

Climates: Architecture and the Planetary Imaginary

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Editor

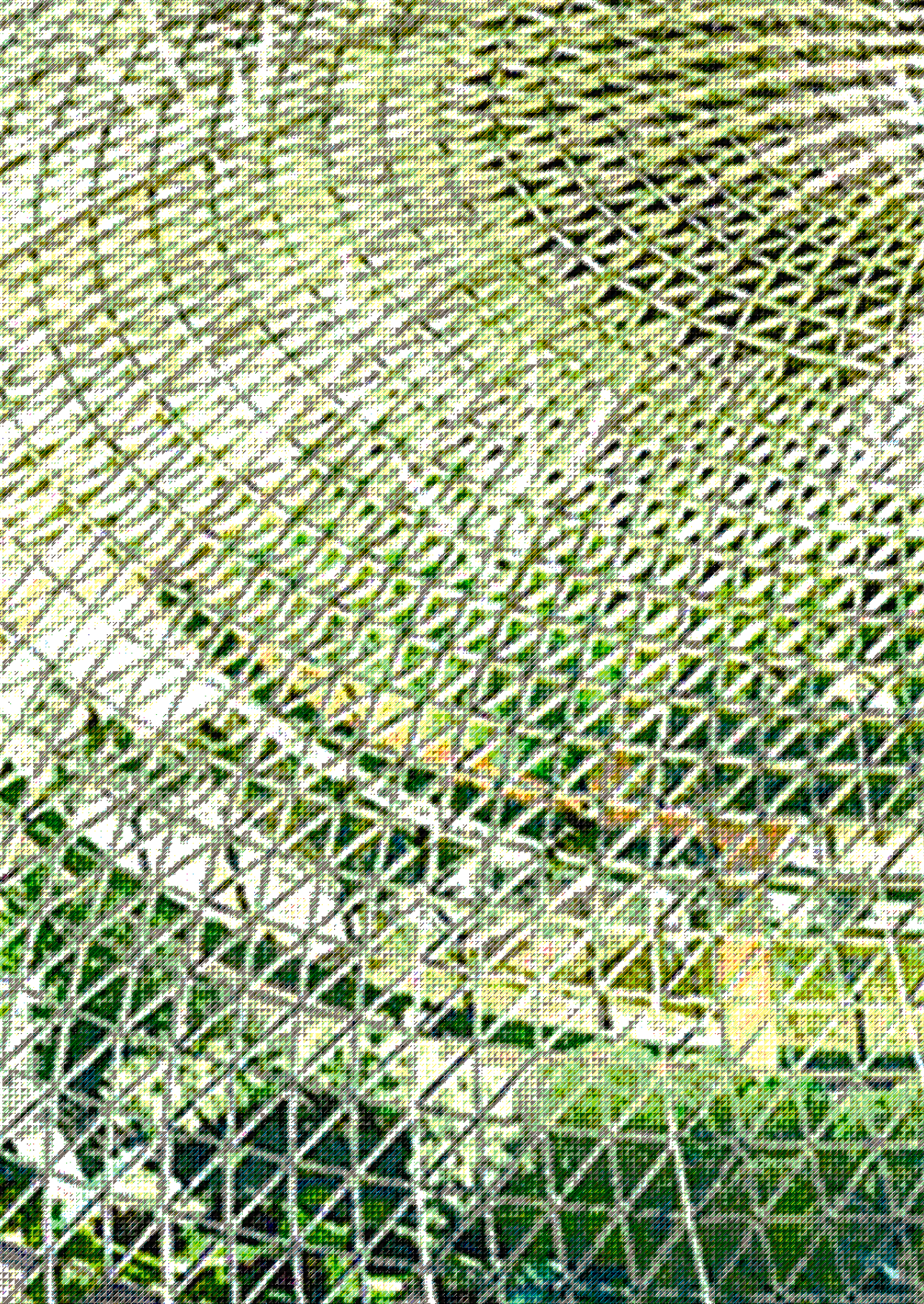
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Air Conditioning: Taming the Climate as a Dream of Civilization

