body-location, which obtained despite the fact that there had been no apparent damage to the tactile-motor area of the cortex, generally regarded as (amongst other things) controlling movement. Adopting the terminology used by Goldstein and Gelb, Merleau-Ponty says that Schneider, whilst reasonably well able to perform *concrete* movements, has considerable difficulties in performing *abstract* movements. Concrete movements are those involved in the immediate practical tasks of everyday life. For example, Schneider is employed in a workshop making leather wallets by hand-sewing, and he is able to deal quite successfully with the materials and implements involved in this - his production rate is about 75 per cent of the average worker’s. He can likewise perform such tasks as removing a handkerchief from his pocket to blow his nose, taking a match from its box to light a lamp, or scratching the place of his leg where he has just been bitten by a mosquito.
By contrast, abstract movements require one to detach oneself from these immediate practical tasks so that it is one’s body itself the movements and positions of its various parts, that become the main focus. Thus, for example, when Schneider is asked simply to point to his nose, he cannot do so - the best that he can eventually manage is to take hold of it as if to blow it; and when asked to identify the place on his body where he has been touched by a ruler, he is unable to do this. Similarly, he has great difficulty in answering questions about the overall spatial arrangement of his limbs - for instance, whether or not his arm is horizontal to the ground, or whether he is lying down or standing up. And he finds it very hard to perform, upon request, actions such as tracing out a specified shape with his hand, or making a particular gesture such as a military salute - he can manage this only after a lengthy process in which he self-consciously adjusts his whole body so that it conforms to his mental picture of a military posture.

Similarly self-conscious and abnormal means are used by Schneider in attempting to perform other such abstract movements. For example:

If the subject is asked to trace a square or a circle in the air, he first ‘finds’ his arm, then lifts it in front of him as normal subject would to find a wall in the dark and finally he makes a few rough movements in a straight line or describing various curves, and if one of these happens to be circular he promptly completes the circle. (PP, p. 110)

Again, when Schneider is asked whether his arm is extended horizontally to the ground, he engages in:

a set of pendular movements which convey to him the arm position in relation to the trunk, that of the forearm to the rest of the arm, and that of the trunk in relation to the vertical;

and from this process he eventually manages to infer the correct answer (PP, p. 107). He likewise, when asked, arrives at the conclusion that he is lying clown by deducing this from the pressure of the mattress on his hack; or, that he is standing upright, from the pressure of the ground on the soles of his feet.

This abnormal reliance upon consciously performed inferences is also displayed in the particular character of Schneider’s visual disorders. His eyes themselves were undamaged, but he suffers from what is termed ‘psychological blindness’ (PP, p. 119): only the separate qualities or features of things are directly perceived, and the complete objects to which they ‘belong’ are arrived at only by a series of inferential conjectures. For instance:
If a fountain pen is shown to the patient, in such a way that the clip is not seen, the phases of recognition are as follows: ‘It is black, blue and shiny’, says the patient. ‘There is a white patch on it, and it is rather long; it has the shape of a stick. It may be some sort of instrument. It shines and reflects light. It could also be coloured glass.’ The pen is then brought closer and the clip is turned towards the patient. He goes on: ‘It must be a pencil or a fountain pen’. (*PP*, p. 131; cf. p. 112, note 2)

Having presented this picture of Schneider’s difficulties, Merleau-Ponty goes on to consider empiricist and intellectualist approaches to understanding them. The empiricist (pp. 112-20) will try to provide a causal explanation of Schneider’s defective motility - for example, by reference to his defective vision. But Merleau-Ponty argues that no such explanation can be either verified or refuted. The intellectualist, by contrast (pp. 120-30), will tend to regard Schneider as having effectively lost the basic powers of a human subject: he lacks understanding of the overall system of objective spatial relationships, he is unable to name or identify things correctly, and so on. On this view, says Merleau-Ponty, Schneider’s continued ability to perform concrete movements must be seen as a merely mechanical, object-like capacity. But, he argues, no such radical distinction between abstract and concrete movement, which maps it on to that between subject and object, is defensible. There is indeed a difference between the two kinds of movement; but this, he claims, can be understood only from an existential-phenomenological perspective.

So Merleau-Ponty completes his discussion of Schneider by providing an alternative, positive account, which preserves those features of intellectualism which make it superior to empiricism, whilst avoiding its distinction between the conscious subject and the body as mere object (pp. 130-39); and in doing so he elaborates upon certain ideas introduced earlier in the chapter (pp. 108-12). Schneider’s difficulties in performing abstract movements, says Merleau-Ponty, can best be seen as indicating an inability to project himself into possible or imaginary situations, as distinct from actual ones. He lacks, that is, the ‘power of projection’ possessed by normal agents; and because of this, he lacks ‘concrete liberty’ (p. 135). Merleau-Ponty insists, however, that this projective power must not be understood as a purely cognitive one, as ‘thought’ which is divorced from bodily action. Intellectualism typically makes this error. But Schneider’s abnormality consists partly in just such a reliance upon conscious thought in the performance of abstract movements. He is, indeed, a caricature of the intellectualist’s subject, a parodic refutation of its disembodied conception of intelligent action.

