

Our Weather: A Selection

Compiled by Jeffrey Kastner and Sina Najafi for Cabinet magazine's special issue on "Weather" (no. 3, Summer 2001)

First, then, the reason why the blue expanses of heaven are shaken by thunder is the clashing of clouds soaring high in the ether, when conflicting winds cause them to collide. A thunderclap does not issue from a clear stretch of sky; the normal source of that terrific crash and roll is the point where the advancing columns of cloud are most densely serried. Clouds cannot be composed of such dense bodies as make up stones or logs, nor of such flimsy ones as mist and drifting smoke. In the one case, they would be forced to fall like stones by the drag of their dead weight; in the other, they would be no better able than smoke to cohere or to contain icy snow and showers of hail. The noise they make above the levels of the outspread world is comparable to the intermittent clap, of the awning stretched over a large theatre, when it flaps between poles and cross-beams; or to the loud crackling, reminiscent of rending paper, that it makes when riotous winds have ripped it. You can pick out the former sound in thunder, and you hear it again when hanging clothes or flying scraps of paper are whipped and whirled by the wind and swished through the air. At other times it happens that the clouds cannot so much collide head-on as pass side by side on different courses, scraping their bodies together protractedly. That is when our ears are rubbed by that dry crackling sound, long drawn out, until the clouds have drifted out of close quarters.

Lucretius, *On the Nature of Things*, c. 50 B.C., trans. Ronald Latham, (Hammondsworth & Baltimore: Penguin, 1951)

More people died in the Galveston hurricane [of 1900] than in all the other violent storms mentioned in this book put together...A few members of the staff of the Weather Bureau had an inkling that a storm was brewing. Sailors visiting the local houses of ill repute told women there that their ships had come through "sheer hell." Someplace out there was a storm of gigantic proportions. The meteorologist at the Weather Bureau had already received cables informing them that a hurricane had devastated Trinidad. They knew that it was wandering around, either someplace in the Gulf of Mexico or the Caribbean Sea. But where? In those days, before the time the airplane patrols, radar, and satellites, it was impossible to follow a storm. Hurricanes moved faster than the information about them. Then the men at the Weather Bureau saw the barometer fall, the wind speed change, the humidity go up. They also noted a change in the sea waves beating on the Galveston beaches...

Acting on information given by the Weather Bureau, the local newspaper published a forecast for the next day: hurricane. There it was in black and white. Anyone who took heed of the notice and left had no problems and was sure of survival. Regrettably, almost everyone ignored the warning. Only a handful of people left the island on which the Galveston was located. In fact, many took excursion trains *to* the city...

Meteorologists watched the barometer fall. It hit 28.5 inches and kept falling. The winds rose. By early afternoon they hit hurricane force. Howling winds swept the island. Water rose onto the beaches. Tourists realized that they were in for more excitement than they had ever bargained for. Things began to fly through the air: papers, lawn furniture, tree limbs. People ran. Telephone poles and wires fell down, hitting some pedestrians...

The waves grew larger and larger. The tide went up and water swept into the city. At first it lapped over the wharves, then it flooded shanties, harborside bars, warehouses. Thousands of poor people lived by the water. Their houses were no longer a safe refuge. Their only hope was to run for it to the richer sections of town, farther inland...

A great number of poor people made it to the solid granite homes of the rich, which were located away from the water. Although this was sixty years before the first civil-rights marches, the wealthy took in without exception every single person who asked for shelter... As the storm howled outside and windows began to break and the houses shake, rich and poor sang hymns together and held long prayer meetings. Outside they could hear the cries of the injured and dying...

People who survived the destruction of their homes, clung for dear life to roofs, to floating beams. Those who lived saw about them a terrible scene. Waves washed people off roofs; tossing beams knocked children out of the grip of their parents. Swimmers gave up and sank beneath the waves. The air was filled with flying debris, the howling noises of the winds, and the terrified screams of the dying.

