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THE BODY AS OBJECT AND MECHANISTIC PHYSIOLOGY

The definition of the object is, as we have seen, that it exists *partes extra partes*, and that consequently it acknowledges between its parts, or between itself and other objects only external and mechanical relationships, whether in the narrow sense of motion received and transmitted, or in the wider sense of the relation of function to variable. Where it was desired to insert the organism in the universe of objects and thereby close off that universe, it was necessary to translate the functioning of the body into the language of the *initself* and discover, beneath behaviour, the linear dependence of stimulus and receptor, receptor and *Empfinder*.¹ It was of course realized that in the circuit of behaviour new particular forms emerge, and the theory of specific nervous energy, for example, certainly endowed the organism with the power of transforming the physical world. But in fact it attributed to the nervous systems the occult power of creating the different structures of our experience, and whereas sight, touch and hearing are so many ways of gaining access to the object, these structures found themselves transformed into compact qualities derived from the local distinction between the organs used. Thus the relationship between

¹ Cf. *La Structure du Comportement*, Chap. I and II.

stimulus and perception could remain clear and objective, and the psycho-physical event was of the same kind as the causal relations obtaining 'in the world'. Modern physiology no longer has recourse to these pretences. It no longer links the different qualities of one and the same sense, and the data of different senses, to distinct material instruments. In reality injuries to centres and even to conductors are not translated into the loss of certain qualities of sensation or of certain sensory data, but into loss of differentiation in the function. We have already discussed this: wherever the seat of the injury in the sensory routes and whatever its origin, one observes, for example, a decay of sensitivity to colour; at the beginning, all colours are affected, their basic shade remaining the same, but their saturation decreasing; then the spectrum is simplified and reduced to four colours: yellow, green, blue, crimson, and indeed all short-wave colours tend towards a kind of blue, all long-wave colours towards a kind of yellow, vision being liable, moreover, to vary from moment to moment, according to degree of fatigue. Finally a monochrome stage in grey is reached, although favourable conditions (contrast, long exposure) may momentarily bring back dichromatic sight.² The progress of the lesion in the nervous tissue does not, therefore, destroy, one after another, ready-made sensory contents, but makes the active differentiation of stimuli, which appears to be the essential function of the nervous system, increasingly unreliable. In the same way, in the case of non-cortical injury to the sense of touch, if certain contents (temperatures) are more easily destroyed and are the first to disappear, this is not because a determinate region, lost to the patient, enables us to feel heat and cold, since the specific sensation will be restored if a sufficiently extensive stimulus is applied;³ it is rather that the sensation succeeds in taking its typical form only under a more energetic stimulus. Central lesions seem to leave qualities intact; on the other hand they modify the spatial organization of data and the perception of objects. This is what had led to the belief in specialized gnostic centres for the localization and interpretation of qualities. In fact, modern research shows that central lesions have the effect in most cases of raising the chronaxies,

² J. Stein, *Pathologie der Wahrnehmung*, p. 365.

³ *Ibid.*, p. 358.

which are increased to two or three times their normal strength in the patient. The excitation produces its effects more slowly, these survive longer, and the tactile perception of roughness, for example, is jeopardized in so far as it presupposes a succession of circumscribed impressions or a precise consciousness of the different positions of the hand.⁴ The vague localization of the stimulus is not explained by the destruction of a localizing centre, but by the reduction to a uniform level of sensations, which are no longer capable of organizing themselves into a stable grouping in which each of them receives a univocal value and is translated into consciousness only by a limited change.⁵ Thus the excitations of one and the same sense differ less by reason of the material instrument which they use than in the way in which the elementary stimuli are spontaneously organized among themselves, and this organization is the crucial factor both at the level of sensible 'qualities' and at that of perception. It is this, and not the specific energy of the nervous apparatus examined, which causes an excitant to give rise to a tactile or thermic sensation. If a given area of skin is several times stimulated with a hair, the first perceptions are clearly distinguished and localized each time at the same point. As the stimulus is repeated, the localization becomes less precise, perception widens in space, while at the same time the sensation ceases to be specific: it is no longer a contact, but a feeling of burning, at one moment cold and at the next hot. Later still the patient thinks the stimulus is moving and describing a circle on his skin. Finally nothing more is felt.⁶ It follows that the 'sensible quality', the spatial limits set to the percept, and even the presence or absence of a perception, are not *de facto* effects of the situation outside the organism, but represent the way in which it meets stimulation and is related to it. An excitation is not perceived when it strikes a sensory organ which is not 'attuned' to it.⁷ The function of the organism in receiving stimuli is, so to speak,

⁴ J. Stein, *Pathologie der Wahrnehmung*, pp. 360–1.