Merleau-Ponty concludes the chapter (pp. 137-47) by drawing out the implications of the preceding discussion for a proper account of knowledge, understanding and intentionality. He emphasizes their intrinsically practical and bodily character; and he illustrates his claims by reference to various examples of the acquisition and exercise of motor skills, such as using a type writer and playing a
musical instrument. These quite normal activities, he argues, are no more open to empiricist or intellectualist analyses than is the abnormal case of Schneider.

4. Schneider as the Refutation of Empiricism and Intellectualism

We can now consider Merleau-Ponty’s arguments in more detail. His main aim is to show that, in attempting to account for Schneider’s case, both empiricism and intellectualism encounter insuperable problems which cannot be resolved in their own terms; and that their failure here reveals their more general deficiencies. For empiricism, with which he begins, he argues that these problems have the following character: any specific causal hypothesis that might be proposed to explain Schneider’s difficulties will turn out to be incapable of conclusive confirmation or refutation; and alternative hypotheses will always be available that are equally plausible in relation to the relevant data. Merleau-Ponty then offers a diagnosis for this state of affairs: what the empiricist regards (in accordance with objective thought) as externally related variables or causal factors are in fact internally related, and hence not susceptible to the procedures of scientific theory-testing.

Merleau-Ponty starts by considering a particular hypothesis that had been advanced in the scientific literature on Schneider: that his difficulties in performing abstract movements were caused by the disorder of his visual sense - by his ‘psychological blindness’, itself resulting from the occipital brain injury. Schneider, then, was forced to rely purely on his tactile experience; and this implies that, whilst the tactile sense by itself is a sufficient basis for concrete movements, which Schneider can still perform, it is not so for abstract movement. Additional support for this hypothesis is apparently provided by the fact that Schneider’s occasional, and partially successful, attempts at abstract movements usually required him to employ his limited visual capacity in monitoring these movements as they developed (PP, p. 113).

However, says Merleau-Ponty (still couching his discussion within the empiricist framework), against this hypothesis the following objection might be raised (PP, p. 116): normal people are able to perform abstract movements with their eyes shut, presumably relying on their tactile sense alone; and so it cannot be the case that Schneider’s difficulties are caused by his visual disability. But a defender of the initial hypothesis could reply that the tactile experience of normal people has been in some way modified by past experience, in which visual and tactile data have become associated with one another - the so-called education of the senses (PP, p. 116). Thus it could still be maintained that Schneider’s difficulties are due to relying on tactile experience alone, unaided by vision. But this reply immediately encounters a further objection: that even those who are totally blind, and thus cannot have had their tactile experience modified by sight, are nonetheless able to perform abstract movements. Yet to this it may he responded that, in the case of blind people, their sense of touch has instead been ‘educated’ by their kinaesthetic sense; and that, anyway, their attempts at abstract
movement do display some degree of abnormality, namely the use of ‘preparatory movements’ similar to Schneider’s (PP, p. 117).

Hence the initial hypothesis remains unrefuted. Nonetheless, says Merleau-Ponty, there is also an alternative causal hypothesis available for the empiricist, which is equally consistent with the relevant data: that Schneider’s difficulties are due, not to visual disorders, but to some primary disorder of his tactile sense (PP, p. 117). In other words, Schneider’s problem is not that, because of his visual defects, he has to rely on his tactile sense, which differs from that of normal people only in being unaided by vision, or from blind people in being unaided by kinaesthesis. Rather, it is his tactile sense itself which is disordered, and it is this, and not his visual defects, that is the cause of his difficulties with abstract movement. Hence, for example, when Schneider makes use of his limited vision to perform, albeit imperfectly, abstract movements, what he is doing is compensating for his defective sense of touch by relying instead upon vision.

Merleau-Ponty then considers some additional evidence that might he used by an empiricist to support this latter hypothesis; and how a defender of the former hypothesis might then counter this by interpreting the new evidence in a different way. What becomes clear, he says, is ‘that the facts are ambiguous, that no experiment is decisive, and no explanation final’ (PP, p. 116); and although he has argued this only in the case of two hypotheses, he believes that the same could be shown for any others. For the ‘ambiguity’ displayed here, he maintains, does not indicate defects in the specific hypotheses: it is, rather, a genuine feature of the actual phenomena (cf Chapter Five, section 2).

