

UC Berkeley

Room One Thousand

Title

Technology and the Box

Permalink

<https://escholarship.org/uc/item/7b46p586>

Journal

Room One Thousand, 1(1)

ISSN

2328-4161

Author

Maitland, Padma

Publication Date

2013

Copyright Information

Copyright 2013 by the author(s). All rights reserved unless otherwise indicated. Contact the author(s) for any necessary permissions. Learn more at <https://escholarship.org/terms>

Peer reviewed

Padma Maitland

Technology and the Box

The room is the beginning of architecture. It is the place of mind. You in the room with its dimensions, its structure, its light responds to its character, its spiritual aura, recognizing that whatever the human proposes and makes becomes a life. —Louis Kahn, 1971

Rooms are for people. Boxes are for things. In his 1971 speech for the AIA Gold Medal Award, Louis Kahn began with the room as the basis of architecture and good design. The potential of architecture to come to life and have meaning lies in the careful handling of space.¹ Through the thoughtful act of designing qualities of light, texture, and proportion, enclosure is transformed into something more than the sum of its parts.

Calling a space a room is an invitation to enter, for design to be activated by inhabitation. Much like a text becomes the meeting point for two minds, a room embodies the potential moment for design and experience to come together.² *Room One Thousand*, UC Berkeley's new architecture journal, grew out of our desire to provide a space for the discussion and research of architecture. Like any room, it is only through the contributions and experiences of those who enter into it that such a project becomes meaningful. By creating a forum open to multiple perspectives on material cultures and the built environment,

our journal seeks to consider a broader discourse on architecture that can accommodate research from a variety of disciplines.

The theme of “Technology and the Box” emerged from a year of conversations with students, faculty, and professionals. Understood as a conceptual device, this theme invokes a practical/theoretical split that is pervasive in architectural practice and education, making it a useful starting point for conversation bridging different approaches. Rather than comprising an exhaustive analysis of space and methods in the field, or a definitive response to what “technology and the box” might mean, this first issue showcases a diverse collection of thematically linked essays. Assembled, the articles present some of the many ways the study of architecture can be approached, suggesting further lines of inquiry and dialogue. What follows is a brief discussion of the room and how it became first a cube and then a box.

Notes on a Theme: All Boxed In

Today, architects do not talk of rooms. They talk of spaces, concepts, and perhaps feelings, the affect of the room having migrated into the quality of the design itself. In order to understand the move away from physical rooms and towards conceptual boxes, it is worth considering the gallery as a mediating zone between the two. As a liminal space between design and realization in the everyday built environment, the gallery has proven to be an important arena for testing and defining new visions of art and design practices. It is in the gallery, after all, where new concepts can be explored without the high costs of construction and the requirements of everyday life.

Like the room, the gallery underwent a series of changes, evolving from a lived chamber to a purified space; as rooms became white boxes, so did galleries. Only five years after Kahn’s Gold Medal speech, Brian O’Doherty wrote *Inside the White Cube*, an insightful commentary on

how the space of the gallery came to be the mediator and medium for appreciating art. Whereas Kahn's room, as the beginning of architecture, culminated with the entrance of the visitor, O'Doherty ascribes to the white space of the gallery a more antagonistic relationship with those who enter. As a case study, O'Doherty considers Duchamp's takeover of the Surrealist exhibitions, first through the installation of *1,200 Bags of Coal* (1938) and then again in *Mile of String* (1942). In both cases, the space of the gallery is made uncanny, effectively creating a perception of the gallery space and the artwork premised on the estrangement of the visitor from that space. Through installations like Duchamp's, galleries themselves became aesthetically charged. Photos of *Mile of String* show a room strung with endless webs of twine: it is no longer clear how one would move around the space, let alone enter. In *1,200 Bags of Coal*, heavy sacks suspended from the ceiling unmoor the basic principles of any habitable space. In each case, spectators enter into the artist's fantasy rather than a room.

Interventions like Duchamp's gallery takeovers signal the transition from rooms to boxes. As gallery spaces are made strange, visitors are made to feel a stranger to the space. The real art of such installations is not on the walls, as it is within the viewer: the artist's medium becomes the emotional response elicited through direct engagement with the space of the gallery. As O'Doherty writes:

By exposing the effect of context on art, of the container on the contained, Duchamp recognized an area of art that hadn't yet been invented. This invention of context initiated a series of gestures that 'develop' the idea of a gallery space as a single unit, suitable for manipulation as an esthetic counter. From this moment on there is seepage of energy from art to its surroundings. With time the ratio between the lateralization of art and mythification of the gallery inversely increases.³

Spatial metaphors such as the “room” or the “gallery” convey deeply held notions about the nature of space and manners of living that influence how architecture is designed and studied. While rooms and galleries are different, it is possible in the current trends of architectural design to trace a lineage where the two spaces are not that distinct. Rather than directed towards an analysis of different typologies, we can read O’Doherty’s discussion of the gallery and Kahn’s discussion of the room as a means to consider pervasive attitudes towards art, architecture, and design.

