

The Porch as a Threshold in Between Architecture and Landscape Architecture

Igor B. Plevitzkys Birdcage (1949) and the Florida Tropical Home

Introduction

The idea of the tropical home for Florida emerged at the *Homes of Tomorrow Exhibition* at the 1933 *Century of Progress Fair* in Chicago. Robert Law Weed (1897–1961), a Miami based architect, designed the Florida Tropical Home for this exposition (fig. 1). The Florida Tropical Home inaugurated the proposition of a regional modern architecture for Florida, departing from the earlier Mediterranean styles that had dominated the state’s architecture. Weed’s Florida Tropical Home advanced spatiotemporally expanded thresholds—which comprised elements of architecture and landscape architecture—to achieve a very gentle transition between the inside and outside, creating a series of semi-open loggias and terraces that would soften and extend the transition between inside and outside (fig. 2). This vision of the extended threshold, which also blurred the boundaries between architecture and landscape architecture, was based on the idea of enjoying and engaging the Florida tropical landscape, which was a mythic construct. The extended threshold made the Florida home distinct from northern homes, where the threshold between inside and outside was often compressed. This Florida Tropical Home at the *Century of Progress* exposition inaugurated the discourse on the Florida tropical modern home, which would later be developed by Florida architects—Marion Manley (1893–1984), Robert Law Weed (1897–1961), Igor B. Plevitzky (1911–1978), Rufus Nims (1913–2005), and Alfred Browning Parker (1916–2011). These architects began experimenting with the threshold, which is the liminal architectural space between inside, that is the house proper in the realm of architecture; and outside, which is the site of the imagined tropical landscape. In the process, these architects transformed the conventional understanding of the threshold space of porch as an architectural element into one that was both within the domain of architec-



Fig. 1 Plan of the Florida Tropical Home at the Homes of Tomorrow Exhibition at the Century of Progress Fair in Chicago in 1933. Architect: Robert Law Weed (1897–1961), Miami. Drawing by Mitchell C. Clarke based on a sketch in “Manifesto for Florida Modern Home,” *Arts and Decoration* 39, (June, 1933): 44.

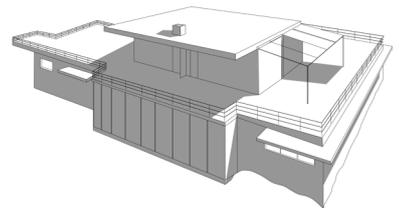


Fig. 2 Perspective of the Florida Tropical Home at the Homes of Tomorrow Exhibition at the Century of Progress Fair in Chicago in 1933. Architect: Robert Law Weed (1897–1961), Miami. Drawing by Mitchell C. Clarke based on a plan in “Manifesto for Florida Modern Home,” *Arts and Decoration* 39, (June, 1933): 44–45.

ture and landscape architecture. The 1933 Florida Tropical Home is also a tentative attempt not only to include porches as open, yet sheltered, rooms of a house, but also to acknowledge the surrounding landscape and work toward connecting the inner rooms through porches and cantilevered roofs with the Edenic Florida landscape. This did not become a robust and revolutionary architectural gesture until Polevitzky's later houses, in particular the two Heller residences, the second of which became nationally famous as the Birdcage House.

Historians argue that the Edenic imaginations of the Florida landscape were a postbellum cultural construct and the consequence of Florida's mythic status as a 'tropical' tourist destination. Both the Florida landscape and the Florida Tropical Home—with its vanishing boundaries between inside and outside and its blurred boundaries between architecture and landscape architecture—are a product of the Edenic imagination of Florida. Hannah Le Roux, a historian of tropical architecture in Africa, notes that the building boundary became the primary site of innovation and design in the African tropical architecture movement and yet this boundary was also the site of asymmetrical power relationships between the European imperial architects and their colonial subjects who used these tropical buildings.¹ Building on Le Roux's work, I propose that the transformation of thresholds and boundaries in the imagination of the Florida Tropical Home connects the histories of Florida tropical architecture with the larger global tropical architecture movement that developed in the colonial tropics of the British, French, and Dutch Empires. Currently, these histories have been written in tightly bounded compartments as if there were no connections between the colonial tropical and Florida tropical architecture. Tropical architecture, as a set of sanitary spatial practices, developed in the nineteenth century colonial discourses of hygiene that circulated along the networks of European Empires. In the second quarter of the twentieth century, European modernist architects, seeking commissions in the colonial tropics, transformed tropical architecture into a climatic design discourse and thus reconfigured tropical architecture as a strain of modernism for hot climates.

