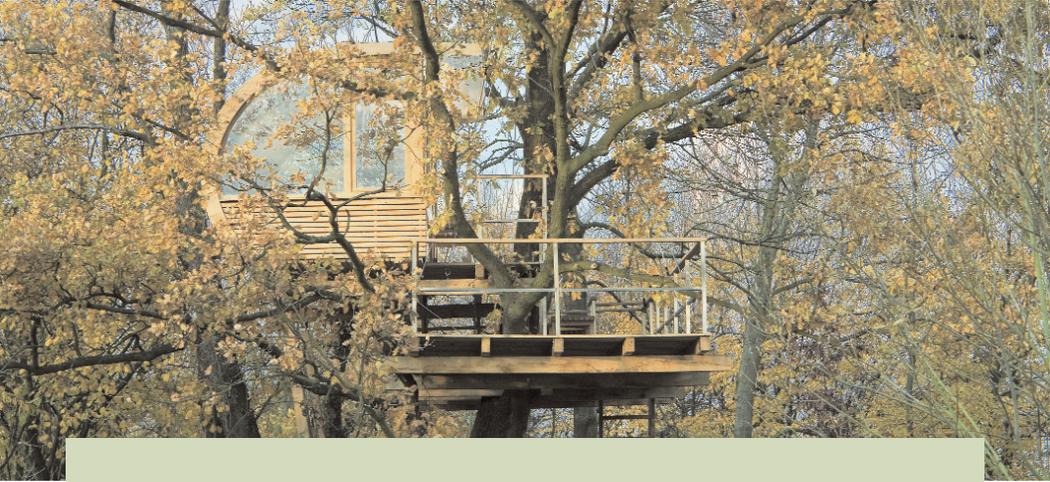
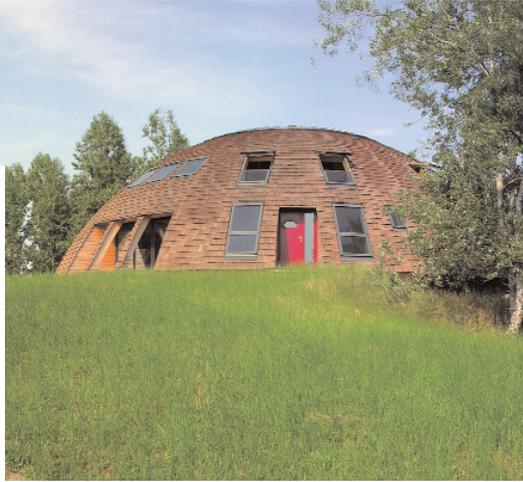


*First, there grew up in the courtyard an olive tree. Round that olive tree I built a chamber, and I roofed it well and set doors to it. Then I sheared off all the light wood on the growing olive tree, and I rough-hewed the trunk with the adze, and I made the tree into a bed post. Beginning with this bed post I wrought a bedstead, and when I finished it, I inlaid it with silver and ivory. Such was the bed I built for myself, and such a bed could not be moved to this place or that.*

*[T]oday, at sunrise, we saw a white flame among the trees, high on a sheer peak before us. We thought that it was a fire and we stopped. The flame was unmoving, yet blinding as liquid metal. So we climbed toward it through the rocks. And there, before us, on a broad summit, with the mountains rising behind it, stood a house such as we had never seen, and the white fire came from the sun on the glass of its windows.... The house had two stories and a strange roof flat as a floor. There was more window than wall upon its walls, and the windows went on straight around the corners, though how this kept the house standing we could not guess.*



## THE ECOLOGY OF HOME

Lance Hosey

These two passages, written nearly three thousand years apart, represent dramatically different concepts of home.

In the first, from Homer's *Odyssey* (c. 800 BC), the hero describes the building of his bed chamber. Returning after two decades away, Odysseus is not recognized. As if to reintroduce himself to his own household, he recounts how he founded it. Having carefully crafted its centerpiece, the bedstead, around a living olive tree, he has created a house that "could not be moved to this place or that." Home is rooted in place.

Contrast this with the second narrative, from the novel *Anthem* (1937). Ayn Rand's most reactionary critique of socialism, the story is a dystopian parable in

which the community so outweighs the individual that the concept of the self has disappeared altogether. The single family house has vanished along with the single family. The narrator, who refers to himself as "we," because the word "I" has been forgotten, escapes the fortress commune and retreats to a mountainous outland, where he discovers "a house such as we [he] had never seen." Looking glasses, narrow doorways, a personal library, and a bedroom too small for more than two signal a lifestyle for the few, not the many. In this "place of wonders," the narrator rediscovers individuality and private life.

