Chapter 1

Toward a Phenomenology of Abnormality

JENNY SLATMAN

Introduction

The contrast between health and illness is often equated with the contrast between normal and abnormal, where health is seen as the normal state and illness as the abnormal one. In contemporary health care, what belongs to the domain of the normal is determined based on scientific insights, consensus within professional groups, and social and political norms. Against the background of current health policy that emphasizes a commitment to early and preventive treatment, it makes sense that the American Heart Association in November 2017 changed the standard for high blood pressure from 140/90 mmHg to 130/80 mmHg. The consequence of this adjustment is that 46 percent of the American population now suffers from hypertension.¹ This example shows how changeable standards or norms are, while at the same time making it clear that abnormality—not meeting the standard—is not necessarily equivalent to illness. Most people whose blood pressure is just above the new standard do not suffer from anything at all. Doctors may want to treat them, but if we label all these people as “ill,” we end up with very few healthy people.

For most people, being ill or sick means suffering from something, experiencing pain or discomfort. If we limit ourselves here to somatic
complaints, we could say that illness, as demonstrated by the blood pressure example, usually goes hand in hand with a certain form of bodily abnormality; however, bodily abnormality does not always go hand in hand with illness. In the same vein, having a genetic abnormality does not necessarily mean that you are currently ill, or will ever become ill. Other cases in which abnormality and illness do not always coincide include a range of physical limitations as well as visible physical abnormalities. If, after a diagnosis and successful treatment of cancer, you continue to live with one breast or without a nose, you are not sick, but you are abnormal. In addition, people with impairments can be said to deviate from the norm of normal functioning, but, very often, this is not seen as a disease but rather as a disability. Perhaps even more importantly, a person with an impairment is often directly identified by others as abnormal. If you have only one leg, you are not sick, but you are abnormal.

In my previous research project *Bodily Integrity in Blemished Bodies*, I studied physical changes that occur as a result of cancer and cancer treatment and how people handled these changes. Central to this research was the question of how people experience their visibly changed bodies. In order to understand these experiences, it was critical to see the individuals in their social context. These people did not only have to deal with a changed body but also with the fact that others might see them as abnormal because they are, for example, missing a breast, have a visible scar, or use a facial prosthesis. It will come as no surprise that the phenomenology of the body was at the heart of this research, for indeed, a phenomenological approach greatly facilitates the interpretation of embodied self-experiences. However, during this research project it also became clear that conventional phenomenology has its limitations.

Phenomenology is well suited for interpreting the phenomenon of illness, of being ill from a first-person perspective. Yet it provides far fewer tools for analyzing the phenomenon of bodily abnormality. Indeed, a sociological and/or social constructivist approach might seem more suitable for understanding abnormality. Yet, as I have suggested elsewhere, phenomenology can account for third-person perspectives on the body if it is developed in the direction of a sociophenomenology. In this chapter I will elaborate on this suggestion and show how phenomenology can account for both illness and abnormality.

For my analysis, I will first return to the most important source text for contemporary phenomenology of health and illness: Maurice Merleau-Ponty's *Phenomenology of Perception*. In the first part of this
chapter I will explain why, according to Merleau-Ponty, illness cannot be equated with abnormality. The distinction between illness and abnormality, I will explain, stems from the phenomenological methodological consideration of putting scientific knowledge and prejudices in parentheses. Merleau-Ponty was also profoundly inspired by the work of the German neurologist and psychiatrist Kurt Goldstein, who in *The Organism* writes, “It may be stated as certain that any disease is an abnormality, but not that every abnormality is a disease. No matter how we may define normality, there are certainly many digressions from the norm that do not mean being sick.” Merleau-Ponty’s contemporary Georges Canguilhem also bases his main work, *The Normal and the Pathological*, on the work of Goldstein. Since Canguilhem discusses the distinction between the normal and the pathological much more explicitly than Merleau-Ponty, I will discuss their work in parallel.

From my analysis of these three authors, it will emerge that the use of statistics plays an important role in the distinction between illness and abnormality. According to phenomenology, statistics as a form of scientific knowledge must be bracketed. However, while following Merleau-Ponty’s remark that the most important lesson to be learned from the phenomenological reduction is the impossibility of a total reduction, I will, in the second part of this chapter, show that statistics should not be banned from our understanding of the lifeworld nor simply put in parentheses. I begin by reviewing Ian Hacking’s analysis of how the rise of the concept of “normal” occurred at the same time as the rise of statistics in the nineteenth century. Even though statistics is inherently descriptive in nature, Hacking asserts that it soon acquires a normative, prescriptive function. Our world is largely made up of “averages” that are considered to be normal and normative. Physical deviations from an average not only imply a statistical observation but also give rise to a judgment of some kind of failure. Thus, I will argue, physical deviation directly affects embodied subjectivity and agency.

