Chapter 7
Perceptual Illusions

Speaking of the phenomenal world I have, up to this point, focused mainly on qualities and spatial orientation. An oriented space would be totally empty without the perception of qualities, but it is important to note that qualities are themselves a relatively abstract element of perception.[1] In ordinary life we do not just see colors: we see landscapes, interiors, and things which *have* certain colors. We do not just hear sounds: we hear the door being shut, we listen to music, or we hear the story someone is telling us. Even if we do just hear a sound, seemingly without a meaning, without a context, we cannot help wondering what its origin is. We want to know whether it is a natural sound or a sound made by a human being or a machine. The quality is normally embedded in a whole network of qualities, held together by the unity of a situation. If the situation centers on things in the external world, these things are perceived against the backdrop of an interior when we are inside, or a landscape when we are outside. Of course, there are all kinds of in-between cases.

According to Merleau-Ponty, our prescientific experience is all about giving meaning.[2] On the one hand, the various elements within our phenomenal

1 Merleau-Ponty, *Phénoménologie de la perception*, 261/263. Cf. Carman, *Merleau-Ponty*, 63, and Taylor's criticism of the "percept": *Merleau-Ponty and the Epistemological Picture*, 36-37.

2 Here, "meaning" is not *primarily* meant in an existential-moral sense, i.e., not in the sense of—to use Taylor's expression—"what life makes worth living" (Taylor, *Sources of the Self*, 4). We are rather concerned with the whatness or specificity of things that gives the world of perception its phenomenal depth. However, for Merleau-Ponty this difference is rather gradual. "Meaning" always has the sense of a certain—if only vital—value or a norm which guides our being in the world. Especially

world give meaning *to each other*. The red of the woman's hair make the green of her coat greener, and vice versa. The distance Jim ran today is short only against the backdrop of the marathon he ran last week; it is long compared to the distance his friend John is able to run. Things possess meanings relative to a context of other meanings. On the other hand, Merleau-Ponty stresses that *we give* meaning to our world by responding to situations that "invite" us to certain actions. The perceptual field is not a *fait accompli* but a field of possibilities. These possibilities are already perceivable for us even when we are merely passively looking around. Merleau-Ponty's concept of motivational structure refers both to the field of pregiven meanings which interact with each other and to the same field as a field of possibilities, i.e., of our own interaction with the world.

One of the things I would like to show in this chapter is that, according to Merleau-Ponty, spatial orientation belongs to a very basic kind of motivation. On this basic motivational level, the elements of the world's structure give each other meaning in such a compelling manner that direct intervention by the perceiver is impossible. Perceptual illusions can make us aware that there is indeed such a level of compelling motivations. I find Merleau-Ponty's description of illusions in terms of motivations, i.e., in terms of the inner structure of the phenomenal world, quite convincing. However, as I will argue, something essential is lacking from his account: in perceptual illusions we also experience the tension between the phenomenal world and *physical reality*. Since Merleau-Ponty is inclined to absolutize the phenomenal world at the price of physical realism, he is not in a position to address this tension.

In Section 7.1 I introduce the concept of motivation, showing that the kinds of motivation discussed by Merleau-Ponty are very diverse. Merleau-Ponty does not create any explicit order in this diversity. I think there are two ways of arriving at a categorization of motivations. On the one hand, we can distinguish between syncretic, amovible, and symbolic motivations. Merleau-Ponty does not make this categorization but as we have seen, in *The Structure of Behavior*, he does distinguish between syncretic, amovible, and symbolic *behavior* and *gestalts*. On the other hand we can use the distinction from the *Phenomenology*, between the prepersonal, habitual, and personal level of existence.

There is some overlap between the two distinctions. If we take our prepersonal, natural being in the world in a narrow sense, excluding habits which are subject to change, then this is the same as syncretic behavior. For example, in the *Phenomenology* Merleau-Ponty says that "visible beings . . . are at the dis-

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towards the end of the *Phénoménologie de la perception* the significance of responding to meanings in the world attains a truly existential-moral sense.

posal of my gaze in virtue of a kind of primordial contract and through a gift of nature, with no effort made on my part; from which it follows that vision is prepersonal."[3] This is similar to syncretic behavior, which according to *The Structure of Behavior* is bound to the smallest play of responses from the animal or the human being.

However, when we turn to the higher levels of behavior *in The Structure of Behavior* we cannot make similar connections with the *Phenomenology*. Amovible behavior does not correspond one-on-one with the so-called "habitual" level of existence, and symbolic behavior is not exactly similar to the "personal" level.[4] As I understand Merleau-Ponty, amovible behavior always relates to the external world: it is the learnable sensorimotor relationship to the environment which human beings share with animals. Habits, however, can also be symbolic in nature: calling your wife "mother", for instance, can be a habit but it is not an action which centers on the world of things. The other way around, not all amovible behavior is action out of habit. A brilliant move by a basketball player is amovible behavior. It presupposes a layer of habits, but the move is brilliant to the extent that his action transcends the habitual level and becomes a unique answer to the situation. In order to create some continuity with Plessner's distinction between the external world and the social world ("shared world"/ *Mitwelt*), I prefer to leave the distinction between prepersonal, habitual, and personal existence aside and present a categorization of motivations according to Merleau-Ponty's distinction, in *The Structure of Behavior*, between the syncretic, amovible, and symbolic levels of behavior.[5] I demonstrate that syncretic motivations constitute the *natural* motivational background against which we respond *freely* to amovible and symbolic motives.

The categorization of motivations is discussed in Section 7.1. In Section 7.2 I explain that spatial orientation belongs to the lowest, syncretic type of mo-

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3 Merleau-Ponty, *Phénoménologie de la perception*, 250-251/251.

4 It should be noted that the distinction between natural, habitual, and personal levels of existence easily leads to misunderstandings and is somewhat controversial. For instance, the word "general" can refer both to the natural level of existence *and* to sedimented habits. And it is a point of discussion whether habits are part of the personal or of the prepersonal level of existence. Cf. Toadvine, *Merleau-Ponty's Philosophy of Nature*, 145.

5 Lester Embree also works with this distinction when he argues that the impression of causality, as produced in Albert Michotte's experiments, cannot be a symbolic or amovible gestalt, and must be a syncretic gestalt. Embree, *The Impression of Causality*, 317-318.

tivational structure, which means it is not subject to learning processes. However, as two perceptual illusions discussed by Merleau-Ponty show, although spatial orientation (in the basic sense under discussion here) cannot be learned, it is subject to processes of *adaptation*. What criterion gives direction to the adaptation? What is phenomenal space anchored in? Merleau-Ponty restricts himself to a criterion intrinsic to the phenomenal world: our striving to get a grip (*prise*) on the world contributes to the establishing of a new spatial level. I agree with Merleau-Ponty that our disposition to increase our purchase on the environment helps bring about the physical adaptation needed in order to establish a new spatial framework. But in Section 7.3 I call into question whether such an immanent criterion suffices for our understanding of spatial orientation. Here I call in Samuel Todes's help. Todes's distinction between the horizontal and the vertical field opens a perspective which allows us to think beyond the phenomenal world and connect this world with physical reality. In Section 7.4, finally, I try to demarcate the ontological-epistemological perspective, adopted in Chapters 6 and 7, by relating it to the existential (or "metaphysical", "meta-ethical") perspective of philosophy.

7.1 THREE TYPES OF MOTIVATION

In *The Structure of Behavior* the word "motivation" in the sense of the *Phenomenology of Perception* has not yet entered the vocabulary. But we find descriptions here which have the same purport as this term. In his discussion of animal life, Merleau-Ponty uses the word "occasions" (*occasions*)[6] to make clear that the stimuli belonging to a situation do not constitute a cause but rather a signification, "eliciting a global response"[7] in the animal. When he discusses human behavior, Merleau-Ponty draws an example from the game of soccer: "For the player in action the football field is . . . pervaded with lines of force (the 'sidelines'; those which demarcate the 'penalty area') and articulated in sectors (for example, the 'openings' between the adversaries) which call for [*appèlent*] a certain mode of action and which initiate and guide the action as if the player were unaware of it."[8] So instead of the terms "motive" and "motivation" we come across "occasions" and "to call for" (*appeler*). I think that we are essentially

6 Merleau-Ponty, *La structure du comportement*, 174/161.

7 Ibid.

8 Ibid., 182-183/168 (translation modified).

dealing with the same thing. Occasions and "appeals" in *The Structure of Behavior* equate motives in the *Phenomenology of Perception*.

To my knowledge, the term "motivation" in the sense under discussion first occurs in the *Phenomenology of Perception*. Merleau-Ponty gives the example of the position of the moon. When the moon is very low at the horizon it seems much larger than when it is high up in the sky. "When I look freely, from the natural attitude, the various parts of the field interact and *motivate* this enormous moon on the horizon, this measureless size which nevertheless is a size."[9] The constellation of figure and background, the relationships between the moon and the elements surrounding it, make the moon large compared to its appearance in the opposite situation, when the moon appears as an isolated object high up in the sky.