EVA HORN

I had no idea the tropics were *that* hot. When I first exited the sliding glass doors at Changi airport, Singapore, I stepped into something I had never quite experienced before. This was not air as I knew it—it was more like a semi-liquid medium, a gel, moist, hot, suffocating. Something you can inhale, but that envelops your body like a mass. Impatiently dragging my luggage through that mass towards the taxi, I started panting, my head and my hands swollen from the heat. The driver opened the door, and I tumbled into the refrigerated inside of the car. For a moment I felt relief as my body escaped the suffocating atmosphere. But I quickly found the stream of cold air on my wet skin to be equally unpleasant. Still damp from the heat, I started to shiver.

The startling chill of the air I found in the car would turn out to be the nature of most of my coming weeks in Singapore. Using the network of subways and subterranean shopping malls, a person can cross the entire city almost completely while avoiding the outside climate. Singaporean temperatures stay around 87 degrees Fahrenheit all year round, with a constant humidity between 80 and 100 percent. If you ever spend time outside, in the streets or lush gardens of the city, a Northern European like me quickly learns what every inhabitant knows: Always seek shade. Don't eat too much during the day. Avoid being outside in the hours around noon. And most importantly, *move slowly*. Most of the time, however, is spent inside, unless you are one of those heat-craving Europeans who have the urge for drinks on rooftops and terraces on balmy Singaporean nights. You will rarely see Asians join the party. Most of the time, whether for work or leisure, is spent in the dry, artificially cooled air of climatized spaces, always rather too cold than too hot. There you can rush and work as hectically as you would in Berlin, London, or New York.

The ascent of a city with such an extreme climate to become one of the most important economic hubs in Asia could not be imagined without a technology that has existed for less than a hundred years. The Singaporean journalist Cherian George called his native city the *Air-Conditioned Nation*.¹ The same holds true for other hot metropolises such as Dubai, Shanghai, Bangkok, and Hong Kong, as well as for the American Sun Belt that in the past decades has rapidly attracted retirees from all over the United States. Air conditioning was not initially developed to enhance human comfort, however, but to facilitate technical procedures in the printing and meat processing industry. At the beginning of the twentieth century, in 1902, Willis Carrier installed the first “apparatus for treating air” in a printing factory to combat humidity; his invention was patented in 1906. Only in the 1920s did air conditioning technology start to be installed in US movie theatres and department stores that suffered from declining customer visits during the sweltering

1

Cherian George, *Singapore: The Air-Conditioned Nation, Essays on the Politics of Comfort and Control, 1990–2000* (Singapore: Landmark Books, 2000).



Proposed conditioned glass biodome for Singapore's Changi Airport, Safdie Architects, currently under construction. Courtesy of Safdie Architects.

summer heat. In the 1950s, air conditioning systems entered private households and cars, and started to spread from the US to the entire world. In Singapore, more than 50 percent of all electricity is consumed by cooling systems; in the US, fewer than 5 percent of newly built houses lack a central air conditioning unit. India and China are quickly expanding markets for climate technology, and even in Europe, where A/C is not yet a default element in private houses, there are virtually no office buildings that do not have it. Stan Cox, who wrote an excellent history of the rise of climate technology in the US, estimates its annual energy consumption for air conditioning in the country at 1,650 kilowatt-hours per person, producing half a billion tons of carbon dioxide.² Dutch researchers estimate that, while heating energy consumption will decrease, energy demand for air conditioning will rise by 72 percent during this century.³