In his essay “Art and Life: A Metaphoric Relationship,” Richard Shiff discusses the gap between life and art—“immediate experience” and “established truth” as he calls them.⁴ Metaphors bridge the two, connecting individual expression with larger cultural trends that inform generational approaches to design and art practice. As Shiff writes:

...at any given time all artistic expression is governed by a particular mode of vision or constellation of visual forms, as if the world were seen through a single grand metaphor. Thus, as Wölfflin writes, the Gothic cathedral and the Gothic shoe will exhibit the same formal principles.⁵

Noticing that modern artists and architects began to search for an art akin to immediate experience, Shiff wonders how art can simultaneously express the individual experience of the artist, while still remaining relevant or meaningful to a larger audience. Shiff’s question is not that different from O’Doherty’s: How does art go from being something on display in the gallery to a force that is able to transfigure space itself into an object of art? As Shiff further writes:

When art is conceived as experience, the work of art is seen as revealing reality from inside by serving as a comprehensible model for life’s persistent immediacy, a fixed image of flux; when art is

conceived as an object, the work of art seems to reveal reality as an external world, a reality against which the life of the individual is thrown in relief and gains definition.⁶

The turn from art as *object* to art as a *force* is an important one; art *on* display verses art *as* display. Rather than being confined within frames or on pedestals and then placed in rooms, corridors, and gardens, art has moved beyond its traditional confines and into every aspect of life. With the loss of a guaranteed frame, the nature of the gallery space changes from being a room for art, to being a container of art: in other words, a box.

Galleries understood as boxes provide a unit of space that can be measured in relationship to aesthetic experiences. Taking this to an extreme, the French artist Yves Klein famously transformed the gallery into a zone of artistic expression by celebrating the absence of art in his project *Le Vide* (1958), an empty gallery space painted white in an exhibition otherwise made blue. The innermost chamber of the Iris Clert Gallery alone was devoid of color, infused instead with the essence of the artist (Yves Klein) who locked himself inside overnight. Outside *Le Vide*, everything from the gallery walls to the napkins, the drinks, and as much of Paris as possible, were colored blue.⁷ Klein's use of the singular space of the artist was combined with universal aspirations and guides for the appreciation of art and culture. Blue on the one hand and white on the other, *Le Vide* expressed a joint desire for the specific and the general within a rhetoric of prime conditions. Though not always made apparent, Klein's work relied heavily on technological innovations, based on a belief that new technologies have the potential to lead to spiritual and material liberation.

Openness, technology, and new models for living came together in Modernist art and architecture. More than thirty years before Klein's *Le Vide*, Le Corbusier had sought to make vast expanses of open space

within the city of Paris, thus radically reimagining how we live, through an ejection of material from the center of the city.⁸ Famous for houses read as little white boxes, Le Corbusier's vision of modern space was as fanatical as Klein's, expanding well beyond the limits of any one structure. Order and openness replaced old and crowded urban centers and the new technologies of cars, streamliners, and airplanes provided the inspiration, unifying a vision of a new, atomized world.

While it was architects like Le Corbusier who made the white cube iconic, it was the Florentine architectural group Superstudio who made it monumental. In their project the *Continuous Monument* (1969), they outlined the evolution of the built environment as emerging from a single cube, becoming first grand, then massive, and finally, universal. Eventually, the *Continuous Monument* became so ubiquitous it disappeared; discernible only as a grid on the ground, a reference to the original dimensions of the cube, and a commentary on the new evenness of Modernism that no longer needed rooms, just more boxes. Again, technology held the vision together, providing the imagined means to make the *Continuous Monument* possible. It is with the cube's recession at the hands of technology into the landscape and the hidden grids of cities that Modernism's utopic visions were pronounced dead, inspiring the most famous line of another architectural collective: "Owing to a lack of interest, tomorrow has been cancelled."⁹