Howard E. Smith Jr., *Killer Weather; Stories of Great Disasters* (New York: Dodd, Mead & Company, 1982)

It is a common opinion that the climates of the several States, of our Union, have undergone a sensible change since the dates of their first settlements; that the degrees both of cold and heat are moderated. The same opinion prevails as to Europe; and facts gleaned from history give reason to believe that, since the time of Augustus Caesar, the climate of Italy, for example, has changed regularly, at the rate of 1 degree of Fahrenheit's temperature for every century. May we not hope that the methods invented in later times for measuring with accuracy the degrees of heat and cold, and the observations which have been and will be made and preserved, will at length ascertain this curious fact in physical history?

Thomas Jefferson, "Jefferson's Summary of his Meteorological Journal for the Years 1810 through 1816 at Monticello," in *Jefferson's Garden Book*, annotated by Edwin Morris Betts (Philadelphia: American Philosophical Society, 1944)

I reverently believe that the maker who makes us all makes everything in New England but the weather. I don't know who makes that, but I think it must be raw apprentices in the weather-clerk's factory who experiment and learn how, in New England, for board and clothes, and then are promoted to make weather for countries that require a good article, and will take their custom elsewhere if they don't get it. There is a sumptuous variety about the New England weather that compels the stranger's admiration—and regret. The weather is always doing something there; always attending strictly to

business; always getting up new designs and trying them on the people to see how they will go. But it gets through more business in spring than in any other season. In the spring I have counted one hundred and thirty-six different kinds of weather inside of four-and-twenty hours. It was I that made the fame and fortune of that man that had the marvelous collection of weather on exhibition at the Centennial, that so astounded the foreigners. He was going to travel all over the world and get specimens from all the climes. I said, "Don't you do it; you come to New England on a favorable spring day." I told him what we could do in the way of style, variety and quantity. Well, he came and he made his collection in four days. As to variety, why, he confessed that he got hundreds of kinds of weather that he never heard of before. As to quantity—well, after he had picked out and discarded all that was blemished in any way, he not only had weather enough, but weather to spare; weather to hire out; weather to sell; to deposit, weather to invest, weather to give to the poor.

Mark Twain, "Speech on the Weather," 1876, *The Family Mark Twain* (New York: Harper, 1935)

Church bells and gunshots to create noises to drive the evil spirits from clouds were used fairly extensively in the middle of the eighteenth century. Most of this activity was intended to prevent the fall of damaging hail...Albert Stiger, the mayor of the town of Windisch-Feistritz, designed a special, particularly noisy cannon and set up a network of thirty-six of them to protect the valleys of the district.

The results during the first year of operation were spectacular. No hail damage occurred. The news spread rapidly all over Europe and Stiger's methods were widely copied. But over the next few years results were mixed. In some places there was less hail and in others more hail. The believers were quick to explain the good results in terms of the efficacy of the cannons, the poor results on improper use of the cannons.

By 1902, the Austrian Government still was not convinced of the worth of the hail cannons and was concerned about the number of casualties. In 1900, for example, eleven people were killed and sixty seriously injured because of accidents in the course of storm bombardments.

An international conference was called to judge the value of the artillery approach to hail suppression. With only a few dissenters, it was concluded that the method could not be ruled out as ineffective, but rather that some carefully controlled tests could be carried out.

Two areas were selected, one in Austria, the other in Italy. Guns and manpower were supplied and the tests began. After two years of operation, the inability of the cannons to prevent the fall of hail was demonstrated by the occurrence of several destructive hailstorms over both areas. According to B. Oddie, in 1907, Austrian professor J. M. Pertner, summarizing the results of the tests, wrote the following:

For all scientific purposes and indeed for all objectively thinking agriculturalists, the matter is settled. We are justified by the total failures at Windisch-Feistritz and Castel-Veneto as well as by the failure, demonstrated in Italy, of rockets and bombs, in saying that the end of “weather shooting” has been sealed.

Louis J. Battan, *Harvesting the Clouds* (New York: Doubleday & Company, Inc., 1969)

We have attempted to discover how the environment, and especially how the glacial period must have influenced the evolution of human character. We have found that this analysis seems to shed important light upon the origin of civilization and upon the present qualities of various races in Asia, Europe, North America, and other continents. We might have gone on to show that in most extreme deserts, and especially in the hotter deserts such as those of Arabia, the Sahara, and those south of the equator, the stress of life is so great that a repressive evolution seems to occur. There, as in extremely cold regions, the conditions under which the environment acts as a stimulant are passed, and retrogression begins.