However, Merleau-Ponty accepts that a defender of empiricism might point to similar situations in the natural sciences, where the testing of theories is likewise often inconclusive; and that one should thus be careful, in discussing the implications for empiricism of Schneider’s case, not to assume an unduly simplistic model of science, in which there are decisive experimental results and direct relationships between causal hypothesis and empirical data - the model implicit, for example, in Mill’s methods of induction (PP, p. 115). For in the natural sciences, theories are often proposed which, since their concepts are not limited to observationally definable ones, can be neither conclusively verified nor conclusively refuted.12

Nonetheless, says Merleau-Ponty, it is still possible in such cases to compare competing theories in terms of their degree of probability, to determine how well supported they are by the data, and hence to assess, albeit inconclusively, their relative merits (PP, p. 118). What he has to show, therefore, is that even this is impossible in the case of Schneider where, as Merleau-Ponty puts it:
Not only do we never arrive at an exclusive interpretation (deficiency of sense of potential touch or deficiency of visual world), but, what is more, we necessarily have to do with equally probable interpretations. (PP, p. 118)

The reason for this, says Merleau-Ponty, is that, in order to assess the relative merits of hypotheses relating abstract movement to either vision or touch, it must be possible to define each of these three variables independently of the others. If this is not possible, however, what might seem to be empirically supported correlations between, for example, movement and vision, will always turn out to be equally well interpretable as correlations between movement and touch. For if vision and touch cannot be defined independently of one another, anything that appears to be correlated with the former will necessarily appear also to be correlated with the latter, since what counts as vision will necessarily refer also to touch, and vice versa. Furthermore, if one cannot define either vision or touch without reference to movement, one will be bound to discover apparent ‘correlations’ between all three of them; but since these ‘correlations’ are due to the internality of the relationships, they cannot be taken to support claims of causal determination.

That these relationships are indeed internal is asserted by Merleau-Ponty in the following passage:

Tactile experience is not a condition apart which might he kept constant while the ‘visual’ experience was varied with a view to pinning on to each its own causality, nor is behaviour a function of these variables. It [i.e. behaviour, for instance abstract movement] is on the contrary presupposed in defining them just as each is presupposed in defining the other. (PP, p. 119)

At least two reasons are given to support this claim. The first is that there are, in Merleau-Ponty’s view, no such phenomena as ‘purely visual’ or ‘purely tactile’ experiences (PP, p. 114). The second is that (normal) vision, touch and movement all involve the ‘power of projection’, and this makes it impossible to define any one of them without some implicit reference to the others:

Visual representations, tactile data and motility are three phenomena which stand out sharply within the unity of behaviour. When, by reason of the fact that they show correlated variations, we try to explain one in terms of the other, we forget, for example, that the act of visual representation . . . already presupposes the same power of projection as is seen in abstract movement ... and thus we beg the question. (PP. pp. 119-20)

As we noted earlier, Merleau-Ponty thinks that Schneider’s difficulties in performing abstract movements are best understood in terms of a loss of this ‘projective power’ of the normal person.
Hence it can be expected that his visual and tactile capacities will be likewise diminished, since each presupposes the same more basic capacity for projection:

Psychological blindness, deficiency of sense of touch and motor disturbances are three expressions of a more fundamental disturbance through which they can be understood and not three component factors of morbid behaviour (PP, p. 119)

This ‘expressive’ relationship between the fundamental disturbance of Schneider’s power of projection and the defects of vision, touch and movement is not a causal one, since it is internal rather than external (see Chapter Five, section 2). Furthermore, claims Merleau-Ponty, the identification of this disturbance requires a quite different kind of analysis to that employed in an empiricist, scientific investigation. What is required instead is

another kind of thought, that which grasps its object as it comes into being and as it appears to the person experiencing it with the atmosphere of meaning thus surrounding it, and which tries to infiltrate into that atmosphere in order to discover, behind scattered facts and symptoms, the subject’s whole being, when he is normal, or the basic disturbance, when he is a patient. (PP, p. 120)

But before considering what this ‘other kind of thought’ (i.e. an existential-phenomenological analysis) reveals about Schneider, we will first examine Merleau-Ponty’s criticisms of the intellectualist alternative to empiricism.

The intellectualist, says Merleau-Ponty, will be inclined to regard Schneider’s difficulties as indicating that he is longer a true subject: that he has lost those central capacities which distinguish the conscious subject from the world of mere objects (PP, pp. 120-22). First, he lacks understanding of the objective system of spatial relationships obtaining between the various parts of the body, and between these and other objects. Second, his inability to perform abstract movements shows that he is unable sufficiently to detach himself from his immediate environment so as to act in accordance with freely adopted goals, which refer to imagined, as yet non-existent, states of affairs. Third, in no longer being able to point (‘zeigen’) to things, including the parts of his own body, as distinct from being able to grasp (‘greifen’) them, he shows a loss of the subject’s fundamental ability to distance itself from the world so as to adopt a ‘categorical attitude’ towards it - to name things, to apply identifying concepts to them, and so on:

In exactly the same way as the act of naming, the act of pointing out presupposes that the object, instead of being approached, grasped and absorbed by the body, is kept at a distance
and stands as a picture in front of the patient. If the patient is no longer able to point to some part of his body which is touched, it is because he is no longer a subject face to face with an objective world, and can no longer take up ‘a categorical attitude’. (PP, pp. 120-21)

Hence Schneider, according to the intellectualist, has relapsed into the condition of ‘a thing’:

the thing being precisely what does not know, what slumbers in absolute ignorance of itself and the world, what consequently is not a true ‘self’, i.e. a ‘for itself’ and has only a spatio-temporal form of individuation, existence in itself. (PP, p. 121)

