

Jenny Slatman

**Plastic Mortals and 21st
Century Healthcare**

PLASTIC MORTALS AND 21ST CENTURY HEALTHCARE

An Introduction to Philosophical Anthropology

Jenny Slatman
j.slatman@tilburguniversity.edu

1. INTRODUCTION

The first human heart transplant was performed in 1967.¹ Initially, this type of surgery was not particularly successful because recipients usually rejected the donor organ. Nevertheless, this event marked a crucial moment in medicine. With the introduction of cyclosporine, an immunosuppressant drug, in the early 1980s, the transplantation of vital organs became an acceptable and successful medical procedure. Next to the possibility of grafting hearts, it also became increasingly common to open thoraxes to repair hearts beating in a less than ideal fashion. Electric pacemakers now ensure that the heart keeps beating in the right rhythm, and inefficient heart valves are replaced by artificial valves or those from a dead pig. Blocked coronary arteries are bypassed, and here and there a stent can be placed to keep the blood vessels open. People who are waiting for a donor's heart can sometimes even get an artificial heart to bridge the time.

Transplant and implant surgery is not restricted to the heart but can be carried out in many other locations in the body. One might immediately think of kidney and liver transplantation, but there are also stents in veins, arteries, and ducts

1. I would like to thank Martine Prange for her constructive feedback on an earlier version of this chapter.

as well as other artificial implants in the joints, teeth, and brains. Additionally, implants are increasingly combined with applications of “smart algorithms,” such as a subcutaneous sensor for people with type I diabetes that can continuously measure the glucose level in the blood, and then automatically adjust it via an insulin pump (see Figure 1). Because hardly anyone will escape having something implanted in their body during their lifetime, we could say that implants, or the possibility of implantation, have become an important part of our existence. Plastic, malleable, artificial people populate our world. Thanks to these technological interventions in medicine, human bodies can be repaired, and human life can be considerably prolonged. Yet, humans remain as mortal as they have ever been.

For philosophical anthropology, the branch of philosophy concerned with the question of how people understand themselves as human beings, the fact that people are aware of their mortality is an important starting point. In classical texts, we can find ideas on how to understand our mortality from the perspective of something immortal, such as the immortal soul in Plato’s *Phaedo*. In our contemporary culture and society, however, the belief in immortality seems to have faded into the background. Our time is mainly characterized by the fact that we try to stretch our mortality as much as possible and postpone our deadlines as long as possible. This stretching has become possible thanks to technological and medical developments.

The emergence and application of all types of medical interventions elicit various philosophical questions. One particular question that often dominates philosophical debate about new technologies in medicine is the ethical one of whether something that is technologically possible is necessarily morally desirable. It remains a question whether “human enhancement”—the application of all kinds of technological interventions to make humans “better than well”—is desirable, or even morally required (Harris, 2010). Very often, discussions on this theme have been hijacked by the so-called transhumanists (those who, like Harris, believe that we should widely distribute technologies that aim at enhancing humans) and bioconservatists (those who believe that we should be skeptical about the use of enhancing technologies because they can threaten human dignity). However, they were in fact philosophically instigated and framed by the Sloterdijk-Habermas debate from around the turn of the century, which explored “therapy” and “enhancement” as a binary pair (Ter Meulen et al., 2007). Whereas therapy is supposed to aim at curing a disease or disorder, enhancement may not be necessary from a strictly medical point of view. Although a neat opposition between therapy and enhancement might be advantageous for various parties, such as health insurers who wish to cover only medically necessary interventions, in reality, the distinction between therapy

and enhancement is not so easy to make due to the ever-changing concepts of health as well as the ongoing tendency of medicalization.