The dominant ethos of "post-utopian" Western culture fundamentally linked to technology is compellingly taken up by R. John Williams in his article "*Technê-Zen and the Spiritual Quality of Global Capitalism*." Taking Robert Pirsig's novel *Zen and the Art of Motorcycle Maintenance* as a manifesto of a postmodern worldview, Williams suggests we take "zen and the art of..." or what he calls "*technê-zen*" philosophy, and its impact on contemporary culture, more seriously. According to Williams, *technê-zen* is "a discourse premised on the supposed commensurability

and mutual determination of Zen Buddhism (including all of its related Taoist notions and techniques of spiritual and aestheticized practice—in short its *technê*) and the possibilities of an organic and holistic form of rationalist technocracy.”¹⁰

The qualities associated with Zen Buddhism in the West seem to make technology more palatable. Drawing on a “cybernetic zen” culture that began in the 1950s and ‘60s, a *technê*-zen ethos, according to Williams, draws on a countercultural yearning for freedom, liberation, and escape already present within the work of artists like Yves Klein and Superstudio, but modifies them according to a brand of consumerism realized through emerging technologies and global networks. Linked to concepts of transcendence from real and lived spaces, a “zen” approach to design finds a natural partnership with technology and its ambitions to disappear. Like the ejection of the inhabitant from the gallery, technology seeks to eject all life out of boxes and into space, constantly attempting to minimize materiality while maximizing immaterial affect: minimal tools, maximum results.¹¹ A *technê*-zen approach therefore perfects the practice of the techno-box, where experiences and the “aura” of the room as discussed by Kahn, are located not in space itself, but in the assumed experience of the user.

Conclusion

The famous purge of modernism was the ejection of sentiment from design. And with it, we were ejected from rooms and into boxes. We are free now to reexamine that great exodus, perhaps reentering the room to see what might be lingering in the corners. While I am not advocating for a complete reappraisal of old and new methods, I am suggesting that we can begin to take a more critical glance at how we describe architectural spaces and the concepts underlying approaches to design.

What does a focus on “the box” in architecture offer? The term “box”

can be defined as a noun—"A case or receptacle usually having a lid"—or as a verb, referring to the act of defining, limiting, and containing.¹² No longer a frumpy wooden case in the cupboard, "the box" can be used as a discursive device that contains and defines architecture in relationship to the tools and means for conceptualizing it. The result of "the box," as a new spatial typology linked to technology, is that design, like art, is somewhat abstract. Unlike the room, the box can take on more imaginative proposals for life and living. Understanding architectural spaces as boxes seems best able to conjure images of the sterile white cube of the gallery, while still allowing for the application of new tools and technology to design it. In other words, "the box" marries space with technology, and design with its methods of production and creation, highlighting a dual interest in the objective and affective nature of created spaces. All we have to do is think of the inbox and outbox of our emails to see how easily the idea of a "box" can be employed in the service of new tools and digital mediums, not to mention the proliferation of shipped boxes (Amazon) and little techno-boxes (Apple, Dell, etc.) that crowd our daily life.

"Technology," like the term "box," can take on a variety of meanings from discourses on the arts to a study of mechanics. A more common understanding of "technology" though, is not as a "study of," but as a collection of objects and things that we have come to live with everyday, referring to the computers, tablets, gadgets, and gizmos that increasingly govern how we see and interact with the world around us. From the cars we drive, to the buildings we enter, the ways we learn, socialize, and make connections, "technology" increasingly defines the world and our relationship with it.

Foundational to technology today is the box, the little metal and plastic cases that contain the millions of circuits and wires that process endless amounts of information to offer altered perceptions of the

world and answers to some of life's biggest questions.¹³ Broken down to bits before being exported as images, texts, apps, and services, the information of technology works best by being all boxed in, broken down and contained within smaller and smaller units of ever increasing potential before being directed out into the atmosphere. Information and technology, thought of this way, suggests an ultimate ambition of new designs and innovations to simply dissolve material into space, becoming ubiquitous in the same way that the cube filled the clouds and earth in Superstudio's *Continuous Monument*, and returns us to the idea of a new "zen and the art of culture" as discussed by Williams.

