Making Room for the Body

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the internal nothingness
of my self
which is night,
nothingness,
thoughtlessness,
but which is explosive affirmation
that there is
something
to make room for:
the body.¹
—ANTONIN ARTAUD, "TO HAVE DONE WITH THE JUDGMENT OF
GOD, A RADIO PLAY"
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According to French historian Bernard Andrieu, the twentieth century has been characterized by the "epistemological dispersion of the human body." According to his thesis, it is only since the approach and methods developed by the *Nouvelle histoire* (New History) in the middle of the twentieth century that the body became an object of intense investigation. In the introduction to his *Feudal Society* (1949), Marc Bloch —one of the cofounders of the new historian journal *Annales*—wrote that "the task of the historian is not to exhibit an uninterrupted chain of connections linking the patterns of the past . . . but rather to understand the infinite variety and richness of the past in all its combinations." It is

in this spirit that Jacques Le Goff suggests rewriting history with a small b, as a history "lived by people," a perspective that emphasizes what he terms the Zusammenhänge, the connections between historical events, their context, and the materiality under investigation. No entity would better offer itself to this new-historical approach than the human body. As British sociologist Bryan S. Turner states, the usefulness of the body to critical analysis lies in the fact that we both are and have bodies. Or, to put in the terms of Le Goff, we experience our own body as well as the bodies of others: "The body is a material organism, but also a metaphor; it is the trunk apart from head and limbs, but also the person [as in 'anybody' and 'somebody']. . . . The body is at once the most solid, the most elusive, illusory, concrete, metaphorical, ever present and ever distant thing—a site, an instrument, an environment, a singularity and a multiplicity." In the aftermath of this approach to questions of epistemology and historical progress, the last decades have seen an ever-increasing number of studies about the human body, representing a bewildering array of perspectives and approaches. Today we know the histories of a sexual body, a female body, a pregnant body, a Greek body—to list but a few of innumerable examples—as well as the histories of a body-in-pieces; in other words, of certain organs and body parts in their specific cultural, historical, and geographical configurations.

One of the most prominent attempts to tell a history of the human body albeit, as his title says, in fragments—is the multivolume work edited by Michel Feher. 8 In this work more than forty authors present various aspects and moments of the human body and its parts. The first volume, the "vertical axis," explores the relationship of the body to the divine, the bestial, and the machinic or "monstrous doubles of the human body." The second volume, or the "psychosomatic approach,"11 provides cross-disciplinary and diachronical studies of the manifestation and production of the soul through emotions evoked by such phenomena as pleasure, sufferings, and death. The third volume, which goes farthest "under the skin," studies the "uses of certain organs and bodily substances as metaphors or models of the functioning of human society, on the one hand, and, on the other, [describes] several remarkable characteristics attributed to certain bodies because of the status of the individuals they incarnate, that is, the position they occupy in a certain conception of the social body, or even of the organization of the universe." Examples from this volume revolve around such body parts and substances as sperm, breast milk, and blood, the clitoris, and the vagina. 13

The dispersion of the body and the resulting invention of a cross-disciplinary approach to studying the body critically has to do with the redefinition of the

body and its functions in several areas of study and research throughout the twentieth century. According to Andrieu, it is because of the realms of psychoanalysis, phenomenology, and cognitive science or artificial intelligence that we are facing an epistemological shift that has, over the last century, opened up new and old interests in the body in all its concreteness as well as in its symbolic value—from philosophy, feminism, and gender studies in general, to the studies of performance art and media art in particular. It is not an exaggeration to say that, throughout recent decades, the study of the body has dominated many critical disciplines in the humanities to the extent that a new discipline has arisen: what Barbara Maria Stafford has coined body criticism (1993). This first chapter investigates how and why these disciplines have opened themselves to questions surrounding the body, thus making room for a new body discourse, and what kind of body concepts result as a basis for bodily installations and configurations in popular culture, media art, and architecture at the turn of the millennium. The thesis of chapter 1, and the basis of the chapters to follow, is that the history of a body-in-pieces is a history of a struggling relationship between a fragmented and a holistic body concept. What I mean by holism is "the view that parts of a system have significance mostly in virtue of their interrelations with other parts."14

Throughout this chapter I show how the concept of bodily fragmentation, in circulation since the sixteenth century, has, in the twentieth century, been integrated into a holistic body concept—a concept that reveals the history of the body to be, in fact, a history of mediation. As shown throughout the following chapters, the history of the body is a history of constitutive mediation, for which both fragmentation and holism are indispensable modes of imagining and configuring the body. However, as I explore in greater detail in chapter 4, it was not until the turn of the millennium, and the digital revolution, that the body was able to show best its *real face*: mediality.

Historical Fragments of the Modern Body-in-Pieces

In the following, I summarize certain fragments of the history of the body, without which we cannot fully grasp the current body concept in question. Of course, body criticism did not emerge *ex nihilo* in twentieth-century thought. There is a long history of the body—one as long as bodies have existed. One of the crucial moments for the transformation of the body concept from a more unified perception of the body to a body-in-pieces was high modernity (that is, eighteenth and late nineteenth centuries). According to Bryan Turner, ¹⁵ modernity

constitutes the beginning of a "somatic society," a society within which major political and moral problems are both articulated in respect to the body and expressed through it. Socioeconomic changes in Western culture—such as the liberation of the body from explicit economic and political bondage to supraindividual power structures (political liberalism, the theorization of privacy, etc.); the secularization of church, and hence the loss of a publicly accepted pedagogical religious discourse; the emergence of a postindustrial society organized around the control of communication; the ever-growing domination of consumer society; and the consequent emphasis in late capitalism on hedonism, desire, and enjoyment—have conspired to create a "new" human body. The new body has a higher expectation of longevity and rejects death from daily experiences. Social reforms of working conditions, such as early retirement, have increased the opportunities for bodily focused leisure activities (hence the importance of sports and keeping fit). A specific focus on the beautiful body has been promoted through Hollywood and the norm-regulating media of mass communication. 16 Finally, the body experience has penetrated fields from the performing arts to adolescent culture, with activities such as piercing and tattooing becoming a collective symbol of almost tribal belonging.

For Turner, the socioeconomic changes have to be seen in relation to a society of rapidly expanding technology as well as in relation to some significant recent developments in medical technology—for example, reproductive technologies such as artificial insemination, in vitro fertilization, xenotransplants, and microsurgery and nanosurgery. The scientific advances associated with new medical technologies have raised major philosophical, ethical, and legal issues in contemporary society, issues ultimately related to the nature of personhood, identity, and individualism.

The British sociologist Anthony Giddens¹⁷ has described the changes as a result of the dissolution of the relation of property between the state and the individual in the period of late or high modernity. Nevertheless, the German historian Norbert Elias¹⁸ argues that the individualization of the body already had begun to take place in early modernity, a process consisting of the separation and differentiation of individuals from the social body. As the autonomous individual begins to take on responsibility for his or her own body, emotion, nonutilitarian trust, and interpersonal intimacy become the principal criteria of self-realization. The individual body no longer is defined by its dependence on an external power; rather, the body is defined by the activities in which it engages. As a result, the body has become a "project" to be worked on and accomplished as a fundamental aspect of the individual's self-identity. In

twentieth-century self-care, responsible living, organic food, and fitness are just some of the slogans that helped proliferate self-realization and, as a result, a fully dominated and controlled body.

In the aftermath of high modernity the health, hygiene, shape, and appearance of the body have become among the most important expressions of an individual's identity. 19 This bourgeois body has become an individual property and a personal construction; conflicts that once occurred between medieval bodies now take place within modernity's embodied and self-aware individual. A current example of such a conflicted body is the AIDS body. The AIDS-discourse universe²⁰ expresses precisely the tendencies toward the separation—and hence loneliness—of modern embodied experience. The French AIDS nurse Françoise Baranne, for instance, talks about her experience with AIDS as if she had entered another universe: "I am nothing but an immigrant making do uneasily in the country of AIDS, and who doesn't dare to return home for fear of not being admitted anymore."21 This local abstraction of an AIDS country has its universal correlate in the symbolization of the HIV virus as a spiked globe, an association that originally comes from an aestheticized microscopic image of the virus. The spikes often are portrayed as screws glimmering in outer space, in an obvious representation of war. The symbol of the spiked globe can be seen as a metaphor for the danger of AIDS itself, but also for the tendency of the infected and affected to inhabit such a separate universe as described by the French nurse, as a manifestation of bodily and hence physical differentiation. Baranne does not want to confront the illness of the body (that is, of her patients), but rather wants to fight in a country where there is only AIDS and nothing but AIDS, a country in which the distinction between healthy and ill no longer would exist. To return to Elias and Giddens, then, there is no longer an externally imposed conflict between bodies in the AIDS-discourse universe.²² Instead, the conflict between bodies has metamorphosed into a conflict within bodies, embodied individuals living separately in ghettos on the AIDS globe.

The modern body has been theorized by cultural historians (Michel Foucault and Barbara Duden), historians of art (Barbara Maria Stafford), historians of medicine (Jonathan Sawday), historians of science (Thomas Laqueur, Bruno Latour), and sociologists (Anthony Giddens). As it would be impossible to summarize all of these important theories of the modern body, in what follows I discuss only a few of the milestones these theories represent.