Air conditioning—the possibility of “fixing” the air’s temperature and humidity at one’s own comfort level—is one of the oldest dreams of mankind. It means creating a world without heat or cold, rain or snow, without suffocating humidity or dusty winds. Climate control allows for a life without weather, without meteorological contingencies and surprises, extreme weather events, seasonal changes, or locally challenging climate conditions. Air conditioning creates what has long been lauded as a “temperate climate,” a climate adjusted to the comfort zone of the human body—a comfort zone that, today, seems to get narrower and narrower. The temperate air that it produces is to be “just right,” as in the Goldilocks tale—neither too hot nor too cold, neither too wet nor too dry. Of course, the creation of artificial climate, historically, has not always meant creating “coolth” but rather providing warmth. Creating or finding a temperate climate in the history of mankind has often meant looking for or building a protected space, cut off from the vagaries of the weather outside: find a cave, build a house, wear protective layers to cover the body and preserve its temperature. The philosopher Peter Sloterdijk has called this basic civilizational act “insulation”—a human

2

Stan Cox,
Losing Our Cool: Uncomfortable Truths About Our Air-Conditioned World (and Finding New Ways to Get Through the Summer) (New York: The New Press, 2012), 133.

3

Morna Isaac and Detlef van Vuuren, “Modeling Global Residential Sector Energy Demand for Heating and Air Conditioning in the Context of Climate Change,” in *PBL: Netherlands Environment Assessment Agency*, February 2, 2009, http://www.pbl.nl/en/publications/2009/Modeling_global_residential_sector_energy_demand_for_heating_and_air_conditioning.

way of being-in-the-world by creating protective “spheres” and thereby isolating human bodies and social environments from the world at large, the natural environment.⁴ Clothing creates a warm microclimate around our skin; houses (at least if they are made of stone) are built to preserve heat in the winter and coolth in the summer. In tropical or torrid climates, for centuries, houses have been built in a fashion as to shelter the inhabitants from sun and hot air (in the case of dry and hot zones such as North Africa) or, on the contrary, to enable a constant circulation of air to cool off sweaty bodies (as in the humid parts of the tropics).

Humankind has not limited itself to the creation of such microclimates. Ever since the Neolithic Revolution, people started to transform landscapes by clearing forests or draining swamps in order to create arable land or pastures—thereby also altering local climates. As early as 1784, the German philosopher Johann Gottfried Herder saw man as a climate-altering species. For him, cultural history is the history of humans changing the climate around them:

As climate is a compound of powers and influences to which both plants and animals contribute, and which every thing that has breath forms as an all-encompassing system, there is no question that man is placed in it as a sovereign of the Earth, to alter it by art. Ever since he stole fire from Heaven, and rendered steel obedient so his hand ... ever since he has made not only the beasts but also his fellow men subservient to his will ... *he has contributed to the alteration of climate in various ways*. Once Europe was a dank forest; and other regions, at present well cultivated, were the same. They are now exposed to the rays of the Sun; *and the inhabitants themselves have changed with the climate* ... We may consider mankind, therefore, as a band of bold though *diminutive giants*, gradually descending from the mountains to subjugate the earth and climates with their feeble arms. How far they are capable of going in this respect futurity will show.⁵

Herder may be one of the first thinkers to understand not only that climate shapes man’s living conditions, but that mankind also changes itself through the cultural techniques it employs to alter landscapes and climates. Humankind shapes its life-world by creating atmospheres adapted to its needs or comfort.

Thus, the Anthropocene—that newly-coined epoch in which humans have become a “geological force” transforming the climate and the biosphere on a global scale—did not simply start with the Industrial Revolution.⁶ Maybe the Anthropocene actually begins with the start of a civilization that actively intervenes into climates and landscapes in order to create or adapt the atmosphere to their needs—that is, with humankind’s transition from hunting and gathering to settlement and agriculture. Climate control, then, is not a product of the twentieth century’s society of comfort, but a central element in the project of civilization. This project mainly consists in liberating human society from the contingencies of nature, and particularly of a dimension of nature that is both as elusive and ubiquitous as the air.

