

The history and ideology of allergies



Breathing Space: How Allergies Shape Our Lives and Landscapes

Gregg Mitman

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Reviewed by Fernando Martinez

The first five chapters of Gregg Mitman's *Breathing Space* are a thorough, richly documented account of the advent of allergies in the United States. Mitman follows hay fever's history, starting in the mid-1800s, when it first became a public concern and was considered a disease of wealthy urbanites. Not surprisingly, the first remedy for the disease was to leave the "frenzied pace of urban life" and seek refuge in resorts in the mountains of the East Coast and the lakes of the Midwest. A flourishing economy grew around the hay-fever 'tourists', and Mitman convincingly argues that the efforts and political influence of allergy sufferers provided strong support for the establishment in the US of sanctuaries of 'virgin Nature', protected from the yoke of civilization.

Soon, however, modern life caught up with the hay-fever resorts, and this prompted the search for new safe havens. I found the portrayal of the development of 'health cities' for asthma, allergies and 'consumption' in the Rocky Mountains and the desert southwest very engaging. On the premise that 'nature cures', Denver and Tucson saw the growth of a thriving industry of sanatoriums and convalescent homes in the early twentieth century. What was done to patients in these institutions to optimize nature's healing properties is as amusing as it is perplexing. The Desert Sanatorium and Institute of Research in Tucson, for example, had the "largest solarium in the world built solely for sun therapy." Mitman tells us that heliotherapy was ineffective for tuberculosis but, without blinking, and quoting only an obscure history book, adds that it "seemed especially promising for bronchial asthma." Heliotherapy never became an accepted treatment of asthma, but some experts have recently postulated that reduced exposure to sunlight may be the cause of the asthma epidemic.

It was interesting for me to learn that the Tucson Desert Sanatorium was built as a series of low buildings covering acres of land to have an unobstructed view of the mountains. This sprawling structure was kept intact when the sanatorium later became the current Tucson Medical Center (TMC). Now I know why, as an attending physician at TMC, I sometimes need to walk a mile of corridors to finish my rounds!

During the twentieth century, hay fever and asthma became widespread

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diseases, and few of those affected could afford the costs of faraway sanatoriums. The targets of treatment shifted to the newly discovered triggers of allergies: first, ragweed, air pollution and other outdoor sources, and later, allergens, dusts and other indoor contaminants. Asthma suddenly became the curse of the poor and destitute, trapped in inner cities and infested tenements.

Mitman is a skillful historian. He methodically shows that after World War II, at the same time that ownership of single-family homes, along with the appliances and comforts associated with them, became a major engine for the American economy, the search for potential treatments for allergy shifted from the external environment to the home environment. He also convincingly shows that devices initially designed to alleviate the discomfort of allergy sufferers (air conditioners to filter pollen and provide a substitute for mountain and desert air; vacuum cleaners to remove dust) were rapidly marketed to all homeowners as sources of healthy cleanliness. Consumers were sold, Mitman writes, on the "illusion that in the home they could engineer nature, bring it under control and create an environment better than the best places nature had to offer," a claim that I found intriguing and cogent.

Much less did I enjoy the last part of the book, which is dedicated to a vague, ill-defined 'ecological vision' of disease. Unfortunately, Mitman rushes through many important scientific and societal issues with a superficiality that is never evident when he writes as a historian. He tells us that allergy sufferers are condemned to the "chemical alteration of their immune landscape," but he offers no alternative for asthma patients who want relief from their symptoms. Disease, he tells us, is a "product of complex biological, economic, material and social relations shifting in both time and space." With generalizations like this, Mitman rightfully intends to criticize the perfunctory attention that modern biological science pays to the role of environmental factors in human disease, but formulaic axioms do little to reverse the trend. My own research today is concentrated precisely on identifying the genetic and environmental factors involved in the inception of asthma, and what we are finding is often counterintuitive—the same environmental factors that predispose some children to the disease seem to protect others who have different genetic and ethnic backgrounds. In Europe, poorer countries such as Albania have a much lower prevalence of allergies than rich Denmark, and the prevalence of asthma in New Zealand is among the highest in the world, even though it is a country with one of the least contaminated environments in the developed world. Clearly, nature does not stick to politically correct or simple rules. Mitman despises the idea that "disease is the effect of a precise cause," and I fully agree that such an idea does not apply to asthma or to cancer, but, for all practical purposes, it does apply to tuberculosis, HIV, malaria and even measles, which today still needlessly kill many more human beings in one year than asthma and allergies do in decades.

I cannot disagree more with the assumption, floating in the book's last chapters, that modernity is intrinsically unhealthy, perverse and corrupt, and that there is a natural, ecological solution for the health problems of 6 billion human beings. It is easy to forget that, before the societal and medical advances of the 20th century, 10% of all newborns died during their first year of life in the US, and they still do in Angola and Mozambique. As an ideologue, Mitman seems to have accepted the same myths that he so elegantly portrays as a historian.