A quite different example presented by Merleau-Ponty is the death of a friend which motivates a person to go on a journey: "Thus a death motivates my journey *because* it is a situation in which my presence is required, either to console a bereaved family or to 'pay one's last respects' to the deceased, and, by deciding to make the journey, I validate this motive which puts itself forward, and I take up the situation."[10] Merleau-Ponty gives this example in order to show that motives are neither causes nor elements of a purely mental life, like the premises of a conclusion.[11] If the things which motivate us were causes, we would not be the subjects of our own actions and there would be no freedom. If they were purely mental elements, the subject would be completely detached from the world and his freedom would be absolute. In Merleau-Ponty's view, both these accounts of human agency are false. Our motives are in the world and we realize ourselves by taking them up. Our lives get meaning through our interaction with the meaningfulness of the world. The subject is situated, and freedom is real, but not absolute.

The examples show that the range of motivations is extremely diverse. The common denominator in the example of the soccer player and in that of the person making a journey is that the situation we find ourselves in immediately calls for a certain response. Part of Merleau-Ponty's own underlying motivation is that he believes that we realize our freedom by engaging ourselves, by getting

9 Merleau-Ponty, *Phénoménologie de la perception*, 40/36 (translation modified). Cf. ibid., 300/302.

10 Ibid., 299/302.

11 Cf. Mark Wrathall, *Motives, Reasons, and Causes*.

involved with the meanings the world presents to us. Our motives are outside us, in the world, and we either answer to their appeal or live halfheartedly.[12]

However, it seems that in Merleau-Ponty's view not all motives can be considered the material of free self-realization. In the soccer example or in the example of the deceased friend the motive invites us to respond in a certain way within a play of possibilities. But some of Merleau-Ponty's examples, like that of the variable appearances of the moon, describe a very basic kind of motivation, one that can hardly be explained in terms of "being motivated" to do something. The situation in which we see the moon either large or small is so compelling that there is not really a play of responses. It is not by our own free interaction with the spectacle that we see the moon the way we do. Merleau-Ponty actually does not say that *we* are motivated to see a large moon: the interaction between the parts motivate the moon itself to appear in a particular way. This is not meant in an anthropomorphic sense. Merleau-Ponty describes the relations of influence between various elements within the same phenomenal constellation. This way of formulating actually underscores that we do not intervene in this mutual influencing of the elements of the phenomenal world.[13] Although seeing the moon large or small is meaningful, it can hardly be regarded as a form of free self-realization. It rather belongs to our nature to see things this way. Although Merleau-Ponty himself does not make this categorization, I think it is safe to say that we are here concerned with the *syncretic* level of perception.[14]

In other words, this motivational structure is to be located at the same level as the "atmosphere of generality"[15] of perception addressed by Merleau-Ponty in a later chapter, where "motivation" is no longer explicitly mentioned: "Every perception takes place in an atmosphere of generality and is presented to us anonymously. I cannot say that I see the blue of the sky in the sense in which I decide to devote my life to mathematics. My perception, even when seen from

12 I think the end of *Phénoménologie de la perception*, including the Saint-Exupéry quotation, offers the clearest support for this interpretation. Ibid., 519-520/529-530.

13 It should be noted that in the example of the death, motivating me to go an journey, Merleau-Ponty does not ascribe the motivation to the person either: he says that the *journey* is motivated by the death. But this way of phrasing seems more adequate to the example of the moon. The difference is that the journey is my response. The large size of the moon is not my response.

14 We are not talking about the way a large moon might, for instance, affect my mood. This affective aspect joins the basic spatial constellation which we are here focusing on.

15 Ibid., 249/250.

the inside, expresses a given situation: I can see blue because I am sensitive to colors, whereas personal acts create a situation: I am a mathematician because I have decided to be one."[16] Since Merleau-Ponty does not speak of motivation at this point, it is not clear whether he would say that my seeing blue is motivated by the blueness of the sky. What is clear, however, is that seeing the moon large or small can be ascribed to the same level of prepersonal, natural being in the world as seeing blue. What is also clear, I would argue, is that the example of deciding to become a mathematician is similar to the example of going on a journey because a friend or family member has died. I return to the latter examples below.

The fact that by daylight the sky appears to me as blue, or that under most circumstances blood appears to me as red, is not the result of my reaction to what is visible before me. We are here concerned with the most basic level of behavior—or perhaps better: the structural basis *of* behavior. In contrast, amovible behavior is really carried out by ourselves as sensorimotor subjects: there is a certain play of possible reactions one of which we realize on the basis of our needs and an intuition of what seems right. Contrary to syncretic structures, amovible behavior is learned; it can also be fine-tuned or unlearned. I think the example of the soccer player, who is invited by a certain opening in the field, a pass from a teammate, or an inattentive goal keeper, fits in the category of amovible behavior, since the sportsman who moves around the field is not primarily expressing himself on a symbolic level. He is not primarily acting as a person, Plessner would say, but rather as a subject in the outer world. His behavior nonetheless still fits the criterion of being intrinsically open to learning processes. Soccer is a game which we learn; we appropriate both technical skills and strategic insight.

Amovible behavior is therefore relatively free, but it is bound to the here-now of the stimuli that we encounter. This is the level of behavior where signals play a role. A stimulus can be a signal for something else, but only on the basis of the spatiotemporal contiguity of signal and what is signaled.[17] For example, our habitual, automatized response to a green traffic light—start driving or riding—belongs to the level of amovible behavior. It is learned and it could be unlearned if we all decided that green lights from now on mean "stop".

The fact that we are here concerned with amovible behavior does not mean that other, syncretic and symbolic, motives are not involved. When we are dealing with human beings this is always the case, because human life is essentially

16 Ibid.

17 Merleau-Ponty, *La structure du comportement*, 115-116/105-106.

characterized by all three levels of behavior. A white ball will seem bigger to the soccer player than a black ball, and a green ball will be hard to see at all, especially from a distance. Such syncretic structures play an important role in playing soccer. As regards the symbolic level, the sportsman might be in it for the money or for the fame. He might feel like a hero after a goal, or like a loser after a poor shot or after losing the match. He might be an extremely good team player, with a great talent for bonding with, and encouraging, his teammates. In Plessnerian terms, being a soccer player is also a social role in the shared world (*Mitwelt*). So although playing soccer is primarily a form of amovible behavior, both syncretic and symbolic behavior are also involved.

Many motor skills function on the basis of signal recognition. If the learning of a motor skill involves the use of language, which often it does, then this process is mediated by a system of signifiers/significations incomparable to a set of signals. Animals use signals but not words. According to Merleau-Ponty, the signal is there for the animal, but the *system* of signals is not there for the animal.[18] Only human beings can treat this system as a language and switch between different grammars. Whereas the system of signals as such is never *there* for the animal, a word is for us per definition part of a linguistic context: a conversation, a text, the language one masters. And whereas the signal functions solely on the basis of the contiguity of signal and signaled, a spoken word or text is not bound to the here-now of the environment. It can refer to something absent in space and time. As the example of the traffic light shows, human beings also use signals. However, animals do not use language (in the sense here presented).

I am illustrating Merleau-Ponty's concept of the symbolic domain, which is quite similar to Plessner's sphere of spirit (*Geist*), by referring to language, but the symbolic domain is not restricted to the use of language: all interaction that works with different domains of structures, which is based on the analogies between them, is symbolic. I call to mind Merleau-Ponty's favorite example of the analogical structures between a melody, a written score, and the design of a musical instrument. Although the thing-structure, the ability to see one thing throughout a set of quite different appearances, is rendered possible by the symbolic level of behavior, it rather belongs to amovible behavior, i.e., to our sensorimotor relationship to the external world in the here-now. It is a lower structure restructured by a higher structure. Or in Plessnerian terms: the eccentric position not only constitutes the social world but also reorganizes the physical environment, turning it into a true *world*.

18 Cf. Section 4.1.

In *The Structure of Behavior*, Merleau-Ponty speaks of syncretic, amovible, and symbolic *behavior* but also of syncretic, amovible and symbolic "formes". As noted, the French "forme" (form) and "stucture" (structure) are roughly equal to the German "Gestalt" (form, gestalt).[19] But traditionally a gestalt is something which is *there* for us: it means something like "appearing figure". If we expand this meaning to the symbolic domain as relatively detached from the here-now of the external world, then "gestalt" can also apply to a structure which is present to us in a psychophysically neutral sense. A teacher understands the mistake of her pupil better than the pupil himself, because she observes a recurring moment within a broader pattern of learning she recognizes in many pupils. To her, the situation is there as a gestalt, and more precisely, as a psychophysically neutral gestalt, because the "learning pattern" does not depend on a specific kind type of appearance in the external world. The pupil can make the mistake in spoken or in written word, or the mistake can be derived indirectly from his reaction to a question which he turns out to have misunderstood.

