British Weather and the Climate of Enlightenment

Jan Golinski
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{ JAN GOLINSKI }

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IN MEMORIAM
Roy Porter (1946–2002)

Scholars of Enlightenment
Pray what was that man’s name,—for I write in such a hurry, I have no time to recollect, or look for it,—who first made the observation, “That there was great inconstancy in our air and climate?” Whoever he was, ’twas a just and good observation in him.—But the corollary drawn from it, namely, “That it is this which has furnished us with such a variety of odd and whimsical characters;”—that was not his;—it was found out by another man, at least a century and a half after him: Then again, . . . that this strange irregularity in our climate, producing so strange an irregularity in our characters,—doth thereby, in some sort, make us amends, by giving us somewhat to make us merry with when the weather will not suffer us to go out of doors,—that observation is my own;—and was struck out by me this very rainy day, March 26, 1759, and betwixt the hours of nine and ten in the morning.

**Laurence Sterne** · *The Life and Opinions of Tristram Shandy*
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THE WEATHER IS ALWAYS WITH US. Even though many of us in modern society spend most of our time indoors, we cannot escape it. Remarks about what it is doing or about to do smooth our everyday social interactions. Reports, observations, and predictions punctuate our daily routines. Extreme weather fascinates us with its uncontrollable violence, now brought near by television even when it occurs on the other side of the world. Modern technology has shielded us from some of these dangers; at least we can be forewarned of the approach of thunderstorms, hurricanes, floods, and tornadoes. But this increased knowledge has not necessarily brought increased security from the weather’s effects. In certain respects, modern society has placed itself more in the way of harm by the weather, which continues to force itself upon our notice and constantly threatens to disrupt our comfortable lives.

Quite a lot of attention has recently been devoted to the cultural significance of our weather worries.¹ In part, the preoccupation expresses prevailing concerns about modern life itself, which is thought to have exposed us to new hazards by trespassing upon the natural environment. As the French philosopher Michel Serres has put it, “Today our expertise and our worries turn toward the weather, because our industrious know-how is acting, perhaps catastrophically, on global nature.”² Recent disasters, such as Hurricane Katrina, along with more persistent anxieties about the influence of human activity on global climate change, have reinforced the point. Journalists and academics have echoed Serres’s suggestion that the weather’s intrusions—aside from their immediate, sometimes catastrophic impact on those directly affected—also raise the fundamental issue of humanity’s relationship to nature as a whole.³ The question is raised of the degree to which human beings have mastered the natural world and how we understand ourselves in relation to it. The weather confronts us with a challenge to the intellectual reach of modern science, to our technological capabilities, and, more basically, to our sense of ourselves as at home (or not) in our physical environment.

In this book, I take these concerns as an invitation to historical inquiry.
It seems worth asking how this situation came about. I propose that we look to the eighteenth-century Enlightenment as the era when fundamental characteristics of modernity and its symptomatic attitudes to the natural world were forged. I want to see how understandings and experiences of the weather figured in the process of enlightenment and modernization. I am focusing this inquiry on Britain, with some references to its overseas colonies. This is partly for pragmatic reasons of my own knowledge of the primary materials and archival resources. I am fully aware that aspects of Britain’s history in the eighteenth century, of its involvement in the Enlightenment, and indeed of its weather are unique. In fact, the specific features of the British cultural and social setting will be part of the story I shall tell. The focus on a single nation, though it yields in some respects a partial picture, enables me to give a richer account of the cultural meanings ascribed to the weather in this period.

The argument of the book has three strands. First, while the idea of climate is an ancient one, it was reconceived in the eighteenth century through systematic study that attempted to normalize the weather, to reduce it to some kind of regularity. This development began in Britain in the late seventeenth and early eighteenth centuries. Inspired by leading physicians and natural philosophers, observers for the first time devoted attention to recording the weather on a daily basis. Meteorological instruments, including thermometers and barometers, were introduced and widely circulated. The weather came to be attended to as an item of “news”: a topic of discussion in the new print media and a subject of public conversation. Through renewed attention to their weather, the British forged a new understanding of their climate, which became a component of the emerging sense of national identity. The British climate was regarded as a providential asset of the nation, a divine gift to the population’s health and prosperity.