⁵ *Ibid.*, p. 362.

⁶ *Ibid.*, p. 364.

⁷ Die Reizvorgänge treffen ein ungestimmtes Reaktionsorgan. Stein, *Pathologie der Wahrnehmung*, p. 361.

to 'conceive' a certain form of excitation.⁸ The 'psychophysical event' is therefore no longer of the type of 'worldly' causality, the brain becomes the seat of a process of 'patterning' which intervenes even before the cortical stage, and which, from the moment the nervous system comes into play, confuses the relations of stimulus to organism. The excitation is seized and reorganized by transversal functions which make it resemble the perception which it is about to arouse. I cannot envisage this form which is traced out in the nervous system, this exhibiting of a structure, as a set of processes in the third person, as the transmission of movement or as the determination of one variable by another. I cannot gain a removed knowledge of it. In so far as I guess what it may be, it is by abandoning the body as an object, *partes extra partes*, and by going back to the body which I experience at this moment, in the manner, for example, in which my hand moves round the object it touches, anticipating the stimuli and itself tracing out the form which I am about to perceive. I cannot understand the function of the living body except by enacting it myself, and except in so far as I am a body which rises towards the world.

Thus exteroceptivity demands that stimuli be given a shape; the consciousness of the body invades the body, the soul spreads over all its parts, and behaviour overflows its central sector. But one might reply that this 'bodily experience' is itself a 'representation', a 'psychic fact', and that as such it is at the end of a chain of physical and physiological events which alone can be ascribed to the 'real body'. Is not my body, exactly as are external bodies, an object which acts on receptors and finally gives rise to the consciousness of the body? Is there not an 'interoceptivity' just as there is an 'exteroceptivity'? Cannot I find in the body message-wires sent by the internal organs to the brain, which are installed by nature to provide the soul with the opportunity of feeling its body? Consciousness of the body, and the soul, are thus repressed. The body becomes the highly polished machine which the ambiguous notion of behaviour nearly made us forget. For example, if, in the case of a man who has lost a leg, a stimulus is applied, instead of to the leg, to the path from the stump to the brain, the subject will feel

⁸ 'Die Sinne . . . die Form eben durch ursprüngliches Formbegreifen zu erkennen geben.' Ibid., p. 353.

a phantom leg, because the soul is immediately linked to the brain and to it alone.

What has modern physiology to say about this? Anaesthesia with cocaine does not do away with the phantom limb, and there are cases of phantom limbs without amputation as a result of brain injury.⁹ Finally the imaginary limb is often found to retain the position in which the real arm was at the moment of injury: a man wounded in battle can still feel in his phantom arm the shell splinters that lacerated his real one.¹⁰ Is it then necessary to abandon the 'peripheral theory' in favour of a 'central theory'? But a central theory would get us no further if it added no more to the peripheral conditions of the imaginary limb than cerebral symptoms. For a collection of cerebral symptoms could not represent the relationships in consciousness which enter into the phenomenon. It depends indeed on 'psychic' determinants. An emotion, circumstance which recalls those in which the wound was received, creates a phantom limb in subjects who had none.¹¹ It happens that the imaginary arm is enormous after the operation, but that it subsequently shrinks and is absorbed into the stump 'as the patient consents to accept his mutilation'.¹² The phenomenon of the phantom limb is here elucidated by that of anosognosia,* which clearly demands a psychological explanation. Subjects who systematically ignore their paralysed right hand, and hold out their left hand when asked for their right, refer to their paralysed arm as 'a long, cold snake', which rules out any hypothesis of real anaesthesia and suggests one in terms of the refusal to recognize their deficiency.¹³ Must we then conclude that the phantom limb is a memory, a volition or a belief, and, failing any physiological explanation, must we provide a psychological explanation for it? But no psychological explanation can

* Failure or refusal on the patient's part to recognize the existence of a disease or disability (Translator's note).

⁹ Lhermitte, *L'Image de notre Corps*, p. 47.

¹⁰ *Ibid.*, pp. 129 and ff.

¹¹ *Ibid.*, p. 57.

¹² *Ibid.*, p. 73. J. Lhermitte points out that the illusion of the limbless bears a relationship to the patient's psychological make-up: it is more frequent among educated people.

