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# **Affective Milieus: Intensive Couplings, Technical Sentience, and a Nonconscious In-between**

Marie-Luise Angerer

The developments in media technology at the dawn of the twenty-first century are characterized by an understanding of once separate entities as radically open systems. Human and animal bodies, and technical and natural environments, are connected in complex ways via processes of organic sentience and algorithmic sensors: signals are transposed into data, which are in turn exchanged (in the form of information) between the bodies and their surroundings, creating a pool of data from which political, economic, social, and ethical conclusions are drawn. Donna Haraway's companion species, Lynn Margulis's symbionts, and Myra Hird's micro-ontology all point to processes of contagion, infiltration, and multiple agencies that call not only for a thinking in relations but for a thinking "as

**embedded, embodied and even ... as the very ‘stuff of the world’” (Åsberg, Thiele, and van der Tuin 2015, 152).**

In the early 1980s, Donna J. Haraway positioned humankind between animals and machines, stating in her *Cyborg Manifesto* ([1985] 1990), that in an age of increasingly porous borders between natural and artificial organisms, hybrids and cyborgs begin to emerge: animal and human, human and machine. Hybrids, however, are neither figures of the future nor prototypes for science fiction films and computer games, but pointers to the here and now. Today, similarities, gradual differences, and relations between humans and others have become more important, making humankind into one species among “significant others” (Haraway 2003). This places the emphasis on the constitution of the networked human body, which is no longer understood as an autopoietic system that merely exchanges energy, but is instead conceived of as a “biomediated-body” (Clough 2010, 2) that processes information.

At the dawn of the twenty-first century, the relations between bodies and environments are being channeled via information technology. Body data communicate with environmental data, neuronal signals control body and ambient temperatures, and the *little sisters* (as Siri and other digital voice assistants are referred to by Rosalind Picard, the founder of affective computing, in order to play down fears of big data [see Picard 1997]), increasingly organize and intervene in everyday routines. Such digital assistants are now being enthusiastically placed at the side of humans as *new Others*, as farsighted planners and sensitive agents, *non- or para-humans* who will outdo or replace humans even in those moments where they (still) differ from machines. Until the end of the twentieth century, affect/emotion was considered as the human dimension that could be neither calculated nor entirely bypassed. Today, algorithms have long since begun to intervene (via affective computing) to connect humans and machines on a psycho-cybernetic basis. This is not the end of humankind (the kind of physical and mental overcoming aimed for by transhumanism) but it certainly shifts the human away from the centuries-old fictitious center of humanism, requiring humans to organize new (affective) milieus with non-, para-, or post-human Others. Rather than being created via social or political networks, these new milieus will be constantly produced, shifted, and reconfigured via complex sets of links.

## Media Fabrics: Process and Relation

Georges Canguilhem has traced out the history of the concept of milieu, describing how, in the second half of the eighteenth century, it moved from mechanics into biology, where it came to denote the fluid, the medium through which life comes into being and develops. The milieu is that which connects two bodies, “it is their milieu; and insofar as the fluid penetrates all the bodies, they are situated in the middle of it [au milieu de lui]” (Canguilhem [1965] 2008, 99). Canguilhem argues that the nineteenth century repeatedly returned to the concept’s mechanical past, strikingly demonstrating his point with the example of Auguste Comte and his *Philosophie positive* ([1830–1842] 1896), according to which the living organism is influenced by its milieu and its variables (such as air, water, and light), while the influence of the organism itself is negligible. The only organism Comte credits with the ability to actively intervene in its milieu is the human organism (see Canguilhem [1965] 2008, 101).

