

HYBRID BUILDINGS
PAMPHLET ARCHITECTURE, NO. 11
 By Joseph Fenton
 Princeton Architectural Press, 1985

Borrowing from a concept found in genetics, “hybridity” is most commonly understood through the crossbreeding of plants or animals. In architecture, hybridity refers to “crossing” — the mixing of different programs and typologies within single buildings.

Hybrid Buildings, a short reference booklet amply illustrated with black-and-white photographs, plans, and diagrams, explores the problem of combining disparate architectural programs and functions in a cohesive whole. Author Joseph Fenton presents the resulting “hybrid buildings” through a survey of historic buildings organized by type: “Fabric Hybrids” camouflage the interior volumetric programmatic configurations with the building envelope; “Graft Hybrids” express the volumetric variety of program through building massing; and “Monolith Hybrids” assume monumental building blocks that contain the various functions without distinguishing them formally. Published in 1985 as part of the well-known *Pamphlet Architecture* series, *Hybrid Buildings* also celebrates the postmodernist theories of its time — the embodied contradiction, ambiguity, and diversity that served as strong postmodern rhetoric.

Prior to the segregation of use through New York City’s 1916 zoning, many buildings were conceived as containing multiple programs. For example, the One Hundred Story Building designed by Theodore Starrett in 1906 in New York was a monolithic structure comprising all sorts of urban amenities: an amusement park, market, residences, theaters, offices, industry, stores, and a hotel stacked one on top of another. New programmatic combinations emerged from greater structural capacities, zoning limitations, and the need to satisfy a broad and diverse market. The department store/hotel and the railroad smoke vents/office type can be traced back to the early 1930s. (Sound familiar? You guessed it: the Big Dig vent exhaust/ InterContinental Boston Hotel and the Nouvelle at Natick Collection — combining luxury housing and a shopping mall — are hybrid buildings in our own back yard.)

A biological hybrid is identifiable when one can recognize two separate entities that have been “crossed” to make a distinct third. Similarly, early examples of hybrid buildings often featured separate entities with clearly defined boundaries and expressions. Today programmatic variety exists without such distinct boundaries. This can be attributed to technology taking on a more active role in building systems as well as people demanding a holistic architectural experience.

The hybrid building became “a city within a city.” Through the reconsideration of multifunctionality and architectural programming, it is a concept that may serve as a fresh model for the revitalization of American cities. If hybrid buildings are also considered in terms of technological systems, they can begin to perform similarly to hybrid cars, using passive and active systems as well as alternative energy resources. The iPhone can store music, serve as a phone, and browse the Internet. Why can’t buildings be as robust?

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FASHIONABLE TECHNOLOGY: THE INTERSECTION OF DESIGN, FASHION, SCIENCE, AND TECHNOLOGY
 By Sabine Seymour
 Springer, 2008

Necklaces that remotely sense and respond to the touch of your loved one, garments that react to your body’s tension and provide a soothing massage, a belt that plays music that is both heard and felt, a coat for shy people that barks if someone invades their personal space, and a dress that “grows” on your body — these creations sound like the stuff of science fiction. But in fact, they reflect the current state of science and design, as capably explored in *Fashionable Technology*.

The body/technology conflation is by no means new. In the late 1960s, farsighted designer Mary Ann Scherr created a heart-pulse monitor bracelet with technology that was eventually patented. In the 1980s, textile artist Junichi Arai created luminous fabrics with metallic yarns, the type of textile that now provides the foundation for garments that conduct sound, light, and electricity. But in recent years, there has been a veritable explosion of designers exploring the fashion/science idiom, aided by an unprecedented number of design collectives, laboratories, and schools, including the MIT Media Lab. Seymour opens the book with a