Second, discourse about the national climate spoke to the British people’s sense of living at a time of significant historical change. Thinking and speaking about their weather, the British were also alluding to the processes that were changing their society, including those that we might say constituted the experience of enlightenment. Thus, in certain respects, attitudes to the weather and climate in the eighteenth century appear unmistakably modern. Enlightened investigators detached the weather from expectations of impending apocalypse or fears of divine punishments. They subjected it to routine, meticulously recording conditions on every day and measuring them with instruments. They insisted that the climate reflected the regular actions of physical laws that were manifestations of God’s providential benevolence. The climate assumed a fundamental role in Enlighten-
enment thought about society and history. It was recognized as a material influence on human health and welfare that significantly affected the development of the world's peoples. Eighteenth-century thinkers speculated about how cultural and material causes interacted in social progress; they bequeathed to subsequent social theory an important legacy of reflection on the role of the physical environment in human history.

On the other hand, however—and this is the third strand of the argument—thoughtful people were constantly made aware in this connection of the ways in which the process of enlightenment fell short of its most ambitious goals. The weather could never be entirely reduced to regularity; its anomalies and extremes continued to spring surprises. And when they did so, they evoked attitudes among the masses that enlightened intellectuals tended to deplore as primitive superstitions. Even British society showed a distinctly unenlightened face when confronted with violent or unusual weather. In other respects, too, the climatic influences on human life showed how much it was determined by natural forces that would not submit to the powers of reason. Thus, reflecting on climate and the weather, enlightened intellectuals recognized the constraints on rationality, the mind's dependence on the physical body, the limited accomplishments of cultural and social reform, and generally the interdependence—the continuing inextricability—of nature and culture.

It is this which makes the eighteenth century an appropriate mirror of our own age and allows a study of the British experience to yield up its more general implications. To this day, the weather remains unpredictable to a significant degree. Its occasional manifestations of extreme violence appear as reminders of the powers of nature that evade human control. It continues to affect our health and emotional state in ways we cannot entirely understand and to unsettle our confidence in the power of reason. Our society's vulnerability to meteorological crises and catastrophes shows that scientific rationality has never completely mastered the natural environment. Hence, the weather has come to bear the burden of some of our most profound concerns about modern society, its past transgressions, and its future prospects. The basic claim of this book is that contemporary attitudes to the weather—our unease about its dangers, our sense that these reflect something profound about our relationship with nature—are not as new as we might imagine. Eighteenth-century intellectuals already realized that the weather's unpredictability demonstrated the limits of human understanding and control of nature. Even while they worried that social change was leading them away from a natural mode of life, they were obliged to recognize the persistent power of the natural forces that
underpinned human existence. Anxieties about weather and climate expressed both a sense of the incompleteness of the process of enlightenment and qualms about the consequences of its successes. Our current weather worries look quite familiar in this context. Looking back to the eighteenth century from this standpoint, one might adopt Immanuel Kant’s famous judgment and say that we still live in an age of enlightenment but not yet in an enlightened age.

It is a pleasure to acknowledge the many debts I have accumulated over the years it has taken me to complete this book. My home institution, the University of New Hampshire, has substantially assisted in several ways. I was appointed Director of the UNH London Program for the year 2000–2001, which allowed me a period of research in London libraries and archives. I received a fellowship from the Faculty Scholars Fund for the spring semester of 2004 and a sabbatical leave in the fall of that year. I am also grateful to the James Fund of the Annual Alumni Gifts Fund of the College of Liberal Arts for a subvention to support publication of the book, and to the Rutman Fund of the Department of History for a grant to help with the cost of illustrations. I particularly appreciate the work of the Dean of Liberal Arts, Marilyn Hoskin, and the Chair of the Department of History, Janet Polasky, in helping secure these grants. I also wish to thank my colleagues in the Department of History and in the Humanities Program for their encouraging and probing responses to presentations on the project.

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Early in the twenty-first century, eighteenth-century studies suffered the loss of two wonderful scholars, Michael DePorte and Roy Porter. Both were generous with their enthusiasm for this project, though sadly neither lived to see the final result. In dedicating the book to their memory, I want to record how the example of their work and friendship continues to inspire those who knew them.
Weather and Enlightenment

The weather is the primary sign of the inextricability of culture and nature. Jonathan Bate · “Living with the Weather”

stirring the ice in his inkpot, his fingers numb with cold, a writer living in Worcestershire in the west of England in January 1703 began to compile a diary of the weather. His daily journal, with its vivid and meticulous descriptions of atmospheric events, has survived down the centuries, though it was almost entirely unread and the name of its author was long forgotten.1 As he wrote, the diarist tried to answer questions that were to preoccupy intellectuals in the century then dawning and into our own times: How are atmospheric phenomena to be explained? Does the weather exhibit regular patterns over the long run, or will it always remain unpredictable? How frequently do violent storms occur, or extremes of heat and cold? Are popular sayings and beliefs about the weather worth attention, or should they be dismissed as simple superstition? How does the weather affect people’s health or mood? The diarist could not have known,
when he started his journal in January, that November 1703 would bring an exceedingly violent storm, the most damaging ever recorded in the British Isles. Toward the end of the year, as he surveyed the storm’s damage to his own property and read accounts of death and destruction from elsewhere, the writer recorded his melancholy reflections on human weakness in the face of nature’s powers.