In her study of the eighteenth-century German physician Johann Storch and his reports on the medical history of eighteen hundred women of all ages in Eisenach, Germany, the historian of the female body Barbara Duden identifies a "new kind of discrete object" that the modern body has constituted since the late eighteenth century: "This isolated, objectified, material body was seized by a dissecting gaze that embraced not only the entire body, not only its surfaces, but also its recesses and orifices. It penetrated inquisitively into the inside, evaluating the palpated organs and relating them to a visual image of organs and cadavers. This gaze turned the body, and with it the patient who possessed it, into a new kind of discrete object."23 The process by which the body was objectified and isolated through the practice of anatomy already had begun in the fifteenth and sixteenth centuries, producing what we could call the scientific fragmentation of the body. As a result of these practices, not only did an objectified, materialized body-in-pieces present itself to a new gaze, but also through the practice and theory of dissection, the female body, as such, emerged with the "discovery" of female anatomy. During antiquity and the Middle Ages a gender paradigm of mimicry had been established between the sexes in which the female body was seen as the inversion²⁴ of the male body, and both female and male bodies were perceived as an inseparable unit mirroring nature and ultimately God. With the "discovery" of female anatomy and the "creation" of woman as a biological category, female and male bodies started to be seen as disconnected entities, or isolated bodies. As historian of the sexed body Thomas Laqueur points out: "In the one-sex model that dominated anatomical thinking for two millennia, woman was understood as man inverted. The uterus was the female scrotum, the ovaries were testicles, the vulva a foreskin, and the vagina was a penis."25 Among other examples of society's preference for the male body were, on the one hand, the domination of male sperm and its historical representation in medicine over the representations of female breast milk and blood; and, on the other, the strict separation of femininity and maternity according to which it was believed that, due to a maturation process, the female orgasm ended in marriage, because the locus of pleasure, the clitoris, shifted to the reproductive locus, the vagina.

The new sex paradigm of high modernity presented the female body as no longer subordinated to the male body in an inverted (and hence hierarchical) way. Instead, woman now became the locus of difference per se, the *other body*. We shall see later in this book how the concept of female *otherness* was no less problematic for the development of a female subjectivity, and how it has been reformulated in recent feminist thought.

As stated above, if we look at the history of a body-in-pieces, we find that it is a history of a mediated body. This underlying *dynamic anatomy* is promoted by a movement that unravels itself throughout the history of the body. Thus, the

fragmented body as we have known it since early modernity has not simply been replaced by a holistic body concept; rather, fragmentation has been revealed as the stratification of a body concept that, from the holistic perspective, can be grasped as constitutive mediation. Fragmentation and wholeness are, in other words, part of the same process: the process of mediation. Jean-Luc Nancy has formulated this circumstance as follows: "The parts of the corpus do not combine into a whole, are not means to it or ends of it. Each part can suddenly take over the whole, can spread out over it, can become it, the whole—that never takes place. There is no whole, no totality of the body—but its absolute separation and sharing." Nancy emphasizes the body's relation via sharing with other bodies, and the impossibility of thinking of the body outside of this relationship. Bodies are first and always others. The other is a body because only a body is other, Nancy argues. At first glance this might seem a tautology, but the inherent alterity of any body is the conditio sine qua non of being as such, of being a particular body—a body that is exposed to its own extremities. 27

Symbolically fragmented body parts have been important since the dominant Galenic view of the body²⁸ in antiquity, in which all parts were perceived as if in perfect harmony with each other, reflecting, above all, the inner harmony and health of the individual. The individual's health was perceived as a reflection of the higher harmony of nature, which in turn was a reflection or mimicry of divine harmony. To cite just one example of how, in Galen's view, health, harmony, and the "usefulnesses" of body parts were linked together, the brain was thought to possess the psychic faculty; the heart, the vital faculty; and the liver, the natural faculty; together forming a health-inducing triad.²⁹ The most important distinction between the Galenic fragmentation of the body and the current body-in-pieces is that today's body parts can constitute their own biotopes, can function independently from each other: "usefulness" has become self-referential, a usefulness of body parts that are conceived and represented as independent and autonomous from the unity of the body (chapter 3 examines this further).

The anatomical fragmentation of the body is a phenomenon dating from the fifteenth and sixteenth centuries. Thus, the body-in-pieces has existed as a topical, hence spatial, trope even outside the realm of medicine since early modernity. In this respect, it is worth mentioning the contemporary rise in the courtly tradition of the textual genre of *blazon*. The blazon has been described as a "poetic fantasy of male surrender to female dissection"; it "formed a significant part of the culture of dissection which produced the partitioned body."³⁰ The elevation of the fragment to a position of central significance and the rejection of

totality thus are not inventions or novelties of postmodernity; rather, "early moderns, no less than postmoderns, were deeply interested in the corporeal 'topic.' "31 It is modernity's "impulse to distinction and individuation" that helped form the "age of synecdoche," an age in which parts are imagined as dominant vehicles for the circulation of cultural goods and for the articulation of culture tout court.

The term *topical* (from *topos*, the Greek word for place) meant, "of or applied to an isolated part of the body," before it came to mean "of current interest, contemporary," as it still is used in today's language. In other words, it was the spatially imagined body that—as pointed out by Hillman and Mazzio³⁴—was the most common vehicle for the making of social and cosmic metaphors in early modern Europe.³⁵ This discovery of a spatially imagined body also has to be seen as a result of the conquest of the inner body as a locus of anatomy. From the beginning of the fifteenth century, the revival of anatomy influenced and determined the representation of the human body in the applied arts and in architecture. Moreover, with the novelty of perspective a desire for immediacy could be expressed, a desire to put the spectator right into the depicted world. No doubt the early modern desire for immediacy can be seen as a precursor for our current fascination with virtual reality, our 3-D animation in a so-called simulation culture. As the media theorists Jay David Bolter and Richard Grusin point out, this desire for immediacy "has been a defining feature of Western visual (and for that matter verbal) representation."36

If we accept the proposition that the body was "opened up" through the event of anatomy in early modernity, its subsequent history can be seen as an ongoing and accelerated process of fragmentation and decomposition into smaller and more controllable units. The skin, having increasingly given up its quality of a human border or natural frontier, no longer is an obstacle for this process of decomposition. German historian Claudia Benthien argues that the loss of the skin as border in such cultural contexts as the multicultural societies of North America has to do with the importance of the skin in the new world (racial and ethnic segregation), and the resulting wish of individuals for such modifications as tanning, cosmetic surgery, or the wrinkle-reducing botulin toxin (Botox) injection.³⁷ However, techniques and technologies of bodily fragmentation have not only revolutionized the outer appearance; what modern medicine's exploration of the twentieth-century body has shaped most drastically is the very meaning of that body for our culture.

From current first world medicine's perspective, the only bodily unity that still remains "undiscovered" is the brain³⁸ as the seat of thought and intelli-

gence.³⁹ The next section investigates the area of the brain, and how the disciplines of artificial intelligence and artificial life are not only a natural consequence of the body-in-pieces, but have introduced bodily fragmentation and disembodiment into the order of twentieth-century discussions of thought.

(Dis)embodiment and Artificial Intelligence or Artificial Life

In his essay, "Can Thought Go On without a Body?" the French philosopher Jean-François Lyotard brings in the important (and inevitable) question of gender and the gendered body in connection with the separability of thought from the phenomenological body of perception: "Thought is inseparable from the phenomenological body, although the gendered body is separated from thought, and launches thought." It is precisely in this very difference that Lyotard sees a "primordial explosion" comparable to a solar catastrophe, and it is this question of the inseparability of body and thought that will be at the core of cognitive science's preoccupation. In fact, this question already had surfaced thirty years earlier when the British mathematician Alan Turing implicitly demonstrated, with his acclaimed Turing test, ⁴² that investigations about the nature of thought could not be answered simply in abstract terms, but only with respect to the concretely gendered embodiment of thought.