The example also illustrates that it is relative to perspective which structure is really there for us, and which is not. The pupil is simply *part* of the situation, and he does not have to understand this type of learning situation in order to learn the right answer. I propose we use "gestalt" specifically for the presence to us of a structure, i.e., for a structure which is there for the person. Motives are also there for the person, and they are clearly part of the structure of behavior. So we can define a gestalt as a concrete motivational unity. Of course, the motivations incorporated by the use-objects around us are in a dormant mode most of the time: the telephone, for instance, is present only as part of the background, until it rings or I need to make a call. Only then does it motivate my behavior.[20]

Above we came across the examples of the decision to become a mathematics teacher and of the journey motivated by a death. Both fit into the category of symbolic behavior. Merleau-Ponty cannot resist speaking of having "reasons" (*raisons*)[21] to go on a journey, despite the fact that earlier he had insisted that a motive is neither a cause nor a "reason" (*raison*).[22] That should not be a problem: it illustrates that an immediate response can still be well-advised. Even when we respond immediately to a symbolic motive, we are still able to answer the question "Why do you do that?" This means that reasons are implicitly part

19 Ibid.

20 Cf. Erik Rietveld's distinction between figure solicitations and ground solicitations (Rietveld, "Context-Switching and Responsiveness to Real Relevance").

21 Merleau-Ponty, *Phénoménologie de la perception*, 299/301-302.

22 Ibid., 60/56.

of the response. We can define them as the subjective affirmation of the motive which preceded the response and which is not primarily subjective but in the world. We should keep in mind that Merleau-Ponty's critical stance with regard to reasons aims only at an intellectualist explanation of behavior which misunderstands decisions as based on an autonomous mental process. It is this kind of intellectualist, overly detached attitude, and the illusion of absolute freedom connected to it, that Merleau-Ponty wants to overcome. Merleau-Ponty only rejects reasons which are detached from motives.

The concept of a "symbolic motivation" seems to have some inner tension. The word "motivation" signifies that we respond immediately, but the level of symbolic behavior suggests consideration, the passing of time, mediation. Although it can become clear to me without much reflection that I need to go on a journey, the detour over reflection and conversation is clearly an option here. Can we still speak of motivated behavior if the decision is preceded by a thought process? I think that the possibility of preparing a decision by reflecting on the available options does not necessarily detract from the principle that we realize our freedom by responding immediately to a situation. Even if we weigh all the pros and cons of the journey in advance, the decision, if truly motivated (in Merleau-Ponty's sense), is not taken on the basis of a rational calculus, for it is not possible to *quantify* the weight of these pros and cons. In the end we decide because we *feel* their respective weight: we feel what is most important in the situation or what action would bring out its best possibility. This feeling is something prediscursive and intuitive: it is nourished by explicit considerations, but it can never be fully explained by them. To use Plessner's terminology, we are dealing with a form of "mediated immediacy": our explicit self-reflection and conversation with others is the mediation which feeds into the immediacy of the decision we ultimately make. Motivated decisions are not irrational or impulsive. Although they *are* taken on the level of our immediate, intuitive rapport with the world, they are not hostile to explicit reflection and rationality.

In the sections below I focus on syncretic behavior, which contrary to amovible and symbolic behavior is not subject to learning processes. We do not learn to see a larger moon when it is low at the horizon, and a small one when it is high above us, and we cannot unlearn to see the moon the way we see it. Likewise, we cannot learn to see the sky as red, and blood as blue. Examples like these confront us with our own nature, and they illustrate that we can get our nature in view without turning to a scientific perspective. This is because we are dealing with the natural framework intrinsic to our phenomenal world. There is an interaction between part and whole, an interaction between meanings within the phenomenal world, which implies that we cannot reduce this phenomenon to

a series of events within physical reality. Only on the level of first-person experience do these phenomena show themselves.[23] But at the same time we are dealing with a very basic level of first-person experience. There is no play of possible responses which requires a direct and at the same time well-advised reaction from the subject of perception. The principles determining the interaction between the scene's elements are inescapable; the scene is what it is without the perceiver's intervention, "with no effort made on my part". [24] The only "contribution" of the person perceiving lies in the fact that he is a human being with a human mode of perception. This is characteristic of the syncretic structure of experience.

7.2 SPATIAL ORIENTATION AND THE ADAPTATION OF SYNCRETIC STRUCTURES

Where does spatial orientation fit in? In the context of this book spatial orientation is not the ability to find one's way by means of a compass and a map, but rather, on a much more basic level, the spontaneous recognition of an up, a down, a left, and a right in the phenomenal world. I refer to this recognition as "spatial orientation" (singular) and to the up, down, left, and right as "spatial orientations" (plural). Spatial orientation, thus defined, belongs to the syncretic level of sensorimotor functioning. The variety of our spatial framework is bound to the smallest play and it is not open to learning processes. However, although spatial orientation is not something that we learn, it is of course something that ontogenetically *develops* in the human being. And once developed, it can also be subject to processes of *adaptation*.

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23 Thomas Baldwin argues that, insofar as there is no normativity involved in perception, it can in principle be explained by natural science (Baldwin, "Merleau-Ponty's phenomenological critique of natural science"). The example of the moon, which is located at the natural level of perception, shows that Baldwin's argument does not hold. An objectifying approach overlooks the fact that the elements within the visual field motivate each other, thus constituting a *meaningful* whole which is only there for a perceiving subject. Even if science can produce some objective explanation of this phenomen, it has then already turned away from the phenomenon as such, i.e., as it presents itself to us as perceivers. Baldwin only asks whether science *can* make an object of perception, which it can in a rather obvious sense. But he fails to ask what is gained and what is lost by this objectification.

24 Merleau-Ponty, *Phénoménologie de la perception*, 251/251.

Although Merleau-Ponty does not use the word "adaptation" in this way (at least not as a central term), I think it follows from some of the experiments he discusses that we are indeed concerned with adaptation. In one experiment, first carried out and described by George M. Stratton, the subject is made to wear special glasses which turn the visible world upside down:

> If a subject is made to wear glasses which correct the retinal images, the whole landscape at first appears unreal and upside down; on the second day of the experiment normal perception begins to reassert itself, except that the subject has the feeling that his own body is upside down. In the course of a second set of experiments lasting a week, objects at first appear inverted, but less unreal than the first time. On the second day the landscape is no longer inverted, but the body is felt to be in an abnormal position. From the third to the seventh day, the body progressively rights itself, and finally seems to occupy a normal position, particularly when the subject is active.[25]

The experiment shows that the ceiling or the sky does not appear above us because particular isolated mechanisms within our bodies cause us to see it there. The phenomenal world has an inner structure which correlates directly with the structure of the phenomenal body: the body schema. As argued in Section 4.4, this body schema includes both the subjective and the objective body, because sensorimotor functioning includes an awareness of the body as interchangeable with the things surrounding it. This subjective-objective space is organized by spatial orientations.[26] The totality of this system, when being brought out of balance, adapts to the situation and spontaneously finds a new balance in a restored spatial framework.

Since in the experiment only vision has been inverted, the order of the world of touch is retained the way it was. So there is a discrepancy between what the subject sees and what he feels when he explores the environment. The restoration of the world's structure happens quicker if the subject actively uses his sensorimotor abilities. The framework is re-installed by a kind of counterfactual anticipation (my formulation) inherent to sensorimotor activity. The *active* subject persists in being a subject, more emphatically so than a *passive* subject.

25 Ibid., 282-283/285.

26 The oriented space includes the body as an object *of the phenomenal world*. The body as an object of physical reality falls beyond oriented space.

It is the subject's "original faith" (*foi originaire*)[27] in the world which helps to bring about the world he has faith in.

This is a faith of an usual, of a very fundamental kind. In Merleau-Ponty's view, this is not the kind of faith one can have or not have. We all have this faith, and only in pathological cases, in the case of experiment, or in perceptual illusions is it shaken or undermined. This indicates that the norms of spatial orientation are not part of the human being's free self-realization but rather constitute one of its basic preconditions. These norms are part of human nature, but they are *norms* because they define a healthy and successful relationship to the world. The syncretic level of our being in the world constitutes the intermediate domain between nature and freedom, between fact and true, moral normativity.

When the subject is wearing the glasses, he needs to learn anew to find his way in this alienated environment. We might thus be tempted to regard this transformation, which literally sets his world aright, as a learning process. But the subject does not regain his full capacities by finding his way in an inverted world. He does not change the world by changing his habits. Rather, the transformation by which the ceiling again appears at the top and the floor appears at the bottom renders possible that the subject can resume his old habits. He can do things in the same way as he used to do them. Merleau-Ponty is not explicit about this, but in my view, this means that the transformation taking place is not a learning process. It is a process of adaptation that concerns the comparatively inflexible *framework* of the phenomenal world, i.e., the framework that allows us to develop and change habits, i.e., to realize ourselves as free beings in the first place.