Ellsworth Huntington, *The Character of Races* (New York: Scribner, 1925)

I worked in the Congo on the left bank of the Kasai river, among the Lele. On the other bank of the same river lived the Bushong, where my friend Jan Vansina worked a little later on. Here were two tribes, next-door neighbors, who celebrated their cold and hot seasons at opposite points in the calendar. When I first arrived, green to Africa, the Belgians said how wise I had been to arrive in the cold season: a newcomer, they said, would find the hot rainy season unbearable. In fact it was not a good time to arrive, because all the Lele were working flat out to clear the forest and fire the dead wood, and then to plant maize in the ash. No one but the very aged and the sick had time to talk to me and teach me the language, until the rains arrived and ended their period of heavy work. When I knew the language better, I learnt of a total discrepancy between the European and native assessment of the weather. The Lele regarded the short dry season as unbearably hot. They had their sayings and their rules about how to endure its heat. ‘Never strike a woman in the dry season’, for example, ‘or she will crumple up and die, because of the heat.’ They longed for the first rains as relief from the heat. On the other bank of the Kasai, the Bushong agreed with the Belgians that the dry season was pleasantly cool and they dreaded the onset of the first rains.

Mary Douglas, “Environments at Risk,” lecture given in October 1970, reprinted in *Mary Douglas, Implicit Meanings* (London: Routledge, 1999)

For Lieutenant Colonel William H. Rankin, a decorated veteran of World War II and the Korean War, the sunny Sunday of July 26, 1959, promised to be routine in every respect. He was scheduled to make a simple 600-mile navigational flight from South Weymouth, Massachusetts, to Beaufort, North Carolina, in his F8U Crusader jet fighter...

Nearing Norfolk at about 6 p.m., Rankin saw the black and roiling mass of a thunderstorm, its tips slightly higher than the predicted 40,000 feet. Then, as he climbed to 47,000 feet, Rankin heard a thump and a rumbling sound within his plane; the bright red fire-warning light flashed on, and the aircraft rapidly lost power. Examination of the wreckage later disclosed that the plane had suffered an engine seizure, caused by extreme friction of unknown cause. Some 20 seconds after he had first heard the ominous noises, while he was still at 47,000 feet, Rankin ejected.

“I had never heard of anyone’s having ejected at this altitude,” he wrote later. “The temperature outside was close to 70° below zero. I had on only a summer-weight flying suit, gloves, helmet and marine flying shoes.” As he hurtled through the air, Rankin almost instantly felt an intense stinging sensation that quickly turned to “a blessed numbness.” At the same time, the sudden change from the controlled atmosphere of the cockpit to the rarified upper air caused an agonizing decompression. “I could feel my abdomen distending, stretching, until I thought it would burst,” he recalled. “My eyes felt as though they were being ripped from their sockets, my head as if it were splitting into several parts, my ears bursting inside, my entire body racked by cramps.”

Surprisingly, Rankin’s free fall into the thundercloud brought relief. His parachute, equipped with a barometric sensing device, was designed to open automatically at 10,000 feet. The denser air eased both the cold and the pain of decompression—and even as he plummeted at a rate of 10,000 feet per minute, Rankin had enough left of his senses to glance at his wrist watch. He had ejected at exactly 6 o’clock, and although it was difficult to see in the dense clouds, the luminous hands of the watch now seemed to indicate about 6:05. A few seconds later, Rankin’s chute opened.

Assuming that he was now at 10,000 feet and calculating that he would require about 10 relatively tranquil minutes to reach the ground, Rankin began to relax. In fact, his awful ride had only begun—the parachute’s triggering sensor had evidently been fooled by the barometric pressure within the cloud—and Rankin was about to enter the heart of the storm.

“A massive blast of air jarred me from head to toe,” he recalled. “I went soaring up and up and up. Falling again, I saw that I was in an angry ocean of boiling clouds—blacks and grays and whites, spilling over one another, into one another, digesting one another.

