

seemed to be culturally safe to stick with a well-known big-city Ivy League architect with design credentials. Later the range for esteemed-architect selection would broaden and become international." Just down the hill from the Amon Carter Museum is Louis Kahn's Texas masterpiece, the Kimbell Art Museum, dedicated in 1972. Now under construction across the street from the Kimbell is a tour-de-force work of architecture by Japanese architect Tadao Ando that will soon house the Fort Worth Museum of Modern Art. In 1970, at the behest of Ruth Carter Johnson, Philip Johnson returned to Fort Worth to design the Fort Worth Water Garden.

Following his successes in Houston and Fort Worth, it was inevitable that Johnson would receive a commission in Dallas. In the early 1960s, on the advice of Houston patron Jane Blaffer Owen, Dallas contractor Henry C. Beck and his wife Patty hired Johnson to design their house. Johnson had recently completed an open-air structure on an artificial pond at his New Canaan estate. The arch motif that defined the portico of the Amon Carter Museum was expanded upon in this colonnaded six-foot-high "folly," which was not tall enough to stand in without bending over. At the Beck House, Johnson exploded the folly motif to full scale, creating an odd, grandiose house that was the opposite of the refined, elegant dwelling that he had designed for the Menils. Indeed, none of Johnson's work in Dallas ever achieved the stature of his work in Houston and Fort Worth. Referring to later Dallas buildings, the Crescent and the high-rise office building Momentum Place of 1987, Houston architectural critic Stephen Fox observed that "Philip Johnson saved his worst Texas buildings for Dallas."

Indeed, by the mid-'80s, Johnson had immersed himself in the paper-thin, post-modern historicism that had invaded architectural practice throughout the United States, showing a lack of a consistent point of view that led critics to dismiss him as a mere stylist, and no longer a leader in design. Among the Johnson buildings in Texas that suffered the fate of gratuitous historicism are the University of Houston's College of Architecture, 1985, and buildings for an office park in Sugar Land. The Crescent in Dallas, the College of Architecture, and the Sugar Land buildings, while clear and logical in siting and plan, fail as works of architecture and mark the low point in Johnson's Texas work.

But before being bitten by the post-

modern bug, Johnson produced some of his most significant Texas work, returning to the clarity and imagination of his earliest Texas buildings. Beginning with the artfully abstract Art Museum of South Texas in Corpus Christi of 1972, this period culminated in a series of Houston office buildings that would not only revive Johnson's career, but would also help to put Houston on the nation's architectural map. This time Johnson's patron was Gerald D. Hines, a man quite different from the architect's cultural patrons of the 1950s and 1960s. A former mechanical engineer from Indiana, Hines began his career as a Houston developer with a series of modestly designed two-story office buildings on Richmond Avenue. Working with architect Harwood Taylor of Houston's Neuhaus & Taylor, Hines was persuaded that good design need not lead to costly buildings, and might even result in higher rents. Soon Hines would retain Hellmuth, Obata & Kassabaum of St. Louis to design the Galleria, which became a trend-setting mix of retail, hotel, and office space.

At that time Hines became acquainted with I.S. Brochstein, who owned land that he hoped to develop near the Galleria. Hines persuaded Brochstein to let the Hines organization lease the property, on which they would build a complex of high-rise office buildings. Brochstein agreed, but wanted a say in the selection of the architect. Hines came up with an initial list of nationally prominent architects, to which Brochstein added the name of Philip Johnson. Brochstein, who owned a business specializing in custom mill work installations, had come to know and admire Johnson when his company supplied the paneling and cabinets for the Amon Carter Museum. Once again the linked chain of Johnson patrons would lead to new commissions. The first was for what would become known as the Post Oak Central buildings. The second was for Pennzoil Place.