In addition to the broad and general ethical question of whether to embrace the latest technological possibilities, the use of technological interventions has also raised more concrete ethical questions in clinical practice. When treating patients, practitioners always have to consider whether the treatment or intervention is beneficial for the patient, whether it may bring them any harm, and whether their autonomy is respected. From a somewhat broader standpoint, one can also consider whether the treatment is fair. This last point is particularly important in cases of very expensive treatment, for example, or treatments to which not everyone has equal access. Within clinical ethics, these four principles—do no harm (*primum, non-nocere*), autonomy, beneficence, and justice—are central (Beauchamp & Childress, 2001). For each intervention, it is essential to assess whether and to what extent these principles will be acknowledged. If, for example, we look at rather experimental transplantation interventions, such as the first facial transplant in 2005 or the first hand transplant in 1998, one may wonder whether the “do no harm” principle was sufficiently guaranteed. These patients received a treatment for which the long-term consequences were not yet known; the first hand transplant patient ultimately had his donor hand amputated because it was difficult to get used to the new hand (Slatman & Widdershoven, 2010), and the first face transplant patient died ten years later due to cancer caused by the immunosuppressant drugs. Technologies such as the fully automated glucose meter and insulin pump raise justice-related questions. Specifically, these devices are not equally available to everyone because they require a lot of knowledge and (social media) skills: if you would like to manage your own insulin level with the help of an implanted pump, you need to be able to manage a smartphone with the pump’s corresponding app. Philosophy in the form of ethical reflection is therefore always needed to analyze whether the development and use of new medical technologies actually contribute to the “good life.”

Besides ethical questions, the use of new medical technologies also raises other kinds of philosophical questions: Have humans turned into human-machines now that technology has become so prevalent in and on our bodies? Is there still a clear distinction to be made between humans and machines? Further, what about the difference between humans and animals when we consider that animal tissue is used to patch up humans (think of the heart valve of a pig, or the first insulin taken from dogs)? These are the kinds of questions that are the subject of philosophical anthropology. In this chapter, I will explore how these interventions may affect the way we see and interpret ourselves as human beings. I will start with a short description of what philosophical anthropology entails. Since the name “philosophical anthropology” was introduced in German philosophy in the early 20th century and did not travel much further than France

and the Netherlands, it is barely used in the English-speaking world. In my description of the discipline, however, I will make it clear that questions central to philosophical anthropology are inherent in philosophical reflection in general. After this description, I will provide an example of a contemporary philosophical anthropological analysis of intrusive medical technology, for which I will draw on Jean-Luc Nancy's philosophy. In my analysis, I will mainly focus on how the coexistence of human and medical technology has affected our ideas about embodiment and mortality.

2. WHAT IS PHILOSOPHICAL ANTHROPOLOGY?

The central question in philosophical anthropology is not an empirical one but rather a reflective one: How do people understand themselves as human beings? Even though such reflection has always been part of philosophy, philosophical anthropology as a separate philosophical discipline has only existed since the beginning of the 20th century. It is no coincidence that anthropology emerged as a separate discipline at that time. The industrial revolution and the rise of capitalism in the 19th century had changed many things at a rapid pace. Many tasks initially performed by humans were increasingly being taken over by machines, and with the rise of medical disciplines such as pathology, physiology, and neurology, medicine was booming. As of the 1920s, more and more philosophers felt the need to reflect on these developments in Western societies. Philosophers who are expressly associated with this tradition include Max Scheler (1874–1928), Arnold Gehlen (1904–1976), and Helmuth Plessner (1892–1985). Philosophical anthropology as a specific philosophical discipline is essentially linked to the German-speaking world.

Other sources of inspiration for philosophical anthropology include the work of 20th century philosophers within the traditions of phenomenology and existentialism, such as Hannah Arendt (1906–1975), Martin Heidegger (1889–1976), Maurice Merleau-Ponty (1908–1961), Simone de Beauvoir (1908–1986), and Jean-Paul Sartre (1905–1980). What all these thinkers have in common is the criticism of the idea that being human is characterized by rationality and reason. The theories of Charles Darwin, Friedrich Nietzsche, and Sigmund Freud—according to Paul Ricoeur (1970), the “three masters of suspicion” (p. 32)—gradually led to the realization that we, as humans, are only small links in evolution, that we are largely determined by existing power relations, and that we are mostly guided by unconscious drives. What the philosophical anthropologists of the first half of the 20th century had in common was that they all underlined the importance of “being situated” and “being embodied” for being human. Below, I will explain in more detail how this focus on embodiment goes hand in hand with a change in thinking about the body (§ 5).

