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Meteorologies of Modernity
Weather and Climate Discourses in the Anthropocene

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Global Warming and the Rhetoric of Heat

Global Warming or Climate Change?

From being a contentious topic between so-called 'climate sceptics' and 'climate catastrophists,' climate change has, in the past decade, morphed into a mostly uncontested scientific fact and thus a political issue taken seriously by most political players. However, many of the publications from the past ten years on climate change (or what in German has more dramatically come to be known as "Klimakatastrophe") bear the mark of this contentiousness that had been staged by lobbyists and so-called scientific "merchants of doubt" throughout the 1990s and the first decade of the twenty-first century. Looking at popular books on climate change from the past 15 years we notice a strong rhetoric of persuasion, as if the readers must still be convinced both of the subject's reality and of its urgency. In order to make a contested and abstract topic feel 'real,' many of these books resort to the trope of heat.

At first glance, it might seem trivial to employ the concept of heat when dealing with a phenomenon of rising global temperatures. However, what is striking about these books is that they hardly ever speak of heat: of intense, tropical heat, torrid climates, and the effect of heat, whether dry or wet, on the soil, the vegetation and on animal or human bodies. What they talk about instead are rather unimpressive averages and slow gradual changes in climates and landscapes: a rise of temperatures by two degrees Celsius within the next hundred years (Berger), the rise of the sea level by one or two millimeters per year (Monbiot), changing coastlines (Motavalli), or melting glaci-

1 The term has been coined by Eric M. Conway and Naomi Oreskes in their book of the same title published in 2010.
ers and a change in local vegetation. They uniformly point to the well-known causes, such as the destruction of primary forests in South America and Southeast Asia, the massive consumption of fossil fuels, the melting of permafrost in Siberia and Alaska, methane emissions from cattle and rice paddies, the ensuing rise of greenhouse gases in the atmosphere and ocean acidification, the change of water cycles etc. Not surprisingly, the heat-books come up with suggestions concerning national climate policy. One book, for instance, in an oddly chosen historical term, suggests a Chinese "green leap forward" (Schröder 97), others give everyday life advice such as lowering the setting on air conditioning in the house or switching to a hybrid car (Berger). What all of these publications make clear to us is that climate change does not designate a predictable process of warming (sometimes stupidly welcomed by the argument that "we will be able to grow vines in Scotland"), but the disruption or alteration of an immensely complex system of atmospheric flows, of the chemistry of the air and the oceans, including the unpredictable transformations of water cycles, erosion of landscapes and coastlines and many more phenomena. Considering the vastness and complexity of climate change consequences, the expression 'global warming' itself almost seems like a reductionist buzzword for a process too complicated to be pressed into one word.

Clearly, the goal of these books trying to popularize knowledge about and awareness of global warming is to lend this elusive and abstract phenomenon some graspable, concrete quality. Climate change as such mostly lacks phenomenal concreteness, it can neither be felt nor seen, nor can its potential consequences be clearly outlined and anticipated. What we have are graphs, simulations and scenarios. Even climate itself - unlike weather-events - stays in the background of our everyday experience; it is a pattern of expectations more than events, of habits more than specific situations. Climate is about averages and long-term periods.

Climate in a narrow sense is usually defined as the "average weather," or more rigorously, as the statistical description in terms of the mean and variability of relevant quantities over a period of time ranging from months to thousands or millions of years. The classical period is 30 years, as defined by the World Meteorological Organization. These quantities are most often surface variables such as temperature, precipitation, and wind. Climate in a wider sense is the state, including a statistical description, of the climate system. (IPCC Third Assessment Report) Defined as a long-term average, climate and climate change despite its profound consequences for any living condition on the globe are purely abstract entities. While we can get a sense of climate at specific locations (i.e., we know typical weather patterns for Stuttgart, Singapore, or Stockholm) there is no such thing as 'global climate' as an object of sensory experience. So, in order to convey a sense of urgency to the transformation of this highly abstract entity, authors of the past 15 years tended to resort to a very familiar feeling: heat. Even if heat in the sense of the familiar scorching feeling is mainly absent from the books flaunting it in their titles, the thermal metaphor has been of vital importance for any politics related to climate change. In fact, 'climate change' seems like a euphemism for a much more dramatic process, the fact that (among many other frightening things) global temperatures are rising.