At the beginning of the twentieth century, however, this mechanistic view began to shift. Jakob von Uexküll presented his theory of *Umwelt*, in which, alongside humans, he gave a prominent place to animals with their various specific realities. In basic terms, his approach states that an organism’s specific qualities create its own specific *Umwelt*, how this *Umwelt* is perceived by the organism, and how the organism intervenes in it. At the same time, each organism is nourished and preserved by its *Umwelt* in a distinct way (see Uexküll [1909] 2011). We find this view again in the writings of Gilles Deleuze and Félix Guattari, where work on the “melodic complexes” between nature and culture (Deleuze and Guattari [1980] 2002, 219) is described against the backdrop of Uexküll.

In 1929, a decade after Uexküll’s *Theoretical Biology* ([1920] 1926), his contemporary Alfred N. Whitehead published the foundation of his process philosophy under the title *Process and Reality* (Whitehead 1978). In it, he formulated the foundations of a relational cosmology that abandoned any categorical distinction between nature and culture, no longer focusing on the place of humankind within either one. Instead, he introduced a radical linking of nature and subjectivity that makes no claim to primacy. Whitehead uses the term “superject,” by which he means the form of subjectivization resulting from a diverse network of processes. With his concept of *prehension*, positing appropriation and abstraction as the basic modes of perception, Whitehead emphasized a *blind emotion* that operates without consciousness (see Whitehead 1978, 162ff.). Haraway borrows this concept in her *Companion Species Manifesto* (2003), rendering it as

“graspings” (Haraway 2003, 6). In this sense, *prehension* can be understood as a growing together of relations in which everything and everyone comes into being in a process of mutual grasping, meaning there can be no subject and no object prior to this process.

This explains Haraway’s interest in evolutionary biologist Lynn Margulis and her endosymbiont hypothesis, elaborated since the early 1960s (see Margulis and Sagan 1995). This theory is based on an assumption that as life developed, one single-cell organism was absorbed by another, becoming part of an increasingly complex organism. Correspondingly, the components of human cells can also be traced back to these original single-cell organisms—the pairing of host and parasite functions via the mechanism of contagion. In this model, individuals (i.e., all organisms larger than bacteria: animals, plants, fungi, etc.) are symbiotic systems, viewed as tightly interwoven, integrated microbe communities. For Margulis, then, most new species have emerged not as the result of random mutations but via the accumulation of bacterial symbionts (see Margulis 1981).

We can return here to the concept of milieu as described by Canguilhem for the nineteenth century, with reference to Auguste Comte and the exchange of energy in thermodynamic bodies. As sociologist Patricia T. Clough explains in her essay “The Affective Turn” (2010), this model was definitively replaced by that of the “biomediated body” at the end of the twentieth century. While the organic, thermic body exists in a state of exchange with its surroundings in order to stock up on energy and maintain itself as an autopoietic system, the “biomediated body” is viewed as an open system converting energy into the information needed to survive in what I propose to call a *MediaNature*. In this model, the reconfiguration of matter as information is described from two angles: from the viewpoint of molecular biology, and with the help of new visualization technologies. With such images and 3D scans, it becomes possible to look inside the body in new ways. This visible, interchangeable, malleable image of the body—one that can be morphologically altered in any way—corresponds with a molecular self (image). In her book *Immaterial Bodies* (2012), Lisa Blackman examines these various developments and explains that biomedicine, too, has long since stopped viewing the body as a singular entity, focusing instead on “the proliferation and emergence of technologies and practices which enable the enhancement, alteration, and even invention of new bodies” (Blackman 2012, 7). These shifts will have a serious and lasting impact on our understanding of body images, she writes, because “these technologies enable the body to travel beyond the boundary of the skin recast as mobile information to be altered, engineered, and transformed within laboratory

and computational settings" (7). In this context, she also mentions the sociologist Nikolas Rose, who in his works has traced the development of such a mobile concept of life that has long ceased to be compatible with the image of the body as a closed entity.