**Illness in the Phenomenology of Perception**

In his philosophical analyses of the body, embodiment, and perception, Merleau-Ponty (1908–1961) makes extensive use of pathological cases. Let us first have a look at why he uses cases of illness within his philosophical analyses of embodiment. Since he contrasts the sick person
(le malade) with the person who is normal (le normal), it seems that he uses illness to explain what is normal, that he understands normal embodiment or perception on the basis of pathological cases. Yet, this is too hasty a conclusion; his use of pathological cases needs to be placed in the context of his phenomenological approach. As Merleau-Ponty clearly describes in the preface to the *Phenomenology of Perception*, the phenomenological reduction and the eidetic reduction (or variation) are crucial methodological steps for phenomenology. The use of pathological cases fits within the design of the eidetic reduction; these cases serve as the variations necessary for finding the eidetic or the invariant of the embodied existence. In Edmund Husserl's view of the eidetic variation, intellectual imagination plays the most important role. In order to be able to determine the eidetic nature of something, we need to think up or imagine all possible forms of a particular phenomenon and then examine what cannot be omitted without the phenomenon ceasing to be the phenomenon in question.

For Merleau-Ponty, however, the eidetic variation is not just an intellectual exercise in which everything possible is first thought or fantasized to see what cannot be omitted. He uses factual variation and factual cases in order to arrive at something like the eidetic or the essential. In the preface, Merleau-Ponty describes this seemingly contradictory idea of a philosophy that focuses on the essential or essences while connecting to the factual as follows: “Phenomenology is the study of essences . . . [and yet it] is also a philosophy that places essences back within existence and thinks that the only way to understand man and the world is by beginning from their ‘facticity.’”

According to Merleau-Ponty, the normal cannot be derived from the pathological because illness is not the same as the loss of normal functions. Pathology and normality are different modalities of the same underlying phenomenon. What the underlying phenomenon is becomes clear when we focus on the case of Schneider, first described by Gelb and Goldstein in 1920. This case plays a crucial role in Merleau-Ponty’s conception of embodiment, and he describes it vividly in “The Spatiality of One’s Own Body and Motricity” in the *Phenomenology of Perception*. Johann Schneider was a World War I veteran who suffered brain damage as a result of shrapnel. Due to this brain damage, his way of perceiving, orienting, and moving was considerably affected. Psychiatrists at the time classified his case as one of “psychic blindness.” Schneider was not blind, but with his eyes closed he was unable to perform so-called “abstract
movements,” movements that are artificially elicited. For example, when requested by his doctor, Schneider was not able to touch his nose (with his eyes closed) or to bend or stretch his limbs on command. However, if his nose was itchy, he could immediately touch his nose (with his eyes closed), and he could also find the handkerchief in his pocket to blow his nose. These kinds of movements are called “concrete movements;” though they are mechanically and physiologically the same as the abstract movements, they differ from abstract movements because they do not exceed a person’s actual situation.

The fact that Schneider could not point to his nose on command should not be explained in terms of a defect in the sensory-motor system, as if something were wrong with a sense organ or a muscle. Pointing (Zeigen, abstract movement) and grasping (Greifen, concrete movement), although they have the same underlying anatomy and physiology, are two different intentional actions. The difference between the two forms of movement shows a variation in how we can relate to the world. Whereas concrete movement is primarily a way of dealing with our actual situation, abstract movement is about transcending that situation. The difference between the two forms of movement also shows a variation in the extent to which motor actions take place in a reflective or prereflective manner. Concrete movements generally take place without reflection or thought, whereas abstract movements require one’s awareness of what one is doing. If you are asked to point to your nose on command, this is a movement that you think about for a moment; yet when your nose itches, you scratch it without reflection. It should be noted, however, that a concrete movement is not the same as a reflexive movement, such as moving one’s lower leg when the knee is tapped with a reflex hammer. Whereas a reflex cannot be controlled, concrete movements can be controlled. You can become aware of concrete movements and reflect on them. Normally, though, this is not necessary, and the movement takes place in the flow of the situation.