If we assume, however, that the central question of philosophical anthropology is that of what it means to be human, then we immediately see that this strand of inquiry has always been a part of (Western) philosophy in general. If we go back in time and look at the texts of, for example, Aristotle, Plato, and Descartes, different conceptions of what it means to be human emerge. Whereas Plato presents us with the image of the soul that is trapped in a body (*Phaedo*, 81e), Aristotle suggests that a human is a living being endowed with reason, or a *zōon logon ekhon*, or in Latin, an *animal rationale* (*Politics*, 1253a). In the 17th century, René Descartes (1641) interpreted the essence of being human as the combination of the thinking substance (*res cogitans*) and the extended substance (*res extensa*). Julian Offray De La Mettrie (1748), after Descartes, presents an entirely different view of human existence, whereby a human is held to be nothing but a machine. The idea that this machine would also need something like a soul or spirit for cognitive functions is not plausible to De La Mettrie.

These historical conceptions of being human do not just lie behind us. In our times, we often fall back on iconic historical conceptions. For example, in contemporary healthcare, it is apparent that the Cartesian dualistic view of man is still prevalent, and it is for this reason that a strict distinction is made between somatic and mental health problems. In contrast, within contemporary neuroscience and neuropsychology, the materialistic view of humans, which can be traced back to De La Mettrie, is flourishing. Today, many are glad to reduce cognitive and mental functions to brain activity, as this belief is supported by the increasing ability to visualize brain activity (Rose & Abi-Rached, 2013). The conception of humankind that corresponds with this perspective is that of a neuronal machine or network. According to this perspective, humans do not have a non-material dimension. Today, this view is enthusiastically preached by neuroscientists such as Dick Swaab (2014) and Joseph LeDoux (2002).

If we look closely at considerations that support or contradict this neuroscientific-inspired view of humankind, we see that the question of being human—the central question of philosophical anthropology—is also implicitly present within the philosophy of mind. Indeed, while some claim that consciousness can be reduced to the brain or neural activity (Churchland, 1989), others argue that consciousness is not a natural or material phenomenon and thus cannot be explained in terms of science (White, 1991). Since the philosophy of mind is often seen as an analytical or Anglo-Saxon branch of philosophy, we can therefore say that the philosophical movement that deals with the question of being human should not only be seen as a legacy of continental philosophy. Instead, philosophical anthropology, despite its lack of use as a term, is at play wherever philosophers deal with the question of what it means to be human.

Because philosophical anthropology searches for the specific meaning of being human, it also deals with the question of how people differ from Gods, angels,

and animals. In contemporary anthropology, the focus has shifted progressively to the relationship between humanity and technology. When we look at how we interpret our behavior and ourselves, we see that we often mirror ourselves with technological artifacts. Without the developments of steam engines, electrical machines, and computers, we would never say that we “have to blow off steam for a while”; that someone has a “loose wire”; or that “we have to recharge” or even “reset” ourselves. As stated above, the question of how people understand themselves as human beings is a reflective question and not an empirical one, even though this reflection is always nourished by empirical observations. The answer to that question, therefore, is always dependent on the context of the people who are posing it. For this purpose, it is valuable to look at the metaphors we use because they certainly say something about how we describe or interpret ourselves as human beings. By using the machine (or computer) metaphor, we could, for example, explain ourselves as fully material beings controlled mechanically (similar to De La Mettrie’s view), or as dualistic beings if we assume that the machine consists of both hardware and software (Cartesian). These metaphors indicate how we compare ourselves to technology, but technologies also affect our bodies and lives. In the remainder of this chapter, I will focus on how technology may change the way we think about human bodies, our “own” bodies, and our mortality.

3. *MORT-VIVANT*

As an example of a contemporary anthropological analysis, I will now zoom in on some ideas of the contemporary French philosopher Jean-Luc Nancy (born 1940). Nancy owes his life to a grafted heart and is therefore in a unique position to reflect on what technology is doing to us as mortals. In several texts, Nancy writes about the meaning of technology in our time, but nowhere do his remarks penetrate as they do in the essay “The Intruder,” a philosophical reflection on the period in his own life in which he suffered from severe heart failure and consequently received a donor heart (Nancy, 2008).