Timothy Morton, the über-hip guru of a new form of ecological thought and a theory of global warming as a 'hyperobject,' points out this logic of euphemism by explaining why he refuses to use the term 'climate change' in his book:

Throughout [my book] I shall be calling it global warming and not climate change. Why? [...] Climate change as a substitute for what should be called "climate change as a result of global warming" enables cynical reason (both right and left) to say that "the climate has always been changing," which to my ears sounds like "people have always been killing one another" as a fatuous reason not to control the sale of machine guns. (Morton 8)

Drawing the comparison between climate change/global warming and the justifications for uncontrolled gun sales, Morton calls for rhetorics of urgency and trauma as the precondition for politicizing the topic:

What we desperately need is an appropriate level of shock and anxiety concerning a specific ecological trauma - indeed, the ecological trauma of our age, the very thing that defines the Anthropocene as such. (8-9)

The metaphor of heat or warming, however, is not only supposed to shock us into awareness and political action. It also serves as the hidden bedrock of the book's core point, the concept of 'hyperobject.' According to Morton, hyper-objects such as climate change, radioactive matter, omnipresent styrofoam and plastic particles and other man-made highly deleterious, and ontologically uncanny entities are objects that elude perception and conceptualization precisely because they are "massively distributed in time and space relative to humans" (1). They defy metalanguage because they contaminate the forms and concepts that are being used to account for them. For Morton, global warming is the 'hyperobject' par excellence, extended in time and space, invisible, barely computable, consisting not in a materially graspable entity but in a vast and complex mesh of inter-objective effects and interrelations. Obviously, the 'hyperness' of the hyperobject 'global warming' hinges on the thermal metaphor of heat - heat as an inescapable quality of atmospheres that bodies can be trapped in, heat as a threat to organic life, and eventually as a physical state of growing entropy.

Yet, the thermal metaphor can also serve as a shibboleth distinguishing between friends and enemies in the political battle about how to take care of the current ecological crisis. In a conversation with the late sociologist Ulrich Beck, Bruno Latour comes up with an almost Schmittian declaration of enmi-
by towards all those who lamely talk about 'climate change' instead of 'global warming':

The decision is brutally clear: Either you make a distinction between friends and enemies - then you enter the realm of the political. Or you back off from waging war and having enemies, but then you eschew politics. (Schwob, n. pag.)

He considers those who talk about "climate change" as enemies, as a radically different species:

They live in a different world than I do, they live in a world that is being destroyed [...] they are humans. I am Gaian. (ibid.)

The Thermal Metaphor

Talking about 'heat' and not just 'change' thus seems to be essential when dealing with the epistemology, the politics and the philosophy of what might perhaps appropriately but also somewhat abstractly - be called 'the Anthropocene': the fact that mankind is leaving its destructive and ineffaceable mark on the surface of the planet. What becomes clear from this use of the term is that 'heat' and 'warming' here are not neutral descriptions but expressions coined to convey the urgency of an imminent threat, the trauma of a looming catastrophe. Heat here is not just a metaphor that conveys a physical sense of a process - or rather, a whole ensemble of hyper-complex, yet im palpable processes of ecological transformation and destruction. In a way much akin to Morton's 'hyperobjects,' 'heat' in this context becomes a hyper-metaphor. It evokes not only a dimension of sensory perception that climate change dramatically lacks, but it also generates an affect - the 'shock and trauma' of a dramatically changing life-world. While we cannot feel global warming on our skins, and while we cannot see it, except in photo series of a hundred years of shrinking glaciers or in long-term simulations of flooded cities, global warming needs to be felt here and now, or made to be felt both sensitively and effectively. The heat metaphor seeks to convey a phenomenal sensibility to an unanny, complex and unrepresentable process that exceeds our categories of perception and cognition.