“I became a molecule trapped in the thermal pattern of the heat engine, buffeted in all directions—up, down, sideways, clockwise, counterclockwise, over and over. I zoomed straight up, straight down, feeling all the weird sensations of G forces—positive, negative, and zero. I was stretched, slammed and pounded. I was a bag of flesh and bones crashing into a concrete floor.

“At one point, after I had been shot up like a shell leaving a cannon, I found myself looking down into a long, black tunnel. Sometimes, not wanting to see what was going on, I shut my eyes. This was nature’s bedlam, a black cageful of screaming lunatics, beating me with big flat sticks, roaring at me, trying to crush me. All this time it had been

raining so torrentially that I thought I would drown in mid-air. Several times I held my breath, fearing to inhale quarts of water.”

At last, Rankin sensed that the turbulence was diminishing. Opening his eyes, he took a quick look—and saw beneath him a patch of green earth. Minutes later—after smashing into the trunk of a tree—he came to ground. The time was 6:40 p.m.

After his frightful experience, pilot Rankin was much the worse for wear: His body was covered with bruises and lacerations; during decompression his torso had swelled so much that it now bore imprints from the stitched seams of his flying suite; ligaments, joints and muscles were strained and sprained; he suffered temporary amnesia and loss of equilibrium. But he recovered rapidly and was soon flying again. To the end of his days, however, he would surely carry with him the memory of those minutes within what meteorologists routinely describe as an “isolated thunderstorm.”

A. B. C. Whipple, *Storm* (Alexandria, Virginia: Time-Life Books, 1982)

On arrival at a town with which he is unfamiliar, a physician should examine its position with respect to the winds and to the rising of the sun....

A city that lies exposed to the hot winds—these are those between the winter rising of the sun and its winter setting—when subject to these and sheltered from the north winds, the waters here are plentiful and brackish, and must be near the surface, hot in summer and cold in winter. The heads of the inhabitant are moist and full of phlegm, and their digestive organs are frequently deranged from the phlegm that runs down into them from the head. Most of them have a rather flabby physique, and they are poor eaters and poor drinkers. For men with weak heads will be poor drinkers, as the after-effects are more distressing to them...

Those that lie towards the setting of the sun, and are sheltered from the east winds, while the hot winds and the cold north winds blow past them—these cities must have a most unhealthy situation...In the summer cold breezes blow in the morning and there are heavy dews; for the rest of the day the sun as it advances towards the west thoroughly scorches the inhabitants, so that they are likely to be pale and sickly, subject to all the diseases aforesaid, for none are peculiar to them. They are likely to have deep, hoarse voices, because of the atmosphere, since it is usually impure and unhealthy in such places.

Hippocrates, *Vol. 1, c. 420 B.C.*, trans. W. H. S. Jones (Cambridge, Mass.: Harvard University Press, 1984)

When, therefore, the sun in its circular course approaches the earth, its heat draws up the moist exhalation; when it recedes the vapour thus drawn up is condensed again by the resulting cold into water. (This is why there is more rain in the winter, and more at night than by day—though this is not commonly supposed to be so because rainfall at night more often passes unnoticed than by day.) The water thus formed falls and is all

distributed over the earth. Now there is in the earth a large amount of fire and heat, and the sun not only draws up the moisture on the earth's surface but also heats and so dries the earth itself; and this must produce exhalations which are of the two kinds we have described, namely vaporous and smoky. The exhalation containing the greater amount of moisture is, as we have said before, the origin of rain water: the dry exhalation is the origin and natural substance of winds. That this must be the case is evident from the facts. For the exhalations that produce rain and wind must differ and it is not only possible but necessary that the sun and the warmth in the earth should produce the exhalations.
Aristotle, *Meteorologica*, c. 344 B.C., trans. H. D. P. Lee (Cambridge, Mass.: Harvard University Press, 1987)

Lightning sometimes gives a warning a few seconds before it strikes. If your hair stands on end during a thunderstorm immediately squat as low as possible since this is an indication that you are about to be struck by lightning. If you lie flat on the ground the difference in potential between your head and feet may be enough to kill you if the strike is close to you.