In 1990, Nancy received a donor heart because his own no longer functioned properly. A doctor had told him that his own heart was not programmed to be over fifty years old. For people born in or before 1900, the age of 50 years corresponded to the average life expectancy (CBS, 2019). For someone born in 1940, such as Nancy, 50 is too young to die. Nancy is keenly aware of the fact that he owes his existence to the technological possibilities available in his time. Had he been born with the same heart twenty years earlier, his life may not have been extended because there was no cyclosporine (the immunosuppressant drug that ensures that a donor organ is not rejected) available at that time. As Nancy writes, “I always finds itself tightly squeezed in a wedge of technical possibilities” (p.

162). His own malfunctioning heart, and the ability of technology to fix it, invited him to think about what it means when we talk about our “self” or “I,” or when we speak of “my” body.

Nancy indicates that there is an ongoing process between what we call our “own” or “self” and what we call “strange” or “other.” In his essay “The Intruder”, he describes the different ways in which “strangeness” can present itself. First, there is the sick, malfunctioning heart. Where at first you are never aware of your own heart—which in itself also indicates a strangeness toward yourself—you later become aware of your own heart in a negative way, for example, through chest pain, shortness of breath, or nausea in your mouth: “I had this heart at the tip of my tongue, like improper food” (p. 163). Nancy’s heart had alienated itself from his own body. Thus, to save his own body and self, the sick heart had to be taken away and replaced by another.

Then there is the donor’s heart, or the heart of another person, which may be of a very different age than you are. Moreover, it could be the heart of someone of a different gender or ethnic origin. To be able to accept that strangeness in your body, your own immune system has to be suppressed. How paradoxical this idea is: to protect one’s “self,” the defense mechanism must be put on inactivity for that same “self” to survive. For Nancy, lowering his own resistance meant that other uninvited intruders, such as viruses, could go about their business more easily. Also, treatment with cyclosporine left him with lymphatic cancer. Cancer, he writes, “is like the ragged, crooked, and devastating figure of the intruder” (p. 168). Cancer can be construed as an intruder, but, at the same time, it is our own cells that turn against ourselves. Chemotherapy, radiotherapy, and stem cell transplantation—all therapies that target both the malignant and the healthy tissue—ultimately had to provide a livable situation for Nancy.

Nancy describes how his own “self” continues to exist thanks to strangeness, strangers, or *Fremdkörper*. In its ultimate form, the strange nature of *Fremdkörper* involves the peculiar nature of death. To us, as living individuals, death represents strangeness *par excellence*. After his heart transplant, Nancy’s son characterized him as “mort-vivant”: a living dead person (p. 170). In multiple respects, this adequately describes the situation. With a heart that is so diseased that its replacement is crucial for survival, one is first bound to die. It is abnormal to live on when having a heart “programmed to live fifty years.” One lives while one should have been dead already. However, “mort-vivant” also refers to the dead donor body. You live because someone else has died. The one heart, donated and accepted, connects the dead with the living.

Although Nancy does not call himself a philosophical anthropologist, I would say that his analysis of his own heart transplantation is typical philosophical anthropology. His analysis revolves around the question of what it means to say

“I” or “one’s own,” and to that end, he is discussing the contemporary phenomenon of heart transplantation. His analysis and questioning of being human are thus very much based on the contemporary context, and even more specifically, on the context of his identity as the philosopher Nancy, who is a heart patient in contemporary France. As such, at first sight, his analysis resembles a medical anthropological study. In medical anthropology, empirical research methods, such as ethnography and interviews, are used to investigate the impact that certain medical practices have on a particular population. However, Nancy’s analysis goes further, as it entails more than an auto-ethnography that indicates the medical practice of cardiology in France in the 1990s. With his historical and contextual analysis, Nancy wants to reflect further on the meaning of being human in a more general sense. For example, he says that the heart transplantation acted as a kind of eye-opener. What he means is that the possibility of heart transplantation enables us to say something about the relationship between humanity and technology in general (in our time) and about the relationship between what is “own” and what is “strange” in ourselves. These two factors are inextricably linked. There is no human being without technology, and there is no such thing as a self apart from something strange or other.