This affect has a political effect. While we are still debating the transition of rich Western economies to carbon-neutrality, we are, at the same time, also facing growing issues of 'climate justice' for Asian and African economies, claiming that reducing greenhouse gases unjustly hampers the economic development of the poor countries. Caught in these political rits of cost-benefit debates in the West, and the desire for a Western lifestyle elsewhere, the thermal hyper-metaphor may transport an affect of trauma and anxiety.

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1 Translated from German by E. Horn.
their means of subsistence, of populations to the locations they dwell in, of cultures to the thermal conditions they exist in. Climate, as Mike Hulme has recently argued, is not just a natural phenomenon but a cultural pattern:

"I propose that climate best be understood as an idea which mediates the sensory experience of ephemeral weather and the cultural ways of living which humans have developed to accommodate this experience. The idea of climate connects material and imaginative worlds in ways that create order and offer stability to human existence. People could not live without their climate."

If climate must be understood as a cultural pattern designed to make sense out of the ephemeral, irritating, yet existentially fundamental experience of ‘being-in-the-weather,’ we need to analyze and interpret the cultural significance granted to climatic phenomena. As for our topic, the question here is not so much as to how and to what degree the Earth is heating up, which indeed pertains to the natural sciences. From a humanities point of view, it means to ask about a cultural history of heat as the history of man’s knowledge, theories and imaginations about this thermal condition. And it also means to ask for an aesthetics of heat as the poetic, pictorial, and auditive rendering of a state that, despite its overwhelming seminal power and immediate perceptibility, seems hard to represent in media through words, images, or sounds. How can we ‘feel the heat’ or make us feel it when we are not in the thick of it? What is the cultural significance of heat? What can we learn from the historical or fictional accounts and theories about the effects of tropical climates on the human body, soul, and culture? My hypothesis is that heat is a specific thermal condition, a condition that is not just at the other end of the thermometer as opposed to cold. Heat is in its cultural understandings melts the boundaries between man and nature, between the inside and the outside of the body, between perception and imagination, between the subject and the object of cognition.

Thinking about the history and cultural significance of heat has to start with a concept of climate that is entirely different from what we discuss as ‘global climate’ today. For a long tradition of thought from antiquity through the Age of Enlightenment to the beginning of the nineteenth century, the idea of a ‘world climate’ would not have made any sense at all. ‘Climate,’ derived from the Greek term klima, marks the specific angle of the sun on the slope of the Earth’s surface, which defines the thermal conditions of a geographical zone. Climate is thus essentially a local category, specifying and explaining the temperature, quality of air, soil and water sources, the vegetation, the forms of agriculture and trade in a given region. Unlike today, where we have come to see climate mainly as a temporal phenomenon – subject to long-term changes, fluctuations and, eventually, human interventions – throughout the long history of the concept climate has been an entity related to a specific locality. It has thus been perceived as essentially stable or subject to very slow historical change – a change that, for some authors, accounts for changes in culture and the downfall of empires. Climate concerns a sense of place, not of time, and conveys an explanation of the differences between one locale and its inhabitants and those of another. By determining a specific region, climate can be used as a category to explain and understand mankind’s relationship to the specific environment humans inhabit. The emphasis is on distinction: The differences in temperature, winds, and forms of subsistence account for the differences between mentalities, cultures and political institutions. The treatise On Airs, Waters, and Places, attributed to Hippocrates (ca. 400 B.C.), e.g., suggests that a doctor first and foremost has to know everything about the seasons, winds and rainfall in a given place in order to understand the bodies, mentalities and ailments of its inhabitants (148-149). Aristotle famously argued that the temperatures have an effect on the inhabitants’ cultural and social institutions:

The nations inhabiting the cold places and those of Europe are full of spirit but somewhat deficient in intelligence and skill, so that they continue comparatively free, but lacking in political organization and capacity to rule their neighbors. The peoples of Asia on the other hand are intelligent and skilled in temperament, but lack spirit, so that they are in continuous subjection and slavery. But the Greek race participates in both characters, just as it occupies the middle position geographically, for it is both spirited and intelligent; hence it continues to be free and have very good political institutions, and to be capable of ruling all mankind if it attains constitutional unity. (VII. 7, 1327a)