In his thought experiment, Turing literally embodies the question of whether machines can think by replacing the question with whether or not we can tell the difference between when the machine is imitating a woman or when a man is doing the imitating. In other words, he replaced the original question of whether machines can think with a gender-sensitive "imitation game":

It is played with three people, a man (A), a woman (B), and an interrogator (C), who may be either sex. The interrogator stays in a room apart from the other two. The object of the game for the interrogator is to determine which of the other two is the man and which is the woman We now ask the question, "What will happen when a machine takes the part of A in this game?" Will the interrogator decide wrongly as often when the game is played like this as when the game is played between a man and a woman? These questions replace our original, "Can machines think?"⁴³

The question for Turing, then, is not *what* is thinking but *who* is thinking, for thought—as it turns out—is a much broader cognitive function than a mere mechanism that a machine can imitate. The outcome of Turing's test is that thought is interdependent with consciousness and the question of intentionality,

both concepts that presuppose subjectivity and body images, hence a gendered, sexual, aged, and racial being-in-the-world (possibly incorporating symbols of class, caste, or religion as well). In other words, as long as we cannot *be* machines, the question of whether machines can think is obsolete.⁴⁴

Nevertheless, there are a variety of reasons why we actually could address these questions against the background of recent achievements in technology, robotics, and artificial intelligence, which have made for a reconsideration of what it means to be human. In fact, some theorists claim that we no longer are humans, but rather *posthumans* ever since we have started to merge with machines. According to N. Katherine Hayles, the posthuman is not a *being*, but a point of view that privileges informational pattern over material instantiation, that views consciousness as an epiphenomenon rather than the seat of human identity (a perspective similar to that of Friedrich Nietzsche or Martin Heidegger), that considers the body as an original but replaceable set of prostheses, that—most important—is capable of seamlessly articulating humanness with intelligent machines. For Hayles, the "posthuman subject is an amalgam, a collection of heterogeneous components, a material-informational entity whose boundaries undergo continuous construction and reconstruction."⁴⁷

Hayles's investigation into the nature of the posthuman unfolds the history of cybernetic technoculture of the twentieth century, a culture that has constructed the figure of the cyborg⁴⁸ as a cultural icon in the postwar era. One of Hayles's major theses in How We Became Posthuman is that since the 1940s information has lost its body in three waves of cybernetic configurations: first, homeostasis, starting from 1945 (Macy Conferences), when information was considered a quantifiable signal that could be transformed into other measurable codes; second, reflexivity, in the 1960s, when the process and the autopoiesis of information, as well as the system-environment (observer and system) and the analysis of the information context, were stressed at the same time that an interdependent relationship was established between the microcosm (human) and the macrocosm (world); and third, virtuality, since the 1980s, when information has been embedded entirely within the spiral-computer universe, handing it over to the disembodied realm of new media, in which data has become flesh, and from which the system can evolve into any direction (no hierarchy, origin, or given directionality). 49

At this point, it is worth looking into the history of the very notion of embodiment and its proclaimed disappearance. However, we need to distinguish carefully between the disappearance of the body from that of disembodiment—

in fact, it is the latter that is at stake for our current concerns. As Hayles points out, embodiment always outlives the body in that it can be performed in the body's material presence or absence. This is precisely why Turing opted for the analysis of concrete gendered embodiment when analyzing the machine's capacity to think.

According to French media philosopher Jean Baudrillard's critique of the television image and the interconnected loss of public space in which "the body, landscape, [and] time all progressively disappear," the postmodern body has long been swallowed up by the screen and network, which themselves replaced mirror and stage in their mediating function. Similarly, media theorists Arthur and Marilouise Kroker question if our fascination with the body is nothing else than the celebration of its disappearance. ⁵¹

To stretch the provocation even further, one might argue that the body's "death" and "death declaration" have been upon us ever since Descartes split the body and mind into an extended substance, the *res extensa*, and a thinking substance, the *res cogitans*. Since then the Western world has tended to think of the brain as the seat of knowledge, which has been traditionally associated with men, whereas the bodily functions (for example, giving life) have been related to women. Despite the fact that the Cartesian tradition has been more influential than any other tradition in modern philosophy, there exist other philosophical paradigms, such as the monism formulated by Spinoza, that reject Cartesian dualism, and that have been of great importance to the feminist thought revolution at the turn of the millennium.⁵²

One factor common to various attempts, feminist and otherwise, to problematize the mind/body distinction at work in the sociocultural field is a debt of influence to Michel Foucault, who saw the "end of man" as a condition that announced itself in the era of high modernity:

As the archaeology of thought easily shows, man is an invention of recent date. And one perhaps nearing its end. If those arrangements were to disappear as they appeared, if some event of which we can at the moment do no more than sense the possibility—without knowing either what its form will be or what it promises—were to cause them to crumble, as the ground of Classical thought did, at the end of the eighteenth century, then one can certainly wager that man would be erased, like a face drawn in the sand at the edge of the sea.⁵³

The erasure of man, as Foucault puts it, also can be understood as resulting from the attempt to objectify the ultimately unruly assemblage of practices that humans engage in into a set of manageable, measurable data—an attempt that finds its correlate in the search to replace or at least imitate the human with pure and disembodied *res cogitans*, that is, smart machines. Some of the hard-core representatives of that angle within today's theory of disembodiment go so far as to maintain that intelligent machines will replace and outlive humans. Of course, this proposition does not stand in isolation but emerges out of current narrative forms such as science fiction and cyberpunk,⁵⁴ as well as advertisement and other realms of popular Western culture,⁵⁵ in which the desire for immortality and its resulting myths are widely represented.

In her important study of the posthuman, Hayles analyzes and interprets the three waves of cybernetics with and against science fiction narratives by Philip K. Dick, Neal Stephenson, and many others to show that science and literature are always interrelated and that the concept of the posthuman is neither a scientific construct nor fiction, but rather emerges out of a cultural moment of progress and invention that is manifest in the pores of our turn-of-the-millennium culture. In fact, when one hears scientists speak about the possibilities of intelligent machines and artificial life, one often gets the impression of listening to science fiction authors, if not to the preamble of *Terminator*, as in the following quote by Warren McCulloch:

As the industrial revolution concludes in bigger and better bombs, an intellectual revolution opens with bigger and better robots. The former revolution replaced muscles by engines and was limited by the law of the conservation of energy, or of mass-energy. The new revolution threatens us, the thinkers, with technological unemployment, for it will replace brains with machines limited by the law that entropy never decreases. ⁵⁶

McCulloch—who was born at the end of the nineteenth century, studied medicine and mathematics as well as philosophy and psychology, and ended his career in the field of physiology experimenting with the functional connections in the cerebral cortex—was driven by two questions: "how [do] we know anything about the world[?]" and "why [do] we desire anything[?]" The answer to these questions for McCulloch, the thinker, are to be found in the nervous system, "a logical machine," a part of the body he describes as "stuff and process," as opposed to the mind, which stands for ideas and purposes. McCulloch's enthusiasm for intelligent machines and the replaceability of the human brain, however, does not differ much from such contemporary techno-euphoricists as Ray Kurzweil (*The Age of Spiritual Machines: When Computers Exceed Human Intelligence*, 1999),

robotics theorist and practitioner Hans Moravec (*Robot: Mere Machine to Transcendent Mind*, 1999), or MIT Media Lab cofounder Nicholas Negroponte (*Being Digital*, 1995)—a group of male futurists who are all expecting to be able to download "information" from the brain into the computer in the near future. Human beings, in these views, are nothing else than very complicated machines, or as the builder of the first neural network simulator, Marvin Minsky (*The Society of Mind*, 1986), puts it: "A person is a very large multiprocessor with a million small parts, and these are arranged as a thousand computers." ⁵⁹

Anthropologist Stefan Helmreich's ethnographic research at the Santa Fe Institute, ⁶⁰ a major U.S. artificial life lab, discloses the viewpoint of scientists for whom not only is the human a multiprocessing machine, but the machine itself has become the model for understanding the human. The artificial life (AL) researchers at the Santa Fe Institute believe that a computer program is not a simulator of intelligence or of the human brain, but indeed in capable of creating actual life-forms. Developers of AL applications, in other words, see reality as the product of information codes.

Of course, many criticize the notion of the disembodied cyborg or posthuman. Their main point of criticism is the very notion of a disembodied being (that is, the mind/body split), as had been discussed already in Lyotard's philosophy. Such theorists of cognitive science as George Lakoff and Mark Johnson, for instance, adhere to this kind of criticism. In their interdependence theory between reason and the body, they argue against the possibility of disembodied reasoning. In the introduction to Philosophy in the Flesh they write: "Reason is not disembodied, as the tradition has largely held it, but arises from the nature of our brains, bodies, and bodily experience. This is not just the innocuous and obvious claim that we need a body to reason; rather, it is the striking claim that the very structure of reason itself comes from the details of our embodiment."61 Similarly. for philosopher Hubert Dreyfus, "what distinguishes persons from machines, no matter how cleverly constructed, is not a detached, universal, immaterial soul but an involved, situated, material body."62 Toward the end of this chapter we see how this very argument has its roots in psychoanalytical and phenomenological definitions of the body and the development of those definitions since the early twentieth century.

Ever since the 1960s, we have been inundated with cyborg and posthuman definitions. One of the most critical and influential of these (especially for cyberfeminism) was given by cultural theorist Donna Haraway, who described cyberspace as a realm of hybrid potential in her socialist-feminist reading of the

cyborg. "A cyborg is a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction Contemporary science fiction is full of cyborgs—creatures simultaneously animal and machine, who populate worlds ambiguously natural and crafted," she writes in her legendary "Cyborg Manifesto." In her Modest_Witness@Second_Millenium. Female-Man®_Meets_Oncomouse** Feminism and Technoscience, Haraway gives an even more categorically dispersed description of the cyborg as an end-of-the-millennium figure. This cyborg's flesh literally has merged with her environment—both physical and psychological. Haraway writes, "Cyborg figures—such as the end-of-the-millennium seed, chip, gene, data-base, bomb, fetus, race, brain, and ecosystem—are the offspring of implosions of subjects and objects and of the natural and artificial." 64

The turn of the millennium, thus, not only produced the field of body criticism, but also the emerging field of posthuman studies, within which the term *cyborg* has been replaced with the term *posthuman*. As Robert Pepperell points out, this field is concerned with a new "self-awareness of the human condition that owes something to our anxiety about, and our enthusiasm for, technological change, but is not entirely determined by it." Pepperell himself examines a number of posthuman technologies that are responsible for this new condition (for example, nanotechnology, prosthetics, robotics), and the emerging questions concerning and resulting from the blur between the real and the artificial.