4. MORTALS FOREVER

Even though the industrial revolution of the 19th century launched humankind into the technological era, technology has always been part and parcel of human life and contributed to making life easier and postponing death. Our forebears went out to look for food carrying clubs and stones. This is what Helmuth Plessner refers to when he claims that people are artificial by nature, as we have always used artifacts. Nancy repeats this idea when he writes that humans have always been the most terrifying and troubling forger who “denatures and remakes nature” (p. 170). In our era, however, technology has received yet another meaning. Contemporary technologies invite us to reflect on our own mortality in another way, and it is their invasiveness and omnipresence in our lives that shows us that the concept of a natural human being, one who is opposed to technology, has become a naive idea.

The most characteristic strangeness of our time is not the bizarre nature of technological feats, but our sustained effort to defer death. If we look at the averages of life expectancy, we can see that we have succeeded in mitigating death wonderfully well. If you were born in 2000 in the Netherlands or a similar European country, your average life expectancy was over 80 years. Because this is an average, and because people with a higher level of education—people who read this book—are surviving beyond their expectancy, there is a good chance that you will live more than 90 years, whereas the average life expectancy for

someone born in 1900 was only 50 years (CBS, 2019). This means that through technology (which includes the construction of good sewers and clean water drains, the development of effective vaccines and drugs, rapid innovations within surgery, and the automation of many processes), we have gained nearly 40 years of life per individual in a century. This dramatic demographical shift has certainly had repercussions on the way our society is organized. However, Nancy raises another crucial point by claiming that contemporary technology has rendered death more visible than ever, for “to defer death is also to exhibit it, to underscore it” (p. 165). In his view, technology has taken over the role of religion in Western societies. If religion offered us a vision of the infinity of life after death, technology merely promises a postponed death. Nancy thus claims that technology emphasizes our finite nature, because by wanting to postpone death for longer and longer, we no longer seem to expect that there is still something ahead of us beyond our own finitude.

5. THE BODY'S PLASTICITY

What is striking about Nancy's text is that when he talks about the “I” or “self,” he is not talking about some kind of thinking substance or mind. The “I” or the “self” is nothing but our embodied existence. Nancy's thought here is closely related to that of the philosophy of existence and phenomenology of the first half of the 20th century. As indicated above, the strongest characteristic of this group of thinkers was that they no longer perceived human beings as an *animal rationale* or a dual being in which the body is guided by the mind. For them, being human is primarily determined by embodiment. It is important to note that this criticism of the idea of the *animal rationale*, or more specifically of Cartesian dualism, goes hand in hand with another philosophical view of the body. In Descartes's view, the body is a *res extensa*, or an extended thing. For Descartes, the human body is thus similar to any other thing or object that takes up space. This idea of the body as a thing, or also a machine, has been confirmed and strengthened by the developments in medicine from the 18th century onwards, from which anatomy was introduced into clinical practice. Whereas in the past, illness was seen as a general imbalance of bodily fluids, from the 18th century, people started to look for the cause of a disease within a certain place in the body. The bodies of people who had died of a particular disease were dissected to look for specific defects in their anatomical structures. This clinical and epistemological development marks, according to the French philosopher Michel Foucault (1973), the birth of the “medical gaze.” In this way, the body changes from a whole that needs to harmonize with itself and its environment into an anatomical-physiological object that can be dissected and examined with millimeter precision.