But, says Merleau-Ponty, since Schneider is still able to perform concrete movements, and to grasp things, the intellectualist must regard these activities as susceptible to mechanistic, causal explanations, just like anything else that occurs in the objective world. Thus, for the intellectualist:

The distinction between concrete and abstract movement, between Greifen and Zeigen, comes down to that between the physiological and the psychic, existence in itself and existence for itself. (PP, p. 122)

This view of the difference between these two kinds of movement differs markedly, of course, from the empiricist’s view, according to which:

the distinction between concrete and abstract movement, like that between Greifen and Zeigen, is reducible to the traditional distinction between tactile and visual. (PP, p. 113)

For the empiricist, that is, the distinction is a matter of the different causal processes, operating through the two different senses, by reference to which each kind of movement can be explained. For the intellectualist, by contrast, it is between movement which can be causally explained and movement which cannot, and which is instead to be understood as the exercise by a conscious subject of its cognitive powers. The failure of the empiricist account, according to Merleau-Ponty, showed that the human body is no mere object; whilst the failure of the intellectualist account will show that the human subject is not separable from its body, and will thereby undermine the dichotomy between subject and object, the for-itself and the in-itself.

The problems facing the intellectualist’s view of the difference between concrete and abstract movement, says Merleau-Ponty, are as follows. If one is prepared to accept causal explanations of the former - say, by reference to physiologically based reflex patterns, whether conditioned or unconditioned - it would be entirely arbitrary to refuse such explanations for the latter also. This is
because, from the standpoint of physiological explanation, there is insufficient difference between the external stimuli, muscular contractions and physically describable behaviour which are involved in the two kinds of movement. For example:

Between the mosquito which pricks the skin and the ruler which the doctor presses on the same spot, the physical difference is not great enough to explain why the grasping movement is possible, but the act of pointing impossible. \(PP\), p. 123

And likewise:

Does not the patient who, in doing his job, moves his hand towards a tool lying on the table, displace the segments of his arm exactly as he would have to do to perform the abstract movement of extending it [on request]? \(PP\), p. 123

Thus, says Merleau-Ponty, ‘it is impossible to set limits to physiological explanation’ \(PP\), p. 123 in this way since, within the scientific framework of objective thought, there is no criterion by which one could appropriately distinguish the two kinds of movement. But, conversely, once one has assigned abstract movement to the powers of a conscious subject, there is no basis for refusing to regard concrete movement in the same manner. If for example, the ability to point to the various parts of one’s body is taken to indicate that one has knowledge of the overall structure of their spatial relationships, there is no good reason to deny that precisely the same knowledge is being applied when one grasps those parts in performing concrete movements.

So the intellectualist analysis of Schneider’s difficulties cannot succeed. It requires that a radical distinction be made between concrete and abstract movement. But the concepts it employs to do this are such that they inevitably fail to preserve the very distinction they were intended to characterize, and the two kinds of movement are instead unwittingly assimilated:

Any physiological explanation becomes generalized into mechanistic physiology, and any achievement of self-awareness into intellectualist psychology, and mechanistic physiology or intellectualist psychology bring behaviour down to the same uniform level and wipe out the distinction between abstract and concrete movement, between Zeigen and Greifen. \(PP\), p. 124

A similar difficulty arises for the intellectualist in attempting to characterize Schneider’s knowledge of the location of his body and its parts. It would be wrong, says Merleau-Ponty, to deny altogether that Schneider has any such knowledge. For example, he can legitimately be said to know where a
mosquito has bitten him, when it is a matter of scratching the bitten area, and to know where his nose is, when it is a matter of blowing it. That Schneider does not know where these are, when asked to point to them or to give an identifying description of them, shows only that ‘knowledge of where something is can be understood in a number of different ways’ (PP, p. 104). But intellectualism is unable to recognize such differentiation, because it accepts the objectivist conception of a determinate, unified structure of spatial relationships and positions.

Thus, for the intellectualist, Schneider must be said either to know where his nose is, or not to know this, since there is ‘in reality’ only a single, objectively specifiable location to be known. In Merleau-Ponty’s view, however, one should instead say that Schneider’s nose is differently situated with respect to the different practical contexts in which the question of where it actually arises for him. Hence one can only understand Schneider’s difficulties in pointing at things, and in performing abstract movements, by an existential-phenomenological analysis which attempts to identify what these different kinds of movement and spatiality mean to Schneider himself, and the basic attitudes towards the world which they can be taken to express. As Merleau-Ponty puts it, one needs to recognize ‘the Greifen and the Zeigen as two ways of relating to the object and two types of being in the world’ (PP, p. 123). Schneider’s problems, then, reside basically in his ‘loss’ of one of these.