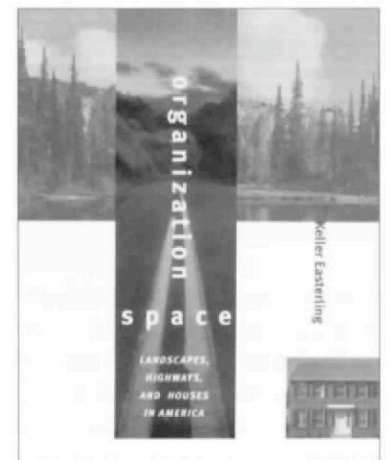
These buildings came at a crucial time in Johnson's career. In the early 1970s Johnson had formed a partnership with John Burgee, and together they had embarked on the design of the IDS Center in Minneapolis, an office tower and enclosed retail center connected to adjoining blocks with pedestrian bridges. Then in his mid-sixties, Johnson was beginning a seemingly new career, this time as a favored architect for high-rise office buildings. Johnson's association with Gerald D. Hines was fortuitous for

both men. The Post Oak Central complex, 1975-1982, and the twin towers of Pennzoil Place, 1976, were noted for their imaginative rethinking of the standardized rectilinear speculative office tower, transformed into objects of pure geometric sculpture best appreciated from the nearby freeways while traveling at 60 miles per hour. While he was not alone in this, Johnson helped set a new direction for America's high-rise office buildings. Hines, as impresario, benefited his company and Houston with impressive architecture that attracted tenants willing to pay premium rents. The Hines/Johnson collaboration continued with the beacon of the Galleria, Transco Tower, 1983, the tallest building in America outside a downtown core, and the RepublicBank building, 1984, which sits opposite Pennzoil Place. Johnson/Burgee's practice expanded to include buildings in major American cities including New York, Chicago, Atlanta, Dallas, Boston, and San Francisco. Much of the credit for the architects' success belongs to their Houston patron, the engineer turned developer Gerald D. Hines.

Johnson's career in Texas came full circle in the 1990s, when he was called back to the University of St. Thomas to design a chapel. Always enamored of the latest trends in architecture, Johnson abandoned the grace and modest scale of his 1950s St. Thomas buildings for a structure that bowed in part to the then-fashionable trend in architecture called "deconstructivism." As a result, the Chapel of St. Basil, 1997, feels out of place, overpowering the spare, modern buildings that form the campus' academic mall. By the late '90s, Johnson appeared more in control of this stylistic shift with his bold design for the Cathedral of Hope in Dallas, a building clearly influenced by the work of Frank Gehry, architect of the Guggenheim Museum in Bilbao, Spain. And there may be more to come — in 1998, at the age of 92, Johnson, with his new partner Alan Ritchie, was asked by Texas A&M regent John Lindsey, a successful Houston businessman, to design an expansion for the A&M College of Architecture.

Frank Welch's *Philip Johnson & Texas* is a book that should find a wide audience. It tells the coming of age story of Texas cities from the post-war years to their dynamic rise in the '60's, '70s, and '80s. Most interestingly, the book brings to life the people and patrons behind the story. Through the shifts and meanderings of Johnson's work, Welch captures trends, both high and low, in the evolution of

American architecture over the last half century. While not a critical biography, *Philip Johnson & Texas* does raise appropriate questions about the qualitative disparities in Johnson's work. Frank Welch has produced a book that captures the spirit and mystique of Texas since the 1950s, a book about the individuals whose determined conviction challenged the status quo to advance the state's cultural boundaries, and, finally, a book about Philip Johnson, an Easterner who practically got his start as an architect in Texas, where his work still flourishes 50 years later.



## Infrastructure Lost

**Organization Space: Landscapes, Highways, and Houses in America** by Keller Easterling. Cambridge, Massachusetts: MIT Press, 1999. 209 pp., illus., \$35.

Reviewed by Keith Krumwiede

Keller Easterling's *Organization Space* is not a book about architecture. That is not to say, however, that it is not relevant to architectural discourse. It is, precisely because it eschews an object-focused perspective and instead examines the processes and organizational paradigms that determine our physical environment.