At the end of Hayles's investigation into how we became posthuman—one, if not *the*, major contribution to the field of posthuman studies—she states that the event of cognitive systems distributed in cyberspace has revolutionized the very idea of "thinking." Thought, as Haraway and others have pointed out, no longer is the domain of humans, but of machines as well, and I might add that it is especially the linguistic notion of thought that has been expanded. We use the word thought for information processing in both humans and machines because we do not have another language available to describe these processes. As we see in Minsky's analogy, humans are like machines, and vice versa. We describe them as such because we are trying to learn from them in order to build better machines, and—as the researchers at the Santa Fe Institute believe—we are learning from the machines in order to understand ourselves better. An example from popular culture shows this dilemma in an aesthetically engaging way: in the Icelandic singer Björk's music video "All is Full of Love" (1999), directed by Chris Cunningham, robots with interfaces resembling Björk (figure 1.1) interact with each other erotically in a human, lesbian way. The robots,



Figure 1.1. Björk. Still of music video, "All is Full of Love," 1999.

in other words, behave humanly, but are themselves built according to the image of the posthuman.⁶⁶

Another example of cyborg criticism, this time from a performance artist, is the Korean artist Lee Bul's feminist cyborg installations (figure 1.2), which she produced in the late 1990s. These sculptures—made of silicone and white porcelain—"feature fragmented, often headless, one-legged and one-armed bodies with the voluptuous proportions typical of Western women as depicted in sexually loaded Japanese comics and animation." ⁶⁷

Whereas Björk's robots seem to transcend humanity, Lee Bul's cyborgs can be read as a criticism of the projection of ideals onto the female body, whether this be a human body or a cyborg. Critics of the cyborg figure, however, seem to agree in their observations that the body is a holistic entity, inseparable from its environment: it produces culture at the same time as culture produces it. This postmodern critique is what unifies the myriad positions against AI and AL, and ultimately against the Cartesian mind/body dualism.

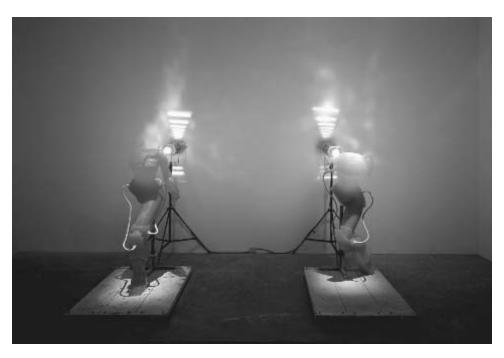


Figure 1.2. Lee Bul, *Cyborg Red and Cyborg Blue*, 1997–1998. Cast silicone, paint pigment, steel pipe support and base, each $160 \times 70 \times 110$ cm. Installation view, Le Consortium, Dijon, 2002. Collection of Ssamzie Foundation, Seoul. Photo by André Morin. Courtesy of Le Consortium.

The critique of the mind/body dualism also revolutionized the rethinking of body and gender issues in current corporeal feminism. What becomes clear from this reopened discussion about the body and the human condition is that *despite* the additional knowledge of the body and its possibilities, we still do not know what the body really is. Expanded or shared cognition therefore may be innovative, but it apparently is not the ultimate way to explain the *posthuman condition* either. It is precisely in this sense that I would like to reemphasize Hayles's final remark that we must see the discourses of disembodiment not merely as a "loss" of the body, but as surplus or excess, in that "human functionality expands because the parameters of the cognitive system it inhabits expand." Accordingly, it is more than a question of "leaving the body behind" in the fantasies expressed by the (male) techno-euphoricists; this very question has made room for certain underevaluated bodies—the body that since its birth in high modernity has been identified as *other*, namely the female body. 69

Nature versus Nurture: What or Who Is the Body?

It is true that one cannot think the body because we still don't know what the body is, or what it is capable of doing, what its limits or its capacities are. More than that, we don't know what a body is because a body is always in excess of our knowing it, and provides the ongoing possibilities of thinking or otherwise knowing it. It is always in excess of any representation, and indeed of all representations. This is part of Deleuze's point: that we don't know what a body can do, for the body is the outside of thought, which doesn't mean that it is unthinkable but that we approach it in thought without fully grasping it.⁷⁰

- ELIZABETH GROSZ, ARCHITECTURE FROM THE OUTSIDE

Hayles has pointed out that the boundaries of the posthuman are under permanent construction and reconstruction. In the above quote by feminist philosopher Elizabeth Grosz, we learn that the body is always in excess of our ability to know its capacities and possibilities, and that when we try to approach the body, we can do this only rudimentarily. One consequence of this posthuman condition is that it is only through the analysis of one bodily aspect or another that we can reveal some truths about it. This consequence is precisely why we have to turn to the more concrete question of embodiment or—with Hayles—disembodiment, and ask concrete questions concerning concrete bodies.

In our reading of the Turing test, Turing's quest to answer the question of whether machines can think revealed an implicit dependence on human categories of gender, which goes to show that a human body is in some sense always a gendered biotope (it is thrown into gender, as well as into race, religion, class, etc.). To paraphrase Grosz, making sense of the consequences of this is a highly speculative endeavor. Grosz had contemplated the difference between the sexes already in her earlier psychoanalytical criticism, stressing the importance of thinking of subjectivity "not in terms of the domination of the characteristics of mind, the mental sphere, or the psyche, but in terms of bodies." She thus brings the focus back to the real, actualized body—understanding subjectivity as "a living-out of the specificities of the body," that is, the sexed body.

The sexed-body paradigm, however, automatically brings with it a large problem: it follows the masculine norm, a norm that enjoys the privilege of being marked or not. In other words, when the body was actually taken into account

throughout the history of philosophy, it was not according to two sexes, but according to a male norm (for example, Freud, Husserl, Bergson, Merleau-Ponty, Heidegger, Foucault, Lacan, Deleuze, Guattari).73 Femininity, on the other hand, is not only subjected to that male norm in a hierarchical and patriarchal sense; the problem also is that, since high modernity, femaleness has been identified as otherness, an otherness that is a priori sexed. Unlike the case of men, there is no asexual being. Or, to borrow Ann Cahill's phrase, without taking into account the role of the body, the justification of women's inferiority would have lacked its entire argument. 74 This somatophobia for the female body can be traced back to the beginning of Western philosophy. Take Plato, for example: "In the Cratylus, Plato claims that the word body (soma) was introduced by Orphic priests, who believed that man was a spiritual or noncorporeal being trapped in the body as a dungeon (sêma)."75 A binarization and dichotomization of the sexes into mind (male) versus body (female) occurred long before 1641 when René Descartes institutionalized this split in his *Meditationes*. In Christianity, in fact, the mind/body split corresponds to the fundamental immortality/mortality separation, with Christ as the example par excellence—his body human, his soul divine. Grosz points out the clear privileging of the sphere of the mind in philosophy, a sphere that is beyond consciousness and even beyond nature. For Descartes, for instance, only the body is part of nature, a functional device, and a "self-moving machine," whereas the mind inhabits the realm of God.

The different feminist approaches to the body can be seen as answers to the problematic that attributes the mind to men and the body to women before feminism began to move beyond the mind/body split. Corporeal feminism itself can be seen as a direct response to a shift from a somatophobic philosophy to a philosophy of the body, which is at the same time almost paradoxically a "female philosophy" to the extent that the body—the *res extensa*—has been left out in earlier male-dominated body theories.

To begin with, the *ecofeminism* of the 1970s—which defines the body as a unique means of access to knowledge and ways of living—wanted to protect the realms of femininity. Ecofeminism is thus very concerned with maternity, as this is a realm of femininity that proves the attachment to nature better than any other. For liberal feminists of the 1970s, in contrast, political inclusion of women into the decision making process in modern democracies was the main issue (for example, U.S. feminist activist group the National Organization for Women, founded in 1966). However, the very questions of maternity and re-

productive rights stood in the way of an easy solution to the political status of women in egalitarian societies. The problem thus lies in the very nature of reproduction, in overcoming it without depriving women of the specificity of pregnancy and maternity. As Barbara Duden points out in her *Disembodying Women: Perspectives on Pregnancy and the Unborn* (1991), the problem of the female body and its pregnant anatomy is that, from the beginning, the womb has been conceived of as a miraculous machine made and used by nature. It is hence no wonder that this concept has been one of the hardest for women to free themselves from:

From the historical beginnings of western medicine, the womb has been seen as a two-handled vessel used by nature for cheese making. When it is stirred and the rennetlike seed is deposited in it, its contents, menstrual blood, curdle. Aristotle provides the classical formulation: "The action of the semen of the male in 'setting' the female's secretion in the uterus is similar to that of rennet upon milk. Rennet is mild, which contains vital heat, as semen does."

As a consequence of the female-body dilemma that liberal feminism was trapped in, some feminists have opted for a "move beyond the constraints of the body," stressing the conflict between the female role of the mother and equal participation in the workplace and other public domains. These feminists started to support in vitro fertilization programs, as it is not from men that women have to free themselves, but from their objectified bodies.