Unlike Schneider, says Merleau-Ponty, the normal person enjoys the use of his body not only in so far as it is involved in a concrete setting, he is in a situation not only in relation to the tasks imposed by a particular job, he is not open merely to real situations; for, over and above all this, his body is correlated with pure stimuli devoid of any practical bearing; he is open to those verbal and imaginary situations which he can choose for himself or which may be suggested to him in the course of an experiment. (PP, p. 108)

In abstract movement, that is, one detaches oneself from the immediate situation, in relation to the demands of which concrete movements are performed. One’s body becomes the potential vehicle of actions which are addressed, not to the actual, but to the possible or the imaginary. In order to do so it must have what Merleau-Ponty calls a capacity for ‘projection’:

The normal function which makes abstract movement possible is one of ‘projection’ whereby the subject of movement keeps in front of him an area of free space in which what does not naturally exist takes on a semblance of existing. (PP, p. 111)
It is this capacity which Schneider has lost; and consequently he now lacks ‘that concrete liberty which comprises the general power of putting oneself in a situation’ (PP, p. 135).

But this projective power must not, says Merleau-Ponty, be understood as a primarily cognitive one, as a capacity for thought and conscious deliberation which is separable from bodily action. This is how it would be regarded by intellectualism. Yet Schneider in fact has this capacity, in its intellectualist interpretation; and it is precisely in this that his abnormality is so clearly displayed. As noted earlier, Schneider does eventually manage to perform abstract movements, but by strikingly abnormal means. For example, he traces shapes in the air with his arm by forming a mental picture of the desired shape, and consciously monitoring his arm’s movements to check their conformity to this picture; and he works out the position of his limbs in relation to the ground by a series of consciously performed inferences. Merleau-Ponty suggests that, from an intellectualist standpoint, the only abnormality involved is that these procedures are operating more slowly and clumsily than usual; whereas in fact it is the very use of such procedures which is abnormal:

Nothing would he more misleading than to suppose the normal person adopting similar procedures, differing merely in being shortened by constant use. (PP, p. 108)

For, he says, one must recognize that:

Illness, like childhood and ‘primitive mentality’, is a complete form of existence and the procedures it employs to replace normal functions which have been destroyed are equally pathological phenomena. (PP, p. 107)

Schneider, then, represents in effect a parody of intellectualism’s conception of the human agent. The intellectualist, in Merleau-Ponty’s view, inevitably views intelligent, purposive action as the application or exercise by agents of the various cognitive capacities which define them as being genuine subjects; and these capacities are regarded as existing independently of the various bodily performances based upon them. They are capacities of the subject; and the subject is not itself a body, but rather a consciousness which guides its body’s activities in the light of its knowledge, aims, and so on. But this is just what Schneider does, albeit in a somewhat inferior manner. For Merleau-Ponty, it is precisely this divorce between ‘thought’ and ‘action’ which characterizes Schneider’s abnormality.

When, for example, Schneider is asked to trace a circle in the air with his hand, he clearly understands what is required, and can judge whether or not he has succeeded. But, says Merleau-Ponty,
although the order has an *intellectual significance* for him, it does not have a *motor* one, it does not communicate anything to him as a mobile subject. . . . What he lacks is neither motility nor thought, and we are brought to the recognition of something between movement as a third person process and thought as a representation of movement ... a motor intentionality in the absence of which the order remains a dead letter. (*PP*, p. 110 trans. adjusted)

The basic error of intellectualism, then, is to abstract the thought and knowledge of the agent from the bodily practices through which they are supposedly displayed:

The intellectualist analysis, here as elsewhere, is less false than abstract. It is true that the ‘symbolic function’ or the ‘representative function’ underlies our movement, but it is not a final term for analysis. It too rests on a certain groundwork. The mistake of intellectualism is to make it self-sufficient, to remove it from the stuff in which it is realized. (*PP*, p 124)

This ‘stuff’ consists in bodily action, and the sensory and motor ‘equipment’ which it relies upon. Indeed, says Merleau-Ponty, if this is not recognized then there is a further feature of Schneider’s case that cannot he understood: that he was, after all, the victim of an injury to his brain, and more specifically to the visual cortex. The intellectualist, by abstracting the subject’s cognitive capacities from the realm of bodily existence, is unable to account for the effects of that injury upon them:

Schneider’s trouble was not initially metaphysical, for it was a shell splinter which wounded him at the back of his head. The damage to his sight was serious, but it would be ridiculous, as we have said, to explain all the other deficiencies in terms of the visual one as their cause; but no less ridiculous to think that the shell splinter directly struck symbolic consciousness. It was through his sight that mind in him was impaired. (*PP*, p. 126)

So although the empiricist is mistaken in attempting to provide causal explanations for Schneider’s difficulties, there is at least one important virtue of the empiricist position: it emphasizes the essential contingency of human powers, their dependence upon the specific character and organization of the human body, and hence their vulnerability to damage and disorders of various kinds. For the intellectualist, by contrast, it is as if the subject could possess any kind of body, or none at all, and its powers not be diminished by the loss of sensory faculties or limbs.13

5. Habit, Practical Knowledge and Intentionality
Having completed his lengthy discussion of Schneider, Merleau-Ponty goes on to develop, in the concluding pages of the chapter, a more positive account of the kinds of knowledge, understanding
and intentionality which are possessed by the human body as the subject of action (PP, pp. 136-49). Turning his attention to various motor skills such as typing, driving or playing a musical instrument, he begins by arguing that empiricism and intellectualism fare no better in accounting for these normal, habitual activities than they did for the abnormal case of Schneider.