In my book *Desire After Affect* ([2007] 2014) I examine the substitution of the psychoanalytically charged concept of desire with that of affect in both theory and practice, arguing that this replacement has far-reaching implications for the way we think the human and, more broadly, our being-in-the-world. As one example, I discuss the work of philosopher Luciana Parisi, who introduces a definition of desire conceived of not as a mental dimension but as a force which, in its most recent stage of development, is defined as nanotechnical desire (Parisi 2008). Parisi frames this desire as an energy, a driving force behind affective contagion. In her essay *Techno-ecologies of Sensation*, she develops the concept of contagion further, applying it via an "extension of feeling" (Parisi 2009, 188) to an environment replete with technology. In this transposition, desire becomes a life force (comparable with Spinoza's *conatus*), but it also becomes a general capacity for feeling as found in the tradition of sensualism.

## Gradations of Sensitivity

For a philosophical reflection on the ongoing convergence between information technology and biotechnology, Isabelle Stengers (2011) suggests a reference to the encyclopedist and materialist Denis Diderot. Firstly, with regard to a general transposition of sensing onto technical nature, he could be read as a direct descendent of a monistic naturalism. Secondly, however, Diderot is someone who does not impose dogmas (either epistemological or ontological), instead appealing to his readers to take practice seriously and to look carefully at what happens, where, and how (Stengers 2011, 373). This focus on practice—what Haraway might call *Staying with the Trouble* (2016)—also applies in the case of transformations such as the emergence of distributed sentience—, when algorithms are cast as sentient beings and when "smartness" denotes a comprehensive capacity to both encode and decode feelings.

In his sensualist epistemology, Diderot views sentience as a fundamental capacity with only gradual differences of degree, increasing from inanimate matter to passive and then active sentience. In *D'Alembert's Dream* ([1769] 1965) Diderot debates with mathematician and physicist Jean-Baptiste le Rond d'Alembert, with whom he co-published the *Encyclopédie*, about the classical question of what might constitute the difference between a

human being, an animal, a marble statue, and a clavichord. In a famous passage, he states:

We humans are instruments gifted with sensation and memory. Our senses are simply keys that are struck by the natural world around us, keys that often strike themselves—and this, according to my way of thinking, is all that would take place in a clavichord organized as you and I are organized. There is an impression that has its cause either inside or outside the instrument; from this impression a sensation is born .... (Diderot [1769] 1965, 101 [translation modified])

But is it really possible to transpose Diderot's comparison between a human and a clavichord onto what Luciana Parisi calls "technosensation"? What Parisi describes here is a kind of "tactile exchange" between agents such as bacteria, viruses, and cells as they transfer information via chemical processes such as quorum sensing,<sup>1</sup> biofilm formation, and sporulation. She draws these examples from the micro-ontological approach of environmental scientist Myra Hird: "Bacterial communities ... perform collective sensing, distributed information processing, and gene-regulation of individual bacteria by the group" (Hird 2009, 42). Hird has adapted Haraway's concept of companion species to her concept of co-evolution and co-enactment among non-species, demonstrating that bodies operate in an intra-active fashion on a cellular level in both genetic and morphological terms. The concept of intra-action was introduced by Karen Barad to stress, with reference to Nils Bohr's quantum theory, that rather than two poles entering into a relation within one another, it is relationality itself that causes them to emerge as poles (see Barad 2007). Unlike Barad's epistemological model, Hird's micro-ontology takes a radically asymmetrical approach: its basic assumption is that the biosphere does not need humans to survive, while humans depend on the biosphere. In this way, she inverts the power structure between parasite and host: for Hird, the human is the parasite, the biosphere the host. Activities taking place inside and outside the human body clearly have no need for a subject that is aware of them, acting instead beneath or beyond the threshold of perception—a zone to which, as I will discuss in more detail below, a concept of the nonconscious might be applied.