Social-constructivist feminism (going as far back as Mary Wollstonecraft's *Vindication of the Rights of Women*, 1792), however, offers an approach to the female body that translates the mind versus body opposition into a biology versus psychology opposition. Representatives of this approach within psychoanalysis, such as Juliet Mitchell and Julia Kristeva, "believe that it is no longer biology per se but the way in which the social system organizes and gives meaning to biology that is oppressive to women." Their project is, therefore, "to minimize biological differences and to provide them with different cultural meanings and values." This kind of feminism is particularly concerned with the female figure of the mother. Following the French psychoanalyst Jacques Lacan, who said that woman only figures in the sexual relation as mother, the linguist and psychoanalyst Julia Kristeva claims that we cannot say of a *woman* what she *is*, except when referring to the mother, the only woman, the only *other sex* we know. Sex

With the discovery of this *other sex*, a power-discourse began to be installed—one that turned the formally demonized female body (for example, witches), as holder of magic and supernatural wisdom (for example, birth giving), into a reproductive organism in which reproduction became merely a function of the body. Thus, control over the female body through the development of medicine has been at stake ever since the eighteenth century. From inversion to difference, the category of woman comes into being through the isolated, fragmented body of modernity.

As Toril Moi points out in What Is a Woman?, the linguistic differentiation between gender and sex—common in the English language, but uncommon in many other Indo-European languages—has not necessarily done any good for the theorization of gender, at least not in its attempt of "producing a concrete, historical understanding of what it means to be a woman (or a man) in a given society."83 For the task of understanding gendered subjectivity Moi suggests a different approach, one that—following Simone de Beauvoir's Le deuxième sexe (1949)—understands the body as *situation*, our "grasp on the world and a sketch of our projects."84 Moi stresses that for de Beauvoir, having or being a body is not a matter of destiny (an argument for which she was, however, well reproached by many feminist thinkers), but a matter of a "fundamental kind of situation, in that it founds my experience of myself and the world."85 The bodyas-lived-experience in question is indebted to de Beauvoir's reading of the French philosopher Maurice Merleau-Ponty's *Phénoménologie de la Perception* (1945), which is discussed in the following section, From Fragmentation to Mediation. In de Beauvoir's existentialist interpretation of the body, there remains no room for any separation of the body from its world—which is not to say that the body is a mere product of its situation, its context (as in a social constructivist account), but that there simply is no looking at and into the world without a body, be it male or female.

However, neither ecofeminism, liberal feminism, nor social constructivism were able to account for a female subjectivity that does not implicitly or explicitly rely on a male and hierarchical gender model. Even difference and otherness are categories trapped within a dualistic and oppositional gender paradigm. Therefore, for a new generation of feminist thinkers the problem of duality itself had to be redefined. It was not until such monist thinkers as the Dutch philosopher, and contemporary of Descartes, Benedictus de Spinoza were rediscovered by Deleuze⁸⁶ that a possibility of bypassing the dualist paradigm with a nonopposi-

tional notion of difference⁸⁷ appeared.⁸⁸ Feminist theorist Moira Gatens sums up the importance of the rediscovery of the Spinozist body concept as follows:

The Spinozist account of the body is of a productive and creative body which cannot be definitely "known" since it is not identical with itself across time. The body does not have a "truth" or a "true nature" since it is a process and its meaning and capacities will vary according to its context. We do not know the limits of this body or the powers that it is capable of attaining. These limits and capacities can only be revealed in the ongoing interactions of the body and its environment. 89

With this new emphasis on the materiality of the body and the body's interaction with its environment, sexual difference reemerged within subjectivity studies in a radically different way. No longer a place of exclusion and sexualization, female *bodies* (and I emphasize the plural) can now be described as the accumulation of different layers of media. In this model of subjectivity, identity is a process that never comes to a halt, as bodily layers can be taken off one by one and rearranged anew. Femininity and masculinity are now strata that are neither stuck in the prisons of essentialism or social constructivism, but are free-floating, nomadic, volatile, performative markers of gender and identity. Feminist thinkers from Donna Haraway, Judith Butler, and Rosi Braidotti to Elizabeth Grosz, Moira Gatens, and Luce Irigaray are part of this new approach to the body, an approach that first needed the fantasies of disembodiment described by Hayles to produce the *surplus* of gender.

In this kind of philosophy, "the body is no longer understood as an ahistorical, biologically given, acultural object." Rather, what is at stake now is the lived, experienced body and its actualizations, for instance in language, as in Irigaray's feminism of the "sex which is not one": To *speak woman* is not the same as speaking of woman. It is not about producing a discourse of which woman would be the object or the subject. That said, in speaking woman, one might attempt to make room for the other as feminine. This notion of a fundamental, irreducible difference between the sexes, which puts the emphasis on cultural marking and inscription, has been called *deconstructivist*, and is a core part of the revolution of body criticism within feminist philosophy. In this move, the very notion of gender versus sex is erased, and the dualist dichotomy is undermined. Now the body becomes a socially discursive object, "the site of contestation, in a series of economic, political, sexual, and intellectual struggles."

In this very spirit, the philosopher and gender theorist Judith Butler deconstructed the categories of sex and gender by pointing out that sex itself already is a gendered category, and that there is no genderless body to begin with:

Gender ought not to be conceived merely as the cultural inscription of meaning on a pregiven sex (a juridical conception); gender must also designate the very apparatus of production whereby the sexes themselves are established. As a result, gender is not to culture as sex is to nature; gender is also the discursive/cultural means by which "sexed nature" or "a natural sex" is produced and established as "prediscursive," prior to culture, a politically neutral surface *on which* culture acts.⁹⁵

This brings us finally to Grosz's approach to the body, which unites a deconstructivist feminism with a feminism of sexual difference. Gender is now defined as both inscription and production of the sexed body, putting the emphasis on the materiality of gender for the creation of the body image. Grosz writes that:

an argument could be made that the much beloved category of "gender" so commonly used in feminist theory should be understood, not as the attribution of social and psychological categories to a biologically given sex, i.e. in terms of mind/body split, but in terms that link gender much more closely to the specificities of sex. Gender is not an ideological superstructure added to a biological base; rather gender is the inscription, and hence also the production, of the sexed body. 96

Grosz makes room for a body concept that goes beyond the question of gender and therefore beyond the question of nature versus nurture. In her fluid body concept, the body becomes an "open-ended, pliable set of significations, capable of being rewritten, reconstituted in quite other terms than those which mark it, and consequently the form of sexed identity and psychical subjectivity at work today." As Grosz further points out, the body has become a sphere of multi-directionality: human bodies have gained the capacity of producing fragmentation, fracturings, and dislocations that orient bodies and body parts toward other bodies and body parts. Grosz develops a beautiful metaphor for these new body movements that not only relates different body parts to others but by envisioning a body that is made from "the outside in," overcomes the binary opposition of inside versus outside. The exterior and the interior of the body merge into the figure of the Möbius strip, through which "interior aspects of the sub-

ject lead inextricably to the exterior surfaces of the body."98 This new body concept breaks down all possible binary oppositions, from the subject-versus-object to the inside-versus-outside and the mind versus body distinctions: 99

The Möbius strip model has the advantage of showing that there can be a relation between two "things"—mind and body—which presumes neither their identity nor their radical disjunction, a model which shows that while there are disparate "things" being related, they have the capacity to twist one into the other. This enables the mind/body relation to avoid the impasses of reductionism, of a narrow causal relation or the retention of the binary divide. It enables subjectivity to be understood not as the combination of a psychical depth and a corporeal superficiality but as a surface whose inscriptions and rotations in three-dimensional space produce all the effects of depth.¹⁰⁰

Only on the basis of this new paradigm of sexual difference has recent feminist theory been able to think of sex and gender in a nonoppositional, nonhierarchical (that is, patriarchal) way—a way from which a new model of subjectivity in a variety of configurations has emerged, and which is studied throughout the remaining chapters of this book. In this new understanding of bodies, *female* bodies (along with other minority bodies) no longer need to be defined in terms of lack and absence (castration); rather, to use Grosz's terms, the female body can now start to be rewritten as a positivity.

Returning to the initial questions of nature versus nurture and what or who the body is, we can say now that while these recent theories of the body have not shown us what the body is but what a concrete body can do, what they do show is that, ultimately, the body is a multiplicity and a potentiality. This body concept owes its instability and redefinition not only to feminist body criticism, but to other influences as well. One of them is the philosophy of Deleuze and his influential rediscovery of Spinoza's body concept, which is discussed in chapters 3 and 4. Other important sources of influence for this unstable subjectivity concept emerging out of the stratified, dispersed body at the turn of the millennium are the psychoanalytic notion of the unconscious and the phenomenological investigations into human awareness.

Despite AI and AL theorists disagreeing with corporeal feminism theorists on the core question of embodiment—the first believing in the reproducibility and replaceability of the body, and hence in disembodiment, and the second holding this very mind/body split responsible for the crimes against women—they converge around the notion of instability and multiplicity of subjectivity. In the

next section, I investigate how this model of multiple subjectivity was inspired by the fields of psychoanalysis and phenomenology.