Considering these two different forms of movement as possible variations of the phenomenon of embodied existence, we find motor intentionality as the invariant underlying both. According to Merleau-Ponty, motor intentionality is founded in what he calls the “intentional arc.” Our entire conscious life is underpinned by this arc, which contains a projection of our past, present, and future as well as of our social environment and our physical, moral, and ideological situation. This intentional arc allows us to situate ourselves somewhere and in a certain way(s). Yet in Schneider’s case, Merleau-Ponty argues, his intentional arc is weakened.
(se détend) and its span into the future is diminished. The metaphor of tensile strength and span refers to the possibilities, or the existential “I can” that people have. Our consciousness, says Merleau-Ponty, is not first of all an “I think,” as Descartes and Kant said, but an “I can” (je peux). The consequence of Schneider’s injury, therefore, is not just a matter of his being unable to perform tasks because of his defects. It is also matter of what possibilities he experiences the world as offering him. Both the environment and the situation in which a person finds themselves and the physical functioning of that person determine together, as if in a dialogue, what that person’s possibilities are. For Merleau-Ponty, having fewer possibilities, having a flaccid arc, is what is most characteristic of what we call illness. Schneider, the sick person, has fewer possibilities. The way he deals with his world and environment is characterized by a high degree of awkwardness. Illness, so we can say, affects his entire being, his existence.

In *Phenomenology of Perception*, Merleau-Ponty does not elaborate on how the dividing line between normality and illness is drawn. By taking a pathological case from clinical literature, he appears to assume unreservedly that medical literature defines where the line between the healthy and the pathological should be drawn. In addition, because he does not give a description of what is normal, he could be accused of a rather naive idea of normality: that normality is that which is not described in the clinical literature and is something that is given naturally. However, this is not the case. Merleau-Ponty describes illness as affecting a person’s intentional arc. This description implies a dynamic understanding of both normality and pathology. In Merleau-Ponty’s own work, this dynamic concept is not really made explicit—illness and normality are by no means the main themes in his work. In order to make it clear how we can interpret illness and normality as dynamic and as nonnaturalistic, I will now briefly discuss a number of elements from the work of Goldstein and Canguilhem.

**The Normal and the Pathological According to Goldstein and Canguilhem**

Kurt Goldstein (1878–1965) was an important inspiration for Merleau-Ponty’s analyses of embodiment. From 1916 onward, he worked as a neurologist and psychiatrist in Frankfurt, where he saw many World War
I veterans with brain damage, including Johann Schneider. According to Goldstein, health represents the most adequate way in which the organism deals with its environment. Health, therefore, consists mainly of “preferred behavior” or “orderly behavior.” By this, he means that the way the human organism acts is based on all kinds of habits (and skills) that have been acquired through time, tradition, and education. From this, it immediately becomes clear that health or healthy action is not something universal but is instead always bound to a certain time and place in which preferences have been developed. Normality or health is therefore not based on a predetermined scientific or moral norm but is formed within a process of habituation. In other words, according to Goldstein, there is no such thing as a supra-individual norm that prescribes what normal or healthy physicality is. The norm that determines whether an individual is healthy or ill is formed by the individual organism while it relates and responds to its environment.

It is precisely this idea of health and normality that Canguilhem (1904–1995) further develops in his main work, The Normal and the Pathological. According to Canguilhem, the most important characteristic of health is a flexibility of standards or norms. The healthy person or the normal person does not so much meet a predetermined standard of health; rather, the person’s health consists of having the possibility to set new norms or standards over and over again. Therefore, he says that being healthy means “being normative,” that is, being able to change and set norms. Whereas Goldstein states that normal physical action is based on a norm-producing process of habituation and adaptation, on an interaction between the organism and the environment, Canguilhem emphasizes that this is an open and infinite process in someone who is healthy.

According to Goldstein, illness or disease manifests itself in disturbed, disorderly behavior that goes hand in hand with a loss of skills (both cognitive and motor). His ideas about health and illness were crucially developed through the examination and treatment of many World War I veterans. These young soldiers suffered from all kinds of devastating health problems, including wound shock and shell shock. These symptoms typically could not be explained by the degree of the soldiers’ physical injuries. Goldstein, therefore, considered illness or disease not simply as a matter of organ or tissue failure but as a total body (or total organism) response. What he observed in injured veterans was that the loss of skills could trigger intense experiences of fear and uncertainty. He called this experience the “catastrophic reaction.” Merleau-Ponty and Canguilhem
both take up Goldstein’s idea of illness. Illness manifests itself in a person’s having fewer possibilities. Merleau-Ponty describes this in terms of a flaccid intentional arc or a reduced “I can.” Canguilhem describes the pathological as an inferior norm of life (norme de vie). It is a norm but an inferior one “in the sense that it tolerates no deviation from the conditions in which it is valid, incapable as it is of changing itself into another norm.”19 According to Canguilhem, being ill is not the same as being non-normal or abnormal. The sick person is not ill because they deviate from a given norm; the sick person is ill because they “can admit of only one norm.”20 As he states, the sick person “is not abnormal because of the absence of a norm but because of [their] incapacity to be normative.”21 This means that they are not able to create other norms in other situations. A sick person is thus “normalized in well-defined conditions of existence and has lost their normative capacity, the capacity to establish other norms in other conditions.”22

Health or normality, therefore, means that the organism is capable of more than just adapting to the environment. When an organism can only adapt to its environment, it only follows that specific situation and is not able to exceed the norm of the situation. It then remains bound to that specific environment and is not normative. Just being able to adapt indicates pathology.23 We also saw this in the case of Schneider. Because he is capable of making concrete movements, Schneider is perfectly capable of coping with the given situation, but he is not able to play with or transcend the situation.