¹³ Lhermitte, *L'Image de notre Corps*, pp. 129 and ff.

overlook the fact that the severance of the nerves to the brain abolishes the phantom limb.¹⁴

What has to be understood, then, is how the psychic determining factors and the physiological conditions gear into each other: it is not clear how the imaginary limb, if dependent on physiological conditions and therefore the result of a third person causality, can in another context arise out of the personal history of the patient, his memories, emotions and volitions. For in order that the two sets of conditions might together bring about the phenomenon, as two components bring about a resultant, they would need an identical point of application or a common ground, and it is difficult to see what ground could be common to 'physiological facts' which are in space and 'psychic facts' which are nowhere: or even to objective processes like nervous influxes which belong to the realm of the *in-itself*, and *cogitations* such as acceptance and refusal, awareness of the past, and emotion, which are of the order of the *for-itself*. A hybrid theory of the phantom limb which found a place for both sets of conditions¹⁵ may, then, be valid as a statement of the known facts; but it is fundamentally obscure. The phantom limb is not the mere outcome of objective causality; no more is it a *cogitatio*. It could be a mixture of the two only if we could find a means of linking the 'psychic' and the 'physiological', the 'for-itself' and the 'in-itself', to each other to form an articulate whole, and to contrive some meeting-point for them: if the third person processes and the personal acts could be integrated into a common middle term.

In order to describe the belief in the phantom limb and the unwillingness to accept mutilation, writers speak of a 'driving into the unconscious' or 'an organic repression'.¹⁶ These un-Cartesian terms force us to form the idea of an organic thought through which the relation of the 'psychic' to the 'physiological' becomes conceivable. We have already met elsewhere, in the case of substitutions, phenomena which lie outside the alternatives of psychic and physiological, of final

¹⁴ Ibid., pp. 129 and ff.

¹⁵ The phantom limb lends itself neither to a purely physiological explanation, nor to a purely psychological one. Such is the conclusion of J. Lhermitte, *L'Image de notre Corps*, p. 126.

¹⁶ Schilder, *Das Körperschema*; Menninger-Lerchenthal, *Das Truggebilde der eigenen Gestalt*, p. 174; Lhermitte, *L'Image de notre Corps*, p. 143.

and mechanistic causes.¹⁷ When the insect, in the performance of an instinctive act, substitutes a sound leg for one cut off, it is not, as we saw, that a stand-by device, set up in advance, is automatically put into operation and substituted for the circuit which is out of action. But neither is it the case that the creature is aware of an aim to be achieved, using its limbs as various means, for in that case the substitution ought to occur every time the act is prevented, and we know that it does not occur if the leg is merely tied. The insect simply continues to belong to the same world and moves in it with all its powers. The tied limb is not replaced by the free one, because it continues to count in the insect's scheme of things, and because the current of activity which flows towards the world still passes through it. There is in this instance no more choice than in the case of a drop of oil which uses all its strength to solve in practical terms the maximum and minimum problem which confronts it. The difference is simply that the drop of oil adapts itself to given external forces, while the insect itself projects the norms of its environment and itself lays down the terms of its vital problem;¹⁸ but here it is a question of an *a priori* of the species and not a personal choice. Thus what is found behind the phenomenon of substitution is the impulse of being-in-the-world, and it is now time to put this notion into more precise terms. When we say that an animal exists, that it has a world, or that it *belongs* to a world, we do not mean that it has a perception or objective consciousness of that world. The situation which unleashes instinctive operations is not entirely articulate and determinate, its total meaning is not possessed, as is adequately shown by the mistakes and the blindness of instinct. It presents only a practical significance; it asks for only bodily recognition; it is experienced as an 'open' situation, and 'requires' the animal's movements, just as the first notes of a melody require a certain kind of resolution, without its being known in itself, and it is precisely what allows the limbs to be substituted for each other, and to be of equal value before the self-evident demands of the task. In so far as it anchors the subject to a certain 'environment', is 'being-in-the-world' something like 'attention to life' in Bergson or 'the function of the real' in P. Janet? Attention

¹⁷ Cf. *La Structure du Comportement*, pp. 47 and ff.