It is possible to revive many people who have been struck by lightning and are apparently dead. A lightning strike is likely to stop the heart. If there is no other damage to vital organs the victim may be revived by immediate application of cardiopulmonary resuscitation. This should be repeated until an ambulance arrives.

Some people have survived more than one lightning strike. The Guinness Book of World Records lists a man who has survived five lightning strikes. During his job as a park ranger in Virginia he lost his big toenail in 1942 to lightning, his eyebrows in 1969, had his shoulder seared in 1970, and his hair set on fire in 1972 and 1973.

Lightning strikes have been known to be beneficial. In 1782 a paralyzed member of the household of the Duke of Kent was struck by lightning. He was immediately cured of the paralysis.

More recently in 1980 lightning struck Edwin Robinson of Falmouth, Maine who was blind and deaf from a head injury suffered in 1971. His sight and hearing returned slowly within a few months. When in New York for an appearance on ABC-TV's "Good Morning America" he said his scalp "felt funny, like whiskers on my face." The lightning strike was also changing his baldness to a thick head of hair at age 62.

Joe R. Eagleman, *Severe and Unusual Weather* (New York: Van Nostrand Reinhold Company, 1983)

Promising that under his system "weather will be made to order," Sykes offered to install his process of full weather control for businessmen in Columbia for one hundred twenty-five thousand dollars a month, over a period of no longer than six months. Early in 1931 he proposed providing the city of New York with twelve inches of rain spread over ninety days, at the rate of twenty-five thousand dollars an inch or a total of at least three

hundred thousand dollars. In neither case was his proposition accepted, but the Weather Bureau grew increasingly uneasy. Finally, in the spring of that year, acting on a request of the head of the Department of Geology at the University of Michigan, Charles Marvin turned the matter over to the Post Office Department to determine if Sykes was securing money under false pretenses. The postmaster general responded that Sykes and his associates operated primarily without use of the mails; hence evidence was not sufficient to warrant prosecution. At that point "Dr." George Ambrosius Immanuel Morrison Sykes dropped from public view.

Clark C. Spence, *The Rainmakers* (Lincoln: University of Nebraska Press, 1980)

It works out very neatly: The climate shift reduced the salinity [levels in the Baltic Sea in the 15th century], the lowered salinity reduced the herring, the lost herring weakened the Hanse towns, the weakened towns failed to unify Germany, German disunity led to religious war, which led to foreign intervention, which led to devastation and worse disunity, which led to militarism and the compulsion toward discipline and order, which led to Bismarck, "Blood and Iron," and, ultimately, Hitler.

Do I believe this climate fantasy? Well, a little.

Robert Claiborne, *Climate, Man, and History* (New York: W.W. Norton & Co., 1970)

The mere narcotizing effect which cosmic forces have on a shallow and brittle personality is attested in the relation of such a person to one of the highest and most genial manifestations of these forces: the weather. Nothing is more characteristic than that precisely this most intimate and mysterious affair, the working of the weather on humans, should have become the theme of their emptiest chatter. Nothing bores the ordinary man more than the cosmos. Hence, for him, the deepest connection between weather and boredom. How fine the ironic overcoming of this attitude in the story of the splenetic Englishman who wakes up one morning and shoots himself because it is raining.

Walter Benjamin, *The Arcades Project*, trans. Howard Eiland and Kevin McLaughlin (Cambridge, Mass. and London: Belknap/Harvard University Press, 1999)

There was a depression over the Atlantic. It was travelling eastwards, towards an area of high pressure over Russia, and still showed no tendency to move northward around it. The isotherms and isotheres were fulfilling their functions. The atmospheric temperature was in proper relation to the average annual temperature, the temperature of the coldest as well as of the hottest month, and the a-periodic monthly variation in temperature. The rising and setting of the sun and of the moon, the phases of the moon, Venus and Saturn's rings, and many other important phenomena, were in accordance with the forecasts in the astronomical yearbooks. The vapour in the air was at its highest tension, and the moisture in the air was at its lowest. In short, to use an expression that describes the facts pretty

satisfactorily, even though it is somewhat old-fashioned: it was a fine August day in the year 1913.