For the empiricist, he argues, the acquisition of such skills has to be explained by a process of learning, through which certain ‘stimuli’ come to be associated with certain bodily ‘responses’, both of these being physicalistically defined. Hence the skill that is acquired must he capable, in principle, of being specified in terms of a determinate repertoire of behaviour that takes place in a similarly specifiable set of circumstances. Against this Merleau-Ponty presents the following objection. Any such ‘mechanistic’ theory, he says,

runs up against the fact that the learning process is systematic: the subject does not weld together the individual movements and individual stimuli but acquires the power to respond with a certain type of solution to situations of a certain general form. The situations may vary widely from case to case [i.e. when their identity or difference is characterized physicalistically], and the response movements may be entrusted sometimes to one operative organ, sometimes to another, both situations and responses in the various cases having in common not so much a partial identity of elements as a shared meaning. (PP, p. 142)

Merleau-Ponty’s main illustration of these claims concerns the playing of a musical instrument. He cites the study of an organist who needed only an hour’s practice to be able to perform successfully his musical programme on an unfamiliar instrument, the physical arrangement of whose stops and pedals was very different to the one that he was used to playing on (PP, p. 145). Thus the physical movements required to play the new instrument were radically different from those which, on an empiricist account, he could be thought of as having previously acquired; yet, within so brief a period of time, it is inconceivable that a quite new set of conditioned responses could have been learnt. To enable this rapid transfer to take place, therefore, what must have been acquired from the outset was the ability to ‘respond with a certain type of solution’ to a situation of ‘a certain general form’; and he argues that both situation and solution are specifiable ultimately only in relation to their musical significance for the organist.

Merleau-Ponty also claims that the way in which the organ player familiarizes himself with the new instrument shows what is wrong with an intellectualist account of bodily skills. According to this, one would expect him to proceed by examining carefully the unfamiliar instrument, noting the positions of its various parts, and drawing up a new mental map or plan of their arrangement, which he would then
apply in practice. But what in fact he does is this:

He sits on the seat, works on the pedals, pulls out the stops, gets the measure of the instrument with his body, incorporates within himself the relevant directions and dimensions, settles into the organ as one settles into a house. He does not learn objective spatial positions for stop and pedal, nor does he commit them to memory. (PP, p. 145)

However, notes Merleau-Ponty, it might he objected that the acquisition of new bodily skills, as distinct from the modification of already habituated ones, is perhaps more susceptible to an intellectualist analysis. For example,

is it not the ease that forming the habit of dancing is discovering, by analysis, the formula of the movement in question, and then reconstructing it on the basis of the ideal outline by the use of previously acquired movements, those of walking and running? (PP, p. 142)

Presumably the idea here is this: faced with learning, say, a new dance movement, one might proceed by first watching it being executed by someone; then breaking it down, mentally, into its sequential elements; and finally, utilizing one’s already acquired repertoire of movements, attempting to apply this ‘formula’, monitoring one’s attempt to do so by reference to a mental picture of what one is aiming to achieve.

Merleau-Ponty’s reply to this objection is as follows:

But before the formula of the new dance can incorporate certain elements of general motility [i.e. the already acquired ability to walk, run etc] it must first have had, as it were, the stamp of movement set upon it. As has often been said, it is the body which ‘catches’ (kapier) and ‘comprehends’ movement. The acquisition of a habit is indeed the grasping of a significance, but it is the motor grasping of a motor significance. (PP, pp. 142 -3)

What he seems to be saying is this. It may well be that, in acquiring this new skill, a certain amount of conscious analysis and mental imagery is involved. But there is also an irreducibly bodily element of ‘understanding’, without which the crucial transition from the established to the new movement cannot occur. However carefully one analyses the new movement, and pictures its relationship to already acquired forms, it is ultimately one’s body which has to ‘grasp’ this relationship, to ‘sense’ how this transformation can he executed, to ‘feel’ incipiently what the new movement would be like, and so on. There is a point at which one’s body ‘knows what to do’, and ‘knows how to do it’; and without this practical knowledge on its part, a purely intellectual grasp will be of no avail. Hence, says
Merleau-Ponty, one must accept that:

it is the body which ‘understands’ in the acquisition of habit. This way of putting it will appear absurd, if understanding is [as the intellectualist maintains] subsuming a sense-datum under an idea, and if the body is [regarded as] an object. But the phenomenon of habit is just what prompts us to revise our notion of ‘understand’ and our notion of the body. (PP, p. 144)

Further, in revising one’s concept of understanding so that it is no longer regarded as an act performed by a disembodied subject, and is instead directly attributable to the (non-objective) body, one needs also to revise one’s concept of knowledge. One’s body ‘knows’ the world upon which it operates, and ‘knows how’ to deal with it successfully, in a way that does not require any explicitly formulable thought or beliefs on the part of a conscious subject:

Our bodily experience of movement ... provides us with a way of access to the world and the object, with a ‘praktognosia’ [practical knowledge], which has to be recognized as original and perhaps as primary. My body has its world, or understands its world, without having to make use of any ‘symbolic’ or ‘objectifying function’, (PP, pp. 140-41; our italics)