1 Quorum sensing denotes the ability of unicellular organisms to employ chemical communication to measure the cellular density of their population. It allows cells to activate specific genes only when cellular density exceeds or falls below certain thresholds. See [https://en.wikipedia.org/wiki/Quorum\\_sensing](https://en.wikipedia.org/wiki/Quorum_sensing) (accessed 13 November 2018)

But let us return to Parisi. She transfers this bacterial exchange model to techno-sensorial processes that interconnect environmental and body data. Parisi's techno-ecology is partly founded on bacterial exchange and communication, but she also introduces Whitehead's concept of prehension, using it as a first stepping stone towards affective thinking. With the help of this concept, she stresses, it becomes possible to understand mathematical computation and information processing in actors and agents as open and reversible rule-based systems,

not only because they are responsive to the physical environment which they seek to simulate, but more importantly because their discrete operations become infected and changed by informational randomness. The apparent opposition between affect and computation is here dissolved to reveal that dynamic automation is central to the capitalization of intelligible functions. (Parisi 2014, 184)

This makes it abundantly clear that the affective dimension is added here as a joker, allowing her to juggle between visceral, biological, cognitive, and technical processes. Data become "affective data" (Parisi and Hörl 2013, 39) because they are affected via their own movements, in the sense of an infection or contagion. The same goes for the abrupt switch to sentience: in Parisi's idiom, a "techno-ecology of sensation" (40) simply means that energy is translated into information. But what is the difference between a technical sensor and a sentient being as described by Diderot?

The ongoing restructuring and infra-structuring of the environment, cities, and bodies by media technology poses us with the challenge of rethinking both the technical and the organic sides of the equation as relational and processual, in turn obliging us to extend our definition of sentience, long seen as the exclusive preserve of humans, and possibly animals, to include the non-organic and the technical. The graded model of sentience proposed by Diderot lends itself to this, but possibly also to a concept of intensity like that discussed by Alfred N. Whitehead and later by Gilles Deleuze and Félix Guattari.

## Intensities

Intensity is one of the central concepts in Gilles Deleuze's *Difference and Repetition* (1968). Deleuze and Guattari define intensity as a variable inscribed in becoming, an element of sensory experience without which mental development is totally inconceivable.



Between the intensive and thought, it is always by means of an intensity that thought comes to us. The privilege of sensibility as origin appears in the fact that, in an encounter, what forces sensation and that which can only be sensed are one and the same thing. ... In effect, the intensive or difference in intensity is at once both the object of the encounter and the object to which the encounter raises sensibility. (Deleuze and Guattari [1968] 1995, 145)

The particularity of an intensity, they write, is to be “constituted by a difference which itself refers to other differences” (154). In *A Thousand Plateaus*, Deleuze and Guattari describe series and structures that are present simultaneously, constantly changing, switching, connecting, exchanging, and redistributing intensities. It is no coincidence that they refer to Spinoza and his conception of bodies as determined by stillness and motion, by speed and slowness. Affects appear here as “becomings” (Deleuze and Guattari [1980] 2002, 256), described as the latitudes of a body: “*Latitude is made up of intensive parts falling under a capacity, and longitude of extensive parts falling under a relation*” (257, italics in original).

What takes place here between latitudes and longitudes on the plateau of the senses, Whitehead attributes to the dense texture of reality that oscillates between subject and object in order to establish “how order in the objective data provides intensity in the subjective satisfaction” (Whitehead 1978, 88). For Whitehead, intensity is directly connected with the question of survival. To organize this survival, nature must produce societies “which are ‘structured’ with a high ‘complexity’ but which are at the same time ‘unspecialized’” (101). This means that the question of intensity is a question of the “ordered complexity of contrasts” (100). With this definition, we can turn back to Diderot’s gradations of sentience, especially since Whitehead himself details the various grades of complexity and structuring from inorganic to organic societies (see 103ff.).