The Silence of Health

Goldstein, Canguilhem, and Merleau-Ponty all emphasize in their analysis of pathological cases the subjective illness experience, that is, the experience of illness from a first-person perspective. Referring to the then well-known statement of the French surgeon René Lériche (1879–1955) that “health is life lived in the silence of the organs,” Canguilhem states that illness is always related to the experience of the sick person.24 A person who only feels the silence of their organs is not sick in Canguilhem’s opinion. This seems to be an easily refuted claim since diseases do not always go together with an experience of being ill: for example, early-stage cancer can still be categorized as being within the “silence of the organs.” In such
cases, people often do not feel anything is “wrong” or “abnormal” in their bodies. To diagnose a physical abnormality, physicians cannot trust patients’ experiences but must rely on all kinds of medical diagnostic equipment. Canguilhem would reject this objection while claiming that contemporary medical knowledge and equipment that allows us to diagnose a disease without it having been “heard” by the patient can ultimately be traced back to patients’ experiences. Medical knowledge, however disconnected it may now seem from patients’ experiences, has been able to develop only on the basis of a rich history of patients who have shared their experiences with doctors. In other words, a device that measures blood sugar levels, even at a level where people have no symptoms, has been developed only because people with actual symptoms of low blood sugar went to their doctor. That is why Canguilhem writes: “there is nothing in science that has not first appeared in the consciousness.”

It is interesting to note that Canguilhem uses the terms “pathology” and “pathological” when he talks about the experiences of sick people. In contemporary parlance, pathology refers to “disease,” and “disease,” according to medical sociology, involves the biomedical perspective on an ailment, and should be distinguished from “illness” (the person’s experience of that ailment) and “sickness” (the social meaning of being sick). Canguilhem, by contrast, suggests that pathology is not necessarily the same as some localizable defect in the body (disease) but rather has its origin in the experience of illness. Only when doctors have developed all kinds of diagnostic tests to determine a possible somatic cause of those complaints does it become a disease. At the beginning of this chapter, I referred to high blood pressure and mentioned that even if people have an abnormal blood pressure value, they do not necessarily feel sick, and probably do not say they are sick. Symptomless high blood pressure is indeed not an illness, but it might be considered a disease or a precursor of disease since something is measured as being wrong or abnormal.

While Merleau-Ponty, Goldstein, and Canguilhem all emphasize the patient’s first-person perspective, they criticize the prominence of the “disease-model” in contemporary medicine. This model, first developed in the eighteenth century and also described, for example, by Canguilhem’s student, Michel Foucault, in his Birth of the Clinic, meant that doctors place increasing emphasis on research into underlying defects and abnormalities in anatomy and physiology for understanding, diagnosing, and treating patients’ complaints. At the beginning of the nineteenth century, Bichat
wrote that corpses had to be opened up in order to understand diseases better, thus creating a happy marriage between anatomy and pathology: anatomy becomes pathological while pathology is “anatomized.” 27

Before the eighteenth century, medicine focused more on the complaints and symptoms that patients reported to a doctor. In the modern era of medicine, the anatomical body became the focus. A disease, a pathology, is what you can locate somewhere in the body. Hence, as Drew Leder argues, the body that is central in modern medicine is actually the dead body, the corpse of pathological anatomy. 28 This emphasis on pathological disease, which in our time is increasingly reinforced by all kinds of diagnostic (imaging) technologies that make it possible to locate inconsistencies in the body without cutting it open, means that in clinical practice the patient’s story disappears into the background. Goldstein, Merleau-Ponty, and Canguilhem, by contrast, want to centralize the patient’s experience of illness.