Interpreting the terms translated here as ‘original’ (‘originale’) and ‘primary’ (‘originaire’) in the following way, one can take Merleau-Ponty to be making two distinguishable claims about the body’s practical knowledge. The first is that is irreducible: ‘original’ in the sense that it cannot be analysed further by reference to more basic concepts. In particular, it is not susceptible to an intellectualist analysis as, in effect, the practical application or exercise of the subject’s cognitive abilities. The second is that this practical knowledge possessed by the body provides the foundation for other forms of knowledge: that it is, in this sense, ‘primary’. Hence, for example, although humans can articulate the knowledge of spatial relationships involved in abstract movement in the form of explicitly stated propositions, one should regard this cognitive ‘representation’ of spatiality as rooted in, and derivative from, the practical knowledge displayed in the actual ability to perform such movement.

Furthermore, argues Merleau-Ponty, and perhaps most fundamentally, one needs also to revise the intellectualist conception of intentionality:

These elucidations enable us clearly to understand motility as basic [originale] intentionality. Consciousness is in the first place [originairement] not a matter of ‘I think that’ but of ‘I can’ (PP, p. 137)
In other words, the irreducible and foundational form of intentionality is that which is involved in one’s ability to act on the world. In such action it is one’s body which is ‘directed towards’ that world. Hence, for example:

In the action of the hand which is raised towards an object is contained a reference to the object, not as an object represented, but as that highly specific thing towards which we project ourselves, near which we are, in anticipation, and which we haunt. (*PP*, p. 138)

The hand, as it were, seeks out its object; it aims to reach this object; and its movements are organized so as to achieve this aim. In performing such actions, one’s body is not to be seen as guided by an intentional consciousness which exists independently of it: the intentionality instead belongs to the body itself, and provides the basic ‘connection’ between humans and the world, without any need for intervening (mental) ‘representations’ of it.

Clearly, this conception of intentionality differs radically from the one employed by Husserl in the *Cartesian Meditations*. As we noted in earlier chapters (especially Chapter Two, section 1), intentionality is taken there to characterize the relationship between acts of consciousness and their objects. The former are said to be ‘directed at’, to ‘intend’ or ‘mean’, the latter; whilst the latter are said to be ‘intended’ or ‘meant’ by the former. This account of intentionality locates it within what is, for Husserl, the basic unit of analysis for the purposes of phenomenological investigation: the *cogitatio*, the particular conscious act, which always displays the same underlying structure, *ego—cogito—cogitatum*. From this perspective, there can be no question of the body occupying anything other than the position of an object intended by the conscious acts of the non-bodily subject, the ego.15

Corresponding to this difference in the conception of intentionality, there is an equally radical difference in the way that phenomenological description is understood and practised. For Husserl, at least in the *Cartesian Meditations*, this is an essentially first-person, self-reflective process, in which each philosophizing ‘I’ reflects upon its own *cogitationes*. Phenomenological description of ‘one’s own body’ would thus consist in explicating this particular kind of object of one’s conscious acts. But this is far from what is involved in Merleau-Ponty’s phenomenological descriptions of ‘one’s own body’. The reader is not, for example, presented with an account of Merleau-Ponty’s experience of his own body as an object of his consciousness; nor in the discussion of Schneider, with an equivalent account of Schneider’s experience of his. Instead, Merleau-Ponty describes the nature of Schneider’s ‘body in-action’; articulates the mode of ‘existence’ it expresses; characterizes Schneider’s bodily ‘attitude’ towards the world; and so on. And it remains (perhaps deliberately) unclear, throughout these descriptions, from whose standpoint they are being provided.

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These differing conceptions of phenomenological description are related to differing interpretations of what is involved in the phenomenological reduction. We shall consider this issue more fully in section 1 of the Conclusion. But there is one point that can be made here, since it concerns the use made by Merleau-Ponty of Schneider’s case. Why, after all, is so much attention given to this example of pathological bodily action? One reason has already been noted: it enables Merleau-Ponty to present what he takes to be a caricature of the intellectualist’s subject of action. But a second reason is this. Schneider’s difficulties in performing abstract movements, and the abnormal means by which he attempts to do so, are intended by Merleau-Ponty to draw one’s attention, in a dramatic way, to everyday abilities with which one is so familiar that it is easy not to notice them at all. The pathological case operates as a heuristic device that shocks one into awareness of what is taken for granted. It is a means of gaining distance from the familiar, so that one is better able to explicate it; and this, in Merleau-Ponty’s view, is the basic nature of the phenomenological reduction. As he puts it in the Preface:

> It is because we are through and through compounded of relationships with the world that for us the only way to become aware of the fact is to suspend the resultant activity, to refuse it our complicity..., to put it ‘out of play’. Not because we reject the certainties of common sense and a natural attitude to things — they are, on the contrary, the constant theme of philosophy — but because, being the presupposed basis of any thought, they are taken for granted, and go unnoticed, and because in order to arouse them and bring them into view, we have to suspend for a moment our recognition of them. (PP, p. xiii)

**Notes and references**

1 On Husserl’s conception of philosophy as a ‘science’, see Chapter One, section 1, and note 2, above.

2 See D. Carr, ‘Husserl’s Problematic Concept of the Life-World’, American Philosophical Quarterly 7, 1970, and Phenomenology and the Problem of History, Northwestern University Press 1974. In discussing Husserl, we shall keep to the term ‘life-world’, whilst continuing to use ‘lived world’ when discussing Merleau-Ponty; but we shall ignore possible differences between the two concepts.