In one extremely vivid passage, Whitehead describes how humans, as “enduring objects with personal order” (161), experience their lives, their surroundings, their existence. Half awake, sleeping, dreaming, remembering, concentrating on feelings—“a torrent of passion” (161)—the human individual is oblivious to all else. What stands out in our consciousness, then, is not “basic facts” but rather the “derivative modifications which arise in the process” (162). The consequences of neglecting this basic distinction, as Whitehead stresses, are “fatal to the proper analysis of an experient occasion” (162). The most primitive form of experience is emotional, a “blind emotion” (162), and in the higher stages of experience this corresponds to

“sympathy, that is, feeling the feeling in another and feeling conformally *with* another” (162). With reference to primitive feeling, Whitehead speaks of “vector feelings” and “pulses of emotion” (163) that are partly responsible for providing contrast. Here again, then, we have contrasts that are responsible for an intensity that has little in common with feelings, as we are used to calling them. Whitehead is very clear on this: feeling in human and animal experience is not merely emotion, but has always already been “interpreted, integrated, and transformed into higher categories of feeling” (163). Even so (and this could be helpful in thinking about affective milieus) the “emotional appetitive elements in our conscious experience are those that most closely resemble the basic elements of all physical experience” (163).

The vector system used by Deleuze and Guattari with reference to Spinoza appears in Whitehead’s work as “dimension of narrowness and dimension of width” (166). The dimension of narrowness is that of the “intensities of individual emotions,” while the dimension of width results from the higher stages of complexity. The “ocean of feeling” (166) permitted by “savoring the complexity of the universe” is due to the dimension of width, while the “emotional depths at the low levels have their limits” (166). Consciousness is defined by Whitehead here as “supplementary feeling” (165), which does not necessarily contain a “conceptual feeling” (165) where contrasts are allowed or rejected.

In spite of the brevity of this account, I hope it makes two things clear: firstly, the subordinate role of what is introduced as consciousness, and secondly a concept of intensity and sensation defined not in opposition to this consciousness, but as passing through it in different stages of complexity. Intensity as contrast, as the difference of difference, leads to the next question, that of the production of encounters, non-encounters, attractions, and repulsions.

## Affective Mimesis

In his 1946–47 lecture series, entitled *Machine and Organism*, Canguilhem spoke about technology “becoming biological,” and concluded by referring to recent efforts made at the Massachusetts Institute of Technology under the label “bionics”—studying biological structures that might serve as models for technology. “Bionics,” he writes, “is the extremely subtle art of information that has taken a leaf from natural life” (Canguilhem [1965] 1992, 69). Today, nanotechnology is learning from nature, copying what nature has always been capable of. In his afterword to the German edition of

Gabriel Tarde's *Monadology and Sociology* ([1893] 2012), Michael Schillmeier understandably argues that Tarde's monadology is well suited to helping us understand nano-research. For Tarde's monads are not windowless like those of Leibniz, but rather performative and open, differing from but also resembling one another in their belief and their desire (see Schillmeier 2009, 109). Tarde himself speaks of a "need for society" that is common to humans, trees, and stars (Tarde [1893] 2012, 14ff.). This reflects a "tendency of monads to assemble" (34). And this assembly takes place via the movement of imitation that occurs on both the micro and the macro level. Deleuze and Guattari refer to this Tardian concept of imitation as a "flow" that is moved by belief and desire.

What, according to Tarde, is a flow? It is belief or desire (the two aspects of every assemblage): a flow always consists of belief and of desire. Beliefs and desires are the basis of every society, because they are flows and as such as 'quantifiable'; they are veritable social Quantities, whereas sensations are qualitative and representations are simple resultants. Infinitesimal imitation, opposition, and invention are therefore like flow quanta marking a propagation, binarization, or conjugation of beliefs and desires. (Deleuze and Guattari [1980] 2002, 219)

In Tarde's model, then, movement and sensation are the two main pillars (comparable to Spinoza's vectors), which he translates as belief and desire. The monad, his smallest unit, constitutes an interconnected difference that creates an environment for itself, creating small and large societies via imitation on both micro and macro levels. This in turn can be compared with Margulis' host-parasite model, as described above, in which each renewal takes place via assemblies that carry their earlier phase into the next.