Igor Boris Polevitzky, a Russian émigré architect, arrived with his family in the United States in 1922 via Finland. The Polevitzky family was forced out of Russia during the Revolution in 1918, and eventually settled in Philadelphia. Igor Polevitzky studied engineering and architecture at the University of Pennsylvania.² He designed over five hundred buildings in South Florida and the Caribbean between 1934 and 1978, through which he tested the limits to which he could 'dissolve' the external envelop or boundary of the building.³ Polevitzky's blurring of boundaries between the 'inside' and the 'outside' culminated with the design of the Heller House—popularly known as the Birdcage House—which was featured in *Life magazine* in

1 Hannah Le Roux, "Building on the Boundary—Modern Architecture in the Tropics," *Social Identities* 10, no. 4 (2004): 439–453.

2 Allan T. Shulman, "Igor Polevitzky's Architectural Vision for a Modern Miami," *The Journal of Decorative and Propaganda Arts* 23, Florida Theme Issue (1998): 334–359.

3 *Ibid.*

1950 and the Museum of Modern Art's exhibit *Built in USA: Post-War Architecture*.⁴ Polevitzky took the screened porch — the liminal space in the house between the inside and outside — and transformed it into an envelope that was wrapped around the house. The whole house was concealed inside a giant screened porch, which redefined the relationship between inside and outside, and between architecture and landscape architecture. This paper examines how thresholds were transformed in the making of one tropical home — the Birdcage House. Allan Shulman argues that Polevitzky appreciated the vernacular wisdom of building elements such as patios, porches, and loggias, but, instead of imitating them, he experimented with these elements to develop novel means of transition between the indoors and the outdoors.⁵ The paper builds upon Shulman's work to argue that the transformation of the boundaries and thresholds between the inside and the outside, and the erasure of the differentiation between architecture and landscape architecture, was definitive of tropicality in Polevitzky's Birdcage House that captured the national imagination. The dissolution of the distinction between boundaries and thresholds resulted in a recalibration of the relationship between the inside and the outside, so the residents of the house could simultaneously inhabit the architecture of the house and spaces of landscape architecture, such as the pool deck, patio, terrace, and garden. The paper further argues that the Birdcage House became the discursive threshold where the divergent trajectories of post-war modernism — universalism and regionalism — dissolved, blurring the boundary between these two opposing discourses.⁶

⁴ "Bird-Cage House," *Life* (June 5, 1950): 63–65; Museum of Modern Art, Henry-Russell Hitchcock, and Arthur Drexler, *Built in USA: Post-War Architecture* (New York: Distributed by Simon & Schuster, 1952), 92–93.

⁵ Shulman, "Igor Polevitzky's Architectural Vision for a Modern Miami."

⁶ I am indebted to Lauren Stalder's reading of the revolving door not only as an architectural threshold, but also a site where two opposing discourses of modernism collide head on. See Laurent Stalder, "Turning Architecture Inside Out: Revolving Doors and Other Threshold Devices," *Journal of Design History* 22, no. 1 (2009): 69–77.

Thresholds and Boundaries

Walter Benjamin notes:

The threshold must be carefully distinguished from the boundary. A Schwelle "threshold" is a zone. Transformation, passage, wave action are in the word *Schwellen* swell, and etymology ought not to overlook these senses. On the other hand, it is necessary to keep in mind the immediate tectonic and ceremonial context which has brought the word to its current meaning.⁷

⁷ Walter Benjamin and Rolf Tiedemann, *The Arcades Project* (Cambridge, Mass: Belknap Press, 1999), 494.