If we go back to the texts of philosophical anthropologists at the beginning of the 20th century, it becomes evident that they find this specific view of the body—the body as a thing or object—far too limited. In the German texts by, for instance, Scheler, Plessner, and Husserl, we find an addition to this idea in their indication of a distinction between *Körper* and *Leib*, which is difficult to translate into English. *Körper* refers to the body as a thing: your own body when you attribute specific physical qualities to it, and the body that the doctor examines, but also the body that the undertaker puts in the coffin. It is indeed very common to take the bodies of others, as well as your own body, as a thing, an object, or *Körper*, and to experience it as such. In doing so, you take an external perspective on the body as you look at it from the outside. However, according to Husserl, and this idea was later adopted by Merleau-Ponty, you can also experience your own body from a first-person perspective. In this case, you experience your body from within. This experience is formed by sensations that are localized in the respective sense organ (Husserl, 1952, § 36), including the sensations of touch, pain, warmth or cold, and even your posture and your own movement. Husserl calls this sensation of your own body the *Leib* experience. In this experience, your body does not appear as an object, as it does in the *Körper* experience, but instead, it is perceived as an embodied zero point, or an embodied here and now from which you act, perceive, and can orient yourself. Merleau-Ponty calls this zero point the “embodied subject” or the “lived body” (*corps vécu*; Merleau-Ponty, 1945).

With the idea that the body is not only an object but also a subject, there is a definitive departure from the classical idea that the subject corresponds to something immaterial like the mind. Subjectivity is not something that can be cut loose from embodiment. This is why Nancy’s “I” must be understood as an embodied self. In his analysis of the meaning of embodiment, Merleau-Ponty shows that the boundaries of the lived body do not simply coincide with the body as a thing or object. The lived body, which Merleau-Ponty also calls “one’s own body” (*corps propre*) given its foundation in the first-person perspective, is a dynamic whole. The boundaries of our own bodies are partly formed by the degree to which things can be incorporated. When something is incorporated, that thing also becomes part of our lived and embodied zero point. Here you might think of the use of tools or instruments. Merleau-Ponty himself gives the example of a blind man with a white cane. When the man uses the cane to explore the world and is no longer aware of the cane as such, the tool has become an extension of his body. It is then incorporated, or completely appropriated (Merleau-Ponty, 1945, p. 144).

This incorporation also takes place when people who use a prosthesis are no longer aware of the artificial device as such. When used flexibly, the prosthesis is no longer experienced as an object but instead becomes a part of the embodied

acting zero point. Incorporation is largely based on habituation and can be understood as the appropriation of something that was previously strange, as the appropriation of *Fremdkörper*. As indicated above, we are very well able to continue living with all kinds of artificial implants and with other people's organs and tissues. Hence, the boundaries of what we call our own body seem fairly elastic. The idea that the boundaries of one's own body are not fixed in advance has become an important theme in contemporary feminist philosophy. For example, Haraway (1992) uses the term "cyborg"—a combination of organism and cybernetics or self-regulating technologies—to indicate that it is not so easy to distinguish humans from technology. In addition, Haraway claims, the distinction between humans and animals is not so clear when we think of cases like the so-called OncoMouse (a laboratory-produced rodent with an oncogene) that is used to test cancer treatment. The human as a cyborg is thus human, animal, and technology (Haraway, 1992). Within feminist philosophy, this blurring of boundaries, which goes hand in hand with the elastic boundaries of one's own body, is by no means considered a loss of humanity. Instead, it invites us to reconsider the idea that identity formation is solely determined by nature or biology, and as such, it contributes to overcoming entrenched gender patterns. The blurring of boundaries emphasizes that what and who we are is not so stable, and that (gender) identity is flexible and multiple rather than fixed and unambiguous (Braidotti, 2013; Grosz, 1994).

In considering Nancy's work against the backdrop of feminist philosophy, it is evident that he is less concerned with issues pertaining to (gender) identity politics, even though some claim that his ideas on embodiment are of great value for feminism (Perpich, 2005). As I see it, his work provides a more general criticism—broader than the feminist criticism—of the idea of our "own body" and the very idea of the "self." A clear difference between Merleau-Ponty and Nancy is evident here. Whereas Merleau-Ponty emphasizes the experience of "ownness" that arises when something is incorporated, Nancy emphasizes that this experience of "ownness" is always related to a form of strangeness. Based on Merleau-Ponty's phenomenology, we could say that in a successful operation, the donor heart or an artificial implant has become part of one's own body. On the contrary, Nancy states that there can be no own body without instances of strangeness. This can be understood as follows: the experience of the body as one's own, the *Leib* experience, is only possible if at the same time we assume that the *Leib* also has a certain thingness, or that the *Leib* is also *Körper* (Slatman, 2014). Without the-being-extended of a thing, the *Leib* could never be touched, either by itself or by something outside of itself, and it would then have no experience of itself. If we interpret the *Körper* as that which in a certain sense is strange to ourselves because we can distance ourselves from it, then it becomes clear that our own body always already has something strange