Quantification of Pathology

In addition to the emergence of the so-called disease model in medicine, Canguilhem describes how in the nineteenth century a shift also occurred from a qualitative to a quantitative concept of disease. In his historical analysis, Canguilhem shows how the definition of health as “normal,” introduced by the physician-physiologist François-Joseph-Victor Broussais (1772–1838), has led to the idea that the difference between disease and health is a quantitative difference. 29 According to Broussais, every organ has a “normal state.” A deviation from this normal state implies illness, and this deviation occurs when an organ is, for example, too much or little stimulated by irritation or inflammation. In his time, Broussais was not taken that seriously and was even caricatured in Honoré de Balzac’s work. Balzac ridiculed Broussais because, at the beginning of the nineteenth century, Broussais was still a fervent advocate of bloodletting. Balzac wrote that just as much blood had been shed under Broussais’ hands as during the Napoleonic battles. 30 Hacking states that it is because of Balzac’s parodies of Broussais that the term “normal” appears in the French language. 31 And Canguilhelm claims that it is mainly due to August Comte (1798–1857) that the idea of health as a “normal state” eventually became a widespread idea. Based on the “eminent philosophical principle” of Broussais, Comte argues
that the pathological and the normal state do not differ substantially, or qualitatively, from each other. The pathological state is nothing more than too much or too little compared to the normal state. This idea of disease is by no means foreign to us. Just think of the examples of normal and abnormal blood sugar levels or blood pressure. More sugar in the blood indicates a problem with an organ, and thus, a disease. With hypertension, or high blood pressure, the pressure of the blood on the wall of the blood vessel is so high that over time it can cause damage to the blood vessel wall.

In his analysis, Canguilhem criticizes this quantification of disease. First of all, he shows that both Broussais' and Comte's reasoning is not entirely consistent and that their determinations of "too much" or "too little" call for a qualitative, normative perspective: "To define the abnormal as too much or too little is to recognize the normative character of the so-called normal state." For Canguilhem (and also for Goldstein), the pathological cannot be seen as a condition that differs only quantitatively from the normal condition. When your blood pressure is higher than 130/80 mmHg, you are not necessarily ill. Illness implies a qualitatively different state than health: you feel different; you are no longer able to do things the way you did before.

Canguilhem and Goldstein's criticism of the idea of disease as a quantitative difference also goes hand in hand with their view that a statistical perspective does not contribute to the understanding of whether an individual is ill or healthy. A norm based on a statistical average does not do justice to the experience of the individual; such a norm cannot determine whether an individual is ill or healthy. At forty beats per minute, Napoleon's pulse, compared to the average of seventy, is far too low, but the man was in good health. Apparently, those forty beats of his heart were sufficient to cope with the demands of life.

Merleau-Ponty's work does not provide a comprehensive analysis of the meaning of statistics, but it is clear that, for him, a statistical perspective on the body is associated with the idea of the body as an object, the objective body. Such a perspective is not compatible with what he calls one's own body (corps propre), lived body (corps vécu), or the body as a subject (corps sujet). The bodily subject experiences themselves as embodied from the first-person perspective, which involves experiences of the body through localized sensations such as touch, pain, proprioception, kinesthetic sensations, warmth, and cold. Statistical measures of the body, like the medical gaze of a doctor, form an external perspective, a
third-person perspective that concerns the objective body (corps objectif). Because Merleau-Ponty is not explicitly interested in the question of what is normal (and what is not), as Canguilhem and Goldstein are, he does not spend many words on statistics. It is, therefore, even more interesting to focus on a passage in which he mentions the statistical perspective in relation to human characteristics.

At the beginning of the chapter on freedom in the *Phenomenology* (in which he enters into a discussion with Jean-Paul Sartre), Merleau-Ponty explains that one cannot have an awareness of one's own qualities such as being jealous or being hunchbacked when one is restricted to a first-person perspective, a perspective pour soi. Let us consider here the reference to the hunchback (le bossu). The figure of the hunchback is an interesting one because—certainly after Victor Hugo's novel *Notre Dame de Paris* (1831) in which the hunchback Quasimodo plays the leading role—it is exemplary of abnormal embodiment in European culture. Merleau-Ponty describes the hunchbacked person as becoming aware of being hunchbacked only by comparing themselves with others, by seeing themselves through the eyes of someone else with whom they then take on a statistical or objective perspective on themselves. Statistically, most people have a fairly straight back and no hunchback. The hunchback is, therefore, a statistical deviation from the average.

