

Technology and Place: Sustainable Architecture and the Blueprint Farm

In April 1988, the first crops poked hopefully from the ground at the Blueprint Farm in Laredo, Texas. An outgrowth of the radical populism of Jim Hightower, the Texas Agriculture Commissioner, the farm was established to challenge the dominance of corporate agriculture in the state and to demonstrate the viability of alternative modes of production based on small growers, high-margin crops and sustainable technologies. In *la frontera chica*, the semi-arid south Texas border region where the farm was located, the farm was also welcomed by activists as a bold attempt to empower low-income Mexican Americans.

The story of the inception and collapse of Blueprint Farm has never been widely reported outside Texas. But, as Steven Moore explains in his book *Technology and Place: Sustainable Architecture and the Blueprint Farm*, the farm did achieve a certain cult status within the emerging sustainable technology movement in the mid-1990s.

For largely political reasons, Hightower had conceived of the farm as a way to transfer the intensive drip-irrigation methods of Israeli kibbutzes to farms that could employ displaced West Texas farmworkers. But for funding reasons, his Texas-Israel Exchange was soon married to the visionary ecologism of Pliny Fisk III, Gail Vittori and their Austin-based Center for Maximum Potential Building Systems.

The flawed nature of this attempt at political alchemy became evident almost immediately. As Moore writes, personal rancor and institutional conflict eventually revealed sharp disagreements over the purpose of the project. Finally, after a series of institutional reshufflings, all hope for the farm was abandoned in 1991. Hightower was voted out of office, the Texas Department of Agriculture withdrew its support, the scientists went home, the ecological community became embittered and the gates to the site were locked by its sponsor, Laredo Junior College.

For Moore, an architecture professor at the University of Texas and director of its Design with Climate program, the demise of Blueprint Farm is “a small story with large implications.” Above all, it reveals the inconsistent foundations of the now-ubiquitous ideology of sustainability.

Specifically, Moore argues, the story indicates how sustainable places can only emerge from democratic engagement with technological change. For planners and designers, the lesson is clear: even the best sustainable endeavors will fail without engaging the social practices needed to support them. Moore’s ethnographic and theoretical case study thus provides fascinating insight as to why sustainability as a practice has yet to live up to its potential as an idea.

Conflicting Visions

Jurors praised the Moore’s ability to foreground hidden attitudes toward technology in the construction of place. Indeed, his intent was to move beyond a “fetishization of objects” to produce a deeper understanding of the relationship between places and their users than normally present in design critiques.

Moore’s research ultimately involved a full investigation of archival sources, extensive interviews and a broad range of theoretical readings. Using methods of content analysis drawn from sociology and anthropology, he identified five competing networks of interest and ideology behind the conception, design and management of the farm.

The Israeli agronomists, the farm’s putative managers, originally developed their computerized drip-irrigation methods within the disciplined confines of kibbutz socialism. But they had no real investment in notions of ecological sustainability, tending instead toward a belief that all the methods of science should be employed to “make the desert bloom.” They were further motivated by a financial interest in promoting their system to U.S. buyers.

By contrast, the ecologist network saw the farm as the ideal location to work out a complete system of organic production. As such, they were less interested in constructing a profitable farm than in promoting a new set of values. And, Moore writes, this orientation soon led them to challenge the boundaries between their work and that of other groups.

A third local network consisted of social activists in and around Laredo. For them, the farm’s technologies were merely “black boxes,” the workings of which were less important than their promise as agents of social change, writes Moore. However, such ignorance caused the group to misunderstand the ideological divide between the Israelis and the ecologists. Furthermore, as Moore points out, all hope for change would have been frustrated if farmworkers had been unwilling to embrace the composters, straw-bale walls and solar food dryers being developed on the farm.

Indeed, the determinist assumptions of all three groups on site—the Israelis, ecologists and activists—were nowhere more evident than in the fact that none had consulted the people whose interests they claimed to champion.

Above: U.S. Representative Albert Bustamonte, an Israeli agronomist and Texas Agriculture Commissioner Jim Hightower, May, 1989.

Photo by Karen Dickey, courtesy Texas Department of Agriculture.

Below: Blueprint Farm as it appeared in 1995. Photo by Steven A. Moore



Such a divergence of views on site was only compounded by interested networks off site, Moore adds. The Texas Department of Agriculture was ultimately responsible for the farm, but many of its employees did not share Hightower's political views. And even if career bureaucrats did not personally subscribe to the corporate farming paradigm, they at least needed Blueprint Farm to conform to pre-established funding and administrative categories.

Finally, as Moore points out, for the Hightower network the farm was never simply about growing sun-dried tomatoes. The symbolic value of the rhetoric of sustainability was equally important in terms of promoting a larger personal and political agenda.

"As the project took shape ... there was no common vision of sustainable architecture, agriculture or technology that bound these competing networks together," Moore writes. "In the battle for the imaginary supremacy to define reality and the politically useful concept of sustainability, there were no victors."

Connections to Architectural Theory

Previous reviewers have faulted Moore's book for being difficult to read. However, its lack of a simple story line stems from a desire to provide "thick description" in the sense advocated by Clifford Geertz. In addition, Moore's concerns extend far beyond the specifics of the case at hand. In this regard, jurors praised Moore's ability to connect the facts on the ground with a breadth of theoretical writings.

Moore's archaeology of ideas draws heavily on the writings of cultural geographer Henri Lefebvre. For Lefebvre, space is never neutral, but always structured by the workings of the society that occupies it. From sociologist Bruno Latour, Moore also adapts, among other positions, the view that scientific "fact" is "not 'about nature,' ... [but] a fierce fight to *construct* reality."