within it. We as humans are capable of incorporating strange elements into our own bodies solely because our own bodies already have something strange.

What a phenomenological anthropological analysis of contemporary technologies teaches us is that technology does not only involve an addition to or transformation of our human biology. The many possibilities of today's technologies hold up a specific mirror that allows us to interpret ourselves in a certain way. As long as the dream or science fiction of human immortality cannot be realized by technology, then technology will only postpone death. We succeed so effectively in delaying death because our bodies are so plastic and thus capable of absorbing strange elements. Looking at the possibilities of technology, we, contemporary humans, can interpret ourselves as *plastic mortals*. More than ever, as Nancy underlines, we are aware of our finiteness because the growing trust in technology seems to go hand in hand with a waning belief in an afterlife. More than ever, we are aware that our own being can never be entirely our own, and that we are always embedded in a network of strange elements. Being human means that one relates to what is strange in a pliable way, and in many cases, this is literally associated with strange material in one's body, such as plastic.

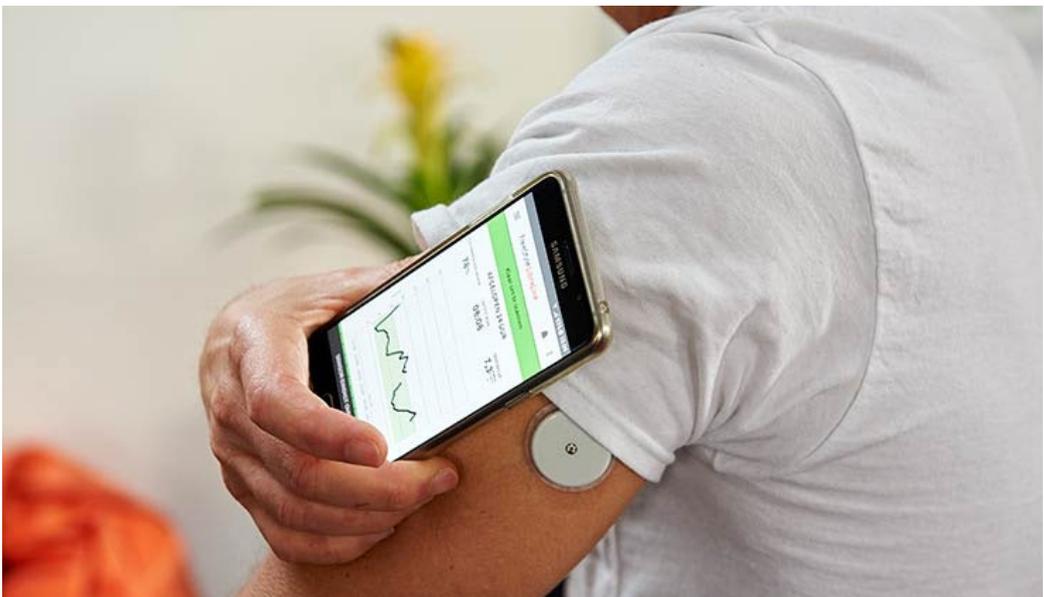
6. PHILOSOPHICAL ANTHROPOLOGY FOR 21ST CENTURY HEALTHCARE

When we ask how people understand and interpret themselves as human, then it is virtually impossible not to discuss the relationship between humans and technology. Therefore, I believe that in our time of increasing technological innovations, the philosophical discipline of philosophical anthropology is of great importance. Technological developments to improve the human body, such as those I have described in this chapter, will only multiply. In addition, more and more technologies will be used to boost human cognition. Already for a long time, computers have been much better than humans in making calculations and playing chess. Recently, due to the great success of deep learning in artificial intelligence (AI), the machine has also beaten humans when it comes to interpreting pictures. AI is now also conquering the medical world, and there are already numerous applications within the healthcare sector (Topol, 2019). The subcutaneous sensor together with the insulin pump (see Figure 1), which helps people with type I diabetes manage their blood glucose levels (which I spoke of in the introduction), is also guided by a deep-learning program. This technology-based system becomes increasingly familiar with the user's body, and it reacts to fluctuations in ways more precise than the user has been able to do herself or himself. The use of such a "smart" technological device brings a new dimension to the coexistence of humans and technology. For indeed, this technology not only involves the implementation of a *Fremdkörper*. The artificial

intelligence embedded in this device will also boost the user's knowledge and awareness of their body. This new type of "self-knowledge" can also be subject for philosophical anthropological scrutiny.