¹⁸ *Ibid.*, pp. 196 and ff.

to life is the awareness we experience of 'nascent movements' in our bodies. Now reflex movements, whether adumbrated or executed, are still only objective processes whose course and results consciousness can observe, but in which it is not involved.¹⁹ In fact the reflexes themselves are never blind processes: they adjust themselves to a 'direction' of the situation, and express our orientation towards a 'behavioural setting' just as much as the action of the 'geographical setting' upon us. They trace out from a distance the structure of the object without waiting for its point by point stimulation. It is this global presence of the situation which gives a meaning to the partial stimuli and causes them to acquire importance, value or existence for the organism. The reflex does not arise from objective stimuli, but

¹⁹ When Bergson stresses the unity of perception and action and invents, for its expression, the term 'sensory-motor process', he is clearly seeking to involve consciousness in the world. But if feeling is representing a quality to oneself, and if movement is changing one's position in the objective world, then between sensation and movement, even taken in their nascent state, no compromise is possible, and they are distinct from each other as are the *for-itself* and the *in-itself*. Generally speaking, Bergson saw that the body and the mind communicate with each other through the medium of time, that to be a mind is to stand above time's flow and that to have a body is to have a present. The body, he says, is an instantaneous section made in the becoming of consciousness (*Matière et Mémoire*, p. 150). But the body remains for him what we have called the objective body; consciousness remains knowledge; time remains a successive 'now', whether it 'snowballs upon itself' or is spread in spatialized time. Bergson can therefore only compress or expand the series of 'present moments'; he never reaches the unique movement whereby the three dimensions of time are constituted, and one cannot see why duration is squeezed into a present, or why consciousness becomes involved in a body and a world.

As for the 'function of the real', P. Janet uses it as an existential notion. This is what enables him to sketch out a profound theory of emotion as the collapse of our customary being, and a flight from our world. (Cf. for example the interpretation of the fit of hysterics, *De l'Angoisse à l'Extase*, T. II, p. 450 and ff.) But this theory of emotion is not followed out and, as J. P. Sartre shows, it conflicts, in the writings of P. Janet, with a mechanistic conception rather close to that of James: the collapse of our existence into emotion is treated as a mere *derivation* from psychological forces, and the emotion itself as the consciousness of this process expressed in the third person, so that there is no longer reason to look for a meaning in the emotional behaviour which is the result of the blind momentum of the tendencies, and we return to dualism. (Cf. J. P. Sartre, *Esquisse d'une théorie de l'Emotion*.) P. Janet, moreover, treats psychological tension—that is, the movement whereby we spread our 'world' before us—expressly as a representative hypothesis; so he is far from considering it in general terms as the concrete essence of man, though he does so implicitly in particular analyses.

moves back towards them, and invests them with a meaning which they do not possess taken singly as psychological agents, but only when taken as a situation. It causes them to exist as a situation, it stands in a 'cognitive' relation to them, which means that it shows them up as that which it is destined to confront. The reflex, in so far as it opens itself to the meaning of a situation, and perception; in so far as it does not first of all posit an object of knowledge and is an intention of our whole being, are modalities of a *pre-objective* view which is what we call being-in-the-world. Prior to stimuli and sensory contents, we must recognize a kind of inner diaphragm which determines, infinitely more than they do, what our reflexes and perceptions will be able to aim at in the world, the area of our possible operations, the scope of our life. Some subjects can come near to blindness without changing their 'world': they can be seen colliding with objects everywhere, but they are not aware of no longer being open to visual qualities, and the structure of their conduct remains unmodified. Other patients, on the other hand, lose their world as soon as its contents are removed; they abandon their habitual way of life even before it has become impossible, making themselves into premature invalids and breaking their vital contact with the world before losing sensory contact with it. There is, then, a certain consistency in our 'world', relatively independent of stimuli, which refuses to allow us to treat being-in-the-world as a collection of reflexes—a certain energy in the pulsation of existence, relatively independent of our voluntary thoughts, which prevents us from treating it as an act of consciousness. It is because it is a preobjective view that being-in-the-world can be distinguished from every third person process, from every modality of the *res extensa*, as from every *cogitatio*, from every first person form of knowledge—and that it can effect the union of the 'psychic' and the 'physiological'.

Let us return now to the problem with which we began. Anosognosia and the phantom limb lend themselves neither to a physiological nor to a psychological explanation, nor yet to a mixture of the two, though they can be related to the two sets of conditions. A physiological explanation would account for anosognosia and the phantom limb as the straightforward suppression or equally straightforward persistence of 'interoceptive' stimulations. According to this hypothesis, anosognosia is the absence of a fragment of representation which