Aristotle links the temperature of an area to the skills and temperaments of its inhabitants. From here he draws conclusions regarding the political forms that the population of a given climatic zone can assume: While the cold facilitates a spirit of liberty, yet disables political organization, hot climates create intelligence, but numb the sense of political freedom. Only the temperate zone in the middle enjoys the virtues of both intelligence and political organization. What we see here is the beginning of a tradition that links the climatic conditions of a place to the cultural and social institutions of its inhabitants. Today, this long tradition of what could be called anthropologism of climate has been discarded as ‘determinism’. Yet, unlike our contemporary idea of a global and temporized climate, this tradition establishes a link between cultures and climates. It offers explanations for the differences between cultures and their histories, and it asks how cultures have evolved in a constant exchange with the natural environment. Instead of strictly separating nature and culture, this tradition of an anthropologism of climate offers a view on human culture and society not as a way of liberating humans from the constraints of nature, but as multiple forms of negotiating human life and environmental conditions in a process of mutual influence and transformation.
Theories of Heat

One of the most famous attempts at constructing a political anthropology of climate in the footsteps of Aristotle is the XIVth book of Montesquieu's The Spirit of the Laws (1748). Montesquieu's overall goal is to establish a theory of legal and political institutions in relation to the facts of human existence, such as climate, religion, forms of trade, modes of subsistence, and the geopolitical position of a country. If climate is one of the determining facts of human existence, Montesquieu argues that it is well worth explaining the different forms of social institutions such as democracy or despotism, monogamy or polygamy, a cult of passive submission or vigorous work ethics in relation to the influences of the climate upon human nature. Montesquieu's idea of climate is relatively simplistic: He sees temperature as the major determinant of human existence. Consequently, his point of departure is a physiological theory of the effects of coldness and heat on the human body and nervous system:

Cold air contracts the extremities of the external fibres of the body; [...] consequently, it increases also their force. [...] On the contrary, warm air relaxes and lengthens the extremities of the fibres; of course, it diminishes their force and elasticity [...] People are, therefore, more vigorous in cold climates. Here [...] the action of the heart and the action of the extremities of the fibres are better performed, the blood moves more freely towards the heart, and, reciprocally, the heart has more power. This superiority of strength must produce various effects; for instance, a greater boldness, that is, more courage; a greater sense of superiority, that is, less desire of revenge; a greater opinion of security, that is, more frankness, less suspicion, policy, and cunning [...] Put a man into a close, warm place, and, for the reasons above given, he will feel a great faintness [...] The inhabitants of warm countries are, like old men, timorous; the people in cold countries are, like young men, brave. (Montesquieu 221-222)

While the cold preserves the forces of both body and soul and therefore allows for physical strength as well as boldness and courage, heat, in Montesquieu's view, softens the fibres of the body. It weakens the body's forces, and hampers a person's willingness to do hard work. Heat makes him passive, lazy, cowardly and more inclined to sensual and especially sexual pleasures. Montesquieu's theory of the physical and mental effects of heat and cold not only draws on an array of travel accounts and colonial lore of the seventeenth and early eighteenth centuries, describing the seemingly outlandish mores of Asian and African societies from a colonialist perspective. It also refers to a relatively crude idea of the body, based on a simple physiological experiment. By freezing a sheep's tongue Montesquieu observes that in the cold the taste-buds contract while they open and expand when thawing (222-223).

Heat, he concludes, opens up the human body to rekindle its energy, but also opens man's mind and soul to perception, imagination and religious faith. Heat thus can have paradoxical effects. The Indians for instance - as typical inhabitants of the hot South - are so delicate and sensitive that their climate-induced passivity and cowardice can be overcome by the power of their imagination that is intensified by the heat:

Nature, having framed these people of a texture so weak as to fill them with timidity, has formed them, at the same time, of an imagination so lively, that every object makes the strongest impression upon them. That delicacy of organs, which renders a contemplative person apprehensive of death, contributes likewise to make them dread a thousand things more than death: the very same sensibility induces them to fly, and dare, all dangers. (Montesquieu 224)