Let me try to elucidate the difference between learning and adaptation in terms of the subjectivity and objectivity of the body. In many forms of sensorimotor learning, both ways of transforming our bodily being in the world—learning and adaptation—go together. In sports, the learning of a new technique is a process of appropriation of a pattern of perception and action by a subject. It is the subject who is learning to use his body in a certain way. An important aspect of subjective learning is looking at someone else performing the action and imitating the required movements. But at the same time we make certain muscles stronger and more flexible so that our bodies are also objectively fit to carry

27 Ibid., 371/375. Colin Smith translates "primary faith". Cf. different formulations in ibid., 381/385 (translation modified): "the belief [*croyance*] in the thing and the world" and ibid., 395/400 (translation modified): "a kind of primordial faith or opinion" ("une sorte de « foi » ou d'« opinion primordiale »"); Merleau-Ponty here refers to Husserl's "Urdoxa" and "Urglaube".

out the technique. That is the aspect of adaptation of our bodily transformation. We are here on the level of proprioception: an intimacy of subject and object characterizes our experience of, for instance, making our muscles longer by stretching them. As subjects we feel immediately in our sensuous bodies what stretching is like. But patience is required because we depend on the spontaneity of a process which happens in the objective-organic body: if we stretch too far, we harm our muscles instead of making them more flexible. In this sense, processes of adaptation are brought about more indirectly than learning, because we bring the objective body in a situation where this organism can gradually adapt to the circumstances.[28]

The same holds for the recovery of spatial orientation in the experiment with the space-inverting glasses. Due to the resistance of the physiological body, the subject depends on a spontaneous process within the organism that he is. On the one hand we, as first persons, experience the transformation because we are troubled by things looking unreal or upside down. On the other hand the process of adaptation is a *natural* one: we can only influence it indirectly, viz. by actively trying to resume our habits. So although we, as first persons, are involved, we become aware of the relative autonomy of the objective-organic body, with which our personal experience is interlaced (*verschränkt*).

On this level, I am not responding to anything, not even within a small play. Recognizing an up and a down in the world is not my decision, and neither is seeing snow as white instead of black. This autonomy of the objective body is the reason why the syncretic level of behavior easily gives rise to one-sided objectifying approaches which focus exclusively on the relationship between organism and physical reality. The reason why materialists are so fond of perceptual illusions is that these seem to prove that personal experience is not true to the world. They seem to provide evidence that all experience is rendered possible by physical mechanisms which operate behind the subject's back. It is much harder to attack the first-person perspective by referring to personal decisions like going on a journey.

But we should not create a watershed here. We should not claim the amovible and symbolic levels of behavior for phenomenology and give the syncretic level of our existence away to materialism. What should prevent us from turning to objectification too easily is that spatial orientations are there *for us* and only in this way they constitute a *meaningful* structure. At the same time we

28 Learning is also a form of mediation and in this sense it is also indirect, but the process of learning is carried out by us directly. In contrast, the process of adaptation is not carried out directly.

have to acknowledge that we are here concerned with a very basic structure of experience. The syncretic level of our being in the world is not the level of free self-realization. It is rather always presupposed in that self-realization, as its steady underground.

So I propose that we distinguish between learning processes which belong to amovible and symbolic behavior, and processes of adaptation which are located on the syncretic level of behavior. I am not suggesting that all forms of syncretic functioning are subject to processes of adaptation. It is hard to imagine that there is a process of adaptation which changes our perception of the moon as relatively large in one case, relatively small in the other. But all adaptation (in the sense here discussed) happens on the syncretic level of behavior.

The difference between learning a skill and letting one's body adapt to a new situation is that the former process is carried out by us directly while the latter is effected only indirectly. When we climb a mountain, from about 3000 meters up, the altitude can begin to have noticeable effects on the functioning of our body. If we are careless we risk altitude sickness, which is caused by the low density of air and thereby oxygen. Symptoms of altitude sickness include headaches, nausea, vomiting, dizziness, and sleeplessness. In severe cases this condition develops into pulmonary or cerebral edema, which can ultimately cause death. We prevent problems by climbing in stages. For instance, we first climb to 2500 meters and only the next day to 3500. At very high altitudes the climbing plan even includes stages of descending to a lower altitude, only then to go back up again. In this way we let the body get used to high altitudes. We are not *teaching* ourselves how to function at high altitudes; rather the body is adapting—a process which needs to be repeated every time we go climbing.

We should keep in mind that in the example, as in any example we choose, the symbolic and the amovible are never completely absent from the situation described. Adapting to high altitudes requires that we use our sensorimotor abilities to go up there in the first place. That is amovible action. It also requires that we were told about the conditions for successful adaptation, or we read about it on the internet. We thus learned about the right way to climb a mountain via symbolic communication. Any example brings to the fore a specific aspect of our being in the world, without, however, making the other aspects redundant.

The syncretic level of our existence does not consist of responses to particular motivations; it rather constitutes the basis of such responses. This basis is relatively solid, but within certain margins our mode of being in the world adapts to variable circumstances. Now the question is: what are we, are our bodies, adapting *to*? My thesis is that both in the example of spatial orientation and in the example of adapting to high altitudes, we are adapting to physical reality

insofar as it precedes and supports our being in the world. This hypothesis presupposes that we accept physical realism.

Before I present my argument, let us focus on Merleau-Ponty's view, because Merleau-Ponty would not agree. When we enter a new spatial framework, as in Stratton's experiment with the space-inverting glasses, we lose our normal orientation. How do we win it back? According to empiricism (as presented by Merleau-Ponty), we fall back on the unchanged spatial orientation of our tactile field. Or the memory of our ordinary experience *before* the experiment helps us regain our original visual orientation. "The reply [of the empiricist, JvB] will run: after putting on the glasses the visual field appears inverted in relation to the tactile and bodily field, or the ordinary visual field, which, by nominal definition, we say are 'upright'. But the same question arises concerning these fields we take as standard: their mere presence is not enough to provide any direction whatsoever."[29] So the question is: what are spatial orientations based on? Where does the criterion for their restoration come from?

In another experiment discussed by Merleau-Ponty (originally from Max Wertheimer), the subject looks into a room via a mirror which "reflects [the room] at an angle of 45° to the vertical".[30] Initially, everything that happens in the room, a man walking, a piece of cardboard falling, seems to happen obliquely. The room appears to be part of an aslant world. But the experiment demonstrates that if the subject looks long enough, the events in the scene start to appear according to normal orientations. Merleau-Ponty explains what happens by distinguishing between two different spatial levels. The first level is defined as the perception of space before the experiment. This level provides a framework for the experience of the room we see by means of the mirror at 45°. The world is aslant *relative to* the first framework of ordinary experience. In the course of the experiment the objects in the other room start to operate as "anchoring points", Merleau-Ponty quotes Wertheimer, which establish the oblique world as no longer oblique but as normal, "causing the previously established level to tilt sideways."[31] The second spatial level, the room we see in the mirror, increasingly operates as the norm of the world we see, not in the mirror, but directly.

Drawing on this example, Merleau-Ponty argues that every new installation of the body in a space is relative to a previous spatial framework: "It remains to be seen what precisely is this level which is always ahead of itself, since every

29 Ibid., 285/287.

30 Ibid., 287/289.

31 Ibid., 288/290 (translation modified).

constitution of a level presupposes a different, preestablished level".[32] According to Merleau-Ponty, our experience of space is not founded on anything outside the system of the body and the phenomenal world. But there is a criterion which guides our inhabiting a new space: "What counts for the orientation of the spectacle is not my body as it in fact is, as a thing in objective space, but as a system of possible actions, a virtual body with its phenomenal 'place' defined by its task and situation. My body is where ever there is something to be done."[33]

In other words, spatial orientation is relative to a criterion, but the criterion is not something exterior to the phenomenal world; it is immanent to it. What counts is the degree to which I get a meaningful world in view, i.e., the success of my sensorimotor interaction with the phenomenal world: "The constitution of a spatial level is simply one means of constituting an integrated world: my body is geared onto the world when my perception presents me with a spectacle as varied and as clearly articulated as possible, and when my motor intentions, as they unfold, receive the responses they expect from the world. The maximum of sharpness of perception and action points clearly to a perceptual *ground*, a basis of my life, a general setting in which my body can co-exist with the world."[34]

The implicit, intuitive criterion which guides us in finding bearings on a new spatial level is the degree to which we get a "grip" (*prise*)[35] on our environment. Spatial orientation is part of the relatively fundamental framework we can call the syncretic level of our existence. I agree with Merleau-Ponty that our sensorimotor grip on the world functions as a criterion for the installation of a new spatial framework, but the question is: is this criterion sufficient if we want to understand what a spatial level is based upon? What kind of criterion is our striving to increase our grip on the world?