ought to be given, since the corresponding limb is there; the phantom limb is the presence of part of the representation of the body which should not be given, since the corresponding limb is not there. If one now gives a psychological account of the phenomena, the phantom limb becomes a memory, a positive judgement or a perception, while anosognosia becomes a bit of forgetfulness, a negative judgement or a failure to perceive. In the first case the phantom limb is the actual presence of a representation, anosognosia the actual absence of a representation. In the second case the phantom limb is the representation of an actual presence, whereas anosognosia is the representation of an actual absence. In both cases we are imprisoned in the categories of the objective world, in which there is no middle term between presence and absence. In reality the anosognosic is not simply ignorant of the existence of his paralysed limb: he can evade his deficiency only because he knows where he risks encountering it, just as the subject, in psychoanalysis, knows what he does not want to face, otherwise he would not be able to avoid it so successfully. We do not understand the absence or death of a friend until the time comes when we expect a reply from him and when we realize that we shall never again receive one; so at first we avoid asking in order not to have to notice this silence; we turn aside from those areas of our life in which we might meet this nothingness, but this very fact necessitates that we intuit them. In the same way the anosognosic leaves his paralysed arm out of account in order not to have to feel his handicap, but this means that he has a preconscious knowledge of it. It is true that in the case of the phantom limb the subject appears to be unaware of the mutilation and relies on his imaginary limb as he would on a real one, since he tries to walk with his phantom leg and is not discouraged even by a fall. But he can describe quite well, in spite of this, the peculiarities of the phantom leg, for example its curious motility, and if he treats it in practice as a real limb, this is because, like the normal subject, he has no need, when he wants to set off walking, of a clear and articulate perception of his body: it is enough for him to have it 'at his disposal' as an undivided power, and to sense the phantom limb as vaguely involved in it. The consciousness of the phantom limb remains, then, itself unclear. The man with one leg feels the missing limb in the same way as I feel keenly the existence of a friend who is, nevertheless, not before my

eyes; he has not lost it because he continues to allow for it, just as Proust can recognize the death of his grandmother, yet without losing her, as long as he can keep her on the horizon of his life. The phantom arm is not a representation of the arm, but the ambivalent presence of an arm. 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 are 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 . . .'

This phenomenon, distorted equally by physiological and psychological explanations, is, however, understood in the perspective of being-in-the-world. What it is in us which refuses mutilation and disablement is an *I* committed to a certain physical and inter-human world, who continues to tend towards his world despite handicaps and amputations and who, to this extent, does not recognize them *de jure*. The refusal of the deficiency is only the obverse of our inherence in a world, the implicit negation of what runs counter to the natural momentum which throws us into our tasks, our cares, our situation, our familiar horizons. 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 involved in a definite environment, to identify oneself with certain projects and be continually committed to them. In the self-evidence of this complete world in which manipulatable objects still figure, in the force of their movement which still flows towards him, and in which is still present the project of writing or playing the piano, the cripple still finds the guarantee of his wholeness. But in concealing his deficiency from him, the world cannot fail simultaneously to reveal it to him: for if it is true that I am conscious of my body *via* the world, that it is the unperceived term in the centre of the world towards which all objects turn their face, it is true for the same reason that my body is the pivot of the world: I know that objects have several facets because I could make a tour of inspection of them, and in that sense I am conscious of the

world through the medium of my body. It is precisely when my customary world arouses in me habitual intentions that I can no longer, if I have lost a limb, be effectively drawn into it, and the utilizable objects, precisely in so far as they present themselves as utilizable, appeal to a hand which I no longer have. Thus are delimited, in the totality of my body, regions of silence. The patient therefore realizes his disability precisely in so far as he is ignorant of it, and is ignorant of it precisely to the extent that he knows of it. This paradox is that of all being in the world: when I move towards a world I bury my perceptual and practical intentions in objects which ultimately appear prior to and external to those intentions, and which nevertheless exist for me only in so far as they arouse in me thoughts or volitions. In the case under consideration, the ambiguity of knowledge amounts to this: our body comprises as it were two distinct layers, that of the habit-body and that of the body at this moment. In the first appear manipulatory movements which have disappeared from the second, and the problem how I can have the sensation of still possessing a limb which I no longer have amounts to finding out how the habitual body can act as guarantee for the body at this moment. How can I perceive objects as manipulatable when I can no longer manipulate them? The manipulatable must have ceased to be what I am now manipulating, and become what *one* can manipulate; it must have ceased to be a thing *manipulatable for me* and become a thing *manipulatable in itself*. Correspondingly, my body must be apprehended not only in an experience which is instantaneous, peculiar to itself and complete in itself, but also in some general aspect and in the light of an impersonal being.