In the face of all kinds of technological developments, philosophical anthropology can ask what exactly is going on, and in what ways the portrayal that humans have of themselves can be changed by that technology. In that capacity, philosophical anthropology is descriptive and not prescriptive: it will not directly address whether the new technology should be used. Herein lies also the difference with an ethical approach, as I explained in the introduction. Nonetheless, a philosophical anthropological approach can also have practical purposes. When we have a better understanding of our own embodied being and how we incorporate technologies, we can also apply that knowledge in (health) practice. A good example of this is the development of a tool to determine the Patient Transparency Diagnosis, which would measure the extent to which an implant is felt by a user (Tbalvandany et al., 2019). Such a tool can help to make the coexistence of people and technology as pleasant as possible. When philosophical anthropologists seek to provide a practical benefit to healthcare, it is recommended that they not only conduct their philosophy from their armchair, but that they also become thoroughly acquainted with the field they are analyzing.

Figure 1



Subcutaneous sensor and insulin pump. Picture by courtesy of Abbott company.

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SIMONE DE BEAUVOIR



MAURICE MERLEAU-PONTY (1908-1961)

PHENOMENOLOGY OF PERCEPTION

Merleau-Ponty is usually seen as the philosopher of the body and embodiment. German philosophers, such as Plessner and Husserl, had already indicated that the idea of the body as a thing or object (*res extensa*) is too limited and that the body is not only *Körper* (objective body) but also *Leib* (lived body). In Merleau-Ponty's main work, *Phenomenology of Perception* (1945), the lived body is explained in terms of "one own body" (*corps propre*) or "embodied subject" (*corps sujet*). For the first time in the history of modern Western philosophy, the body is conceived as a subject. As a French philosopher educated in the 1930s, Merleau-Ponty is particularly influenced by German phenomenology (Husserl) and philosophy of existence (Heidegger). Where Husserl speaks of sense-making (*Sinngebung*) in terms of intentionality or "consciousness of," Merleau-Ponty makes it clear that before we are explicitly aware of anything we already give meaning through our embodied actions. He, therefore, speaks of "motor intentionality." Whereas Heidegger describes human existence as *Dasein*, Merleau-Ponty underlines that existence always involves being embodied. It is striking that Merleau-Ponty also had great knowledge of the psychology, neurology, and psychiatry of that time. Especially the work of the German psychiatrist and neurologist Kurt Goldstein who, among other things, examined and treated World War I veterans, was very important to him. Merleau-Ponty's analyses of what it means to be human are thus developed in close dialogue with empirical findings from that time and are not only based on philosophical theories. Jean-Luc Nancy (born 1940) nowhere explicitly discusses Merleau-Ponty's work and does not call himself a phenomenologist because he finds this movement too subject-centered. Nevertheless, his thinking does fit within the philosophy of existence (following in the footsteps of Heidegger). And just like Merleau-Ponty, he describes existence as embodied. Unlike Merleau-Ponty (and also unlike Heidegger), Nancy emphasizes that the (embodied) subject is not the center of sense-making, but that sense always emerges in the "between," the "being with" of multiple bodies.