“Air”—as an ancient shorthand for “climate”—surrounds and penetrates us, not just our bodies but our minds, souls, and societies. Since ancient times, weather events and seasonal patterns have been the epitome of that which cannot be controlled by humans, but which does mark the imprint of nature upon culture. The seasons, for example, are a circular model of time

4

Peter Sloterdijk,
*Sphären III:
Schäume* (Frankfurt: Suhrkamp, 2004), 319.

5

Johann Gottfried Herder, *Outlines of a Philosophy of the History of Man*, trans. T. Churchill (London: Hansard, 1800), 176.

6

Paul Crutzen,
“The Geology of Mankind,” *Nature* 415 (2002): 23.
Will Steffen,
Jacques Grinevald,
Paul Crutzen, and
John McNeill,
“The Anthropocene: Conceptual and Historical Perspectives,” *Philosophical Transactions of the Royal Society A* 369 (2011): 842–867.

that interferes with linear human time and gives it structure. In antiquity, the weather was the stage for the whims of the gods who would fight among each other or against humans by the means of thunder, wind, and inundation. Climate, for both antique geography and medicine, was that which ineluctably shaped bodies and mentalities. Aristotle wrote that

those who live in a cold climate and in Europe are full of spirit, but wanting in intelligence and skill; and therefore they retain comparative freedom, but have no political organization ... Whereas the natives of Asia are intelligent and inventive, but they are wanting in spirit, and therefore they are always in a state of subjection and slavery. But the Hellenic race, which is situated between them, is likewise intermediate in character, being high-spirited and also intelligent. Hence it continues free, and is the best-governed of any nation...⁷

While Aristotle uses the climate of certain geological zones to explain their political systems, Hippocrates points to the profound physiological and psychological effects of soils, winds, seasons, plants, temperatures, water sources, etc. on the inhabitants of a region. Human health and physical constitution, he argues, can only be understood in the context of climate.⁸ From antiquity to the age of Enlightenment, climate was seen as the primary influence on bodies, mentalities, and cultures. In this line of thought, the difference between local atmospheres and livelihoods accounts for the infinite number of different human shapes, colors, social institutions, religious cults, and political systems of power.

Temperature played a particular and vital role in climate theory. Following up on this tradition of thought in the eighteenth century, the legal theorist Montesquieu tried to establish a link between the laws and political institutions of different cultures and the climates in which they are situated.⁹ Heat, Montesquieu posited, softens the fibers of the body and thus, he concluded, renders men's bodies slack and lazy, their souls fearful and disorderly. However, heat also entices the imagination and sexual desires. Cold climates, on the other hand, make their inhabitants strong, brave, and virtuous, not to mention relatively disinterested in erotic matters. Montesquieu argues that this explains the differences between social institutions in cold or hot zones. Institutions such as slavery, polygamy, or despotism must be seen as reactions to the slackening effects of hot climates; inventions such as democracy and romantic love are only suitable to the highly disciplined dwellers of Northern spheres, who need an idealized idea of love to be tricked into sexual activities. Peoples who live in the heat therefore need different institutions than those in the cold.

Montesquieu's somewhat bizarre and yet oft-repeated theory about the cultural effects of temperature might look strangely deterministic, from the contemporary standpoint, or even dangerously racist. Is it really the local temperature that determines whether one lives in democracy or under despotism? Clearly not—though in any case, his theory grants humans a certain degree of freedom in positioning themselves in relation to the influence of the climate. While Indians—in terms of their social systems as well as their fatalist religion—yield to the mollifying effect of their native heat, he argues, the Chinese toil against it by establishing a cult of work and discipline. In Montesquieu's Enlightenment style of thought, one always has a choice.

The "temperate climate"—not too cold and not too hot, and thus best suited to both physical and mental work—has been a central facet of all

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Aristotle, *The Politics and the Constitution of Athens*, book VII, 7, 1,327–1,328, cited here from the edition edited by Stephen Everson (Cambridge: Cambridge University Press, 1996), 175.