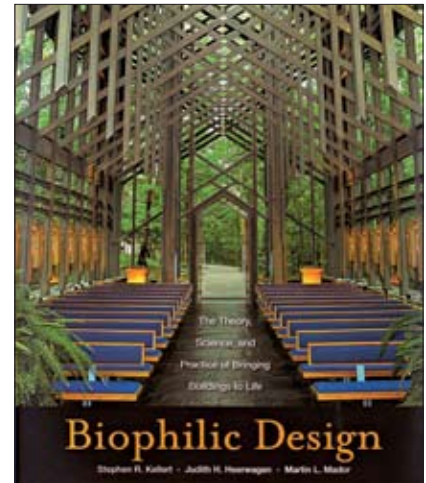
“theoretical discourse” to provide an intellectual grounding and an introduction to the lexicon of “fashionable technology” (a phrase she coined in 2000). This section is rather thin, and the ideas presented could use deeper explanation. For example, Seymour argues that the integration of the body and technology is not evident in what the author calls “fashionable wearables” (i.e. fashion), but this can be readily disputed if one considers the correlation between haute couture, which is designed to seamlessly integrate with the body, and the “technology” of garment construction.

The first chapter, “Electronic Fashion,” rightly opens with London-based fashion designer Hussein Chalayan. Chalayan has been exploring the confluence of fashion and technology from the outset of his career in the early 1990s and has notably created automated garments and a recent line that incorporates LED displays into the dresses’ fabric. The rest of the book attempts to make sense of the burgeoning field by dividing the presentation of

designer-scientists into chapters with titles such as “Scientific Couture” and “Social Fabric.” Each entry consists of color illustrations and brief write-ups about the artists and their creations. While some veer into the realm of the conceptual, the book reminds us that some of this technology is readily available in the marketplace — the iPod’s touch pad is a good example of a highly successful “e-textile.”

While thorough in its presentation and international in its scope, the book feels hastily compiled. Many of the descriptions read like promotional literature; there are several editorial oversights and misspellings; and a more thorough explanation of the technologically complex products would be useful. *Fashionable Technology* is, however, an excellent resource and useful guide to the sheer possibility of such high-tech alchemy.

Michelle Tolini Finamore, a design and fashion historian, is a curatorial research associate in the Art of the Americas at the Museum of Fine Arts, Boston.



BIOPHILIC DESIGN

Edited by Stephen R. Kellert, Judith H. Heerwagen, Martin L. Mador
John Wiley & Sons, 2008

Our culture is facing tough times. The need for drastic changes in our use of natural resources struggles daily with entrenched economic interests and our enjoyment of creature comforts. The



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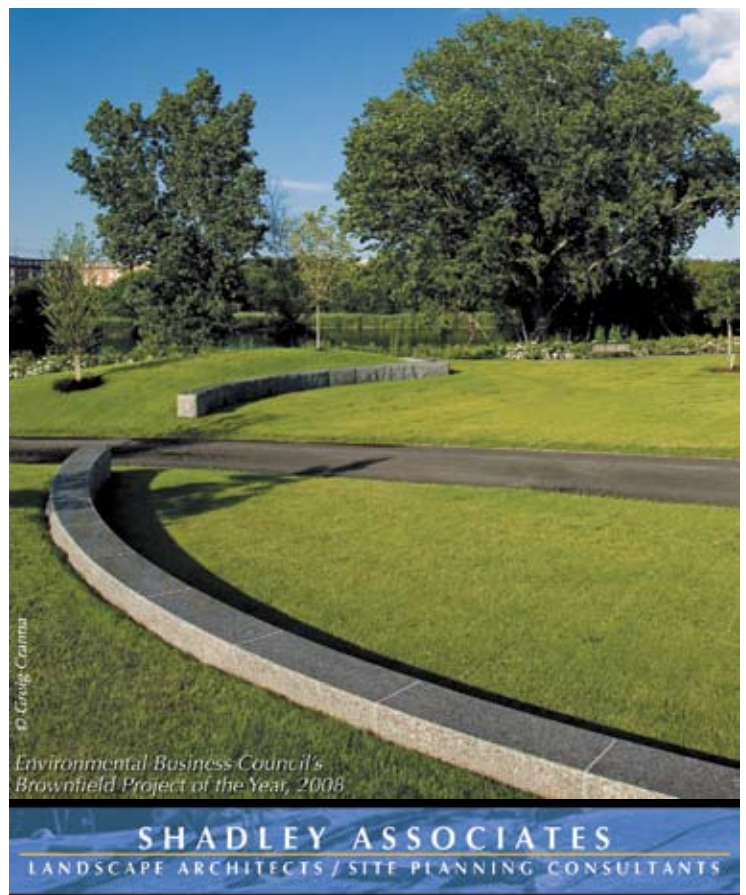
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concepts of sustainable design are beginning to take root in the community consciousness, but standard practices may well have to change more radically than we can imagine.