From Fragmentation to Mediation

And if such world affirmations or world negations tout court lack any grain of significance when measured scientifically, they are the more valuable for the historian and psychologist as hints or symptoms of the body, or its success or failure, its plenitude, power, and autocracy in history, or of its frustrations, weariness, impoverishment, its premonitions of the end, its will to the end.¹⁰¹

—FRIEDRICH NIETZSCHE, THE GAY SCIENCE

As we have explored, the concept of the body from early modernity to high modernity underwent what could be described as a gradual process of objectification and fragmentation, and, in the case of the female body and philosophy, outright exclusion.

It is not until the end of the nineteenth century that an alternative to the objectification of the body appears: the attempt to reintroduce a holistic body concept into the human sciences, which in turn becomes characteristic of much twentieth-century thought. Holism—which I have defined as the interrelation of all (body) parts-in-pieces—slowly incorporates the discourse of fragmentation initiated in early modernity. One of the major forerunners of this return to a holistic body concept was Friedrich Nietzsche. In his second introduction to The Gay Science (1886), Nietzsche, who had just recovered from a severe illness, inquires whether it was not illness that originally inspired philosophy. He further asks if philosophy was not, in the long run, an interpretation of the body, whether it was not in fact the continually misunderstood interpretation of the body's symptoms. He argues that all metaphysical answers to the question of the value of life have to be seen as corresponding to the symptoms of specific bodies. In his desperation, Nietzsche waits for a "philosophical physician—one who has to pursue the problem of the total health of a people, time, race or of humanity—to muster the courage to push my suspicion to its limits and to risk the proposition: what was at stake in all philosophizing hitherto was not at all 'truth' but something else—let us say, health, future, growth, power, life."102

Nietzsche's body concept¹⁰³ is closely related to life, a unity of contradictory and multiple forces—no longer a simple product, but rather an organic animating relationship of forces. 104 As Eric Blondel points out, for Nietzsche images are metaphors of the body; 105 images, however, or even language for Nietzsche are mere (and ultimately unsuccessful) attempts to express what lies beneath the "truth," namely, that the body cannot be reduced to dualistic terms, but rather expresses a plurality of multiplicities that cannot be explained in physiological or spiritual terms. Any explanation, for Nietzsche, whether scientific or spiritual, is never factual, but always symbolic. Only philology, and precisely the act of interpretation, can attribute meaning to the body. Nevertheless, Nietzsche as Blondel stresses—does not reduce the body to culture. His attempt is rather of a quasi-ontological nature in that, for him, everything begins through the body because prior to the body "there is no order or relation or text, and the world is the greatest possible multiplicity." 106 The body, according to Blondel, "is therefore an intermediary space between the absolute plural of the world's chaos and the absolute simplification of intellect."107 Of course, the body serves as a metaphor here, a metaphor for an interpretative space within which the actual creation of meaning is an act of the will to power. 108

The following section shows how some of the basic premises of Nietzsche's body concept were carried into the twentieth century, in particular into the fields of psychoanalysis and phenomenology and their definitions or approaches to the body. Finally, it looks at how these fields also have influenced the notions of the body that dominate at the turn of the millennium, and how the apparently divergent directions of fragmentation and holism can be understood as elements or perspectives within a greater horizon of mediation.

Psychoanalysis

The main impulse behind the psychological discussion of the body in the twentieth century is the advent of psychoanalysis early in the century and the resulting increase in medical consideration for the factor of sexuality in understanding the human psyche (Sigmund Freud, *Drei Abhandlungen zur Sexualtheorie*, 1905; Michel Foucault, *Histoire de la Sexualité*, 1984). Through psychoanalysis, the body has become increasingly diagnosed as a psychological entity. The key concept in this regard is the *image* of the body produced by the body itself (autoperception), hence the immediate perception of the world through one's own skin, the *moi-peau*.¹⁰⁹

Psychoanalysis is less interested in the actual body than in the body image, which is considered a representation, that is, a construction that depends on how it is apprehended in external, social relations—an image that is created by the subject's perception of the outer world and the outer world's perception of it. The recognition of one's self in the gaze of the other is among the most fundamental concepts for understanding the meaning of subjectivity in the twentieth century. 110 Freud defined the ego as a corporeal projection, arguing that "the ego does not result from a preordained biological order, but is the result of a psychosocial intervention into the child's hitherto natural development." Basing his psychoanalytical ideas on Freud's ego theory, the French psychoanalyst Jacques Lacan argued in Le stade du miroir (1936)¹¹² that the only way we can perceive our bodily selves is through a deceptive image that is framed by somebody else's gaze (in the beginning, the mother's or her substitute's), or by the frame of a screen or interface of some kind (mirror, computer interface, television screen, etc.). In this phase of the construction of the self, which takes place in the first six to eighteen months of a child's life, the child recognizes him- or herself in the mirror as a separate being from his or her environment (especially the mother). Through the recognition of his or her own *gestalt*, the child anticipates his or her corporeal unity, which is needed to build a proper ego. This results in the lack of an "original" bodily identity tracing back to one origin of a body image, such as the genetic mixture of the parents' bodies, and hence in the loss of a secure historical representation of the body, such as the presentation of a growing body in a child's photo-album. The stable concept of identity is replaced by what Lacan calls the fractal body (dispersed body), whose identity depends on a process of inscription and semanticization through an outside world. This fractal body, not responsible or even aware of the bodily images that it is producing, gives reason for a profound discussion and repositioning of subjectivity in the twentieth century.

In *The Ego and the Id* (1923) Freud talks about the body ego as a border surface, a *skin sack* or a *skin fold*. In other words, the skin for Freud is a psychic hull that constitutes the contact between the outer world and the psyche: "The surface of the body, the skin, moreover, provides the ground for the articulation of orifices, erotogenic rims, cuts on the body's surface, loci of exchange between the inside and the outside, points of conversion of the outside into the body, and of the inside out of the body." For Freud the skin is what constitutes the ego: "the ego is ultimately derived from bodily sensations, chiefly those springing from the surface of the body. It may thus be regarded as a mental projection of the surface of the body, . . . representing the surfaces of the mental apparatus." ¹¹⁴

Many definitions of the skin, and more generally of the human interface or surface, have been proposed since the beginnings of psychoanalysis; whether or not these attempts have taken into account a psychoanalytic key of analysis, all of them agree on the importance of the skin. The French dermatologist and philosopher François Dagognet, for instance, presents a physical anthropology in which any *interface* of the body is regarded as a region of choice. ¹¹⁵ For Dagognet, the skin obtains an incomparable importance over any other body part: in the skin the relation between outside and inside exists intensely. This definition clearly resonates with the analogy of the gendered body's inside and outside relationship as a Möbius strip, as described by Grosz. ¹¹⁶ In a later book, *La peau découverte*, ¹¹⁷ Dagognet characterizes the interdependency of the skin's "outside-inside" and "inside-outside" relationship as most relevant for the explanation of certain dermatological disorders such as acne, eczema, hives, and other skin diseases.

The *timeless timeliness* of our preoccupation with the skin is shown in Steven Connor's recent in-depth account of the skin's significance in its historical and cultural imaginary. In his *Book of Skin*¹¹⁸ Connor reads the skin cross-culturally, diachronically, and synchronically. He points to the skin's importance from the Egyptian embalming practice to contemporary tattooing and piercing trends. Similar to Dagognet, Connor puts the emphasis on the skin as boundary zone and medium of passage: "The skin is the vulnerable, unreliable boundary between inner and outer conditions and the proof of their frightening, fascinating intimate contiguity." ¹¹⁹

It is perhaps the post-Lacanian psychoanalyst Didier Anzieu¹²⁰ who has introduced the most useful notion for a psychoanalytical account of the skin, taking into account both *chrós* (Greek for body as a whole and skin) and *dérma* (Greek for fur, skin, leather). Anzieu's notion of the "skin ego" draws a comparison between the complexity of the skin and its different functions—that is, anatomical, physiological, cultural—and the complexity of the psychic ego. Of all our perceptive organs, as Anzieu points out, the skin is the most vital one: one could live blind, deaf, and lacking the senses of taste and smell, but without the integrity of the major part of the skin organ, one could not survive. ¹²¹ The skin has also the greatest mass (20 percent of the total body weight of a newborn, and 18 percent of an adult's weight), and occupies the largest surface (1800 sq. cm. of the newborn, and 2500 sq. cm. of the adult) of all our organs. The skin serves as an *interface* between *me* and the *other* by protecting the ego on the one hand like an envelope, and on the other hand dividing it from the outer world. The first skin that the baby recognizes as meaningful is that of its mothering

environment. Thus it is not until the mirror and the Oedipal stages that the infant gets *into its own skin*, building up its ego on the basis of the (mis)recognition of itself in the mirror in the wake of a functional fragmentation, as shown by Lacan. ¹²² For Anzieu, the skin plays the most important role in psychic development because the ego can only be built on the basis of its experience of the sur-face of the (mother's) body.