Till Boettger notes that thresholds are spatial conditions that create openings in boundaries allowing for movement and transition in space.⁸ This paper considers the threshold as a permeable architectural element that allows for interchange and mediation between two different spatial conditions that are separated by an impermeable boundary. These different spatial conditions include spaces distinguished by environmental conditions — for example inside and outside, and air-conditioned and non-air-conditioned; socio-cultural attributes such as public and private, formal

⁸ Till Boettger, *Threshold Spaces: Transitions in Architecture Analysis and Design Tools* (Basel, Switzerland: Birkhäuser, 2014), 15–51.

and informal, and accessible and inaccessible; and specific spatial functions such as sleeping, dining, living, and cooking. The transactions between the two distinct spatial environments include movement of people through thresholds such as doors, verandahs, colonnades, porches, triumphal arches, terraces, marquees, stairways, patios, loggias, and stoops. Besides the passage of people across a physical boundary, mediation across environmental, acoustic, and visual boundaries includes flow of air, light, sound, and odor through thresholds such as doors, windows, louvers, and screens. While allowing transition, mediation, and passage through boundaries, thresholds are associated with specific symbolic meanings, rituals, and socio-cultural behavioral codes.⁹ Based on their function, thresholds have distinct material, spatial, and tectonic qualities, which can determine their occupation either for a quick transition or for habitation for an extended period of time. The porch is an architectural threshold that is intended for both a quick movement from inside to outside or vice versa, and prolonged habitation.

⁹ Quentin Stevens, "Betwixt and Between: Building Thresholds, Liminality and Public Space," in *Loose Space: Possibility and Diversity in Urban Life*, ed. Karen A. Franck and Quentin Stevens (London; New York: Routledge, 2007), 73–92.

Traditional American Porches in Domestic Architecture from Early to Mid-Twentieth Century

In a do-it-yourself pattern book on porch building titled *Making and Furnishing Outdoor Rooms and Porches* (1913) the author, Harold Donaldson, defined the porch as:

The porch, as we know it, is a peculiarly American institution [...]. A porch is a porch "for a' that," call it what we may — piazza, veranda, loggia or what not. It is that pleasant midland country between indoors and out that we, in America, have such a blessed opportunity of using to the full extent, thanks to our usually bright skies and sunny climate. One might define a porch generically as an open or semi-open structural contrivance for shelter, incorporated within the lines of a building or attached to it, for the benefit of those who wish to be out-of-doors and yet would not be rained on, nor shined on, nor blown on too violently.¹⁰

By the early twentieth century, American homes in all regions had developed a variety of porches which, in addition to the transition between indoors and outdoors, served various living functions. Thus, porches often served a dual purpose — allowing transit and habitation. When the porch was used for extended habitation or chores, it was meant to engage the landscape. Through the prolonged habitation of the porch, the landscape could be experienced for a number of different purposes — for sensory perceptions such as sight, smell, and sound; and for physiological comfort such as relief from humidity, cold, or heat, depending on how the porch was intended to create comfort.

¹⁰ Harold Donaldson Eberlein, *Making and Furnishing Outdoor Rooms and Porches* (New York: McBride, Nast & Company, 1913), 11–12.

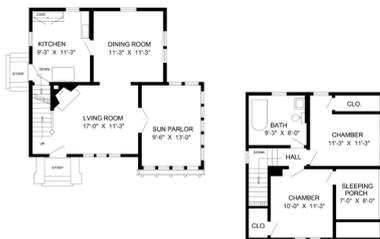


Fig. 3 Pattern book plan published in 1920 in Central Lumber Company's pattern book titled *Central's Book of Homes* shows a plan that has a sun parlor on the lower level with a sleeping porch on the floor above. Drawing by Jonah A. Greenwood based on a sketch published in Central Lumber Company, *Central's Book of Homes* (Reading, PA: Central Lumber Company, 1920), 2.