8

Hippocrates, "Airs, Waters, Places" [ca. 400 BCE], in *The Medical Works of Hippocrates*, trans. John Chadwick, W. N. Mann, Oxford: Blackwell 1950, 90–111.

9

Charles-Louis de Secondat, Baron de la Brède et de Montesquieu, *The Spirit of the Laws* [1748], book XIV, trans. Thomas Nugent and J. V. Pritchard (London: Bell & Sons, 1914).

attempts to think about the relations between climates and cultures. Eventually, in the twentieth century, truly deterministic models were established by climate researchers such as Ellsworth Huntington, Ellen Churchill Semple, and Willy Hellpach. Huntington, to take an example from 1915, measured the loss of performance of workers in the southern US during the summer months. He concluded 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.¹⁰ Such deterministic takes on the relation between climate and culture were often used to legitimize repressive measures for overcoming native “sloth” in colonial contexts; but as the twentieth century progressed, that connection was increasingly used to advertise the intensive use of cooling technology to enhance work efficiency.

Ultimately, for these and other reasons, the idea that climate (or other environmental factors) determines the nature of a people has been discredited entirely. Today, the social world and the natural world are supposed to be separate from one another. To be “modern” means to be independent of such negligible things as air temperature or the degree of humidity. The weather, no matter how often we speak about it, is a background to our social interactions, not a major factor shaping them.

However, this seemingly outdated question about the exchange between climate and culture raised by thinkers from Aristotle to Herder and even the deterministic school of geography also marks something that has been repressed, or at least “cleanly separated” from the modern idea of man as a social and cultural being—the fact that being-in-the-world is also being-in-atmospheres, being-in-a-climate. As Bruno Latour has pointed out, we still feel compelled to cleanly separate “social needs and natural reality, meanings and mechanisms, signs and things.”¹¹ Yet, with the insight at the heart of the idea of the Anthropocene—the fact that man has started to alter and disrupt climate not only on a local but a planetary scale—a separation of climate and culture, nature and technology, environment and humanity is becoming untenable. The old and supposedly defunct tradition of pre-modern climate theory raises the question of how both nature and culture have, in very different forms and degrees of intensity, been shaped by a mutual transformation of climates and civilizations. Climate is the epitome of that which surrounds and impacts human life forms. It is the imprint of nature upon man—yet a nature that, in turn, is massively altered by human technology.

At the core of the modern project to separate and purge the spheres of nature and society from one another—even if, as Latour has stated, this project might have never really been achieved—is a thought of creating spheres in which climate either doesn’t play a role anymore or has become a mere option (i.e. a space of pleasant coolth in the hot zones, a comfortably heated room in the cold). Ultimately, the venture of controlling and dominating nature comes into its own in the dreams of creating an atmosphere that is completely adapted to human needs and comfort. This is an old motif of utopian thought: In Thomas More’s *Utopia*, the inhabitants “fortify themselves ... against the unhealthiness of their air” not only by their “temperate course of life,” but they also “cultivate their soil” and pluck “whole woods ... up by the roots, and in other places [plant] new ones, where there were none before.” The transformation of landscapes and vegetation is a way to alter the “unhealthiness of the air” and thereby become healthier than any other population.¹² The more radical utopian Charles Fourier, often hailed as one of the forerunners of socialist thought, dreamt of a thorough reorganization of both

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Ellsworth Huntington, *Civilization and Climate* (New Haven: Yale University Press, 1915); Ellen Churchill Semple, *Influences of Geographic Environment: On the Basis of Ratzel’s System of Anthropo-Geography* (New York: Holt & Co., 1911); Willy Hellpach, *Die geopsychischen Erscheinungen: Die Menschenseele unter dem Einfluß von Wetter und Klima, Boden, und Landschaft* (Leipzig: Engelmann, 1911).

11

Bruno Latour, *We Have Never Been Modern*, trans. Catherine Porter (Cambridge, MA: Harvard University Press, 1993).