For Freud, the relationship between the ego and the body image is libidinal, that is, constituted through a narcissistic investment during the oral stage when the baby is breastfed by the mother (autoeroticism). Freud clearly distinguishes the narcissistic libido (*Ich-Libido*) from the object libido (*Objekt-Libido*) that the child adopts later in his or her development; only the investment of a narcissistic libido can lead to a psychic unification of the body and the self. One of Freud's contemporaries, Otto Rank, finds in the phenomenon of paranoia the important topic of the projection of the self. In his book on the *Double* he states that it is in the shadow that the human being sees for the first time his or her own body. 123 Thus, paranoid anxiety points to a problematic or unsuccessful personification with the recognition of oneself in its shadow (double). 124 In the works of Freud and Rank, paranoia had become an important means for understanding the power of the image. Lacan points out that paranoid psychosis goes back to a broken genesis or development in the phase of a preimaginary reality, the stage that precedes mirror identification. Because of the possible threat of losing the unified body image and returning to a fragmented bodily experience, the psychological process of formatting an "Ego-Ideal" is accompanied by a feeling of anxiety. This feeling can return at any time during a paranoid psychotic experience, and in fact does come back in many different appearances. For instance, anorexia, hysteria, and other (often female) illnesses can be seen as mourning for the loss of a unified body image. Grosz sees anorexia in particular as a "mourning for a pre-Oedipal body and a corporeal connection to the mother that women in patriarchy are required to abandon."125

The genre of media performances discussed in the following chapters will suggest the relevance of these psychoanalytical insights into the formation of a secure body image and self. In chapter 3 we will further encounter several body artists who stage themselves in media performances. All these examples from contemporary art should be read against the Freudian, Lacanian, and feminist psychoanalytical theories developed during the twentieth century as a foreground for a new understanding of subjectivity and corporeality.

Phenomenology

Similar to psychoanalysis, phenomenology tries to separate the subject of the body (the world as perceived through one's body) from the objectified body (the body as it is perceived by the world)—a distinction between the subject of perception and the socially constructed body, between the psychoanalytical *I* and the *Me*.

The notion of the immediate perception of the world through one's own skin was promoted in the philosophy of the French phenomenologist Henri Bergson. For Bergson, the body image has two distinctive and somewhat paradoxically interrelated sides. On the one hand, l'image du corps is the way in which the subject perceives his or her own body, a perception corresponding to the Freudian psychoanalytical category "Ideal-Ego." The body becomes a necessary intermediary between the self and the unknowable outside reality of the body, organizing the relations to the outside through the mediation of images; the image one has of oneself is therefore the center of one's being and perception, a kind of interface to the world. 126 The other side of the interrelated body image, l'image de corps, indicates that the body itself is the perceptive apparatus through which the world is being processed. This means that the image is itself produced by the body (autoperceptive), the intermediary source of all images (corpocentrism). In other words, the body is at the same time mirror or screen for the images from the outside and the perceptive center; the body is "what takes shape at the center of perception."¹²⁷ Nevertheless, as Andrieu points out, this taking shape is constantly blurred by the motion of the body, because the Bergsonian body is "a moving limit between future and past."128

Unlike with psychoanalysis, for Bergson there is no unconscious, only an *unconsciousness*. In the Bergsonian notion of the body there is no rupture between events. Rather, all memory is related to the totality of events that precede it and that come after it. The unconscious mental state, hence, is nothing other than a never-perceived material object, or a nonimagined image. ¹²⁹ The body (and not the soul) provides equilibrium, and is therefore the complementary pole to the mind, without which orientation toward the action would never be possible. For Bergson, matter is within space and mind outside of it. There is no possible immediate transition between these dimensions. Rather, the mind contacts matter through the function of *time*. The body in turn possesses the material capacity to translate the intensity of time into action. In this way the mind itself is not directly materialized, but rather becomes the body in action after first traversing the possible intensities of memory. ¹³⁰ Bergson thus develops a theory of indirect

unity, for it is neither in perception, nor in memory, nor in the activities of the mind that the body contributes directly to representation. The body is united indirectly with the spirit, and the markers of this unification are the image, on the one hand, and the skin (or a rethinking of that border zone), on the other.

The upshot of Bergson's contribution is the impossibility of thinking of consciousness outside of embodiment, because mind is only ever manifest in the actions of a body over time. Likewise, for Bergson's contemporary Edmund Husserl, the discipline of phenomenology Husserl founded sought the truth of consciousness in the ways the subject lives in his or her body. Whereas for Immanuel Kant phenomenology meant the study of empirical appearances, for Husserl phenomenology means the "science of essences" (Wesenswissenschaft). 131 At stake for Husserl are not real appearances, existences, things, or essences, but the intentionally conscious gaze onto the essences (Wesensschau). In other words, consciousness is always consciousness of something. Reality has no absolute or independent status, but is always presupposed as intentionality, or intentional appearance (noema). As a result, the body is no longer a symptom, a sign, or any other kind of manifestation or placeholder. Rather, the body becomes the presence in the world of an intentional subject and his or her phenomenal experience of the world. It is here that a body discourse can start to disperse the body by literally opening it to investigation. As Andrieu formulates it: "phenomenology opens the body trying to describe the various levels that constitute it: the body becomes flesh-body (*Leibkörper*) in order to demonstrate the lived incarnation of the subject, but without reducing it to its psycho-genetic stages." ¹³²

A generation after Bergson and Husserl, Merleau-Ponty dedicated his entire work to the problem of the lived (perceiving) body and its image, from his early *Phénoménologie de la perception* (1945) to the unfinished *Le visible et l'invisible* (1964).¹³³ In Merleau-Ponty's philosophy, the body (*Leib*) has become inseparable from the world it inhabits, for body and earth (that is, the body's environment) are related through the world's presence in the body: "the body not only flows over into a world whose schema it bears in itself but possesses this world at a distance rather than being possessed by it."¹³⁴ The "pragmatic turn" of this phenomenological approach lies in the fact that this body is only a body through its use by a subject, in other words through the way in which a subject's presence in the world embodies it.¹³⁵ Merleau-Ponty argues that the outer world is necessarily perceived through a lived body, hence, as Andrieu puts it, "I am susceptible to signify with my body the way in which I am conscious of the world."¹³⁶

He thus founds a philosophy of embodiment and primordial presence that for the philosopher Gail Weiss constitutes the departing point in her analysis of the body image, leading her to develop a theory of embodiment as *intercorporeality:* "To describe embodiment as intercorporeality is to emphasize that the experience of being embodied is never a private affair, but is always already mediated by our continual interactions with other human and nonhuman bodies." ¹³⁷

Lacan had specified that a child always comes to its self-identity via a fundamental misrecognition of its own body. This concept of a body-in-pieces is, in other words, already distinctly phenomenological, in that the infant's own experience of itself prior to the organization of the image in the mirror is a bodyin-pieces. 138 It is thus precisely in respect to the lived-body experience that Merleau-Ponty's thought converges with Lacan's notion of the mirror stage, in that for both thinkers the notion of an experienced embodiment goes along with a double alienation, the recognition of one's self in a deceptive image that is framed by somebody else's gaze, a mirror, a screen: "At the same time, this body image makes possible a kind of alienation, the capturing of myself through my spatial image. The image prepares me for another alienation, that of myself (as viewed) by others." 139 Indeed, as far as this aspect is concerned, Lacan's and Merleau-Ponty's explanations of subjectivity as it unfolds in the infant are very similar. As Weiss points out, they both emphasize "that it is this very schism that makes it possible for the child to project and extend her/his own bodily awareness beyond the immediacy of her/his introceptive experiences by incorporating the perspective of the other toward one's own body—a perspective one actively participates in—rather than having it thrust upon one from the outside." ¹⁴⁰ In other words, the inscription and semanticization of the body through the outside world—as we described embodiment—is not a process that the subject undergoes, but on the contrary, one in which he or she is actively involved. Inscription does not occur without the subject's intercorporeal interaction providing an outside-in as well as inside-out perspective, to borrow Weiss's terminology. 141 What is more, with phenomenology the emphasis now lies on the production of images and no longer on the libidinal investments that in Freud's theory shift from the mouth to the anus and finally to the sexual organs. In fact, for the British psychoanalyst and Freud's contemporary Paul Schilder, "the object of the narcissistic libido is not the mouth, anus, penis, or clitoris per se, but the image of the body that arises out of the sexually pleasurable sensations associated with them."142 The resulting "body image ideal" is—as Weiss formulates—"an internalized standard against which we continually measure our present body." 143

However, as the Merleau-Ponty scholar Stuart Murray points out, Merleau-Ponty does not actually use the term *body image*, but instead *schéma corporel*. Body image, as Murray suggests, may be a misleading translation, because *image* is far too visual: "What Merleau-Ponty has in mind with *schéma corporel* is a kinesthetic body, a body actively 'polarized by its tasks.' Through the *body schema*, Merleau-Ponty posits that the body does not end at its skin, but rather extends into the world." ¹⁴⁴

With Merleau-Ponty's theory of perception and the lived body's extension into the world, the ground is laid for new discussions to evolve surrounding questions of concrete embodiment. These questions concern the gendered body and the racialized body in new ways. Nevertheless, concreteness also is realized by another dimension, namely language and how the body is embedded in it. In linguistic terms we can say that from Husserlian phenomenology's focus on the systemic side of language, the *langue* or the *parole parlante*, Merleau-Ponty puts the emphasis on the pragmatic speech-act side of the *parole parlée*. In this realm Merleau-Ponty slowly distantiates himself from the Husserlian distinction between *Körper* and *Leib*, substituting it with a broadened *Leib*-notion, in which language becomes the body of thought.