In that way the phenomenon of the phantom limb is absorbed into that of repression, which we shall find throwing some light on it. For repression, to which psycho-analysis refers, consists in the subject's entering upon a certain course of action—a love affair, a career, a piece of work—in his encountering on this course some barrier, and, since he has the strength neither to surmount the obstacle nor to abandon the enterprise, he remains imprisoned in the attempt and uses up his strength indefinitely renewing it in spirit. Time in its passage does not carry away with it these impossible projects; it does not close up on traumatic experience; the subject remains open to the same impossible future, if not in his explicit thoughts, at any rate in his actual being. One

present among all presents thus acquires an exceptional value; it displaces the others and deprives them of their value as authentic presents. We continue to be the person who once entered on this adolescent affair, or the one who once lived in this parental universe. New perceptions, new emotions even, replace the old ones, but this process of renewal touches only the content of our experience and not its structure. Impersonal time continues its course, but personal time is arrested. Of course this fixation does not merge into memory; it even excludes memory in so far as the latter spreads out in front of us, like a picture, a former experience, whereas this past which remains our true present does not leave us but remains constantly hidden behind our gaze instead of being displayed before it. The traumatic experience does not survive as a representation in the mode of objective consciousness and as a 'dated' moment; it is of its essence to survive only as a manner of being and with a certain degree of generality. I forgo my constant power of providing myself with 'worlds' in the interest of one of them, and for that very reason this privileged world loses its substance and eventually becomes no more than a *certain dread*. All repression is, then, the transition from first person existence to a sort of abstraction of that existence, which lives on a former experience, or rather on the memory of having had the memory, and so on, until finally only the essential form remains. Now as an advent of the impersonal, repression is a universal phenomenon, revealing our condition as incarnate beings by relating it to the temporal structure of being in the world. To the extent that I have 'sense organs', a 'body', and 'psychic functions' comparable with other men's, each of the moments of my experience ceases to be an integrated and strictly unique totality, in which details exist only in virtue of the whole; I become the meeting point of a host of 'causalities'. In so far as I inhabit a 'physical world', in which consistent 'stimuli' and typical situations recur—and not merely the historical world in which situations are never exactly comparable—my life is made up of rhythms which have not their *reason* in what I have chosen to be, but their *condition* in the humdrum setting which is mine. Thus there appears round our personal existence a margin of *almost* impersonal existence, which can be practically taken for granted, and which I rely on to keep me alive; round the human world which each of us has made for himself is a

world in general terms to which one must first of all belong in order to be able to enclose oneself in the particular context of a love or an ambition. Just as we speak of repression in the limited sense when I retain through time one of the momentary worlds through which I have lived, and make it the formative element of my whole life—so it can be said that my organism, as a prepersonal cleaving to the general form of the world, as an anonymous and general existence, plays, beneath my personal life, the part of an *inborn complex*. It is not some kind of inert thing; it too has something of the momentum of existence. It may even happen when I am in danger that my human situation abolishes my biological one, that my body lends itself without reserve to action.²⁰ But these moments can be no more than moments,²¹ and for most of the time personal existence represses the organism without being able either to go beyond it or to renounce itself; without, in other words, being able either to reduce the organism to its existential self, or itself to the organism. While I am overcome by some grief and wholly given over to my distress, my eyes already stray in front of me, and are drawn, despite everything, to some shining object, and thereupon resume their autonomous existence. Following upon that minute into which we wanted to compress our whole life, time, or at least, prepersonal time, begins once more to flow, carrying away, if not our resolution, at least the heartfelt emotions which sustained it. Personal existence is intermittent and when this tide turns and recedes, decision can henceforth endow my life with only an artificially induced significance. The fusion of soul and body in the act, the sublimation of biological into personal existence, and of the natural into the cultural world is made both possible and precarious by the temporal structure of our experience. Every present grasps, by stages, through its horizon of immediate past and near future, the totality of possible time; thus

²⁰ Thus Saint-Exupéry, above Arras, with shells bursting all round him, can no longer feel as a thing distinct from him his body which shortly before seemed to escape him: 'It is as if my life were given to me every second, as if my life became every moment more keenly felt. I live. I am alive. I am still alive. I am always alive. I am now nothing but a source of life.' *Pilote de Guerre*, p. 174.