12

Thomas More, *Utopia* [1516], translated into English (London: Chiswell, 1684), 131–132.

human society and climate. His first book, *The Theory of the Four Movements* (1808), is a plan for the rearrangement of social as well as sexual relations along the lines of a general theory of the “laws of attraction.” These laws, Fourier believed, were as general to all things natural and human as the law of gravity. A rearrangement of society, in order to work with and not against these laws of attraction, would not only bring perfect individual satisfaction but also universal social harmony.

What is striking in Fourier’s plan is that this new, sexually liberated and socially harmonious society would come into effect alongside of a fundamental global change of climate. Over the course of the eighty thousand years that such a reorganization of human society would take, Fourier explains, the *aurora borealis* would intensify so much that it would become an additional source of heat, focusing on the poles. This would heat up the polar zones and thereby enable places like Siberia and the north of Canada to enjoy temperatures like the Côte d’Azur.¹³ At the same time, Fourier predicts, the tropics would (fortunately) not heat up any further. The entire planet would eventually be bathed in the pleasant weather of the Mediterranean that European pensioners and tourists still deem to be the absolutely “perfect climate.” This temperate utopia—which today strikes us as the IPCC’s worst nightmare—is, in his logic, a necessary step, since this planetary Mediterraneanization is necessary in order to provide resources and space for a sexually liberated and thus ever growing global population. A globally harmonized and homogeneous society—and Fourier is actually one of the first to think of a “world society”—needs a globally regulated, temperate world climate. Biopolitics and climate change, for Fourier, must go hand in hand.

Fourier’s climatic utopia may, in the days of global warming, sound more like a threat than a promise. However, he brings to the foreground a motif that has been, and remains, central to climate thought—the idea of an ideal climatic “norm,” as it were. No matter how differently these philosophers and scientists have regarded the causal link between climate and culture, we find in each the idea that there is such a thing as a singularly “moderate” and thus ideal climate. Aristotle praised the Greek climate as the middle ground between too cold and too hot; Montesquieu seems fixated on an ideal, temperate climate that resembles that of his native Bordeaux; for Kant, it was the general middle European climate zone. While the Scotsman John Arbuthnot praised the effects of Scottish weather as a precondition of high achievements in the arts and in philosophy, the Frenchman Montesquieu pondered the link between the soggy climate of the British Isles and the preponderance of their inhabitants to commit suicide.¹⁴ Every philosopher locates the “ideal climate” exactly in his native country or climate zone. Even the geographer Ellsworth Huntington participated in this “climate-jingoism,” as it were, locating the world’s best climate in Newport, Rhode Island, a hundred miles from his home at New Haven.

Today, global health has dropped this idea of an ideal climate. The fact that “populations living in different climates have different susceptibilities, due to socio-economic reasons, and different customary behavioral adaptations” is generally acknowledged.¹⁵ Bodies and cultures adapt to the temperatures (and degrees of humidity) they are set in. However, modern medicine also concedes that human health and work performance are related to the temperatures of the environment. The biggest challenge, it seems, is posed by temperature extremes that are unusual in a certain environment, such as heat waves or periods of sudden and unfamiliar cold. Temperature

13

Charles Fourier, *The Social Destiny of Man, or: Theory of the Four Movements*, trans. H. Klapp Jr. (New York: R. M. Dewitt and C. Blanchard 1857), 42–44.

14

John Arbuthnot, *An Essay Concerning the Effects of Air on Human Bodies* (London: J. and R. Tonson, S. Draper, 1735). Montesquieu, *The Spirit of the Laws*, 301–302.

15

Gerd Jenditzky and Birger Tinz, “The Thermal Environment of the Human Being on the Global Scale,” in *Heat, Work, and Health: Implications of Climate Change*, special issue of *Global Health Action*, ed. Tord Kjellstorm (2009), 10–21, 10.