I argue that increasing grip is a higher structure which reorganizes the lower structure of space. It answers our aspiration to find a foundation in the direction of the human world. Can we also find a foundation of oriented space in the alternative direction: the direction of nature? As just noted, "[w]hat counts for the orientation of the spectacle is not my body as it in fact is, as a thing in objective space". Merleau-Ponty does not seek to ground phenomenal space in physical space. From his perspective it makes no sense to ask for a further *ontic* ground of oriented being: "Thus, since every conceivable being is related either directly or indirectly to the perceived world, and since the perceived world is

32 Ibid., 288/290.

33 Ibid., 289/291.

34 Ibid., 289-290/292.

35 Ibid., 289/291. Colin Smith translates "prise" with "gearing".

grasped only in terms of direction, we cannot dissociate being from oriented being, and there is no occasion to find a basis for space or to ask what is the level of all levels."[36]

7.3 THE PHYSICAL FOUNDATION OF PHENOMENAL SPACE

I think that this explanation of what happens in the two experiments discussed (Stratton's and Wertheimer's) cannot be the whole story. But let me start with what I agree with. I agree with Merleau-Ponty that the body proper and the phenomenal world constitute one structural system which functions on the basis of principles that cannot be explained in terms of its partial processes, such as, for instance, events in the brain. There is a certain teleology at work in our relationship with the world. The body strives towards an equilibrium in which sensorimotor action is possible. We need to be able to "inhabit" (*habiter*)[37] a world, as Merleau-Ponty puts it. The partial processes, notably our brain functioning, need to be understood by starting from our embodied being in the world, not vice versa. Only in this way can we explain that the subjective-objective body spontaneously adapts to a new situation, as in the experiment with the space-inverting glasses or the experiment with the mirror positioned at an angle of 45°. This is another way of expressing what we have established before: the phenomenal world has its proper structure which requires phenomenological description, not the isolation of the objective aspect of the body proper. Of course, this does not detract from the possibility of correlating phenomena with processes in the nervous system.

I also agree with Merleau-Ponty that our disposition to perceive the world as clearly as possible, and in a way which gives us purchase for action in that world, functions as an organizing principle which helps to *re*organize the spatial structure when the setup of the perceivable world has been changed. Merleau-Ponty enables us to understand the transition from one spatial level to another. I think that our "faith in the world" indeed plays an essential role in both learning and in indirect mediations which aim at adapting to fundamentally new situations.

However, Merleau-Ponty's account suggests that there is a certain relativity to what spatial level we are on at any given moment for, as we saw, he says that

36 Ibid., 293/295.

37 Ibid., 359/363.

"every constitution of a level presupposes a different, preestablished level". The new situation is relative to the old situation, and vice versa. There is no framework outside these frameworks which would further define their relationship. According to the passage quoted above there is no "level of all levels". The only criterion of adaptation is our increasing grip on the world. I think something is missing from this account. I want to show this in two steps. In the first step I follow Samuel Todes's view of spatial orientation. I quoted Todes above, in Section 4.2, because he addresses the objectivity of the body proper in self-perception. I now want to look into his view of space, which connects directly with his conception of the body proper as both a subject and an object. In the second step, drawing on that view, I return to the relationship between the phenomenal world and physical reality.

Todes demonstrates that we do not only live in a horizontal field, as both Plessner and Merleau-Ponty stress, but also in a vertical field which stretches from the sky above us down to earth below:

> In practical sense experience, the vertical field appears to be the field of the common world in which we find ourselves thrown together with objects. And the horizontal field, by way of contrast, appears to be the field of our experience in this world. We orient ourselves in the horizontal field by orienting ourselves in respect to *objects* we find in this field, which is itself *centered in us*. But we orient ourselves in our vertical field by orienting ourselves in respect to the *field* itself, which is *not* centered in us; we find ourselves near the bottom of the vertical field, in like manner with the objects around us.[38]

As we see, the vertical field primarily correlates with the body's objectivity; the horizontal field correlates with the body's subjectivity. But this does not mean that our bodies are completely passive in regard to their position in the vertical field. Todes makes a convincing distinction between *balance* and *poise*. The transition from the vertical field to the horizontal field is mediated by our own orientation in the vertical field, i.e., by our balancing our bodies in it. In the practical orientation within the horizontal field, then, we are poised to interact with the objects surrounding us. Our balance is so taken-for-granted that it is easily overlooked, but Todes shows that without being in balance with regard to the vertical field, we cannot be poised to do anything in the horizontal field.

Because poise presupposes balance Todes insists that, phenomenologically speaking, the vertical field has "priority"[39] over the horizontal field. This could

38 Todes, *Body and World*, 122.

39 Ibid., 124.

raise questions. One could defend against Todes that not the vertical field but the horizontal field has priority because, in our everyday lives, we are *primarily* concerned with the things surrounding us in this horizontal plane. Our activities in the horizontally organized world give a context and a meaning to the relatively abstract fact of our being balanced. The cook in his kitchen has a horizontal orientation: his stoves, ovens, and cooking gear are all in a circle around him. As long as the cook does not drink too much during his cooking, he is balanced, for sure, but this is not what matters most about his activity: it does not describe the art of cooking. We can make similar observations about most of our ordinary occupations. Our activity in the horizontal plane constitutes the higher structure which gives the lower structure—being balanced—a meaning in the first place.

Arguing in the latter way, we are seeking a foundation (or a "priority" or "primacy") of our being in the world in the direction of the higher structures of the human world. I think this argument is valid. But Todes is also right. We could say that according to the alternative direction of foundation, the horizontal field is founded on the vertical field, simply because, as Todes points out: "Balance in the vertical direction may exist without poise in respect to circumstantial objects; but poise in respect to circumstantial objects without balance is impossible."[40] Poise *technically speaking* presupposes successful balancing, not vice versa. However, Todes's view is one-sided as well, because existentially speaking our balance is but a technical *moment* in our horizontally oriented existence. I think that both arguments are valid, and that this shows that we are dealing with two directions of foundation. On the one hand, we look for a foundation in the direction of the higher structures of our existence. On the other hand, we search this foundation in the direction of the syncretic level of our being in the world, and finally, in the relationship between this syncretic level of existence and physical reality. Let us pursue this a little further.

Balancing oneself is an achievement of an organism on the surface of a body which exerts gravitation on the body proper. Todes does not go into the question what this means for the relationship between the phenomenal world and physical reality. But he makes a step in the direction which I have characterized as the foundation of the human world on nature—the complement of the foundation of nature on the human world. The next step is simply the acknowledgement that spatial orientation does not only have possibility conditions which are immanent to the body-world system, such as our disposition to increase our grip on the world. We have to acknowledge that spatial orientation is also founded on conditions exterior to that system: it rests on the undeniable reality of a dense

40 Ibid., 124.

concentration of matter that we call "earth", and the power of gravitation it exerts on much smaller physical bodies, regardless of the question whether they are inanimate objects, organisms, or specifically human beings. Our way of being, our phenomenal world, depends on this natural-ontic precondition. If there were only scattered matter in the universe, and no solid bodies about the size of the earth, which could retain water on its surface and have all the additional conditions for life, then human beings and their phenomenal world would not exist.

The spatial level constituted by the mirror at 45° might be real for us in the sense that we can inhabit it and experience it as a fully natural space in which we could act if we were really part of the scene. However, our grip is in this case limited, because we are *not* really part of the scene. The scene—a real room, but mediated distortedly—is a construction relative to our real position in regard to the surface of the earth and the gravitational force which is vertical to it. We have an experience of this verticality by means of a very particular kind of perception. Our sense of balance is mediated by the vestibular system. Of course, this system can also be tricked, so that we could again speak of different spatial levels. But in regard to such cases I argue that one of these levels is more *realistic* than others because it has an uninhibited and undistorted connection to the horizontal plane of the earth and to the verticality of gravitation. Accordingly, the "first level" in the experiment with the mirror at 45° is the starting point and the foundation for the "second level". After the experiment is over, the subject returns to the world where his vestibular system, his vision, and his tactile sense are cooperatively attuned to the physical preconditions of his life.

We can think of other examples taken from computer generated virtual realities. We can appropriate these worlds and become magnificently skilled in finding our way in a virtual space of a computer game. Merleau-Ponty would be right to point out that we would nonetheless lose our grip if we would want to live only in that virtual world. (People have died neglecting their real bodies while playing video games.) So for Merleau-Ponty the *basic* level would be the spatial level where we do *not* lose that grip on ourselves and our world. But what is the possibility of having a grip on something founded upon? And what do we experience when we make the transition, not to another spatial level, but from "normal" perception to technically mediated perception, as in the case of the space-inverting glasses? When we establish ourselves anew in the world, what do we establish this new phenomenal world *in*? Insofar as we are concerned with things, with a ground to stand on, with the weight of the body proper, the phenomenal world is re-installed in physical reality. It is tempting to forget this when we focus on the inner structure of the phenomenal world, because that structure on the one hand integrates the physical and turns it into phenomena and

on the other hand hides the physical insofar as it remains the pre-phenomenal ontic support of the phenomenal world.