²¹ 'But it is true that, in the course of my life, when not in the grip of urgency, when my meaning is not at stake, I can see no more serious problems than those raised by my body.' A. de Saint-Exupéry, *Pilote de Guerre*, p. 169.

does it overcome the dispersal of instants, and manage to endow our past itself with its definitive meaning, re-integrating into personal existence even that past of all pasts which the stereotyped patterns of our organic behaviour seem to suggest as being at the origin of our volitional being. In this context even reflexes have a meaning, and each individual's style is still visible in them, just as the beating of the heart is felt as far away as the body's periphery. But this power naturally belongs to all presents, the old no less than the new. Even if we claim to have a better understanding of our past than it had of itself, it can always reject our present judgement and shut itself up in its own autonomous self-evidence. It necessarily does so in so far as I conceive it as a former present. Each present may claim to solidify our life, and indeed that is what distinguishes it as the present. In so far as it presents itself as the totality of being and fills an instant of consciousness, we never extricate ourselves completely from it, time never completely closes over it and it remains like a wound through which our strength ebbs away. It can now be said that, *a fortiori*, the specific past, which our body is, can be recaptured and taken up by an individual life only because that life has never transcended it, but secretly nourishes it, devoting thereto part of its strength, because its present is still that past. This can be seen in cases of illness in which bodily events become the events of the day. What enables us to centre our existence is also what prevents us from centring it completely, and the anonymity of our body is inseparably both freedom and servitude. Thus, to sum up, the ambiguity of being-in-the-world is translated by that of the body, and this is understood through that of time.

We shall return later to the question of time. Let it merely be noted for the moment that starting with this central phenomenon the relationships between the 'psychic' and the 'physiological' become conceivable. Why can the memories recalled to the one-armed man cause the phantom arm to appear? The phantom arm is not a recollection, it is a quasi-present and the patient feels it now, folded over his chest, with no hint of its belonging to the past. Nor can we suppose that the image of an arm, wandering through consciousness, has joined itself to the stump: for then it would not be a 'phantom', but a renascent perception. The phantom arm must be that same arm, lacerated by shell splinters, its visible substance burned or rotted somewhere, which

appears to haunt the present body without being absorbed into it. The imaginary arm is, then, like repressed experience, a former present which cannot decide to recede into the past. The memories called up before the patient induce in him a phantom limb, not as an image in associationism summons up another image, but because any memory reopens time lost to us and invites us to recapture the situation evoked. Intellectual memory, in Proust's sense, limits itself to a description of the past, a past as idea, from which it extracts 'characteristics' or communicable meaning rather than discovering a structure. But it would not be memory if the object which it constructs were not still held by a few intentional threads to the horizon of the lived-through past, and to that past itself as we should rediscover it if we were to delve beyond these horizons and reopen time. In the same way, if we put back emotion into being-in-the-world, we can understand how it can be the origin of the phantom limb. To feel emotion is to be involved in a situation which one is not managing to face and from which, nevertheless, one does not want to escape. Rather than admit failure or retrace one's steps, the subject, caught in this existential dilemma, breaks in pieces the objective world which stands in his way and seeks symbolical satisfaction in magic acts.²² The ruin of the objective world, abandonment of true action, flight into a self-contained realm are conditions favouring the illusion of those who have lost a limb in that it too presupposes the erasure of reality. In so far as memory and emotion can call up the phantom limb, this is not comparable to the action of one *cogitation* which necessitates another *cogitatio*, or that of one condition bringing about its consequence. It is not that an ideal causality here superimposes itself on a physiological one, it is that an existential attitude motivates another and that memory, emotion and phantom limb are equivalents in the context of being in the world.

Now why does the severing of the afferent nerves banish the phantom limb? In the perspective of being in the world this fact means that the impulses arriving from the stump keep the amputated limb in the circuit of existence. They establish and maintain its place, prevent it from being abolished, and cause it still to count in the organism. They keep empty an area which the subject's history fills, they enable the

²² Cf. J. P. Sartre, *Esquisse d'une théorie de l'émotion*.

latter to build up the phantom, as structural disturbances allow the content of psychosis to form into delirium. From our point of view, a sensori-motor circuit is, within our comprehensive being in the world, a relatively autonomous current of existence. Not that it always brings to our total being a separable contribution, but because under certain circumstances it is possible to bring to light constant responses to stimuli which are themselves constant. The question is, therefore, how the refusal of the deficiency, which is a total attitude of our existence, needs for its expression such a highly specialized modality as a sensori-motor circuit, and why our being-in-the-world, which provides all our reflexes with their meaning, and which is thus their basis, nevertheless delivers itself over to them and is finally based upon them. Indeed, as we have shown elsewhere, sensori-motor circuits are all the more clearly marked as one is concerned with more integrated existences, and the reflex in its pure state is to be found only in man, who has not only a setting (*Umwelt*), but also a world (*Welt*).²³