What is interesting about this incidental remark about the hunchback is Merleau-Ponty's claim that it is partly due to statistics that people become aware that they deviate from the norm, that they are abnormal. Yet, this is not the same as an awareness of illness. Like Goldstein and Canguilhem, Merleau-Ponty assumes that statistics—which set supra-individual norms—do not help to determine whether an individual is ill or not. For all three of them, awareness of illness is based on the patient's own experience, on the first-person perspective. This means that being hunchbacked is not really considered an illness because the person who is hunchbacked does not experience it from their first-person perspective as such. Here it becomes clear how we can interpret the difference between illness on the one hand and abnormality on the other hand in Goldstein, Canguilhem, and Merleau-Ponty. Illness is the lived experience of having fewer opportunities to deal with the situation and environment. Abnormality can exist without being “heard,” whereby it remains hidden under the “silence of the organs,” as long as it is not confronted with others and thus with a comparison with others.
Abnormality, or abnormal embodiment, therefore, appears only within a framework of comparison. In medicine and public health, this framework is formed by large-scale biomedical, epidemiological, and statistical measurements. Goldstein and Canguilhem were both trained as clinicians, and their criticism of the statistical approach should thus be seen in the light of their view that this approach does not do justice to the experiences and stories of their (individual) patients. This is, of course, different for Merleau-Ponty. He was not a physician, and his criticism of a statistical approach to the body was not inspired by the wish to improve clinical practice. His criticism is philosophical in nature. Putting the statistical perspective on the body in parentheses in order to gain a better understanding of the embodied existence fits within the phenomenological exercise of “returning to the things themselves.” The proposal for such a return implies that we should bracket our science-formed knowledge and prejudices as much as possible. Since the term “abnormal embodiment” is a result of statistics, it must be bracketed in the phenomenological interpretation of the embodied existence. In that sense, a phenomenology of abnormality seems to be a contradiction in terms. It is, therefore, no wonder that Merleau-Ponty does not use the term “abnormal” in his analysis of Schneider. Schneider, the patient (le malade), is contrasted with the normal (le normal). Nowhere is the normal (le normal) contrasted with the abnormal (l’anormal). 38

In the remainder of this chapter, I want to show, however, that it is also possible to develop a phenomenological approach to abnormal embodiment. I will explain that the statistics of abnormality are not just a neutral form of scientific knowledge that exists peacefully and independently of the way people experience their bodies. Even though we intend to bracket statistical knowledge for our phenomenological analysis of lived experiences from a first-person perspective, such a bracketing, or such a phenomenological reduction, can never be complete. Our world is permeated with statistics. Most of our daily activities are dictated by statistical norms. In order to clarify how statistical knowledge infiltrates the lived experience of people, I will now take a trip outside phenomenology to discuss Hacking’s analysis of statistics. In his historical analysis of nineteenth-century statistics in *The Taming of Chance*, Hacking establishes a direct link between the development of statistics and the emergence of
the concept of “normal.” According to Hacking, the concept of “normal” in the sense of “usual,” “ordinary,” and “common” originated in the nineteenth century. Before that time, when it came to people or bodies, one did not speak of something like a normal person or a normal body but of “human nature.” The term “normal”—derived from the Latin *norma* and Greek *ortho*, which means “right angle”—takes on the meaning of “usual” through developments in statistics.

One of the most important statistical ideas is that most characteristics or properties are “normally distributed” within a population. The term “normal distribution,” expressing this symmetrical distribution of properties, was introduced by Francis Galton (1822–1911) at the end of the nineteenth century, but before that it was already thought of in terms of the so-called Gaussian curve, which was used in the calculation of probability and named after the German mathematician Carl Friedrich Gauss (1777–1855). If properties are normally distributed, this means that the mean or average coincides with the median (the value that is in the middle) and the mode (the value that occurs most often). A normal distribution curve looks like a so-called bell curve that is completely symmetrical.

Typical examples of normally distributed properties include biometric properties (weight, height) and also students’ grades. A typical normal distribution emerges only when the statistical calculation of mean, median, and mode is based on a large sample. The normal distribution and the mean are descriptive models that give us insight into the variation of properties within a certain population. Hacking, however, shows that as soon as the normal distribution appears on stage as a descriptive model, it also immediately acquires a normative function. The work of the Belgian statistician Alphonse Quetelet (1796–1874)—according to Hacking, the “greatest regularity salesman” of the nineteenth century—is exemplary in this respect. Quetelet, who was very interested in all kinds of measures and calculations of the human body—thanks to him we also have the still widely used Body Mass Index (BMI) or Quetelet Index—managed to obtain a biometric dataset from the Scottish army that was remarkably rich for the nineteenth century. The chest size of about 5,000 soldiers was measured, probably to determine measurements for new uniforms. According to Quetelet’s calculations, the chest size values are “normally” distributed. He did not yet call it a normal distribution—since that term was only later on introduced by Galton—but used the term “error
curve,” which Gauss used to represent the values of measurement errors in astronomy.

According to Gauss, the error curve showed that the values that occur most frequently and are concentrated in the middle are the least false values. The measured values further from the center and that occur less frequently are—most probably—erroneous. By means of this curve, Gauss could indicate, based on many measurements, which measurement of a certain planet was most likely correct. When Quetelet uses this error curve—which has the same graphical form as the normal distribution—to calculate the average chest size of the Scottish soldier, something remarkable happens, as Hacking indicates. Whereas Gauss based the average or mean and, therefore, the most correct measurement on multiple measurements of one and the same planet, Quetelet calculates the average size of the chest on the basis of measurements of many different soldiers. Quetelet seems to see the measurements of many different thoraxes as a multitude of measurements of one and the same body—the “average body.” Quetelet thus approximates the average chest, or the average body, in the same way that Gauss considers a planet. Whereas a planet is a real entity, an average is not. Therefore, as Hacking writes: “Quetelet changed the game. He applied the same curve to biological and social phenomena where the mean is not a real quantity at all, or rather: he transformed the mean into a real quantity.”