The reflection on the syncretic level of behavior shows that we need a concept of physical reality as something which, in a sense, precedes the motivational structure of the world. So my claim is that syncretic motivations pertain to a level of perceptual adaptedness and adaptation of the human body to physical reality. My second claim—connected to the first—is that we can only understand this ambiguity if we accept that physical reality both *supports* and *transcends* the phenomenal world.

I do not propose that we substitute Merleau-Ponty's criterion of having a grip on the world. Rather I suggest that we recognize that this criterion belongs to the relatively higher structures of behavior. We could look for even higher structures, by giving a more existential twist to the concept of having a "grip" on the world. People who make big existential mistakes, or are affected by traumatic events, can lose their grip on their lives, which immediately entails a deterioration of their perceptual abilities. In the movie *Ordinary People*, Calvin Jarrett goes for a run and falls without there being any object to trip over. We, the viewers, are not surprised, because we have followed Calvin's struggle with family problems and we have seen that, during his run, his head has been spinning with all kinds of confused impressions and thoughts. We understand that his fall is an *existential* fall. Golyadkin, the protagonist of Dostoyevski's *The Double* is so perplexed and devastated by what his enemy is doing to him that, in a restaurant, he cannot remember whether he just ate the meal the rests of which he finds in front of him. He offers to pay for the meal that in fact was someone else's. In these cases, perception is inhibited because people lose their grip on the world, but "loosing one's grip" is here not understood on the level of amovible behavior but of symbolic behavior, because in both cases the problems of the characters are of a social and existential nature.

Merleau-Ponty might agree with this flexible use of "having a grip on the world", which goes beyond *literally* getting a grip on an object through touch, or getting a clear view of an object through vision. There are structures on an existential level which ultimately give direction and meaning to the relatively lower structures of seeing this or that object—in accordance with Plessner's distinction between "subject" and "person". But Merleau-Ponty *would* object when I say that the search for a foundation of our existence in such higher structures of our being in the world does not suffice. In my view, this direction needs to be complemented by a foundation in the opposite direction—of nature. As argued above, this means that we face the task of describing the relationship between phenomenal world and physical reality.

It is by now clear that this also means we need to address the syncretic level of motivated behavior as it shows itself in perceptual illusions. After all, the two experiments discussed above *are* such illusions. It concerns the way the organic subject is attuned to a reality which consists for the most part of inanimate matter. When you are on the beach and you perceive, in the distance, a child bouncing its beach ball, it occurs to you that you first *see* the ball bounce, only then to *hear* the same event. This does not prove Merleau-Ponty wrong when he says that synesthetic perception cannot be reduced to the sum of its parts—the parts here being the ball's visual appearance and its sound. On the contrary, normally we hear and see an event at the same time; the *style* of the visible permeates that of the audible and vice versa, without us even distinguishing between the ways in which the event is there for us.

The example of the beach ball only illustrates that the way our senses are rooted in physical reality is imperfect. It does not imply that our human world is nothing but a complex mechanical system. It reminds us of the fact that the higher dialectics of the human world, which are incomparable to physical nature, are nonetheless still also based on that nature, rendered possible by it in a way which can never be fathomed completely by science or philosophy. In the asynchronous perceptions of the beach ball we experience the tension between the norms of the phenomenal world and physical reality's indifference with regard to these norms. As noted above, "indifference" means that physical reality is not only the *possibility* condition of perception but also its *im*possibility condition, and that the relationship of "rendering possible" can show itself to be a contingent one. This happens in the threat of natural disasters: then we are concerned with nature as the (im-)possibility condition of our whole existence. In perceptual illusions, by contrast, nature presents itself more specifically as the (im-) possibility condition of perception. Here, our existence is not threatened but our sensorimotor functioning is undermined. But it also happens in perceptual illusions or distortions, such as in the example of the beach ball which we first *see* bounce only then to *hear* it hit the ground. The speed of sound happens to be much slower than the speed of light. Under most circumstances this fact of physical reality does not undermine perception, but in this case it does. If physical reality would *not* be "indifferent" to what it renders possible, if it would constitute a perfect support for the phenomenal world, then the speed of sound and of light should have been the same, rendering possible a synchronic perception of sound and vision under all circumstances.

In perceptual illusions we do not experience the depth of phenomenal qualities and shapes, but rather the tension between our organic-subjective openness to the phenomenal world and physical reality. We experience the tension

between the *norms* of the phenomenal world and the *laws* of physical reality. The norm at work in the example of the beach ball is that the whole is more than the sum of the parts, whereby the spatial and temporal contiguity of various elements motivates what counts as a whole: the sound is "supposed" to be synchronous with the visible scene. Such norms can be undermined because the phenomenal world is only imperfectly founded on physical reality and because physical reality is indifferent with regard to what it renders possible.

I will not attempt to give an overview of all norms of perception—presuming that this is possible in the first place, but it might be helpful to add another example. Let me return to horizontality and illustrate how it is a norm of the phenomenal world. Our active attitude is attuned to the situation of being surrounded by things in a circle from left to right (or from right to left) around us which are present against the backdrop of a (visible or invisible) horizon. Once we are balanced, which we normally are whenever we are awake, our world is a horizontal one. But we can also experience discrepancies between the norm of horizontality and the factual constellation of things in objective space. When we walk high up in the mountains and we look down on a village in the valley, the village can appear to us to be "more under" us than "in front of" us. We really have the sense of looking *down* on the village. Or more precisely, we intuitively estimate the horizontal distance to the village to be shorter than the vertical distance, so that we would expect the angle of your vision to be more than 45° compared to looking straight forward. However, when we look on the map, which in this case needs to have contour lines showing the altitudes, we may discover that the horizontal distance is in fact greater than the vertical distance. The line of our gaze seemed steeper than it was in fact; it turns out that the angle of this line is still closer to horizontal than to vertical. This optic illusion occurs because we experience a situation which strongly deviates from the norm of horizontality. The situation is preconsciously experienced as an anomaly, as something excessive in comparison with our predominantly horizontal world. Consequently, we experience the spatial situation (ourselves in relation to the village) as "very vertical", which translates into estimations of an angle greater than 45° compared to the horizontal. In small discoveries like these, of discrepancies between intuitive estimation and measurement, we experience the tension between phenomenal world and physical reality. We discover that our perception is not neutral but guided by norms which under "abnormal" circumstances can lead to a distorted awareness of our situation.

It might be useful to address a misunderstanding my account so far might evoke. I have been saying that physical reality precedes, transcends, and *supports* the phenomenal world. The word "support" is not to be misunderstood.

The discontinuity between physical reality and phenomenal world guarantees that the phenomenal cannot be reduced to a physical mechanism. So when I say that physical reality supports the phenomenal world, this should not be interpreted as meaning that it *causes* the phenomenal world. The latter statement is rather the position of reductive materialism which both Merleau-Ponty and Plessner reject. To the extent that physical reality is not chaotic, it is in itself causally structured. Physical reality is also a possibility condition for the phenomenal world, but its status as possibility condition pertains to the relationship *between* this causally structured reality and a world structured by meanings and motivations. The relationship is one between the causal domain and *something else*, so that the relationship *itself* cannot be of a causal nature. It connects two aspects which are fundamentally unlike. In such cases Plessner uses the word "hiatus". So physical reality is not a causal condition of the phenomenal world, but it is nonetheless an *ontic* possibility condition: we cannot exist without it.

Only if there is a disintegration of higher structures are we dealing with a causal relationship between the physical and the lived world, but insofar as the first person of experience is alive and conscious, the discontinuity now sits between physical reality and an *epi*phenomenal world (the world as symptom). For example, if a person gets lost near the South Pole and she is about to freeze to death, the poor state of her perceptual consciousness is *caused* by the low temperature of the surroundings of her body. But her diminished openness to the world still constitutes an aspect of her existence which is distinct from the process of increasing hypothermia, in that consciousness (diminished or not) cannot be understood in terms of physical properties like temperature, or in terms of the objective-organic effects of temperature. So although her awareness of the world is then gradually turning into the mere symptom or epiphenomenon of a bodily state which has physical causes, this dramatic process can only be understood if we maintain the distinction between her openness to the world and the physical causes that threaten it.[41]

Let me sum up the latest results of the discussion. Our starting point was the three types of behavior Merleau-Ponty distinguishes: syncretic, amovible, and symbolic behavior. I have argued that we can apply this distinction to the scope of *motivations* (in the Merleau-Pontyan sense of elements of the situation's structure which immediately motivate us to respond to that situation in a particular way). I focused especially on the spatial character of the world, showing that, in Merleau-Ponty, spatial orientation belongs to the most basic level of motivations: the syncretic. On this basic motivational level, the elements of the

41 Cf. Bernet, *The Body as a 'Legitimate Naturalization of Consciousness'*, 55-57.

world's structure give each other meaning in such a compelling manner that direct intervention by the perceiver is impossible. That there is such a level of compelling motivations becomes clear especially in perceptual illusions. The main example here was the experiment with the glasses which turn the subject's world up side down. These glasses *force* me to see the world in this inverted mode. The experiment shows that after a number of days of wearing the inverting glasses the world will start to right itself again. On the syncretic level, we can at best influence the structure of perception *indirectly*, in this case by *actively* moving around in the world which to us is up side down.