Robert Musil, *The Man Without Qualities*, trans. Eithne Wilkins & Ernst Kaiser (London: Minerva, 1995)

Let us recall the difference between modern satellite meteorology and the traditional wisdom about the weather, which ‘thinks locally’. Modern meteorology assumes a kind of metalanguage view on the entire atmosphere of the Earth as a global and self-enclosed mechanism, while traditional meteorology involves a particular viewpoint within a finite horizon: out of some Beyond which, by definition, remains beyond our grasp, clouds and winds arrive, and all one can do is formulate the rules of their emergence and disappearance in a series of ‘wisdoms’ (‘If it rains on the first day of May, beware of drought in August’, etc.) The crucial point is that ‘meaning’ can emerge only within such a finite horizon: weather phenomena can be experienced and conceived as ‘meaningful’ only in so far as there is a Beyond out of which these phenomena emerge, following laws which are not directly natural laws—the very lack of natural laws directly connecting actual weather here and the mysterious Beyond sets in motion the search for ‘meaningful’ coincidences and correlations. The paradox is that although this traditional ‘closed’ universe confronts us with unpredictable catastrophes which seem to emerge ‘out of nowhere’, it none the less provides a sense of ontological ‘safety’, of dwelling within a self-enclosed finite circle of meaning where things (natural phenomena) in a way ‘speak to us’, address us.

Slavoj Žižek, *The Plague of Fantasies* (London: Verso, 1997)

Homer relates how a shower of blood fell upon the heroes of Greece, as a presage of death for many of their number... There was a shower of blood when Tatius was murdered...

In the early part of July, 1608, one of these pretended showers of blood fell in the outskirts of Aix (Provence), and this shower extended to the distance of half a league from the town. Some priests, either being themselves deceived or wishing to work upon the credulity of the people, at once attributed it to diabolic influence. Fortunately, a person of education, M.de Peiresc, examined very minutely into this apparent prodigy, studying in particular some drops that fell upon the wall of the cemetery attached to the principal church in Aix. He soon discovered that they were in reality the excrements of some butterflies which had been noticed in large numbers during the early part of July...

On March 14, 1813, one of these strange red showers fell in the kingdom of Naples and the Two Calabrias. Sementina examined and analyzed it, rendering the following account to the Naples Academy of Sciences: “An east wind had been blowing for two days, when the inhabitants of Gerace noticed a dense cloud moving toward the sea. At 2 P.M. the sea became calm, but the cloud already covered the neighboring mountains and began to intercept the light of the sun. It’s color, originally a pale red, soon became as deep as fire. The town was then plunged into such profound darkness that, about 4 P.M., it was necessary to light candles in the houses. The inhabitants, alarmed by the obscurity and the

color of the cloud, rushed in crowds to the cathedral to pray. The obscurity increased, and the whole sky seemed red as fire; thunder began to growl; and the sea, though six miles distant, added to the general alarm by the roar of its waves. There then began to fall large drops of reddish rain, which many persons took for blood, and others for fire. At last, as night advanced, the air became clear, the thunder and lightning ceased, and the inhabitants regained their self-possession.”

Camille Flammarion, *The Atmosphere* (New York: Harper Brothers, 1874)

Where, if not from the Impressionists, do we get those wonderful brown fogs that come creeping down our streets, blurring the gas-lamps and changing the houses into monstrous shadows? To whom, if not to them and their master, do we owe the lovely silver mists that brood over our river, and turn to faint forms of fading grace curved bridge and swaying barge? The extraordinary change that has taken place in the climate of London during the last ten years is entirely due to this particular school of Art... At present people see fogs, not because there are fogs, but because poets and painters have taught them the mysterious loveliness of such effects. There may have been fog for centuries in London, I dare say there were. But no one saw them, and so we do not know anything about them. They did not exist until Art invented them.

Oscar Wilde, “The Decay of Lying,” 1889, in *The Writings of Oscar Wilde* (Oxford: Oxford University Press, 1989)

The tests they gave me were the ones routinely given in the first hours after a lightning injury: another CAT scan to check for cerebral bleeding, X-rays for broken bones, blood panels to monitor kidney function and cardiac enzymes, EKGs for the late onset of arrhythmias and changes that might indicate tissue damage in the heart or lungs, and an overdue EEG to make sure my blackouts weren't epileptic seizures. Lying on a small bed with wires attached to my skull, I watched white printouts of brain waves stack up on a table beside me and wished the motions of the mind, the hieroglyphics of imagination, were as accessible to me...