While both stories ask fundamental questions about identity and home, their answers are very different.

Homer portrays the house as entangled in its environment, inextricable from the living tree. Rand conceives the house as a vessel for the self—a solipsistic refuge. Over the entry the protagonist of *Anthem* carves "the sacred word": EGO. Homer's house extrudes itself from the earth. Rand's floats like flame. The ancient home was bound to its natural setting; by nature it was externalized, a reflection of its surroundings. The modern was internalized, a personal sanctuary.

This distinction is not between old and new but between house and home. A house is just shelter—four walls and a roof—but home, of course, is where the heart is. In this sense, the concept of a "green home" is essentially redundant. While green building strategies

often focus on technical issues such as energy efficiency and material content, sustainability really is a form of homecoming. The Greek root of "ecology," *oikos*, means "home," an understanding of place familiar to indigenous peoples. Native American activist Winona LaDuke describes the task of sustainability using the Anishinaabeg word *keewaydahn*—"going home." Ecology is rooted in home, and home is rooted in place, so "green home" has a circular definition.

The relationship between a house and its ecosystem mirrors the relationship between home and planet. Whereas the boundaries of a house may lie at its property line, home includes the entire earth. As Thoreau mused, "What's the use of a house if you haven't got a tolerable planet to put it on?" A house does not become a home through dramatic design but through a profound empathy between people and place.

Yet, the rooted nature of home is lost on the modernist conception of both house and culture. In philosophy and practice, the industrial revolution attempted to subdue nature, and Freud called the "exploitation of the earth" one of the hallmarks of culture. Nature had value only through human permission. Rand has her character claim that "the sight of my eyes grants beauty to the earth," and he controls everything he sees: "my sky, my forest, this earth of mine." This possessive attitude toward the earth is well represented by the "house such as we had never seen"—a Miesian glass box, which would have seemed so futuristic in 1937. (How quaint to call a flat roof

"strange.") The modernist glass house transformed the picture window—nature as decoration—into an entire building. "There was more window than wall upon its walls," as Rand describes it. From safe inside, the rest of life was a thing to behold, like a souvenir. Look, don't touch.

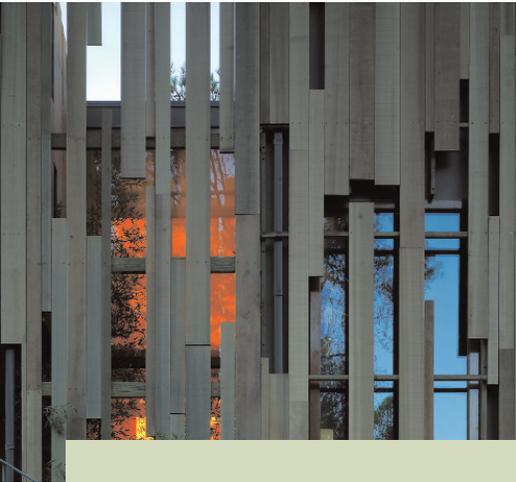
Ironic that for her chapel of individuality Rand would choose the machine aesthetic, an architectural vocabulary based on mechanical reproduction. Her house-of-the-self sounds much like Philip Johnson's house for himself, built in Connecticut a decade later (1949). But Johnson's personal expression was dependent on someone else's personality, since he was admittedly Mies van der Rohe's ventriloquist dummy. Consequently, his house was more homage than home, and it has always felt more like a museum than a residence. The architect is said to have been "distracted" by its "proximity to nature," and this sort of distraction seems to have been endemic to the modernist house. Mies' own version of his vision, the Farnsworth House (1950), was abandoned by Edith Farnsworth within six months because she felt exposed, alienated, or alone. This house literally became a museum.

Frank Lloyd Wright replaced Mies as Rand's inspiration in her most popular novel, *The Fountainhead* (1943), which itself carved out EGO as the sacred word of the architect. In seven years, Rand seems to have realized that the self in question is not the occupant but the architect. Since then, the designer house has become an excuse to live out the architect's dreams,

not accommodate those of the client or the community. As anyone who has ever lived in a Wright house will tell you, it is more the domain of the designer than the owner.