I find Merleau-Ponty's description of such illusions in terms of motivations, i.e., in terms of the inner structure of the phenomenal world, very convincing, but I have also argued that something is missing: in perceptual illusions we experience the tension between the phenomenal world and *physical reality*. Merleau-Ponty is inclined to restrict himself to the description of the inner structure of the phenomenal world. In the case of our distorted experience of an up and a down in the world, he suggests that our experience of the horizontal plane is relative only to the *phenomenal* situation we find ourselves in, i.e., to the extent we can get a *grip* (*prise*) on the world.

This was the reason I turned to Samuel Todes, who focuses on the fact that our experience of an up and a down is based on our experience of *gravitation*. On the basis of Todes, I argued that only *some* possibility conditions of spatial orientation are intrinsic to the phenomenal world. Other conditions, the ontic-natural ones, belong to physical reality. And we can say this without turning from philosophy to science. Gravitation is a possibility condition of the latter category. I hope the broader meaning of this argument is clear: Merleau-Ponty is inclined to absolutize the phenomenal world and to neglect the foundation of the world on physical reality. Plessner's physical realism enables us to complement Merleau-Ponty's view, and to respect that there are two directions of foundation, neither of which has the primacy. Just like the discussion of natural disasters in the previous chapter, the discussion of perceptual illusions leads to the conclusion that both phenomenal realism and physical realism are indispensible if we want to make sense of our bodily being in the world.

In order to further clarify the connection between the human being's eccentric position and his relationship to physical reality, I will discuss two more perceptual illusions: the illusion of the moving train, and the illusory experience of movement which astronaut Gus Grissom had in outer space.

Merleau-Ponty discusses the illusion of the leaving trains both in the *Phenomenology* and in *Sens et Non-Sens*.[42] It is a situation most people are familiar with: I am waiting for my train to leave, and all I can see through the window of my compartment is the train right next to mine; if the other train leaves first, I will be tricked into believing that it is in fact my train which is leaving at that moment. Merleau-Ponty refers to Koffka, who points out that whether *my* train or the other train appears to be in motion, depends on whether I have been focusing on the other train or on the interior of my own compartment: "The chief rule for these ambiguous cases is this: that the objects which form the (dynamic) center of our visual world are at the same time our points of anchorage. When I am playing cards in my compartment I see the train move on the next track even if it is in reality my own train which is moving, but when I am looking at the other train, searching perhaps for an acquaintance in the coach, then it is my own train which seems to be moving."[43]

The word "dynamic" in this passage refers to the activity or possible change within one of the two spaces: we automatically presume the spatial framework, i.e., the background, of the "dynamic" center of our attention to be *at rest*. There are two important conditions for the illusion to work. Firstly, my visual field should not include too many elements from the world outside the two trains. Secondly, if it is *my* train which is leaving (and I am led to believe that it is the other one which is put in motion), then this should happen at a slow pace and in a smooth way. If these additional conditions are fulfilled I will be tricked.

In *Sense and Non-Sense*, Merleau-Ponty argues against the view that there is a stable layer of sensations which is interpreted by an intellect which is detached from those sensations. In the example of the leaving trains, there are two ways of experiencing the situation but, according to Merleau-Ponty, it is not by an intellectual hypothesis that I determine which of the two ways will be realized: "Movement and rest distribute themselves in our surroundings not according to the hypotheses which our intelligence is pleased to construct but according to the way we settle ourselves in the world and the position of our bodies assume in it"[44]

Considering Koffka's observations in the passage quoted above, it seems that Merleau-Ponty is right: our experience depends on the way we inhabit the

42 Hereafter: Sense and Non-Sense, except in footnotes.

43 Koffka, "Perception: An introduction to the *Gestalt-Theorie*", 578. Cf. Merleau-Ponty, *Phénoménologie de la perception*, 324/326.

44 Merleau-Ponty, *Sens et non-sens*, 92/52.

situation, notably on where our focus of attention is. However, in my view this explanation is not sufficient. Again, Merleau-Ponty tries to explain a perceptual illusion by referring only to criteria which are intrinsic to the phenomenal world. With Merleau-Ponty we can understand why we experience the situation of the trains in one way *or* in the other, but he does not help us understand why one of the two experiences is illusory while the other is veridical. And therefore he does not address that, when we experience an illusion like that of the leaving trains, we often *know* we are experiencing an illusion. Often in this situation, our state is not simply one of being tricked: it is one of being troubled because we already feel that we are being tricked.

Suppose I know that it is not yet the right time for my train to leave. This is a theoretical knowledge in the sense that it is, at that moment, not supported by particular perceptual motives. If I nonetheless have the strong sense that it is my train which is leaving, then I am not ignorant of the *real* situation. I am *troubled* because two "interpretations" of my situation are competing with one another. If I know quite certain that it cannot be my train which is leaving, I may even stick to my conviction but at the same time have this peculiar sense in my stomach, and experience a kind of dizziness and disorientation which almost make my body lose its conviction. If one is tricked the experience is "false"; if one is troubled one has a perception and at the same time a disengaged awareness of the truth of the perception, which lies beyond it. This truth refers to the situation in its objectivity: which vehicle is moving relative to earth. It is our eccentric positionality which renders possible that we are not simply tricked, that, instead, we have a double experience: on the one hand of the situation as conveyed by perceptual motives; on the other hand of the situation as we know it to be. We feel dizzy or disoriented in our situation because we experience the hiatus between these two aspects of our being in the world, the physical and the phenomenal.

Gus Grissom, the third person ever in outer space, tells an anecdote about his return to earth. He is preparing his spacecraft, which is moving at a constant distance from earth, for reentry into the earth's atmosphere. The spacecraft is fitted with so-called retrorockets which bring the capsule to a halt, so that the turn towards the earth can be made. "His mission almost over, Grissom prepared his spacecraft for reentry and manually fired the bank of three retrorockets, right on schedule. 'It was a strange sensation when the retros fired', he would later write. 'Just before they went, I had the distinct feeling that I was moving backwards—which I was. But when they went off, and slowed me down, I definitely felt that

I was going in the other way. It is an illusion, of course. I had only changed speed, not direction.'"[45]

Grissom has a similar experience as we sometimes have in the train, except that the meaning of his situation was to him relative only to the previous situation: a movement backwards. Because Grissom lacked any cues belonging to an external context, he had to experience his deceleration as a movement in the opposite direction. His movement had become his normal situation and had literally started to function as a norm, as a stable background, in relation to which the deceleration had to be experienced as something *positive*: a movement in the direction opposite to the "previous" movement. What furthermore makes this example interesting is that Grissom is not simply tricked. The success of his space travel depends on him trusting his *knowledge* about his situation more than the *perceptual cues* he receives. In other words, Grissom's sensomotoric actions can only be succesful if he sometimes ignores the motives the world offers to him and acts on a disengaged kind of insight. The reason for this is that sometimes his knowledge is true to his objective situation, whereas his phenomenal experience is not.

Because human beings are eccentrically positioned, they are able to resist the invitations the world offers them and to grasp an objective physical reality which lies beyond the phenomenal. They are not only in the world but both in *and* above, or beyond, the world of perception. So we see that there is an intrinsic connection between Merleau-Ponty's failure to grasp our *disengagement* from the world of perception and his failure to recognize the transcendence of physical reality. With Merleau-Ponty we cannot understand the fact that our physical situation sometimes contradicts the motivational structure of the world and that our non-perceptual knowledge is then more true to our situation than our perceptions. There is a correlation which stretches from an eccentrically positioned ego, across and beyond the phenomenal world, to physical reality which is *known* by the ego. Only if we take distance from our sensorimotor attunement to the phenomenal world and see how a thinking I reaches beyond the motivational structure of the world can we make sense of perceptual illusions such as the one of the two leaving trains or Grissom's experience in outer space.

45 Francis French and Colin Burgess, *Into that Silent Sea*, 80.

7.4 LOOKING BACK: THE PLACE OF ONTOLOGY AND EPISTEMOLOGY WITHIN PHILOSOPHY

In this final section I want to reflect on the ontological-epistemological framework which I have adopted in Chapters 6 and 7, and especially on its limitations. I will do so by looking at some of the common suspicions regarding ontology and epistemology.