Direct hits by lightning can cause unconsciousness and coma, cardiopulmonary arrest, or ventricular fibrillation, which is cardiac arrest, and automatic nervous system damage. As millions of volts of electricity pass through the body, brain cells are burned, “insulated,” or bruised, which can result in cerebral edema, hemorrhage, and epileptic seizures. Passing down through the body, electricity hits the soft tissue organs—heart, lungs, and kidneys—causing contusions, infarctions, coagulations, or cellular damage that can lead to death. Tympanic membranes in the ear sometimes burst from the explosion of thunder, and cataracts develop if the flash has been intensely bright. Cases of leukemia have been recorded, and when pregnant women are hit, either spontaneous abortion occurs, or else they carry the baby to full term but after delivery the infant dies.

Gretel Ehrlich, *A Match to the Heart* (New York: Penguin, 1994)

Cambyses detached a body of 50,000 men with orders to attack the Ammonians, reduce them to slavery, and burn the oracle of Zeus.... It never reached the Ammonians and never returned to Egypt. There is, however, a story told by the Ammonians themselves and by others who heard it from them, that when the men had left Oasis, and in their march across the desert had reached a point about midway between the town and the Ammonian border, a southerly wind of extreme violence drove the sand over them in heaps as they were taking their midday meal, so that they disappeared forever...

The neighbors of the Nasamones are the Psylli - but they no longer exist. There is a story which I repeat as the Libyans tell it: that the south wind dried up all the water in their storage tanks, so that they were left with none whatever, as their territory lies wholly within the Syrtis. Upon this they held a council, and having unanimously decided to declare war on the south wind, they marched out to the desert, where the wind blew and buried them in sand. The whole tribe was wiped out, and the Nasamones occupied their former domain.

Herodotus, *Histories*, c. 445 B.C., trans. Aubrey de Selincourt, rev. John Marincola (London: Penguin, 1996)

If you find yourself running out of things to say, bring up the subject of the weather. Cynics regard this as a banal topic, but the fact is that no subject gets the people talking faster. Stop and think about it for a moment, and you'll begin to see a metaphysical, even religious quality to this preoccupation with wind-chill factors and Central Park snowfall accumulations. Weather is the great equalizer. There is nothing anyone can do about it, and it affects us all in the same way—rich and poor, black and white, healthy and sick. The weather makes no distinctions. When it rains on me it also rains on you. Unlike most of the problems we face, it is not a condition created by man. It comes from nature, or God, or whatever else you want to call the forces in the universe we cannot control. To discuss weather with a stranger is to shake hands and put aside your weapons. It is a sign of good will, an acknowledgement of your common humanity with the person you are talking to.

Paul Auster, "Gotham Handbook," in Sophie Calle, *Double Game* (London: Violette Editions, 1999)

... We have ventured to think of the moon, the other planets and their moons, and finally the fixed stars, as collaborating in the whole; and the human being, who necessarily refers everything to himself, goes on to flatter himself with the notion that the universe, of which he is but part, really exerts a special and noticeable affect on him.

In the fact of reason he may have given up his astrological whimsey; i.e., that the starry heavens rule the fate of man. Nonetheless, he could not drop the conviction that the planets (if not the fixed stars), or the moon (if not the planets), determine and define the weather in a regular way.

But we will reject any such effect and consider weather phenomena on the earth to be neither cosmic nor planetary; it is; it is our premise that they may be explained in purely tellurian terms.