The entrance porch in front of the house also served as a public sitting space in which people interacted with their neighbors.¹¹ In colder climates, porches also doubled as sun parlors, which could be hermetically sealed in the winter and opened in the summer. For example, the Central Lumber Company's pattern book, *Central's Book of Homes* (1920) shows a plan that has a sun parlor with a sleeping porch on the floor above (fig. 3). With the development of greater control over porch openings to the outside with devices such as sliding glass panels, louvered walls, and interchangeable screens, porches became usable year-round and more adaptive to the climate.¹² Sleeping porches — often located on the upper level, or in the rear of the house for privacy — provided an extension to the bedrooms for sleeping outdoors and were valued in hot and humid climates where breeze was the only means for providing comfort.¹³ Porches also served as semi-enclosed extensions of the kitchen and dining areas, as dining and utility porches for performing household chores. For example, the United States Department of Agriculture's pattern book, *4 Farmhouses for the South* shows two plans of farms — one with a kitchen and dining porch and one with a utility porch for performing household chores (fig. 4 and 5). The roof over the porch ranged from fully covered with an impermeable roof for protection against rain and sun, to partially covered with a trellis or pergola, which might also have a screen.¹⁴ Porches were either embedded within the footprint of the house, known as the “ingrown” porch, or added to the plan, known as the “tacked on” porch.¹⁵ While the “ingrown” porch is better integrated with the house, the “tacked on” porch extends into the landscape, making it possible to inhabit the landscape.

In the South, porches held a special place in the imagination of domestic life. The hot and humid climate made porch living a necessity. In 1919, the novelist Dorothy Scarborough wrote in *From a Southern Porch*:

In the South, when a person plans a home, he first builds a porch, and then if he has any money left, he adds few or more rooms according to his needs, but the porch is the essential thing.¹⁶

In the South, the usage and social meanings of the porch are attributed to its highly creolized origins that can be traced to cultural influences from Africa, Europe, and the Caribbean.¹⁷ Porches were liminal spaces, which, through inclusion and exclusion, performed the function of regulating social boundaries of class, gender, and race.¹⁸ The porch as a crossing point between the highly regulated private-inside and the unregulated public-outside was the site where social boundaries began to be spatialized.¹⁹

Screened porches were especially prominent in the South to provide protection from bugs. The screened porch was an interstitial space, suspended between the inside and the outside. In Florida, the screened porch known

11 Raymond Arsenault, “The End of the Long Hot Summer: The Air Conditioner and Southern Culture,” *The Journal of Southern History* 50, no. 4 (1984): 597–628.



Fig. 4 Pattern book plan of a Southern Farm, plan number EX 7044, with a kitchen and dining porch. Drawing by Jonah A. Greenwood based on a plan published in United States Department of Agriculture, Alabama Polytechnic Institute, Extension Service, North Carolina State College, Agricultural Extension Service, Mississippi State University, and Cooperative Extension Service, *4 Farmhouses for the South* (Washington, D.C.: United States Department of Agriculture, 1950).

12 Ethel Brostrom, *How to Plan Your Porch and Patio* (New York: Greenberg, 1956), 5–10.

13 Charlie Hailey, “From Sleeping Porch to Sleeping Machine: Inverting Traditions of Fresh Air in North America,” *Traditional Dwellings and Settlements Review* 20, no. 2 (2009): 27–44.



Fig. 5 Pattern book plan of a Southern Farm, plan number EX 7054, with a utility porch. Source: Drawing by Jonah A. Greenwood based on a plan published in United States Department of Agriculture, Alabama Polytechnic Institute, Extension Service, North Carolina State College, Agricultural Extension Service, Mississippi State University, and Cooperative Extension Service, *4 Farmhouses for the South* (Washington, D.C.: United States Department of Agriculture, 1950).