Let me start with ontology. One suspicion we might have is that ontology aims at describing reality without taking into account the fact that (a) the philosopher is a human being who is always already part of the reality he attempts to grasp in his descriptions, (b) reality is always in some way *given* to this human being, which means that our thinking about being is mediated, colored, or filtered by our sense-organs, by the intrinsic structure of perception, presuppositions, concepts, or language. An ontology in the sense of pre-critical metaphysics is thus out of the question.

This suspicion brings us to the necessity of complementing ontology with epistemology: we cannot speak of the things we know without reflecting on the conditions of knowledge. Reality is always given to a subject who is also part of this reality. We can specify this in terms of *physical* reality: according to the physical aspect of our bodies we are part of the physical universe. And yet by addressing the topic of physical reality we seem to claim, implicitly, that we are at a distance from it, and thereby that we have this reality fully in view and at our disposal. The critical response to ontology leads to epistemological questions: which are the conditions for the possibility of knowing physical reality? How do epistemological considerations affect our attitude towards physical realism?

If asking these questions summarizes the project of epistemology, then it starts to sound like a sensible project—and I think it is. But there are suspicions against epistemology as well. On the one hand there are suspicions based on systematic reasons which are inextricably intertwined with the essence of epistemology. Below I argue that this does not mean that epistemology is useless and without any truth value, but rather that its truth value is limited. On the other hand there are suspicions which respond to particular historical *forms* of epistemology which have been so dominant that they have given epistemology a bad name. When Charles Taylor criticizes epistemology he is in fact responding to two such currents of epistemology: foundationalism and representationalism.[46] The question rises whether these predicates (these -isms) apply to my interpreta-

46 Taylor, *Overcoming Epistemology*.

tion of Plessner and Merleau-Ponty and whether, consequently, the criticism of these forms of epistemology applies to my view.

We can be short about representationalism: this predicate does not apply to my account of the relationship between physical reality and the phenomenal world. Plessner's principle of mediated immediacy excludes this interpretation. First-person experience of the outer world was not explained in terms of mental representations which occupy a position in between the subject-pole of experience and the world experienced. It was explained in terms of categories, i.e., bodily relationships to the essences of the beings around us. The medium is here our categorial attunement to situations and things of various sorts. These categories are thus attitudes embodied by us, so that subject-pole and medium fall together. That is the basic structure of mediated immediacy: if subject-pole and medium coincide, then the medium is no longer *in between* me and the world; I am then directly "with the things" (*bei den Dingen*). Of course, this does not rule out that explicit mediation through representations *can* be involved in our interaction with the world. This happens for instance when we explicitly reflect on what we are doing. In that case mediation and the immediate dimension of life, disengagement and disengagement, are temporarily separated like during a time-out. As regards Merleau-Ponty, Taylor in fact bases his own criticism of representationalism on Merleau-Ponty's view.[47] I think my reading of Merleau-Ponty is in line with that interpretation.

Insofar as foundationalism is concerned, my account of the relationship between physical reality and phenomenal world in terms of two *directions* of foundation aims precisely at *avoiding* foundationalism. Dennett's physical realism is foundationalist because it seeks to ground the phenomenal world in physical-neural reality. In this view, there is but one reality and Dennett regards our access to it as surprisingly unproblematic and unambiguous.[48] Merleau-Ponty is a more complicated case. It would go too far to accuse him of foundationalism, but as noted, in some passages he bases physical reality one-sidedly on the phenomenal world. This one-sidedness leads to problems: physical reality can no longer be considered a reality once we dissolve it into perceptual structures or intellectual constructions. Here there is only one direction of foundation and, consequently, one aspect of reality is neglected.

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47 Ibid., *Merleau-Ponty and the Epistemological Picture*.

48 Cf. David L. Thompson, *Phenomenology and Heterophenomenology*. Thompson argues that Dennett should abandon his "naïve scientific realism" (ibid., 216) and acknowledge that "scientific"—i.e. physical—reality itself depends on subjective experience.

A final suspicion with regard to both ontology and epistemology is that they are restricted to a theoretical perspective which leaves out the practical, metaphysical, or existential dimension of our lives. This is a valid point but, as I argue, it does not imply that the ontological-epistemological framework has no role to play beside the metaphysical framework.[49]

The idea of a foundation implies that we are dealing with the most fundamental and in that sense the most important things in philosophy. The reason I introduced the problem of a foundation of our being in the world by saying that it was relative to an ontological-epistemological framework is that I wanted it to be clear that this "fundamental character" and "importance" need to be qualified, but this is easier done after I have shown what ontology and epistemology look like in the context of the chapters concerned (Chapters 6 and 7). I wanted to set the discussion apart from those philosophical approaches which address what is most "fundamental" or "important" in another sense of these words.

In our factual lives our fundamental questions concern things like freedom, meaning, values, death, family, sexuality, trauma, friends, work, needs, society, politics, experiences of meaningfulness in nature, art, or love, and so forth. From the wider metaphysical perspective which addresses such questions, it cannot be true that physical reality (foundation in nature) or the person who experiences or knows physical reality (foundation in the human world) constitute the most fundamental topics of philosophy. In our everyday lives the most important things are the things which ultimately make our existence meaningful. For some people this is art or exploring nature. For other people God is a source of meaning in this existential sense. For almost all people, the people we love constitute such "moral sources" (Taylor). This is why I said that the foundations discussed in Chapters 6 and 7 are the most fundamental things *only* within the restricted framework of ontology and its complement epistemology.

So why do I insist that an ontological-epistemological perspective tells us anything important at all about our being in the world? The reason is that in some questions regarding our place in nature, we are restricted to knowledge in the pure sense of the word. By this I mean that, on the ontological-epistemological level, we are not (directly) trying to create a constructive view of the world, one which contributes to our societies or the things we value or one which would recognize or affirm values in the first place. The connection between the ontological and the epistemological aspect of this approach is that the ontic conditions under discussion are *natural* conditions and therefore we can only *know* them.

49 I will from hereon refer to the moral-existential framework as "metaphysics".

What does this mean? What can we *not* do with these conditions? Our approach to these conditions cannot have a positive influence on them. There is, here, no "seeing which also helps effect what it sees",[50] in the moral-existential sense meant by Taylor. To illustrate this, in contrast with theoretical knowledge, our knowing a friend is never a pure knowing but also at the very same time an appreciation which plays a role in the selective functions inherent to perception and understanding. Getting to know someone is always at the same time getting to like or dislike, love or hate, someone. Our knowledge is here never neutral. To continue this example on a philosophical level: a phenomenology of friendship already presupposes the value which friendship has for us in our personal lives and it does not offer a neutral description but also affirms this value and teaches us something about it. So this kind of philosophy is clearly not restricted to the ontological-epistemological framework. Or, another example, our knowledge of society is embedded in an idealistic (or cynical) view of that society which bears on our perception and colors it. A philosophy which tries to grasp our *Zeitgeist* will always attempt to understand the world in such a way that it contributes to positive development, even if it does so only by expressing criticism, thus constituting a negative moment in an anticipated positive development. Even a philosophy which would cynically refuse to offer constructive criticism affirms that it operates within a metaphysical framework, because ontology and epistemology are never cynical: they are morally neutral.

In contrast to the value-oriented approach of metaphysics, the epistemological-ontological approach is defined by "knowledge of nature", whereby nature refers to being which simply *is*, regardless of considerations of good and evil, regardless of our morality and our existential questions. Insofar as the immanence of experience is concerned, this distinction coincides with another distinction, viz., between the most basic, syncretic, motivations and relatively higher motivations: those on the amovible and symbolic level. The moon as seen relatively large because it is low on the horizon is in itself not an object of a need or of an esthetic or romantic desire, although such motivations can join the basic structure of its appearance. The spatial constellation of the sky, the moon, and the horizon serves as a foundation for our vital needs and for such higher motivations. The relationship between a relatively large moon and the physical reality of a moon whose size does not change is a purely natural relationship. On the one hand, the appearance of the moon has different sizes; on the other hand we know that, in fact, it only has one size. This knowledge is theoretical because it refers to a natural object which is indifferent to our attitude towards it. The

50 Taylor, *Sources of the Self*, 449.

knowledge is in itself not of metaphysical or existential significance. We can also know *why*, under certain conditions, we see the moon as relatively large. Then our knowledge includes an insight in our *own* nature, i.e., in a structure of perception that we cannot change. So when we explore basic motivations, we examine the relationship between our own nature and external nature. This is not a form of naturalism, because the perspective remains loyal to first-person experience: we explore the *intrinsic* structure of perception in relation to a reality which transcends it.

The fact that we are concerned with the relationship between our nature and external nature implies that a practical perspective cannot interfere in these matters. We are restricted to ontology and epistemology. The ontological-epistemological perspective relates to our daily lives in a relatively indirect manner compared to metaphysics which explores our freedom and our orientation towards moral sources. But perhaps this book makes clear that the ontological-epistemological framework is a necessary complement to metaphysics. Hopefully it contributes to our insight in the relationship between science and first-person experience and to our understanding of freedom by exploring freedom's natural preconditions.