His emphasis on the interdependency of body and world, and the resulting notion of embodiment as inseparable from the original kinship with the world, turned Merleau-Ponty into arguably the greatest influence for body theorists of the twentieth century. Whether maintaining a constructivist, a performative, a volatile, or even an essentialist account of the body, all of these ways of thinking of *the body* presume that the body is *access to the world* (given, construed, performed, or even all at once). Merleau-Ponty's philosophy thus has not diminished in its influence and importance, especially as it has been reinterpreted in recent times, for instance in the work of the contemporary French philosopher Renaud Barbaras.¹⁴⁵

Barbaras reminds us of a crucial quote in the *Phénoménologie de la perception* in which Merleau-Ponty declares that the body "'has its world or understands its world without having to pass through representations'; it 'is the potentiality of the world.'"¹⁴⁶ The importance of the Merleau-Pontian account of the body for the theoretical framework of *Getting Under the Skin* lies in the fact that, in such a conception of the body, the medium that signifies the body, its *representation*, no longer is any different from the "raw material" of the body itself. Without mediation the body is nothing. However, mediation already is what the body always was, in its various historical and cultural strata.

In that sense the body *constitutes* mediation and vice versa. It is by following this very conception, namely of the *body as constitutive mediation*, that *Getting Under the Skin* aims to trace back a body concept that oscillates between holism and fragmentation. Since Merleau-Ponty's phenomenology theories were posited at the latest, this universe no longer is conceived in a Cartesian manner that takes the thinking subject as a secure point of departure against the objects in the world; the body—"the fabric into which all objects are woven"¹⁴⁷—is thus not a mere *intermediary*, in-between the subject and the world, but rather a unifier of a holistic subjectivity and a fragmented objectivity that effectively undermines the existence of these very categories. As Murray puts it: "There never is an 'objective world out there' or a 'subjective world in me.' Subject and world, in Merleau-Ponty, are linked through the flesh."¹⁴⁸

Many different authors—among them Barbaras—have pointed out that Merleau-Ponty's phenomenological account of the body cannot be understood without its uninterrupted dialogue with both Husserl, the father figure, and Heidegger, who was himself a student of Husserl's. There are many converging moments in both Merleau-Ponty's and Heidegger's phenomenologies; one of them, however, is clearly their interest in language. For Merleau-Ponty, "meaning is something intended by the sign, that is, something still veiled or concealed within it." ¹⁴⁹ In this pragmatist approach to semiosis, the sign is constituted as such only at the moment of signification. At any moment prior to signification the sign remains a pure potentiality, in fact a materiality, not separable into what structuralism has coined the levels of form and expression. It is with this very notion of language, the "soil" of all genesis, ¹⁵⁰ that Merleau-Ponty encounters Heidegger.

In his "Letter on Humanism," Heidegger states: "Language is the house of being. In its home human beings dwell. Those who think and those who create with words are the guardians of this home." As the "house of being," language has been "freed" from grammar, the absoluteness of its use in science and research, and the "dictatorship of the public realm." It is thanks to thought and poetry that language has found its essential origin and the truth of being. Language comes from that place where humanity means "standing in the clearing of being," a position that Heidegger calls "human ek-sistence." Ek-sistance means the ability of standing outside of oneself, which is also what, for Heidegger, distinguishes humanity from nonhuman animals' being-in-the-world. Language is what Heidegger further calls the "clearing-concealing advent of being itself."

What saves language for Heidegger is thought, neither a practical nor a theoretical process, since it happens before this decision is made. Thought is *thought* of being and nothing else. Thought is a "building" of the bouse of being. Heidegger points out many times that these are not mere images and metaphoric uses of language, building, or dwelling. On the contrary, the house of being is the essence of being itself, not its image.

But what does Heidegger mean by this language that for him constitutes being's house? If we are attentive to Heidegger's use of language in his first great work, *Being and Time*, we see that what Heidegger means by language is nothing other than primordial mediation:

The fact that the explicitness of a statement can be lacking in simple looking, does not justify us in denying every articulate interpretation, and thus the as-structure, to this simple seeing. The simple seeing of things near to us in our having to do with . . . contains the structure of interpretation so primordially that a grasping of something which is, so to speak, *free of the as* requires a kind of reorientation. When we just stare at something, our just-having-it-before-us lies before us *as a failure to understand it* any more. This grasping which is free of the as is a privation of *simple* seeing, which understands; it is not more primordial than the latter, but derived from it. The ontic explicitness of the "as" must not mislead us into overlooking it as the a priori existential constitution of understanding.¹⁵⁵

For Heidegger, in other words, there can be no perceiving subject who then enters into relations of mediation with objects and other people. On the contrary, the very act of perception is at its basis always already an act of perception *as something*, that is, always already the referring of some thing, place, or time to some other thing, place, or time. This constant referral is why, at its heart, Dasein is ek-stasis, and why the house of this ek-static identity is none other than language.

Heidegger's basic move, then, is to represent the relation between the knowing subject and objective world—which he argues had been the basic assumption of the history of Western metaphysics—as a secondary, derivative splitting of a previously holistic unit he calls being-in-the-world. This splitting—which, in at least some cases, Heidegger traces to modernity ("World Picture")—can for our purposes be associated with a shift from the late Middle Ages to early modernity, when with the founding of anatomy the body was literally cut into pieces, opened up, and explored as an object of knowledge. The

event of anatomy, in other words, may be seen as a historical correlate to the objectified, extended entity that Descartes distinguished from the thinking thing that is our mind.

In his lectures on Nietzsche—no coincidence¹⁵⁶—Heidegger formulates his famous statement that one does not *have* a body but rather *is* a body: "We do not 'have' a body in the way we carry a knife in a sheath. Neither is the body a natural body that merely accompanies us and which we can establish, expressly or not, as being also at hand. We do not 'have' a body; rather, we 'are' bodily. Feeling, as feeling oneself to be, belongs to the essence of such Being. Feeling achieves from the outset the inherent internalizing tendency of the body in our Dasein." ¹⁵⁷

Having traced psychoanalysis, phenomenology, and other philosophical theories that have made room for a holistic body concept that one does not have, but inhabits like a world, I am suggesting that we understand the history of the body as such as a gradual "unconcealment"—to speak Heideggerese—or revealing of the *body as mediation*. This is indeed what *Getting Under the Skin* traces: the history of the body as a struggle between holism and fragmentation. That this dilemma is in some deep sense irresolvable is shown by the fact that the same period during which such discourses as psychoanalysis and phenomenology have developed a conception of the body as a whole depending on the experience of mediation has also seen the intensification—through technological and medical progress—of domains of expertise dedicated to removing layers from the body's "skin," to unraveling its "inner truth" (to make it last longer, to cure it, or to replace it). This dilemma is also shown by the "striking coincidence"158 that the medical discipline of dermatology had its peak in the very cultural and even geographical climate (that is, Vienna) in which Freud developed his theory of psychoanalysis.

The postpsychoanalysts Deleuze and Guattari, whose concept of the body-without-organs I address more completely in the third chapter, have reconfigured the process of fragmentation as a relation of "organ-ized" strata to a state of radical and virtual disorganization they call the plane of immanence. The body in this view no longer is mediation, but rather the potentiality underlying all mediation. In recent body installations under analysis in this book, this struggle between holism and fragmentation has been widely staged and emphasized, from feminist performance art to cyber-performances to recent examples of architecture. All these examples share a dialogue between the body as a whole and as a multiplicity of fragments; what the history of their time demonstrates—and what I am ultimately arguing—is that the apparently contrary vectors of

fragmentation and holism are in fact part and parcel of the same historical development. In other words, the discovery of the body as mediation has converged with an age of mediative proliferation, such that what we are witnessing in the apparent continuing fragmentation of the body is the work of mediation itself as the body. It is for this reason that there can be no history of the body that is not at the same time a study of the various media that constitute embodiment as such.

The advent of new media has facilitated enormously the move of the reunion between holism and fragmentation. One must acknowledge that it is thanks to posthuman technology such as nanotechnology and robotics, and more generally thanks to new media, that the body has survived not as a whole, but rather in a dispersed and scattered way—or better: because of this technology, the body was able to adapt to a new form of wholeness that manifests itself as a multiplicity and plurality of mediative forms. The result of this discussion is a new body concept that could have emerged only from the grounds of early-twentieth-century phenomenology and psychoanalysis. But that concept would be inconceivable outside of the achievements of artificial intelligence and cognitive science on the one hand, and the feminist criticism of the resulting notion of disembodiment on the other hand, as well as outside of the digital revolutions of the latter twentieth century.

The following chapters trace the history of the body neither via a strictly psychoanalytic nor a phenomenological reading of bodies configured in popular culture, performance art, new media, and architecture. Rather, these body practices are there to reveal mediality as corporeality in the various languages that they employ. Chapter 2 begins by historically tracing body performances in the realm of art production and connecting these definitions of the body with the philosophers and theorists already discussed.