The articles in this issue of *Room One Thousand* all explore different approaches to the study of architecture through references to "Technology and the box." Margaret Crawford's piece "Little Boxes, High-Tech and Silicon Valley" explores how Silicon Valley has fostered dynamic social processes and communities within the often-derided "ticky-tacky" homes of the suburb.¹⁴ Among other insights, Crawford traces the genealogy of the garage, leading from the 1930s to its present day incarnation, as a site of start-up innovation and troubleshooting development, questioning basic assumptions about the nature and quality of such spaces. Simon Sadler, in "A Container and Its Contents," reviews Tomas Moldonado's 1970s text *Design, Nature, and Revolution: Toward a Critical Ecology* as a means to reflect on the larger implications of a technology-box dialectic in the practice and education of architecture. Picking up on the role of technology in design education, Kyle Steinfeld, in "Public, Private, Protected," discusses the different "transparencies" of computer operating systems. In "The Seduction of the Glass Box," Katie Acherly considers why the glass box has remained so alluring for architects, despite the physical limitations and possibilities of more innovative uses of material and forms. Expressing a similar history of architectural fantasy realized through technological

innovation, Gina Greene writes about the ability of architecture to ignite the imagination in “Eiffel’s Apartment and the Architecture of Dreams.” Ajay Manthripragada’s studies of Mies van der Rohe highlight the importance of details in the pursuit of architectural perfection and spatial ideals. Sasha Rossman’s “Transitional Objects” offers a study of how designed objects were shipped around the country in boxes as part of postwar West German reconstruction efforts, connecting good design with the work of rebuilding a nation. The artistry of the box, like those described Rossman, is further considered in Joey Enos’ “The Fine Art of the Art Crate,” offering a more detailed account of how even the most banal looking crates can possess real beauty. Elaine Stiles brings to light (bringing them out of the box, so to speak) new holdings of the Environmental Design Archives in Berkeley, showcasing the work of Ernest Kump Jr. and his new “Architecture for Man” that combines technology with prefab boxes. Brian Knecht’s collection of photos of Sun City in Arizona considers the box-like nature of many suburban homes, and the small idiosyncratic treatments of each house and yard by its owners. Photographs by Art Gray feature designs by Taalman Koch Architecture and Minarc Architects, two contemporary designers that are pushing prefab technologies in the construction of energy efficient homes. Prominently showcased in Sheri Koone’s text *Prefabulous and Almost Off the Grid* (2012), and reviewed by Lotus Grenier and Zoe Beba in “Considering *Prefabulous and Almost Off the Grid*,” the IT HOUSE and the Superb-A House are examples of current trends in architectural practice related to the theme of “technology and the box.”

While “Technology and the Box” offers a way to connect theoretical and applied approaches to architecture, it also serves as a productive counterpoint to the journal’s name—*Room One Thousand*. The theme highlights the journal’s ambition to be a space for community while recognizing that the way people come together and engage in

dialogue has changed. While the novelty of online forums and long distance communication made possible through the internet, personal computing, and so forth, has perhaps worn off a bit, the desire to make real connections with others through them has not. Therefore, while *Room One Thousand* is an online and print-on-demand journal, it also refers to a real room on the top floor of Wurster Hall in Berkeley, California.

[Endnotes]

1. Reprinted in 1973. Louis I. Kahn, "The Room, the Street, and Human Agreement," *A+ U* 1 (1973): 5–222.
2. The idea of two minds—that of author and reader—meeting on the page of a text is taken from Toni Morrison's Nobel Lecture of 1993.
3. Brian O'Doherty, *Inside the White Cube: The Ideology of the Gallery Space* (Berkeley: University of California Press, 1999), 69.
4. Shiff, Richard. "Art and Life: A Metaphoric Relationship." *On Metaphor*, Ed. Sheldon Sacks. Chicago: University of Chicago Press, 1979. 105.
5. *Ibid.*, 113.
6. *Ibid.*, 109.
7. Yves Klein had drawn up designs for lighting the obelisk in Place de la Concorde, Paris, blue. It was only years later that his vision was realized. Blue balloons were released instead, as perhaps the next best thing.
8. See Le Corbusier's *Plan Voisin* (1925).
9. This was the title of Warren Calk's 1969 article, first published in *Architectural Design*. Calk was a member of the Archigram collective at the time, a group famous for its explorations of technology in partnership with radical designs. The work of Archigram suggests an interesting line of consideration for the basic units of space used to describe architecture. Their "Walking City" project, for example, suggests units of space that can come to life, introducing a new architectural device: the pod.
10. Williams, R. John. "Technê-Zen and the Spiritual Quality of Global

Capitalism.” *Critical Inquiry* 37 (Autumn 2011): 19.

11. Just think of Silicon Valley’s eternal quest for ever-smaller computer chips that can process ever-greater amounts of information.

12. Definition from the Oxford English Dictionary.

13. Here I am thinking of Douglas Adams’ 1978 radio comedy, “The Hitchhiker’s Guide to the Galaxy,” in which the super computer Deep Thought is asked what is the answer to the ultimate question of life, the universe and everything; the answer being “42.”

14. Refrain from Malvina Reynolds’ song “Little Boxes” (1962).