Of course, most American houses are driven not by egoism but by economics, since the majority sit in commercial real estate developments. The pre-modern house was wedded to place, embodying its larger setting through local materials, local techniques, local climate and local culture. Think of the Thai thatch hut, the Inuit igloo, the Icelandic turf farm, the Nantucket saltbox, the Virginia dogtrot, the Anasazi cliff dwelling. In the hands of contemporary production builders, regional flavor has become a brand to be marketed anywhere, and the image of place has become independent of place. An English manor made sense in Oxford but not in Albuquerque, and a Tudor in Tallahassee symbolizes the comforts of home without providing them. Today, the true International Style is not the machine aesthetic—it's the McMansion. When home becomes a commodity, the entire planet becomes a suburb of Dallas.

How do we address the dilemma of home in an age of environmental and cultural degradation? How can home transcend the glamorization of the architect and the globalization of place? The book in your hands asks these questions. In various ways—with varying degrees of success—every project examines identity in relation to social and natural community. If this



work is any indication, the modern green home is a tug-of-war between place and personality.

The subject of that last sentence is carefully chosen, as the focus of this book is not the green home but the modern(ist) green home. Every project dates from the last five years, and virtually all of them adopt the formal traits of modernism even while challenging its technical and philosophical premises. These architects explore the relationships between aesthetics and ethics by combining Mies' "less is more" with environmentalist Paul Hawken's description of sustainability as "doing more with less."

Though diverse in size and situation, together the projects illustrate four kinds of inquiry:

- Technique. How is it made?
- Systems. How does it perform?
- Aesthetics. What does it look like?
- Context. How does it relate to its natural and cultural environment?

Context varies considerably, as twelve projects are spread across North America, nine through Europe, and two in Australia. Most are detached single family houses, two are multi-housing, and a few defy categorization. (Baumraum's "Between Alder and Oak" tree-house marries Homer's tree-bound home to Rand's floating box.)

Much of the work is exceptional. Jennifer Siegal's Seatrain House is one of the most compelling residential designs in recent memory. Salvaging materials has

become popular, but the designs often appear stitched together like a junkyard Frankenstein. The Seatrain transcends its bits and pieces and transforms an industrial wasteland into a gorgeous oasis, a home on the scrap heap. Kieran Timberlake's Loblolly House combines mechanical fabrication with a uniquely sensitive interpretation of its wooded setting. The blending of the striated cladding with the surrounding pine forest causes figure and ground to oscillate in a way that is positively surreal.

Some of these projects apply environmental strategies to old forms. The Les/Gwen McDonald House is a Canadian modern version of McKim Mead and White's Low House. The lacing of brick and photovoltaic panels in The Solaire, by Pelli Clark Pelli, echoes both the Manhattan tradition of layered high-rise facades as well as Cesar Pelli's own long-term interest in the expressing the thinness of modern construction. EHDD's F10 house updates the Chicago townhouse, Arkin Tilt's Eastern Sierra House reinterprets the Western cabin, House W reimagines a Bavarian farm, the R4 House brings Japanese metabolism to Spain, and "Dome-space" revisits the post-war dome house—Buckminster Fuller with cedar shingles.

The Zero Carbon House gives an eco-tech twist on the generic suburban model. A gabled box with dormers, it exists everywhere and nowhere at the same time (though it happens to be in Scotland). Of course, if every suburban house were energy neutral, we could worry only about the state of our neighborhoods, not

the state of our planet. Accordingly, such projects perfectly demonstrate the status quo of sustainable design—its vision is in the nuts and bolts, not on the napkin sketch.

The high-design equivalent is the Walla Womba Guest House, a Tasmanian variation on the Farnsworth, with a bent roof. Passive solar Mies. The influence of the Farnsworth can be seen in the work of another Australian, Glenn Murcutt, which begs a question: what is the relevance between contemporary living in Australia and a 1950 German-designed house in Illinois? Do the icons of architecture overshadow the particularities of place? The ultimate example of this dilemma is modern prefab, popularized by Michelle Kaufmann's Glide House but epitomized by projects such as Cannata & Fernandes' "self-sustained module," which feels as much like product design as it does architecture. Stylistic questions aside (prefab is a technique, not a style, though it has made mid-century modern a retro fad), can a project be truly "green" when it is designed specifically without a site in mind? Can there be such a thing as placeless sustainability?

These questions do not diminish the design of these projects but, rather, underscore the ambition of their aims. Is the modern green home a house with better technology, or is it a whole new way of living? You may find some answers on the following pages.

## The symbolism in each project's fact sheet refers to the following themes:



ENERGY



WATER



MATERIALS



OTHER