In the domain of *Organization Space* architecture is symptomatic of the intelligence, or lack thereof, of larger, often invisible, infrastructures. The book is an attempt to reveal those infrastructures, to expose the underlying procedural history of the American landscape. While other observers of our suburban nation may bemoan the aesthetic degradation of the environment, Easterling is not so much worried that the environment is ugly as that it is stupid. She is, therefore, less



interested in the physical artifacts she examines — landscapes, highways, and houses — than in the organizational forces that determine their spatial arrangement.

To Easterling, the visible solids of our environment are nothing more than the concrete manifestation of the multiple, immaterial, and often conflicting protocols of politics, economics, and technology. Easterling is an architect, not a historian, and her examination of these protocols — a term she repeats throughout her book like a mantra to refer to procedures, organizational formats, rules, policies, and general development guidelines — is, in effect, a search for sites of opportunity within the systems that continue to direct our spatial development.

*Organization Space* is divided into three sections that address what Easterling describes as “eccentric episodes” in the planning of American landscapes, highways, and subdivisions. The episodes are eccentric to Easterling because they involved alternative design practices, ones that sought to define new relationships between various infrastructures or presented proposals that would have configured differently our most familiar environments. The first of these episodes concerns Benton MacKaye, a self-proclaimed regional planner who was a member of both the Technical Alliance and the Regional Planning Association of America, two influential technical/political groups in the 1920s and 1930s that advocated the use of emerging transportation and hydroelectric infrastructures to “sponsor distributed networks of community.” Easterling describes MacKaye’s attempts to forge a design methodology capable of integrating transportation, housing, and environmental needs, a methodology he referred to as geotechnics because it fused “geography, forestry and conservation, engineering, colonization, regional planning, and economics.” As practiced by MacKaye, geotechnics saw the sites of spatial development as ecological in nature, sets of “interdependent parts within which small shifts in balance or orientation had enormous effect.”

As opposed to conventional notions that tend to define site as a physical locale with definite limits, Easterling praises MacKaye’s method of identifying site in not only “spatial, but temporal and procedural” terms as well. The presentation of MacKaye’s comprehensive planning methodology — his complex understanding of site — makes it clear that, for Easterling, the reconception of site within

design practice is a central issue. While Easterling claims no heroes, Benton MacKaye serves, one assumes, as a model for a productive designer engaged in an interdisciplinary, organizational practice.

His conception of the Appalachian Trail, as first presented in a 1921 article in the *Journal of the American Institute of Architects*, serves as a touchstone for Easterling in this regard. Typically understood as a hiking trail that extends from Georgia to Maine along the crest of the Appalachian Mountains, the trail as initially proposed by MacKaye would function as “a kind of public utility or reservoir of natural resources, organizing transportation and hydroelectrical networks while locating industry and community.” Through a simple hierarchical inversion scaled from highway to pedestrian path, MacKaye’s design for the trail sought to reorder an entire region as one vast ecological system. Conceived of as a settlement levee for the Eastern Seaboard, the Appalachian Trail was seen by MacKaye as an infrastructure along which “compact communities and industries would crystallize ... to replace the suburbs.” Easterling doesn’t clarify the extent to which the trail ever performed as MacKaye envisioned it, but ultimately that is not the point. Instead, she sees the power of MacKaye’s proposal in the attitude it expresses toward the relationship between infrastructure, settlement, and nature.

Though Easterling’s first “eccentric episode” examines landscapes through the work of a single individual, the final two episodes address the subjects of highway and house from a broader perspective, looking at the development of early alternative proposals for both the interstate highway system and the residential subdivision. For Easterling, these alternatives expose new sites of action within which architects might find opportunities to redirect conventional patterns of spatial development.