3 We return to the question of Husserl’s instrumentalism in section 2 of the Conclusion.

4 An alternative form of such an ‘extension’ was provided by Berkeley’s idealism, which rejected Locke’s distinction between primary/objective and secondary subjective: for discussion, see P. Alexander, Ideas, Qualities and Corpuscles, Cambridge University Press 1985. See also A. Koyré, Metaphysics and Measurement, Chapman and Hall 1968, Chapter 1, on the Platonist elements in Galileo’s ‘mathematical’ conception of nature.

5 This idea of ‘analogizing apperception’ had played an important part in Husserl’s account of the recognition of other Egos in the Fifth of the Cartesian Meditations (trans. D. Cairns, Martinus Nijhoff 1977; French translation 1931): see Chapter Eight, section 2, for discussion of this.

6 In section 1 of the Conclusion we consider some of the issues raised by this rejection of Husserl’s transcendental reduction.
7 R. M. Zaner, in The Problem of Embodiment (2nd edn, Martinus Nijhoff 1971) emphasizes the importance of the idea of ‘one’s own body’ in Marcel’s philosophy, and its influence on Merleau-Ponty; and he compares both with Sartre’s account of ‘the body for-itself’ in Part Three of Being and Nothingness. We consider Merleau-Ponty’s criticisms of Sartre’s distinction between the in-itself and the for-itself, which imply corresponding criticisms of Sartre’s account of the body, in section 3 of Chapter Nine; for a sympathetic analysis of Merleau-Ponty’s position vis-à-vis Sartre’s, see A. De Waellen, ‘A Philosophy of the Ambiguous’, in Merleau-Ponty, Structure of Behaviour, pp xviii-xxxviii. See also E. W. Straus, Selected Papers: Phenomenological Psychology (trans. in part E. Teng, Tavistock Publications 1966) especially Chapters 2, 7 and 10, for a discussion of ‘the lived body’ that is in many ways similar to Merleau-Ponty’s.

8 A classic discussion of this can be found in P. Schilder, The Image and Appearance of the Human Body (International Universities Press 1950; first published 1935): Merleau-Ponty refers only to an earlier work by Schilder, published in 1923).

9 In his analysis of this phenomenon, Merleau-Ponty also explores the possible relevance of the idea of an ‘organic repression’ (PP, pp. 77-8). To understand what he says about this, it is helpful to consult Chapter III of The Structure of Behaviour (1941; trans. A. Fisher, Methuen 1965), and his discussion of the psychoanalytic concept of repression in PP, Part One, Chapter 5.


12 See C. G. Hempel, Philosophy of Natural Science, Prentice-Hall 1966, Chapters 2 to 4, for a discussion of scientific theory-testing which takes account of these problems.

13 See also PP, pp. 171-73, where Merleau-Ponty talks both of the ‘necessity’ and of the ‘contingency’ of the body as a feature of human existence, a view that is related to his rejection of the Kantian distinction between the a priori and the a posteriori: cf. section 1 of our Conclusion. In What Computers Can’t Do: The Limits of Artificial Intelligence (Harper and Row 1979), H. Dreyfus draws upon Merleau-Ponty to argue, inter alia, that computers cannot think because they do not have bodies.

14 There are interesting parallels here with Gilbert Ryle’s distinction between ‘knowing how’ and ‘knowing that’, and more generally between Merleau-Ponty’s rejection of ‘intellectualism’ and Ryle’s: see The Concept of Mind (first published 1949), Penguin Books 1988, especially Chapters II and IX.

15 See Zaner, The Problem of Embodiment, Part III, Chapter III, for a Husserlian criticism of Merleau-Ponty on this point. This raises more general issues about the relations between existential and transcendental phenomenology, and about Merleau-Ponty’s ‘non-representationalist’ view of intentionality, which we discuss in sections 1 and 3, respectively, of the Conclusion.

16 From a Foucauldian perspective, Merleau-Ponty might himself have criticized for complicity in the ‘normalizing’ procedures of modern forms of power (see M. Foucault, Discipline and Punish, trans. A. Sheridan, Penguin Books 1979); and, more generally, for ignoring historical and social specificities in modes of bodily practice. However, it might he replied that Foucault’s own account of the disciplining of bodies suffers from its lack of adequate phenomenological description, and that such descriptions can be given in ways that recognize both socio-historical diversity and relations of power. See, for example, P. Connerton, How Societies Remember (Cambridge University Press 1989) and I. M. Young ‘Throwing Like a Girl: A Phenomenology of Feminine Bodily Comportment, Motility and Spatiality’, Human Studies 3, 1980.