14 Brostrom, “How to Plan Your Porch and Patio.”

15 Eberlein, “Making and Furnishing Outdoor Rooms and Porches, 31.”

16 Dorothy Scarborough, *From a Southern Porch* (New York; London: G. P. Putnam's Sons, 1919), 3.

17 Jocelyn Hazelwood Donlon, "Swinging in Place Porch Life in Southern Culture" (Chapel Hill: University of North Carolina Press, 2001), 57–97.

18 Ibid.

19 Christian Norberg Schulz notes that the doorstep as a threshold between inside and outside marks the transition from moving from a space that is regulated to one that is uncontrolled. Christian Norberg-Schulz, "Existence, Space, and Architecture" (New York: Praeger, 1971).

20 Georg Simmel, "Bridge and Door," *Theory, Culture & Society* 11, no. 1 (1994): 5–10, translated by Mark Ritter from the original, Georg Simmel, "Brücke Und Tür," in "Brücke Und Tür; Essays Des Philosophen Zur Geschichte, Religion, Kunst Und Gesellschaft" (Stuttgart: K. F. Koehler, 1957).

21 Here I use Simmel's idea of the wall as the boundary and the doors and windows that allow permeability between the inside and the outside. See Simmel, "Bridge and Door."

22 Georges Teyssot, "A Topology of Thresholds," *Home Cultures* 2, no. 1 (2005): 89–116.

as the Florida room creates a semi-enclosed transition space between spaces of landscape architecture such as patios, steps, and decks, and inner architectural spaces of the house proper. The porch is meant for a spatiotemporal pause before proceeding to outdoor spaces of landscape architecture. The porch is connected to the garden through permeable boundaries so that the landscape can be experienced—visually (colors, flowers, greens, and birds), olfactorily (flower fragrances), and auditorially (water and bird sounds).

The porch is materially distinguished from the indoor architectural spaces and outdoor landscaped spaces through material differentiations—varying degrees of hardscaped and softscaped surfaces—for example, the porch may be paved with a flooring material that is not as delicate as indoor flooring materials but not as hardy and rustic as outdoor pavements. The screened porch is neither a completely formal space that is associated with the decorum of architectural usage—as seen indoors with a fixed furniture layout—nor is it completely free of architectural constraints. Despite its design, materiality, spatiality, degree of enclosure, and degree of assimilation with the architecture, the porch is definitely in the domain of architecture.

The screened porch is neither completely indoors, nor completely outdoors. By virtue of the description of the outside as 'outdoors' and inside as 'indoors,' the door occupies a special position as a permeable threshold between the indoors and the outdoors. Georg Simmel notes that the door forms a connection between the inner space of habitation and the outside and, therefore, "transcends the separation between the inner and the outer."²⁰ The architectural spaces of the living room, dining area, or bedroom open into the screened porch, through hard thresholds—doors and windows. The porch is connected to the spaces of landscape architecture such as a pool deck, pool, and patio via thresholds such as a door, followed by a single riser or a few steps. The screened porch softens the hard thresholds of doors and windows that allow permeability between indoors and the outdoors, separated by the impermeable boundary of the wall.²¹ Thus, the screened porch is a spatiotemporally extended threshold between the inside and outside at the same time. The door is occupied for a fleeting moment in the process of going indoors or outdoors. Unlike the porch, it is not a space of habitation. The porch creates a habitable space that is an inbetween space—neither indoors, nor outdoors; neither completely public, nor completely private; and neither formal, nor completely informal. This "*Zwischenraum*," or the "space in-between" plays a mediating role, allowing for not only just movement between the yard and the house proper, but also makes living possible between architecture and landscape architecture.²² It is a leisure space that serves various functions—living space, barbecue area, and transition to the swimming pool. The porch

extends the spatiotemporality of the door, making the threshold a living space — one that is not subject to the same social regulation as the space indoors, but not completely unrestricted as the outdoors. The porch in Florida tropical architecture would become a key space in the definition and development of the Florida Tropical Home.