Prior to the passing of the Interstate Highway Act in 1956, several proposals envisioned a more complex highway network capable of handling a variety of transportation and community demands. Among the losses that Easterling bemoans are the ideas of intermodality and “intelligent switching” within the highway system, as well as differential treatments of highway rights-of-way. Easterling describes a variety of proposals, from Warren Manning’s 1923 “trunk-line traffic tracks” that proposed “trunk-lines [lying] next to railways and waterways, and ... provided

with facilities for freight interchange” to Benton MacKaye’s “cement railroads” to Norman Bel Geddes’ 1939 plan for a national motorway system, a plan that proposed a grid of roadways that would pass close to but not enter major metropolitan areas, instead focusing attention on subordinate centers located at the intersection of the motorways.

These and other proposals were ultimately abandoned for the present system, a relatively undifferentiated arrangement of simple traffic corridors and interchanges, indifferent to external circumstances. What we are left with according to Easterling is a “frozen” infrastructure, a “dumb network with dumb switches.” Her implication is that the sprawl that now chokes many cities, and which has been encouraged by interstate construction, need not have occurred. More important for Easterling, however, is the possibility that unexplored and underused or misused sites remain within the highway system. Though vague about what might be accomplished at these sites, she nonetheless, through her citation of historical precedents that saw the highway differently, suggests ways to reevaluate our relationship to an almost 50-year-old infrastructure.

In a similar manner, various non-urban settlement proposals generated by a wide range of designers before World War II were ultimately neglected in favor of the more generic patterns associated with suburbia. Easterling examines the development of what she terms “subdivision science” through an analysis of prototypes, including ship-building communities developed for the U.S. Housing Corporation during World War I as well as New Deal demonstration projects from the 1930s.

In these early prototypes, varied approaches to housing were explored. While some of these proposals provided the basis for much of what we today recognize as the generic subdivision layout — cul-de-sacs foremost among them — they tended towards a more ecological, as MacKaye might have described it, organization. In a Radburn, New Jersey, prototype, for example, the use of cul-de-sacs worked in concert with what were called “super blocks” that left an open stretch of green park in the block’s center, a neighborhood park that functioned as a pedestrian spine and reoriented the house.

Ultimately, many of the new town prototypes suffered from being labeled as socialist experiments; private development

interests, including the National Association of Real Estate Boards, lobbied against them in order to procure subsidies for their own projects. Following World War II, the FHA’s mortgage insurance policies, combined with demands for housing at a scale that could boost the post-war economy, effectively standardized subdivision layouts regardless of location. Ironically, it is in this understanding of the house as a product — a product filled with products — that Easterling finds what she believes to be a potentially rich site for design intervention. She speculates that it is in the individual components, such as appliances or even building materials, that are distributed throughout houses that an adjustment might be made to the larger system of housing. Easterling imagines “a fitting that does not remain neutral to the larger organization, but rather sends in an order to adjust interplay between the house and its surroundings or between groups of houses.”

Collectively, Easterling’s “episodes” tell a story of proposals waylaid by bureaucratic efficiencies and political deal-making. It is a tale of design being subsumed by politics and transformed into readily digestible and rapidly deployable prototypes and rules. Her book exposes brief moments in time when the American landscape might have been made differently, and then asks how we can best use the knowledge of these lost opportunities to chart productive courses of action.

In response, Easterling tries to articulate new definitions of architectural practice, ones that would not only coordinate political, economic, and technological forces within the design process, but redefine the basic terminology and paradigms of design itself. This is a struggle; as Easterling’s often-difficult prose demonstrates, architectural discourse suffers from a limited vocabulary. Ultimately, this limited vocabulary, even when supplemented by terminology appropriated from other disciplines, prohibits *Organization Space* from clearly establishing architecture’s potential to effect change. We are left instead with vague assertions as to the power of minor adjustments to modify whole fields of development. While this may be possible, the stories Easterling tells tend to suggest that the power of legislative action in the service of industrial demand is far more influential. Nonetheless, *Organization Space* is an important book, important not so much for the answers it provides — they are few — but for the questions it raises.