

SCIENCE WITHOUT SNOOZING: INTERESTING OPENING FROM SCIENTIFIC WRITING

Note: All the authors quoted here have Ph.D.'s, M.D.'s, or both.

“Nothing to Sneeze At.” Randolph M. Nesse and George Williams. *The Sciences*. Nov/Dec 1994. pgs. 34-38.

Every August, in certain temperate parts of North America, the ragweed plant inaugurates another season of human misery. In a single day one plant can send out a million grains of pollen on the morning breeze to receptive flowers as far away as 400 miles, reaching even into the centers of large cities. A square-mile field of ragweed plants can yield sixteen tons of pollen in a year, yet only a millionth of a gram can start an allergic response of the kind that can send many of us into fits of sneezing, scratching, coughing and wheezing. Relief does not come until a few weeks before the first hard frost, when the ragweed finally withers.

Ragweed, of course, is not the only culprit. Allergies are provoked by thousands of other substances, taking virtually any route into the body....One of four Americans suffers from some allergy or another.

Why, with bodies of such exquisite design, do so many people suffer such physical torment? Why has evolution been unable to fashion, at the very least, an immune system that can deal with ragweed without going wild? It is as if the best engineers in the universe took every seventh day off and turned their work over to stumbling amateurs. [study of the genetics of allergies and immunology]

“Whenever the Twain Shall Meet.” Thomas J. Bouchard, Jr. *The Sciences*. Jul/Aug 1997.

They arrived at the Minneapolis airport from opposite ends of the United States. Although they had only spoken on the phone a few times, they hugged, laughed and cried when they met. As they walked down the airport corridor to the baggage claim, I followed along, struck by the remarkable similarity in the pace of their speech. As soon as one stopped talking the other would start, like a pair of jugglers passing oranges to and fro, and yet the conversation never seemed to stumble or fall out of sync. My wife and I had been married for well over twenty years, I remember thinking, and we could not carry off such a highly coordinated exchange. [study of the genetics of twins]

“Polio Redux.” Marinos C. Dalakas, Harry Bartfeld, and Leonard T. Kurland. *The Sciences*. Jul/Aug 1995.

Forty years ago this summer, in July and August of 1955, a great cloud of fear began to lift from the national psyche. For the first summer in recent memory, parents began to

decide they could allow their children to cool off in the local swimming hole, without the gnawing dread of dire consequences. Just a year before, fear had been the dominant emotion, and with good reason. In that summer, as in many preceding ones, the season of joyful outdoor play had also been known as the season of polio. [study of the long term effects of polio]

“Sustainable Growth; A Bad Oxymoron.” Herman Daly. *Science*. Vol 273 9/20/96.
(this is an editorial)

Impossibility statements are the very foundation of science. It is impossible to: travel faster than the speed of light; create or destroy matter-energy; build a perpetual motion machine, etc. By respecting impossibility theorems we avoid wasting resources on projects that are bound to fail. Therefore economists should be very interested in impossibility theorems, especially the one to be demonstrated here, namely that it is impossible for the world economy to grow its way out of poverty and environmental degradation. In other words, sustainable growth is impossible.