Of course all this sounds like the jingoistic theory of a climate theorist from the North, who, just like Aristotle, sets his home climate as the norm of truly beneficial temperatures. And this jingoism will be the birthmark of many theories of climate and culture from Montesquieu up to twentieth century theorists such as Ellsworth Huntington or Willy Hellpach. Unlike these modern theorists, however, Montesquieu allows for paradoxical effects of the temperatures or even for institutions that effectively counteract the effects of the climate. While in the Indian example heat - by the power of imagination - counteracts its own slackening effects, Montesquieu also mentions an example of deliberate human resistance to the effects of climate: The Chinese, equally challenged by hot temperatures on their territory, establish a cult of work which opposes the weakening force of heat: "The more the physical causes incline mankind to inaction," he writes, "the more the moral causes should estrange them from it" (226). Humans, in Montesquieu's view, may be challenged by climate - but by means of well chosen social and legal institutions they can decide whether to give in or to resist the forcings of their climate.

In his essay "Kultur und Klima" (1938), Willy Hellpach, a German psychologist and psychologist of the beginning of the twentieth century, follows in Montesquieu's footsteps to produce a similar typology of cultures and social behavior determined by climatic conditions. Hellpach, however, does not assume any degree of liberty within these climatic conditions. He bluntly states the differences in cultures and mentalities between Northerners and Southerners as follows:

The inhabitants of the northern parts of each continent are largely characterized by such essential traits as sobriety, austerity, coolness, calmness, readiness to get to work, patience, tenacity, rigor, and the consequent exertion of the understanding and the will. In the southern parts the essential traits are liveliness, excitability, impulsiveness, sensitivity of the sphere of feeling and imagination, a sedate letting-things-go or sudden flaring-up. Within a nation, its northern population is more practical, dependable, but less open and sociable, whereas the southerners are more musical, more open (pleased, endearing, catchy), but inconstant. (Hellpach 429-430)
The anthropology of climate seems to project a disparaging, if not utterly racist view on any culture other than the Northern-Occidental. From a post-colonial point of view, these broad-brush and mildly ludicrous theories on the cultures of "the South" or of "the North" reflect not much more than the eternal self-proclaimed superiority of the colonial gaze. However, it could be useful to throw a more redeeming glance on this tradition of the anthropologizing climate. Bruno Latour has criticized the idea of modernity as a path towards a separation of man and nature (Latour, "We have..."

By pursuing a process of separating and 'cleansing' the spheres of culture and nature, human culture has emerged not as a liberation from or domination of nature, but as a constant re-entanglement of both spheres (Latour, "Waiting" 10).

If human culture and social structures are not seen as a liberation from nature but as constant renegotiations between nature and the human, Montesquieu has a point: He tries to establish a theory of human society that links the facticity of a natural habitat to the normativity of human institutions. He thereby investigates the degrees of freedom or determination of culture by nature. We cannot think of the structures of government or of the family outside and independent from the ground, the locality and the natural conditions in which they are set. While modern climate anthropologists such as Hellman or the most famous of modern climate determinists, Ellsworth Huntington, see humans essentially bound and determined by their climatic origin, Montesquieu emphasizes that within these settings, man has a choice: The good lawgiver will try to counterbalance the pressures of climate on humans for instance by establishing a cult of work in the hot regions where people are prone to laziness, as the Chinese had done. He tries to think man's freedom to make his own rules and laws, i.e. man's modernity, but within the framework of his climatic environment, not independent of it. Without the determinism that has often marked the anthropological theories of climate, Montesquieu may be seen as a first attempt to think acclimatization, the endless negotiation between man and his climatic conditions. What we call today the "cultural history of climate" is the history of this negotiation (Behringer 1).

After Montesquieu, with more and more Europeans confronted to the intense experiences of tropical heat through the rise of colonialism in the nineteenth century, heat gains a reputation of being a massive hazard to both mental and physical health. The nineteenth century abounds with medical treatises on the deleterious effects of tropical climates on European bodies and souls. Tropical heat is not just suspected to temporarily ruin the health of colonial officials and travelers but it also affects their modes of life, moral composure and heredity. Eventually, the destructive effects of heat are even passed on to their offspring (Livingstone 95-110). Europeans, within a few generations, "degenerate" in the tropical heat:

[...]

