

In his **prelude** to “After Cooling,” Eric Dean Wilson tells us that he started his research not knowing “a tank of Freon from propane.” It’s a subtle chemistry joke, but a good one. By the end of the first 20 pages, however, the reader realizes beyond a doubt that the author is very aware of everything there is to know about what we call air-conditioning. After his **deftly** persuasive opening argument that cutting back on machine-made cooling is the most pressing environmental task of our generation, Wilson walks us through the science of chemical coolants in detail, both the chemistry and physics of these miracle molecules, and the horrifying discovery of the havoc they wreak within the thin protective layers of the Earth’s atmosphere. Woven into Wilson’s history of the first modern coolant — Freon, a compound in the chlorofluorocarbon, or CFC, family, was developed in the 1930s — is an interesting **fable** about how our best efforts toward environmental regulation can bring out the worst in us.

In a desperate attempt to save our ozone layer, the Montreal Protocol effectively ended the production of CFCs in 1987, forcing the temperature-control industry to switch to less powerful fluorocarbon compounds. Since then, while the *production* of CFCs has been banned, their use has not been. This has created a vigorous underground market in previously hoarded Freon that caters to small-time farmers and mechanics — those who don’t have the resources to retrofit the cooling systems in their tractors or long-haul trucks. Small businesses have even sprung up, staffed by teams that go undercover to buy these CFCs in order to play the California carbon market. Wilson’s account of his cross-country road trip to meet and talk with the buyers and sellers of Freon beautifully exemplifies the book’s tragic premise — with which I quite agree — that the road to Climate Hell was, and still is, paved with good intentions. For example, John Gorrie’s 1851 design for the first air-conditioner was meant to provide better air circulation in cramped **tenements** and crowded classrooms, Wilson relates, but it didn’t work out that way. The first complete cooling system was not implemented in the inner city, but used — quite literally — to benefit the market: The first workers provided with air-conditioning were traders on the floor of the 1902 New York Stock Exchange. Since then, many of us have come to accept that for much of the year, the temperature inside our offices, homes, cars, malls and movie theaters will be strikingly cooler than the outdoors.

Our ability to dramatically cool the spaces we inhabit has changed the way we travel, consume food, use medicine, design our architecture and much more. But eventually, the chemical compounds used for this cooling cannot help leaking from coils and holding tanks as machines age and are discarded. Upon release, they form **persistent** greenhouse gases — meaning refrigeration as a practice makes an outsize contribution to global warming. In a supreme irony, one Wilson points out, our world before the adoption of institutional air-conditioning was *cooler* overall. Wilson’s research for “After

Cooling” was ambitious. “I needed to become more intimate with climate violence,” he writes in his prelude, and proceeds to tackle several controversial themes. He describes how the history of cooling personal and professional spaces is **entwined** with the history of racism and the institution of slavery. Before mechanical coolers were invented, enslaved children living in intemperate climes were forced to fan their oppressors for long hours, or to move air across containers of water in an effort to cool whole parlors and palaces. “One life was comforted at the expense of another,” Wilson writes with powerful simplicity. Today, he explains, the global socioeconomic gap between those who can effectively cool their surroundings and those who cannot is widening rapidly.

One issue that Wilson does not address, and that I wish he had: how changes in the Western diet have (or have not) influenced our perceived need for air-conditioning, as well as its use. Admittedly, the measurable increase in average personal insulation over the last 50 years is a prickly subject, but surely it’s relevant to any discussion of the ways we modify our personal space. “After Cooling” has its greatest impact when it asks us to think deeply about the reasons humans wish to change the temperature of their surroundings. At one time, occasional sweating was simply accepted as a way of life, Wilson postulates, but now we regard comfort as a **prerequisite** for work and play. But what does it really mean to be comfortable? Is it merely the absence of discomfort, or is it something more? Is it a bodily experience or an emotional state? Wilson invites the reader into deep existential discussions by invoking broad themes of culture and philosophy — an unusual and delightful trait for a book on climate change. Particularly **fascinating** is Wilson’s examination of the marketing impulse behind the phrase “air conditioning,” as opposed to “air cooling” or something more concrete. Clearly, the production of a better “condition” of air, of better “conditions” for life, is the very definition of progress, isn’t it?

My main **quibble** with “After Cooling” is that the book seems at times to apologize for its very existence. Wilson notes that racism, misogyny and poverty have been vigorously acknowledged in the media recently and are beginning to be addressed at scales both large and small, and he contrasts this with how his friends and colleagues are simply “waiting for the topic to pass” whenever he brings up climate change. He also states that people find discussions of **refrigerant** management less “**compelling**” and “strangely impersonal” compared with climate strategies involving (say) electric vehicles or bioplastics. In response, I maintain that the quality of information and storytelling found in “After Cooling” contradicts the author on these very points. Wilson dares to state plainly that lasting climate solutions **hinge** on our capacity to redefine what makes our lives meaningful, not on new technologies or better products. The first baby step may be as simple as experimenting with an air-conditioner on a hot July day, setting the room a few degrees higher than usual, and asking ourselves at bedtime whether we even noticed.