Furthermore, as Kenneth Frampton points out in his foreword, Moore is influenced by Andrew Feenberg's holistic critique of contemporary technoscience. According to this view, the inability of market-driven societies to invent new technologies that are both efficient and life-enhancing represents a fundamental failure of imagination.

But it is Frampton's idea of critical regionalism that most interests Moore. For the last twenty years, critical regionalism has provided a basis for place-based critiques of Modern architecture. But as Fredric Jameson has noted, these efforts have been weakened by their largely aesthetic bias. By drawing on the ideas of landscape architect John Tillman Lyle, Moore attempts to extend Frampton's principles to describe a "regenerative" architecture.

In his last chapter Moore argues that the two poles of current architectural theory, Modernism and Postmodernism, are both inadequate to such a task. Modernism's homogenizing tendencies are well known. What is less well appreciated is how the Postmodern alternative often merely reverses Modernism's conceptual bias without reengaging with the place-bound moral codes that once sustained traditional environments. As a result, Postmodernist projects often seem emotionally sterile.

At one end of an alternative philosophical axis is what Moore calls "radical nihilism"—evident, for example, in the writings and work of Dutch architect Rem Koolhaas. What is important to this way of thinking is less what technology amounts to, so much as the deliberate secularization of experience it allows.

At the other end of Moore's alternative axis is a matrix of emergent "non-modern" positions that embody a conscious reengagement with issues of technology and place. Among these are the "eco-tech" projects of architects such as Norman Foster and Richard Rogers, the notions of ecological sustainability that played such an important role at Blueprint Farm, and Frampton's critical regionalism.

However, Moore cautions that the consolidation of such an alternative path will require full recognition of architecture as an "ecological, technological and political practice." In this sense, buildings and communities represent social agreements first. More important than any particular ideological agenda will be the ongoing contest over what architecture embodies as a normative practice. In other words, without unity of conception and execution, no new orientation toward architecture, technology or place will ever stand the chance of being socially sustained.

Technology and Place

Steven A. Moore, *Technology and Place: Sustainable Architecture and the Blueprint Farm*, foreword by Kenneth Frampton (Austin: University of Texas Press, 2001).

THE LAREDO BLUE PRINT FARM

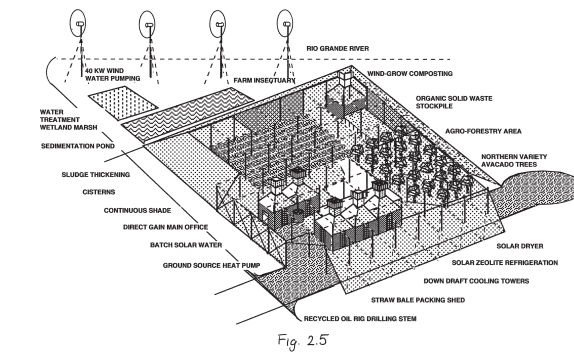
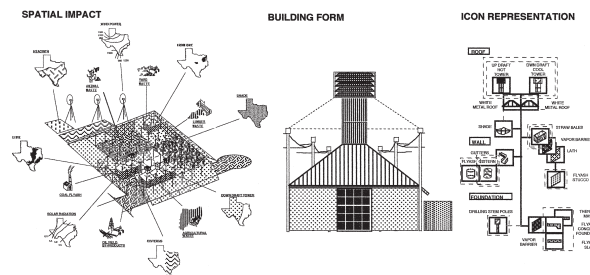


Fig. 2.5



Jury Comments

Quigley: I wish I had time to read the whole book. Its one of these wonderful “green” projects where everybody was on board. And the level of design looks quite high. Then everybody pulled out and there were all kinds of problems. The book documents the whole process.

Brown: It serves a useful purpose, specifically because it provides an anthropological analysis of the conflicting idea of sustainability. Because the competing parties couldn’t come to an agreement, the whole project failed. That is pretty sad for a concept that is supposed to be so healing and over-arching.

Quigley: This seems enormously relevant to architectural practice now, because we are seeing, just in the last twelve months, city councils say “you will do a green building,” having no idea what that means or entails.

Brown: And you could see practicing architects reading this and learning from it?

Quigley: Yes, I could.

Rabaim: From that standpoint, it really seems to show the pitfalls of jumping on the bandwagon with little knowledge of what’s going on.

Quigley: It is a bandwagon, and on a certain political level, it’s dangerous. But in another way, I couldn’t be more pleased, because although we’ve been advocating this direction for twenty-five years, it’s been happening in such an uninformed and naive way. I’m hoping books like this could help sort out these issues.

Mozingo: I liked the methodology, which sought to look at complexity. That led to a set of eight propositions, which were concise and enlightening. They were very insightful and they would only be convincing after this careful immersion in the situation.

Fraker: Attitudes about technology in our society are under-discussed and under-researched. To show the relationship between technology and social objectives—and, in fact, the dysfunction of a set of ideas—is really interesting. We don’t arrive at consensus about technology at the start of projects. It’s that “other.” Somebody else does it: “It’s not my responsibility—oh, it’s *them*.” And to bring these issues into the design process and show how critical they are to users—how much they have to understand it, be able to buy into it and take care of it—this is a great case study of that challenge.

Mozingo: Something else I really liked is the consistent intervening of theory. There is a discussion about a specific place and time, but it’s connected to a broader discussion about how we make decisions as humans, how we operate in the world. Every place that I’ve opened the book, there is something interesting.

Above: Dialogic qualities of place and technology. Diagram by Steven A. Moore