From the existential point of view, these two facts, which scientific induction contents itself with setting side by side, are linked internally and are understood in the light of one and the same idea. If man is not to be embedded in the matrix of that syncretic setting in which animals lead their lives in a sort of *ek-stase*, if he is to be aware of a world as the common reason for all settings and the theatre of all patterns of behaviour, then between himself and what elicits his action a distance must be set, and, as Malebranche put it, forms of stimulation from outside must henceforth impinge on him 'respectfully'; each momentary situation must cease to be, for him, the totality of being, each particular response must no longer fill his whole field of action. Furthermore, the elaboration of these responses, instead of occurring at the centre of his existence, must take place on the periphery and finally the responses themselves must no longer demand that on each occasion some special position be taken up, but they must be outlined once and for all in their generality. Thus it is by giving up part of his spontaneity, by becoming involved in the world through stable organs and pre-established circuits that man can acquire the mental and practical space which will theoretically free him from his environment and

²³ *La Structure du Comportement*, p. 55.

allow him to see it. And provided that even the realization of an objective world is set in the realm of existence, we shall no longer find any contradiction between it and bodily conditioning: it is an inner necessity for the most integrated existence to provide itself with an habitual body. What allows us to link to each other the 'physiological' and the 'psychic', is the fact that, when reintegrated into existence, they are no longer distinguishable respectively as the order of the *in-itself*, and that of the *for-itself*, and that they are both directed towards an intentional pole or towards a world. Doubtless the two histories never quite coincide: one is commonplace and cyclic, the other may be open and unusual, and it would be necessary to keep the term 'history' for the second order of phenomena if history were a succession of events which not only have a meaning, but furnish themselves with it. However, failing a true revolution which breaks up historical categories so far valid, the figure in history does not create his part completely: faced with typical situations he takes typical decisions and Nicholas II, repeating the very words of Louis XVI, plays the already written part of established power in face of a new power. His decisions translate the *a priori* of a threatened prince as our reflexes translate a specific *a priori*. These stereotypes, moreover, are not a destiny, and just as clothing, jewellery and love transfigure the biological needs from which they arise, in the same way within the cultural world the historical *a priori* is constant only for a given phase and provided that the balance of *forces* allows the same *forms* to remain. So history is neither a perpetual novelty, nor a perpetual repetition, but the *unique* movement which creates stable forms and breaks them up. The organism and its monotonous dialectical processes are therefore not alien to history and as it were inassimilable to it. Man taken as a concrete being is not a psyche joined to an organism, but the movement to and fro of existence which at one time allows itself to take corporeal form and at others moves towards personal acts. Psychological motives and bodily occasions may overlap because there is not a single impulse in a living body which is entirely fortuitous in relation to psychic intentions, not a single mental act which has not found at least its germ or its general outline in physiological tendencies. It is never a question of the incomprehensible meeting of two causalities, nor of a collision between the order of causes and that of ends. But by an imperceptible twist an organic

process issues into human behaviour, an instinctive act changes direction and becomes a sentiment, or conversely a human act becomes torpid and is continued absent-mindedly in the form of a reflex. Between the psychic and the physiological there may take place exchanges which almost always stand in the way of defining a mental disturbance as psychic or somatic. The disturbance described as somatic produces, on the theme of the organic accident, tentative psychic commentaries, and the 'psychic' trouble confines itself to elaborating the human significance of the bodily event. A patient feels a second person implanted in his body. He is a man in half his body, a woman in the other half. How are we to distinguish in this symptom the physiological causes and psychological motives? How are we to associate the two explanations and how imagine any point at which the two determinants meet? 'In symptoms of this kind, the psychic and the physical are so intimately linked that it is unthinkable to try to complete one of these functional domains by the other, and that both must be subsumed under a third . . . (We must) . . . move on from knowledge of psychological and physiological facts to a recognition of the animic event as a vital process inherent in our existence'.²⁴ Thus, to the question which we were asking, modern physiology gives a very clear reply: the psycho-physical event can no longer be conceived after the model of Cartesian physiology and as the juxtaposition of a process in itself and a *cogitatio*. The union of soul and body is not an amalgamation between two mutually external terms, subject and object, brought about by arbitrary decree. It is enacted at every instant in the movement of existence. We found existence in the body when we approached it by the first way of access, namely through physiology. We may therefore at this stage examine this first result and make it more explicit, by questioning existence this time on its own nature, which means, by having recourse to psychology.

²⁴ E. Menninger-Lerchenthal, *Das Truggebilde der eigenen Gestalt*.