This specific interpretation of the mean implies that values that lie (far) from the mean are considered to be errors, as actual deviations and not just as a statistical deviation. This means that if the average chest size is thirty-nine inches, then someone with a chest size of forty-seven inches is abnormal, a deviant. From the idea of the error curve, the average is equated with a standard or norm. A soldier with a chest size of forty-seven inches does not meet the standard. What we see in these analyses by Quetelet is that the average is not only a descriptive model of how the biometric values of chest size are distributed. The average itself becomes normative or prescriptive in the sense that it indicates how the chest of a Scottish soldier should be. For Quetelet, the statistical average is ideal. Based on his conviction that the natural and social world is structured and organized according to certain laws of regularity, he assumes that the statistical average is the expression of the ideal type within a given population. Quetelet, therefore, like most of his colleagues, agrees that statistics are of great importance to...
identify and improve the qualities of a population. Statistics were indeed considered an important tool for what Galton called “eugenics”: the theory that a population could be enhanced through the elimination of inferior (hereditary) characteristics while embracing one specific (racist) idea of humankind. Interestingly, whereas most eugenicists considered the above-average person (i.e., the person endowed with exceptional strength or intelligence) as ideal, Quetelet considers the average person—l’homme moyen—as ideal. The average person is not only a statistical construct according to Quetelet, but also an actual entity. He does not see the average person as a mediocre person (as Galton did after him). No, for him the average is the ideal. He literally says: “An individual who epitomized in himself, at a given time, all the qualities of the average man, would represent at once all the greatness, beauty and goodness of that being.”

Hacking’s analysis of Quetelet’s work shows how the seemingly neutral and descriptive statistical mean becomes directly normative. Although nowadays we do not directly link mediocrity to the greatness of mankind, even in our time the ideal of the average is often embraced when it comes to appearance. In the 1990s, psychologists established that a beautiful face is nothing more than an average face. Kathy Davis, who researched the motives of women who undergo cosmetic surgery, also observes that averages are more important than diversity. Most women who underwent cosmetic surgery indicated that they wanted to be “ordinary” or normal in the sense of ordinary. They did not necessarily want to be more beautiful; they wanted to be more normal. So here we can clearly see how the idea of an average can easily ensure that individuals who, outside the scope of the statistically normal, regard themselves as different in a negative sense, and, therefore, even feel the pressure to adapt more to the norm, to normalize themselves, to belong more to the average, to be within the scope of the normal. When you are average or normal in a certain population, you do not stand out, and you do not attract attention. However, if you are not average, then you stand out and are confronted with the comparative views of others that may hinder you. In addition, our entire living environment is geared to averages: architects, designers, and tailors use sizes that suit the majority of the population. If you fall outside the bell curve of the normal, most things do not happen automatically. This point can help us to integrate the abnormal into phenomenology.
A Phenomenology of the Abnormal

Merleau-Ponty argues that the hunchback needs the third-person perspective if they are to become aware of the fact that they are “different” from others. This is true, but this third-person perspective, which is fed by ideas about averages, is also part of our living environment. When Merleau-Ponty indicates that someone is not aware of their own characteristics, such as being hunchbacked, it means that this form of being embodied for that person, without the gaze of the other, has something in itself that is self-evident. We can also say that when the hunchback is not aware of their hump and experiences their body as a matter of course, their body forms the obvious zero point of action and orientation. This zero point coincides with the above-mentioned “I can.” Therefore, we can say that the “I can” of the hunchback who is not aware of their hunchback is not diminished.

Based on his analysis of Schneider, Merleau-Ponty defines illness as a disruption or reduction of the “I can.” This is also in line with Goldstein’s view on disease in terms of a total body response resulting in “disordered behavior” and sometimes a “catastrophic reaction,” and Canguilhem’s idea that pathology goes hand in hand with the loss of normativity, that is, the capacity of setting norms. What I want to add here is that disturbances of the “I can” are not only provoked by illness or pathology. As Merleau-Ponty points out, there is a disturbance of the “I can” when the natural way to deal with your environment and situation is disturbed. But this disruption of the “I can” also occurs when people feel that their embodiment, their way of being embodied, is not self-evident within a specific social group. In his chapter “The Lived Experience of the Black (le Noir),” in his book Black Skin, White Masks, Frantz Fanon states that being black in white France in the 1950s has a direct impact on his body schema and thus on his physical subjectivity. According to Fanon, the body schema—which for Merleau-Ponty forms the basis of the “I can”—must be exchanged for a “racial epidermal schema” (schéma épidermique racial). In Queer Phenomenology, Sara Ahmed elaborates on this: “For bodies that are not extended by the skin of the social, bodily movement is not so easy. Such bodies are stopped.” Being black in a white world means that you stand out, that your being embodied as “black” is never self-evident, that instead of being a zero point of orientation, you often become a point of attention for others. In this sense, being black...
in a white world leads to an inhibition of intentionality and possibilities; it leads to being arrested both figuratively and literally.