Biophilic Design collects descriptions of current destructive practices, analyzes their roots in human nature, and offers low-cost, low-impact strategies for change. Rather than give directions on Right Living, the concept provides an organizing structure for a great number of ideas on how changes in development and construction practices can improve our health, the health of the planet, and the relationship between the two.

Economic gain is the primary driver for the development and construction industry, and non-quantifiable motivations for development activity are generally considered suspect by the business community. *Biophilic Design* maintains that design and development strategies determined by the social sciences must be given equal weight with financial drivers. The editors have

assembled a remarkably eclectic group of essays to make the case.

The essays cover a range of issues in the social sciences, medicine, the construction industry, and public policy. The first of three parts explores the theory of biophilic design and considers the ways in which nature can be an inspiration to architecture. The rationale is presented in chapters describing the disastrous effects of industrial society on ecosystems and on human relationships. “The Extinction of Natural Experience in the Built Environment,” for example, is a searing description of the devastation wrought by coal mining in West Virginia.

Part II looks at the science and benefits of a biophilic approach, through essays on the effect of design on health care, on restorative design, and on the necessity to focus on the needs of children in the design process. The need to connect human beings with nature as a source of mental and physical nourishment is documented in detail. Ian McHarg’s *Design With Nature*, and Christopher

Alexander’s books are cited as groundbreaking investigations into ways in which design intervention can make an environmental and social difference at many scales.

Part III focuses on the practice of biophilic design, with essays considering everything from the place of windows in healthy design to developing urban biophilic concepts.

The essays are somewhat uneven in quality, and mining the gold takes some effort. It is worth it, however, and the ratio of “aha!” to “ho-hum” moments is high. Among many lyrical passages, I found a list by Stephen Kellert of nine very different ways in which humans respond to water.

My initial reaction to this book was, “Oh boy, another flaky plan to save the world through design by acupuncture.” Then I read the book. I recommend that you do, too.

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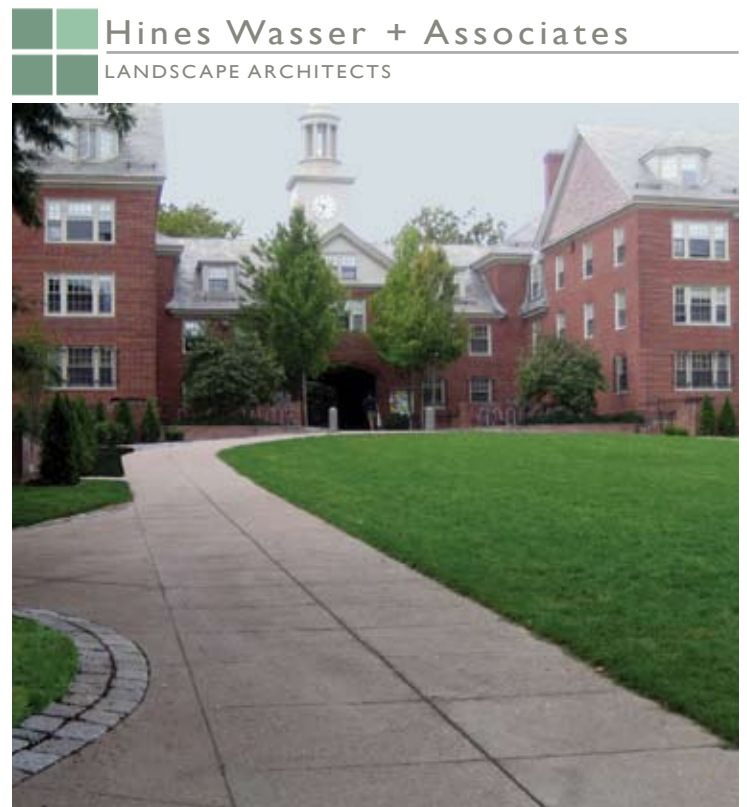
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