Eighty years later, another dramatic weather event seized the attention of the British population and reminded them of their vulnerability. During June 1783 a gloomy haze settled in the atmosphere, darkening the sun for weeks. The air became increasingly sultry and oppressive. Undisturbed by wind or rain, the haze made breathing difficult, rotted foodstuffs, and slowed the growth of crops. Many observers recorded the phenomenon, though no one understood the connection with what was later found to have been the cause: a volcanic eruption in Iceland. In Hampshire, the vicar of Selborne, Gilbert White, wrote that the event awakened apocalyptic fears among the populace. At a school near Oxford, a Quaker boy, Luke Howard, was inspired by the anomalous season to a lifelong interest in the weather. Howard later settled in Essex, became a passionate observer of the atmosphere, and invented new ways to record and analyze it. He is best known for developing the nomenclature still used today to classify clouds. He also understood that meteorology intersects with sociology, that finding out about the weather involves listening to what people say about it. In his writings, he often discussed the ways people talked about the weather and how they tried to make sense of it.

These two observers, the Worcestershire diarist and the Quaker meteorologist, were among many British men and women who pioneered the study of weather in the age of enlightenment. As their country took its first steps toward modernization, with burgeoning commerce and the beginnings of revolutionary growth in agriculture and industry, new ideas about the weather came to the fore, assuming a place in the beliefs of a people increasingly confident of their destiny as a civilized nation. As they came to think of themselves as an enlightened people, the British developed a sense of what their homeland owed to its weather. As Howard remarked, “Habit completely reconciles the Englishman to a sky, which rarely glows for a week together with the full sun, and which drips, more or less on half the days of the year.” Far from being a handicap, however, the damp and chilly air was invigorating, and “incessant changes” of weather were mentally stimulating. The changeableness of atmospheric conditions on the island was generally thought to be a positive influence on the spirit of the people. British writers decided they would rather not have tropi-
cal sunshine or heat, which brought with them lassitude, immorality, and disease. A mutable but temperate climate—notwithstanding occasional anomalies—was thought to be good for the country’s bustling commercial life and its population’s health.

Many of the attitudes to the weather common in Britain today were established during this period. The climatic peculiarities of the island became embedded in the national culture. Sitting as it does between the westerly air currents of the North Atlantic and the more stable atmospheric patterns of the European continent, Britain experiences rapid changes in weather conditions within fairly narrow limits of temperature. It rains a lot, but intermittently and usually not very heavily. Prolonged periods of extreme heat or cold are rare. During the eighteenth century, commentators first noted how these conditions provided material for conversational remarks to acquaintances or strangers. Samuel Johnson protested the pointlessness of such exchanges, but the custom persists. Johnson also used to say that a person of sufficient mental discipline should be able to ignore the weather. His attitude still seems to prevail among those British men who refuse to wear raincoats or carry umbrellas, though foreign tourists understand that these are very prudent accessories in the prevailing conditions. When the British talk about their weather, they draw upon recollections that are tinged by nostalgia and often quite inaccurate. They remember extraordinary events, like the “hurricane” of October 1987. Sometimes they exaggerate seasonal extremes, as with memories of white Christmases that have only rarely occurred. Often, extreme and violent conditions are thought to be increasing and are taken as signs that the climate is changing. Serious storms and floods are believed to be becoming more frequent. Warmer summers, which one might imagine would be welcome, are said to bring the threat of invasion by foreign insects and diseases. Sometimes the British worry that their weather is becoming “more Continental,” perhaps a reflection of their hesitancy about involvement with the European Union. These concerns are expressions of uncertainties about the future; they invoke a common notion of the past and the good old British weather, which is feared to be passing away.

In this book, we look back to the age when the British first began to formulate ideas about their national climate based on accumulated records of the weather. Somewhat paradoxically, we shall also find that people then were already saying that the climate was changing. Modernization brought with it the sense of a break from a traditional or natural way of life. One consequence of this was a belief in some quarters that the weather was being altered, for example by new agricultural practices, urban growth, or