Johann Wolfgang von Goethe, "Toward a Theory of Weather," 1825, in *Scientific Studies*, trans. Douglas Miller (New York: Suhrkamp Publishers, 1988)

It is a fact that several times in the summer there comes a wind from the direction of the sandy wastes that lie around this plain, a wind so overpoweringly hot that it would be deadly if it did not happen that, as soon as men are aware of its approach, they plunge neck-deep into the water and so escape from the heat. To show just how hot this wind can be, Messer Marco gives the following account of something that happened when he was in these parts. The king of Kerman, not having received the tribute due to him from the lord of Hormuz, resolved to seize his opportunity when the men of Hormuz were living outside the city in the open. He accordingly mustered 1,600 horse and 5,000 foot soldiers and sent them across the plain of Rudbar to make a surprise attack. One day, having failed through faulty guidance to reach the place appointed for the night's halt, they bivouacked in a wood not far from Hormuz. Next morning, when they were on the point of setting out, the hot wind came down on them and stifled them all, so that not one survived to carry back the news to their lord. The men of Hormuz, hearing of this, went out to bury the corpses, so that they should not infect the air. When they gripped them by the arms to drag them to their graves, they were so parched by the tremendous heat that the arms came loose from the trunk, so that there was nothing for it but to dig the graves beside the corpses and heave them in.

Marco Polo, *The Travels*, c. 1300, trans. Ronald Latham (NY: Penguin, 1958)

Summoned by the creaking of utensils, by their fulsome chatter, there arrived the powerful caravans of wind that dominated the night. An enormous, black, moving amphitheatre formed high above the city and began to descend in powerful spirals. The darkness exploded in a great stormy gale and raged for three days and three nights...

I ran barefoot to the window. The sky was swept lengthwise by the gusts of wind. Vast and silvery-white, it was cut into lines of energy tensed to the breaking point, into awesome furrows like strata of tin and lead. Divided into magnetic fields and trembling with discharges, it was full of concealed electricity. The diagrams of the gale were traced on it which, itself unseen and elusive, loaded the landscape with its power.

One could not see the gale. One could recognize its effect on the houses, on the roofs under which its fury penetrated. One after the other, the attics seemed to loom larger and to explode in madness when touched by its finger...

The gale blew cold and dead colors onto the sky—streaks of green, yellow and violet—the distant vaults and arcades of its spirals...

Night came. The wind intensified in force and violence, grew immeasurably and filled the whole area. It had now stopped visiting the houses and roofs and had started to build a many-storied, multi-level spiral over the city, a black maze, growing relentlessly upwards. From that maze it shot out along galleries of rooms, raced amid claps of thunder through long corridors and then allowed all those imaginary structures to collapse, spreading out and rising into the formless stratosphere...

We suddenly remembered that we had not seen father since the morning. He must have gone out very early to the shop, where the gale had probably surprised him and cut him off from home.

“He will not have had anything to eat all day,” mother wailed. The senior shop assistant, Theodore, volunteered to venture into the windswept night, to take some food to father. My brother decided to go with him.

Wrapped in large bearskin coats, they filled their pockets with flatirons and brass pestles, metal ballast to prevent them from being blown away by the gale. The door leading into the night was opened cautiously. No sooner had Theodore and my brother taken one step into the darkness, than they were swallowed up by the night on the very threshold of the house. The wind immediately washed away all traces of their departure. From the window one could not see even the light of the lantern which they had taken...

We stood behind the front door of the house and listened. In the lament of the gale one could hear all kinds of voices, questions, calls and cries. We imagined that we could hear father, lost in the gale, calling for help, or else that it was my brother and Theodore chatting unconcernedly outside the door. The sounds were so deceptive that Adela opened the door at one point and in fact saw Theodore and my brother just emerging, with great effort, from the gale in which they had sunk up to their armpits.

They came in panting and closed the door with difficulty behind them. For a moment they had to lean against it, so strong was the storming of the wind at the entrance. At last they got the door bolted and the wind continued its chase elsewhere.

They spoke almost incoherently of the terrible darkness, of the gale. Their fur coats, soaked with wind, now smelled of the open air. They blinked in the light; their eyes, still full of night, spilled darkness at each flutter of the eyelids. They could not reach the shop, they said; they had lost their way and hardly knew how to get back; the city was unrecognizable and all the streets looked as if they had been displaced.

Bruno Schulz, “The Street of Crocodiles,” 1934, in *The Complete Fiction of Bruno Schulz*, trans. Celina Wieniewska (New York: Walker and Company, 1989)

Thanks to Mats Bigert, Brian Conley, Kathleen Tobin, and Gregory Williams for their suggestions.