Within colonial medicine, heat is cast as the chief villain: It wrecks bodies and minds, undermines the virtues of a European lifestyle, and either kills Europeans or eventually brings them to mingle with the natives. It is this colonialist discourse on the deleterious effects of hot climates that will eventually form the basis for climate-determinist anthropology. At the beginning of the twentieth century, theories of climatic influences on human minds, characters, and work efficiency will eventually conflate climatic factors with hereditary categories such as race or genetic health. For the geographer Ellsworth Huntington, superior civilization can only thrive in a 'temperate climate,' free from the extremes of heat or cold, yet blessed with an invigorating seasonal contrast between winter and summer. Huntington actually even measures the performance loss among workers in the Southern US during the summer months. He concludes that heat unfailingly reduces mental and physical energy and, therefore, that no advanced cultural or scientific achievements could be expected from the inhabitants of hot countries. Consequently, the colonial theories of heat and the deterministic takes on the relation between climate and culture were often used to legitimize repressive measures for overcoming native "sloth" or to raise the efficiency of workers by artificial cooling through air conditioning (Horn 233-234).

The Aesthetics of Heat

Even if these deterministic theories on extreme climates are mostly defunct today, the demonization of heat as a particularly intense climatic factor cannot be entirely dismissed. Physically, heat presents a particular challenge. It is a thermal condition that is much more powerful, much more invasive than cold against which the body can easily be protected by muscular contraction, clothing, and housing. Heat cannot be so easily escaped. In the tradition of the anthropology of climate (deterministic or not, colonial or post-colonial), heat is perceived as the epitome of climate influence tout court, a climate that radically shapes man and human culture. Cold is external to human fibers; it makes them contract within themselves which in turn facilitates more freedom of movement, more restraint, more control — in other words: more independence from the surrounding environment. As thermal influences on bodies and cultures, heat and cold are, thus, not just gradually different
values on the thermometer, they are qualitatively different. Cold closes the body off from its environment, it calls for contraction and insulation. Heat, on the contrary, makes the body dissolve into it, open up to it. The body cannot help but being infused with heat. While cold allows for distance, self-reflection and objectivity, heat triggers apathy and relaxation, but also, as Hellpach suggests, it is supposed to facilitate social intercourse and communication. It makes us open up not only to the natural but also to the social environment. Heat gets us involved, as it were, involved with the world around us as our senses are being sharpened to the point of oversensitivity. Our imagination intensifies. Our bodies soften and melt into the sensual and sexual appetites that heat stimulates.

Most of the authors examining the influences of temperature on human bodies either favor ‘temperate climates’ – usually located at the place where they happen to live – or sing the praise of the invigorating effects of cold climates. Yet, with the rise of modern traveling and tourism to tropical countries, warm climates have gained in public favor. What once accounted for the noxious character of tropical zones now has become their special point of attraction: lush nature, exotic bodies, the ‘relaxed’ lifestyle of the South, and erotic stimulation (Cocks 215-235).

Michael Taussig, one of the few ethnographers to address heat as the almost inevitable condition of ethnographic research (at least in tropical countries), sketches out a theory of heat as a force to transform perception and consciousness.

Heat is a force like color that sets aside the understanding in place of something less conscious and more overflowing, radiance instead of line, insinuation instead of that famous bird’s-eye view. As our planet heats up and the Tropics spread, is it not possible that not only a new human body but a new type of bodily consciousness will be created in both temperate and tropical regions, a consciousness that reattaches the body to the cosmos? (55)

By suggesting surrendering to the intense, mind-opening force of heat, Taussig gets to the core of its fundamentally aesthetic impact. In the inescapable, penetrating force of heat, we realize how climate transforms the human being. Not just the culture, mind, work-efficiency or mentality, but more fundamentally, the very conditions of the human relationship to the world. Heat radiates, penetrates and transforms solid matter and thereby dissolves clear-cut lines and boundaries. It oozes out of the atmosphere into bodies and things, it sticks to objects, it distorts our view, and it intensifies our feelings. Heat is – as it were – the bodily sensation of what Morton describes as the “viscosity” of the hyperobject. Hyperobjects, such as climate, elude conceptualization precisely because they are too extended in time and space. At the same time they are also too close to be perceived. They don’t allow for a distance reflective kind of cognition. We are always already immersed in them, as they are immersed in us:

Global warming [...] is vicious. It never stops sticking to you, no matter where you move on Earth. [...] The object is already there. Before we look at it. Global warming is not a function of our measuring devices. Yet because it’s distributed across the biosphere and beyond, it’s very hard to see as a unique entity. (Morton 45)

Heat, in other words, is the quality of something that has no qualities, yet a quality that challenges the terms and conditions of perception itself. Heat allows for no bird’s-eye view on global warming, no distanced perception or cognition of heat. Heat must be felt, like an affect. Heat may just be an affect.

Representing Heat

The question is: How can one represent heat? How can one describe it, make it palpable? We can look at graphs of rising temperatures, but that will not do much to help us – as the books on global warming advise – to “feel the heat.” How can we feel the heat when it is not (yet) hot? When the temperature where we live and produce massive greenhouse gases is moderate? What would the aesthetics of heat look, feel, sound, and taste like? I can only give two small, maybe far-fetched and in every respect ‘exotic’ examples. The first one is a passage from the novel Tropen by the Austrian expressionist Robert Mller, published in 1915. Tropen is a lurid, slightly surreal account of a trip three men took into the jungle between Venezuela and Brazil, a journey full of violence, dreams, plagues and desire for an enigmatic indigenous woman called Zana. As the men are being rowed upstream on the fictional Rio Tiquind, in white, blistering tropical heat, the narrator half-consciously starts contemplating:

All of this I had already experienced once. This mild, sunny water had washed around me. This illusionary light, this sweetness, this mood, this dawning of the unspeakable, it was not new, it resonated with the memory in man, it was a repetition. It was [...], hot, hot, hot, the river might even have cut across the equator; [...]

Perhaps I’m just one of the lichens that turn in the water, one with a brain, with a sick, evil brain [...]. The fat arms of lianas hugged the overhanging trees and fed an entourage of luscious-looking flowers. Orchids spread their little, thick snouts through the knotted leaves [...]. In the depths of my consciousness, in the mountain of my provenance lumbered a mood from the prehistory of millions of living beings, the maternal lactation and feeding of the river, the obliging calm of idle ness had gratified my simple drive [...]. Between me and this life about me there existed not only perhaps a metaphorical, but even a suprahuman identity [...]. I am a much improved tropical landscape. Wherever I go and wherever I stand, I
It is obvious that Müller, who possibly never visited the tropics but may instead have spent the time in question in a psychiatric hospital, borrows his tropics of the tropics from colonial literature (such as, e.g., Conrad’s Heart of Darkness (1899)) and climate anthropology: the laziness and lust triggered by the suffocating heat and moisture; the lush, sexualized landscape and vegetation; and the regression to ‘primal instincts’ and to lower stages of consciousness. However, what is most striking in this passage is the blunting of the boundaries and instances of cognition: While immersed in the perception of the tropical jungle, he suddenly perceives himself not only as part of this jungle but also as the landscape itself. He is the landscape turned outside in, a tropical biotope at stable 36 degrees Celsius, “a sumptuous shooting of juices, a vegetation of warm splendor” (50). In Müller’s fictional vision of heat, not only does the instance of perception and the perceived collapse into one flowing, productive stream or mush but the narrator also dives into the deep time of his ontogenesis, the fetus floating in the nutritive waters of the womb, and into the even deeper time of the origin of life as such: into the world of liquids and cells, molecules and temperatures, the “prehistory of millions of living beings, the maternal lactation and feeding of the river” (27).