16

Ken Parsons,
*Human Thermal
 Environments: The
 Effects of Hot,
 Moderate, and
 Cold Environments
 on Human Health,
 Comfort, and Per-
 formance*, 3rd ed.
 (Boca Raton, FL:
 CRC Press, 2015),
 323–325.

stress (and especially “heat stress”) also depends on the specific vulnerability of certain groups (the elderly and fragile, or those who don’t know how to “acclimatize”).¹⁶ Thus temperatures are not just a physiological “given” but rather are culturally coded and subject to acclimatization. While Singaporeans (whether immigrants from Britain or Beijing, or born in the area) know just how to deal physically with the combination of heat and humidity, I did not miss a chance to do everything wrong. I ate too much, I ran hectically through the sunbaked streets in a misguided attempt to quickly find a taxi or a spot of shade, I did not wear a hat, I did my shopping around noon. My first day in the tropics I spent mostly in bed, dizzy and nauseated. Yet, not only did I slowly learn, but somehow my body did too. I wasn’t hungry anymore during the daytime, I didn’t feel like I was suffocating, and I instinctively started to adapt the relaxed, shade-seeking pace of the locals. Heat and cold, it seems, are codes the body learns to deal with. But they are also freighted with cultural significance. In the tropics, coolth is clearly a sign of status and wealth—hence the over-cooled hotel lobbies and luxury shopping malls. Only the poor dwell outside, in the sweltering heat.

It is this cultural significance of climate that inspires the type of artificial atmospheres that societies dream of, and sometimes even build. While our present times seem to fear nothing more than rising temperatures, the nineteenth century, to the contrary, was obsessed with the idea of a slowly cooling planet. Camille Flammarion, Gabriel Tarde, H.G. Wells, and others devised fictional scenarios of human life slowly dying off in an ever colder global climate. Yet, by this period, architects had discovered how to harness the heat of the sun in closed glass-covered spaces even with chilling outside temperatures. Starting in the seventeenth century with the invention of orangeries to protect Mediterranean plants in Northern Europe during the winter months, glasshouse architecture reached its heyday in the second half of the nineteenth century. The famous “Crystal Palace” built in London for the Great Exhibition



The Crystal Palace built by Joseph Paxton for the Great Exhibition, London, 1851.

of 1851—by Joseph Paxton, who, notably, was a horticulturist and cultivator of bananas—was the first cast iron and plate glass structure of its size, covering an immense space of nearly a million square feet and enclosing, together with the stalls of some fourteen thousand exhibitors, several high elm trees. It was a ventilated and warm space like a giant marketplace or town square, full of plants, shops, and people, yet protected from the rain, cold, and wind of British weather. The Crystal Palace offers the pleasures of being “outside” without the discomfort of bad weather or seasonal temperatures. The nineteenth century also saw the birth of covered passages, gigantic imperial greenhouses, elegant shopping malls—all ways to stroll the streets of a city or to roam the world of exotic plants without being exposed to meteorological surprises. Little wonder that the “Famillistère,” built by the industrialist J.P. Godin on the basis of Fourier’s social thought, included a glassed-in central court.

In the twentieth century, these capsules of ever-pleasant climate have morphed into giant covered theme parks, Buckminster Fuller’s geodesic domes, or the *Biosphere II* research project. Glass enclosure offers a world “outside”—streets, trees, marketplaces, cafés, town squares, and various forms of “wild nature”—yet contained by a sphere that locks out the challenges of natural climate. These are architectures of a locked-in outside, a stabilized nature deprived of anything unforeseeable or uncomfortable. Specifically in the greenhouse architecture at the zenith of colonialism toward the end of the nineteenth century, the “nature” captured inside the glass sphere is exotic, allowing the visitor to not only look at exotic plants and flowers but also to experience the exotic climate of tropical rainforests or deserts. “In their greenhouses,” Sloterdijk remarks, “the Europeans started a series of successful experiments on the botanical, climatic, and cultural implications of globalization.”¹⁷ Once it is possible to take a short Sunday family jaunt to the sweaty heat of Malaysia or to endure the aggressive dryness of the Sahara for some ten minutes, climate becomes an *option*. It ceases to be the inevitable atmosphere of a given locale, an element of reality that comes part and parcel with being in a specific place. Glass architecture thus creates “atmotopes,” as Sloterdijk calls them—zones of a carefully manipulated climate, flooded with natural sunlight, overgrown with plants, and populated with humans (and sometimes animals). Spaces that seem to be open, transparent, and airy, yet hermetically sealed from the outside air. They are artificial atmospheres that experiment on the artificiality of nature itself.