Merleau-Ponty, as we all know, makes no reference to skin color and argues that physical characteristics that are noticed from a third-person perspective belong, phenomenologically speaking, to the “objective body” and not to the lived body, the body as subject. Fanon and Ahmed show that skin color and racial characteristics have an enormous impact on the body as a subject, the body as the incarnation of the “I can.” This observation can be extended to the domain of abnormal embodiment, that is, embodiment that statistically differs from what is considered normal within a social group, such as that of the hunchback. Because not being average within a social group often goes hand in hand with being different in a negative sense, it makes you stand out in this group, protruding so that you cannot pass for normal. If that is the case, being nonaverage can have an impact on the lived body.

When Merleau-Ponty talks about the hunchback, he states that this person will experience themselves as different only from the perspective of the other. Perhaps it is true that a hunchback who lives in total social isolation or in a community with only hunchbacked people does not experience their hunchback as something different. In real life, however, this is never the case. In real life, we are always confronted with the comparative views of others. This gaze can affect someone’s embodiment by transforming the self-evidently embodied zero point of action and orientation into a body that stands out to others. The gaze, therefore, directly affects the lived body because it breaks the self-evidence of it. Those whose physical appearance is statistically different can, therefore, experience a disturbance of their “I can” without any pathology as described by Merleau-Ponty, Canguilhem, or Goldstein.

Goldstein wrote that pathology always goes hand in hand with abnormality, but that abnormality does not always go hand in hand with pathology. We can agree with this viewpoint of Goldstein if we think back to the example of high blood pressure. Blood pressure higher than 130/80 mmHg is currently considered abnormal in the United States, but, as mentioned above, most people with such blood pressure do not feel ill and would probably not say they are ill. Goldstein would indeed say these people are not ill. We could, therefore, say that Goldstein’s distinction between disease and abnormality can very well be used to counteract contemporary medicalization.
The norms and standards that Goldstein and Canguilhem are talking about are mainly physiological standards, standards that, according to Broussais, indicate the normal state of an organ or tissue. In this chapter, however, I am talking about norms or standards of how bodies appear. As I indicated above, standards of what a body should look like often correspond to average values within a population. Based on my explanation of the effect statistical reasoning can have in today's societies, I have put forward the suggestion that the mere fact of being physically abnormal can also lead to a distortion of the zero point of action and, therefore, to a reduction in possibilities. This applies to any physical characteristics that can be observed by others; it applies if you are black in a white society, you have a hump in a society where the majority do not, you are much taller or smaller than most, you are missing a limb, your breast is amputated, or your face is damaged.

In the phenomenology of the body, this variation in physical characteristics is very often considered to be characteristic of only the objective body and, as such, is usually bracketed and kept out of the analysis. What I have just shown is that perceptible physical differences—abnormality according to statistics—do not necessarily mean that someone is ill, but they should be included in the phenomenological analysis because they also concern the lived body. A phenomenology of abnormality integrates the third-person perspective, the perspective from the outside, into the first-person perspective. A phenomenology of abnormality can thus help us to describe and interpret how being physically different is experienced.

Notes

3. This project was funded by the Dutch Research Council (NWO). For a summary and the results of this project, see www.nwo.nl/en/research-and-results/research-projects/i/85/6485.html


38. Merleau-Ponty uses the term “abnormal” in the *Phenomenology of Perception* only when he refers to the experiments by Stratton which incite “abnormal perception” in the chapter, “Space” (p. 248, note 4).
46. Here we see how statistics contributes to what Foucault has called “normalizing power.” As a student of Canguilhem, Foucault developed an equally critical perspective to statistics and quantification in the human sciences. Whereas Canguilhem criticized the statistical approach for its clinical shortcomings, Foucault revealed how statistics and numbers turn people into objects that can be manipulated without exercising power in a blatant way. Indeed, as described by Hacking, who was greatly influenced by Foucault’s early work, the descriptive statistical average or “normal” is often conflated with a normative “normal,” which leads to a powerful normative language of normality and abnormality. Hacking, *Taming of Chance*, 169.