The world of the formation of species, yet in their mere potentiality, in their origins, not yet formed. Heat allows for a relation to this primordial world, and perhaps, according Tassie, a “bodily consciousness [...] that reattaches the body to the cosmos” (31). Müller’s fictional tropics open up a world of pre-history, a trip back into unfathomable pasts: of the individual into his origin, into the pre-history of the human species as well as the becoming of life in general. J.G. Ballard’s novel The Detrited World (1962) will take up this idea of heat as a reversal of time by depicting a world that has returned to the heavy heat of the Triassic period. Clocks start going backwards, animals and plants revolve to prehistoric shapes and sizes. The novel develops a theory of time as climate:

Just as psychoanalysis reconstructs the original traumatic situation in order to release the repressed material, so we are now [with the Triassic heat] being plunged back into the archaepsychic past, uncovering the ancient taboos and drives that have been dormant for epochs. The brief span of an individual life is misleading. Each one of us is as old as the entire biological kingdom, and our bloodstream are tributaries of the great sea of its total memory. (Ballard 56)

Heat allows for a relation to these pasts, a relation of the observing subject to the history and the continuous becoming of everything around it. It dissolves

4 I am grateful to Ben Robinson for translating the passage. Unfortunately, to my knowledge there is no English translation of the novel so far.

not only the boundaries of bodies, the positions of subject and object, observer and observed, body and environment. It also reverses time, sets the human in relation to a prehistory of life that exceeds human consciousness and existence. In this sense, heat may actually be the appropriate temperature of the Anthropocene.

This may sound a bit vague, if not esoteric. Let me deepen this impression of vagueness with my second example, Max Ernst’s L’Europe après la pluie II (1942).

Max Ernst, L’Europe après la pluie II, découlomanie, oil on canvas (182.2 x 54.9 cm), Wadsworth Atheneum Museum of Art, Hartford, USA.

I cannot go into Ernst’s surrealist aesthetics of landscape in detail. Instead, I would like to focus on the question what it could mean to depict a landscape formed by and infused with heat. What does it mean to ‘paint’ heat, to make it visible? Obviously, it does not mean to depict the sun or objects warmed by the sun, nor using so-called ‘warm’ colors (even though Ernst actually does use mostly oranges, yellows, and browns). The depiction of heat does not even seem to be Ernst’s primary goal. What we see in L’Europe II is the scenario of strange vegetal, animal and inorganic shapes, rocks, steep mountains and rotting wood, and organisms that look like sponges and corals. Others look like animals or human beings in strange attire, both exotic and archaic, with a head (or headgear) in the shape of a bird. Artwork and natural form are indistinguishable. The sky is bright and mildly clouded, watery in contrast to the solidity of the landscape in the foreground, an effect created by the goopy color paste used in the découlomanie technique. What we see is living matter, yet not fixed in species or objects, but metamorphosing from organic to inorganic, from marine to terrestrial, from animal to human and back. What looks like coral may as well be a cow’s head. What looks like a human body may as well be a corpse, or a statue. Everything, however, seems to be made of one common substance: the vegetation, the rocks, as well as the human or animal figures that emerge darkly against the bright backdrop of the clear sky.
This is what I believe comes closest to what one could call the visual aesthetics of heat. Ernst paints heat without even trying to mimetically represent it, by light, sweat, mist or the use of certain colors. Ernst shows what heat does and brings forth: a melting of forms and shapes, a consubstantiality of nature and what might be human figures, made out of living matter that just takes ever-changing shapes. Heat brings out the inseparable, non-objective, 'vicious' coherence of life, a life or super-organism of which the human species is a part, yet only a part. Like any other species, it is formed by and yet also forming and transforming this living matter.

Understanding the Anthropocene that we are facing might therefore be a task that necessarily not only involves a new look at history – both the natural history of the Earth and of the human species and the history of cultures, as Dipesh Chakrabarty has convincingly argued (197-222) – but also on the mutual transformations between humans, climates, and cultures. This view on the historical anthropology of climate must necessarily also draw on works of art, fiction, and the bizarre imaginations of the hoarded and overheated brains of artists. "As the planet is beating up," as Tuanis puts it, the only way to re-think the relationship between man and nature is to re-think the complexity of the mesh of life, to 'feel the heat' through an aesthetics of heat, and to learn its lesson.

Works Cited


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