Is it possible, today, to see a resurrection of Gabriel Tarde's monadology with its psychomorphism in a kind of "media-techno-morphism" that organizes itself via "sensory" coupling disguised as affective mimesis? This would bring together all of the aspects considered in isolation above: *Umwelt*, sensitive capacities, intensities, affections, desire. So why is it that these aspects are coming together today as an "affective milieu"? Not because of any noticeable return of emotion, and not because particular attention is now being focused on the notion of intensity (see Kleinschmidt 2004) as Tristan Garcia's book *The Life Intense* ([2016] 2018) seems to suggest. Instead, this milieu must be understood as an intrinsic connection, which, rather than linking humans, animals, and others in new ways based on information technology, causes them to emerge from these

connections as contrasts (as defined by Whitehead). Garcia conceives of intensity as a technical coupling, but he does so exclusively in terms of electricity, equating today's often-heard imperative to live an intensive life (with regard to social media, event culture, experience of nature, social status, etc.) with the electrification of the modern, enlightened age. The invention of the lightbulb, attempts to measure bolts of lightning, and the hysterical fad of Mesmerism all point to an irreducible moment: point zero. In the course of the nineteenth century, this point was located in technology, in nature, and in humans, allowing it to be introduced as the ineluctable/unsurpassable degree of intensity. Today, however, Garcia claims to observe the exact opposite: the more humans try to intensify their lives—via all manner of pleasures like sport, wellness, yoga, and a healthy diet—the more exhausted they feel. In recent years we have become used to such descriptions of an exhausted society and the fatigued self, a phenomenon habitually blamed on the media. But Garcia believes he can name the culprit: electronics (as opposed to electricity, which, as a natural phenomenon, affects humans) is responsible for the end of intensity—it has robbed electricity of its intensification. Because “[i]n the electronic age, data is transmitted by electric current, but electricity no longer excites our imagination; now it is little more than a commodity capable of transporting information” (Garcia [2016] 2018, 134). Intensity is now only a means, not an end: “Our obsession thus imperceptibly shifts away from intensity and instead becomes attached to information” (136). Because information depends not on the intensive but on the extensive, every piece of information, be it text, image, or sound, is broken down and reassembled. Translated into Spinoza's language it would read: *capacity* (latitude, including affects) is replaced by the question of *relations* (longitude, extensive). The ethical dilemma described by Garcia as a consequence of all this is an ontological barrier (the bar that separates signifier and signified in Lacan, and crosses out *le grand A(utre)*, A): life versus being, says Lacan, life versus thinking, says Garcia: “Living makes us intense,” he writes, “but thought makes us equal” (Garcia [2016] 2018, 142).

But what if this radical separation between living and thinking has long since ceased to function? Or to put it differently: what if the radical bar (Lacan) has been an ideology of the twentieth century with its obsession with the hegemony of language? What if, instead, a kind of intermediate stage has opened up, an in-between area not occupied by the kind of preconscious described by Freud, but having become a zone of the *non-conscious* where technology and organic sensation intra-act? N. Katherine Hayles has introduced the term “nonconscious cognition,” which, as she

writes, “provides a bridge between human, animal, and technical cognition, locating them on a continuum rather than understanding them as qualitatively different capacities” (Hayles 2017, 67). But this gradation between human and animal, between human and technology, needs one decisive extra step, which is lacking in Hayles’ account, and which I would like to call an *affective translation*. If we understand affect not as something related to the body or as something opposite to emotion, but as a conceptual term or—as Whitehead defines feeling—as “a mere technical term” (Whitehead 1978, 164), we might get an impression of this nonconscious as a zone of ongoing translational processes, from bodily processes via technical signal to meaning and vice versa, where affect operates as connecting, disconnecting, and/or translating movements (see Angerer 2017, 27). This experience is affective and nonconscious.

*Translated from German by Nicholas Grindell*

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