Today, climate is, except for the exotic options in greenhouses and zoos, well on its way to becoming globally standardized. Landing in Singapore places you in the same 72 degrees Fahrenheit with 50 percent humidity as landing in Moscow; working in an office in Montreal has you sit in the same climate as in Dubai. (This temperature standard is, by the way, adapted to middle-aged men and generally slightly too cold for women.) It is a culture of stabilized and standardized climate, which architecture “makes real” by creating smaller or larger pods of identical air all over the planet—a standard set by European and American ideas of ideal climate. It is also based on a Northern/Western idea of efficiency and performance, a nine-to-five lifestyle that needs no siesta or summer break. The modern ideal of open spaces and glass walls means that architects continue building huge office spaces with glass facades that require enormous energy to keep the temperatures inside stable. Sometimes a small fraction of this energy consumption is gained by solar panels to earn these buildings the label of “sustainable.” Today, these atmotopes grow larger and larger. Ironically, even without the sexual and social liberation of



"Cooled Conservatories," Gardens by the Bay, WilkinsonEyre Architects, Singapore, 2006–2012. Courtesy of WilkinsonEyre.

Fourier's dreams, his vision of a homogenized global climate is about to come true. The irony is that we are getting less and less able to tolerate the very same warming temperatures that we are creating, largely through the massive CO₂ output of air conditioning technology itself. As early as 1992, the British economist Gwyn Prins found that "the physical addiction to air-conditioned air is the most pervasive and least noticed epidemic in modern America."¹⁸

Taking climate advice from an inhabitant of Great Britain might not come naturally to people living in Dubai, Bangkok, or Phoenix. Yet, even youngsters in the tropics are growing more and more intolerant to temperatures above 80 degrees Fahrenheit. What my first and slightly traumatic encounter with tropical heat made me understand was the extent to which climate not only shapes our physical well-being and performance, but also our lifestyles. The alleged "laziness" of Southeast Asians or Africans that infuriated colonial officials, the Mediterranean "siesta" or preponderance for very late meals, all these cultural practices are elements of a climate culture or, as it were, a "climatic intelligence." Dwelling as we do in globally standardized air, we are about to lose this climatic intelligence. We try to run through the streets of Singapore as if we were in Berlin or London. Wherever we go, we tend to count on the temperatures and humidity of a mild Californian day; everything else is an aberration. Our world "outside" has become a climate-controlled interior which we only leave for occasional adventure trips into more extreme climates. The time we spent between the airport door and the cab, the cab and the office, the office and our home gets shorter and shorter. While we're heating the planet by cooling our climate-controlled life-world, it might be worth stepping out into the very wet, very cold, very hot, very dry air that is waiting for us.

Eva Horn is a professor of German literature and cultural theory at the German Department of the University of Vienna, Austria. She has taught at the Universities of Konstanz, Basel, Frankfurt/Oder, NYU, and Columbia University. She is the author of *The Secret War: Treason, Espionage, and Modern Fiction* (Northwestern University Press, 2013), and *Zukunft als Katastrophe* (Fischer, 2014). Her current research revolves around a cultural history of the concepts and representations of climate.

18

Gwyn Prins, "On Condis and Coolth," in *Energy and Buildings*, vol. 18, no. 3–4 (1992): 251–258.



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