## Healing Spaces: The Science of Place and Well-Being

reviewed by Brian Volck in the December 15, 2009 issue

## **In Review**



Healing Spaces: The Science of Place and Well-Being

Esther M. Sternberg Belknap In science, as in most things, what one concludes depends on what one as sumes. Nineteenth-century mathematician Bernhard Riemann showed what happens to geometry if one disregards Euclid's fifth postulate (that parallel lines remain equidistant) and thereby developed a field of mathematics that later proved important to the theory of general relativity.

Likewise, varying assumptions about the interaction of body and consciousness have enormous consequences. When I was a pediatric fellow, I was certified in hypnotherapy (a credential I have, alas, permitted to lapse) and participated in research in psychoneuroimmunology—the study of interactions between the brain and the immune system. Even sympathetic colleagues referred to it as "mind-body medicine." They were reacting from the perspective of a kind of medical science that assumes the mind is a black box easily bracketed from bodily processes, a model that has always struck me as bizarre. As a physician, a reasonably careful reader of scripture, and a creedal Christian who hopes for the resurrection of the body, I've never found the metaphysical gulags of Cartesian dualism appealing.

These days, of course, mind-body medicine is hot, both intellectually and economically. The poles of the emerging discourse are defined on one end by theories borrowed from non-Western traditions such as Ayurveda and Qigong, and on the other by extrapolations from recent brain research. At their extremes, the former posit nonphysical realities or substances that humans can manipulate, while the latter reduce mind to an epiphenomenon of brain chemistry, likewise subject to manipulation.

Esther Sternberg locates her treatment of health and place closer to this second pole. In the final sentence of *Healing Spaces*, she states the assumption undergirding her entire narrative: "The most powerful of healing places is in the brain and in the mind." It would not be unfair to claim that the healing place to which she devotes nearly all her attention is bounded by the skull.

Sternberg begins with the design of hospitals, citing Roger Ulrich's 1984 study showing that after gallbladder surgery, patients who had a view of trees left the hospital sooner than those whose windows revealed only a brick wall. What follows is an interesting tour through the architecture of hospitals, churches, labyrinths and theme parks, alongside a bracing introduction to the architecture of the brain. We move from the stress response, sickness behaviors and distinct types of memory to

Lourdes, virtual realities and biophilic design.

Readers relatively new to discoveries in brain science will appreciate Stern berg's light touch when discussing technologies such as PET scans and functional MRI. She also renders bewildering complexities of brain anatomy and physiology in accessible language. As a physician, though, I wanted more detail and citation. That's a quibble, of course —the sort of thing one expects to hear from professionals, who aren't the intended audience for this book. (There is a bibliography organized by chapter at the end of the book, which is helpful but unwieldy.)

Sternberg's intended audience should be careful with her sometimes overconfident extrapolations from data. In science there is no useful data apart from careful interpretation, and Sternberg's reader-friendly style often slips into problematic phrasing suggesting that available data tell us more than they can.

The book is too wide-ranging to be distilled into a single take-home message. One major theme, however, is that we now know enough about the interaction between physical surroundings and the chemistry of the brain to build better health facilities that will help patients heal more efficiently. How, Sternberg asks, can we arrange environments in order to exploit the brain's healing mechanisms?

There are parts about this that I find intriguing, but I'm put off when Stern berg lavishes so much attention on the "clever" manipulation of brain function at Disney theme parks. When you enter such a place, she writes, "you're crossing a threshold into an imaginary world that was created, down to its minutest detail, to fool your brain into thinking it is real." What she really describes is a gnostic paradise that is like your dull embodied life but much, much better.

In spite of her concern about healing and places, Sternberg evidences little concern for healing the places where most of us live. Her consideration of communal environments appears only in the penultimate chapter and is superficial and cursory. There she describes New York City, with its emphasis on pedestrian travel, as a large healing place and Manhattan as "one enormous gym, with plenty of opportunities to work out in the course of one's daily routine." It's not clear to me, however, that folks in the South Bronx view their neighborhoods with the same élan. Where are the poor to go for healing if they can't afford a well-designed hospital or a ticket to Tomorrowland? And even in the case of those with cash to afford such things, Sternberg shows little concern for the way contemporary environments sicken and

divide communities; she hardly mentions the New Urbanists and says nothing of Wendell Berry, who has written more about the cultivation of place and wholeness than any other contemporary American.

At the heart of my quarrel with Sternberg is my concern that in identifying the brain (and by extension, the mind) as the primary locus of healing, she makes place into little more than an apparatus to manipulate an individual's brain chemistry. The reductionism and hyperindividualism of her argument are merely different facets of her assumptions about health, mind and matter.

Early in the book Sternberg asks the reader to imagine a man with Alz heimer's disease: "You are his main caregiver, you grieve every single day, over and over again. Here is the same man you've known throughout your life, but his body is now just a shell." I understand what reality she's gesturing toward, and I've heard the "just a shell" trope from Christians, too, but they ought to know better. Where in the Bible, where in 2,000 years of Christian theology (at least those parts untainted by Platonism, gnosticism or Cartesianism), do we learn that corruptible bodies house separable, creamy nougat centers of intellect and volition? For those who acknowledge the goodness of creation, embrace the scandal of the incarnation and look for the resurrection of the dead, this book and many like it provide much information but little, if any, wisdom.