Tropical Architecture

Tropical architecture has multiple meanings that depend on the period, context, and discipline within which the term is being used. Tropical architecture in the popular imagination might be the exotic shack on the beach, but in the discipline of architecture it refers to any of these: colonial architecture, vernacular architecture, and mid-twentieth-century modern architecture in the hot and humid colonial tropics.²³ In modernist historiography, tropical architecture is defined as an alternative iteration of European modernism that was adapted to the tropical climate and dispersed to the tropics — the colonized and decolonizing zones of the European Empires — in the postwar period.²⁴ As a region, the tropics are defined as zones between the Tropic of Cancer in the northern hemisphere and the Tropic of Capricorn in the southern hemisphere. The tropics, also known as the Torrid Zone, include the adjacent areas on either side of the equator, encompassing South East Asia, most of South Asia, North Australia, Central America, regions of South America, parts of the Middle East, and a large part of Africa.

The tropics were not only a climatic zone but an orientalist discursive construct produced by colonial knowledge from several disciplines including geography, anthropology, zoology, botany, medicine, and hygiene.²⁵ David Arnold argues that tropicality was predicated upon the notion of tropical or temperate differences, which constructed the tropics as an imaginary underdeveloped homogeneous zone.²⁶ In the late nineteenth and early twentieth century, tropical architecture was part of an environmental health discourse within the disciplines of hygiene, medicine, and sanitary engineering. From an environmental health perspective, tropical architecture was seen as an object of mediation between the body and the environment. The idea that buildings should be designed according to the tropical climate to protect the body from tropical diseases was the foundational principle of tropical architecture. Consequently, the colonial hygiene manuals provided detailed specifications for tropical architecture to implement sanitary best practices through spatial layouts, construction practices, materials, natural ventilation, natural lighting, sewage disposal, and water supply as preventive techniques to circumvent the spread of diseases.²⁷

23 Gianni Invernizzi Luca Francione, "Bali Modern: The Art of Tropical Living" (Hong Kong; North Clarendon, VT: Periplus; Distributed by Tuttle Pub., 2000); Maxwell Fry and Jane Drew, "Tropical Architecture in the Dry and Humid Zones", (New York: Reinhold Pub., 1964).

24 Mark Crinson, "Modern Architecture and the End of Empire" (Aldershot, England; Burlington, VT: Ashgate, 2003); Anthony King, "Exporting Planning: The Colonial and Neo-Colonial Experience," in "Shaping an Urban World" ed. Gordon Cherry (London: Mansell Publishing, 1980), 203–226; Hannah Le Roux, "The Networks of Tropical Architecture," *The Journal of Architecture* 8, no. 3 (2003): 337–354; Ola Uduku, "Modernist Architecture and 'the Tropical' in West Africa: The Tropical Architecture Movement in West Africa, 1948–1970," *Habitat International* 30 (2006): 396–411; Rhodri Windsor-Liscombe, "In-Dependence: Otto Koenigsberger and Modernist Urban Resettlement in India," *Planning Perspectives* 21, no. 2 (April, 2006): 157–178; Rhodri Windsor-Liscombe, "Modernism in Late Imperial British West Africa: The Work of Maxwell Fry and Jane Drew, 1946–1956," *Journal of the Society of Architectural Historians* 65, no. 2 (2006): 188–215; Rhodri Windsor-Liscombe, "The Lagos Hotel Affair: Negotiating Modernism: In the Late Colonial Domain," *DOCOMOMO Journal* 28 (2003): 58–61.

25 Felix Driver and Brenda Yeoh, "Constructing the Tropics: Introduction," *Singapore Journal of Tropical Geography* 21, no. 1 (2000): 1–5.

26 David Arnold, "Illusory Riches": Representations of the Tropical World, 1840–1950," *Singapore Journal of Tropical Geography* 21, no. 1 (2000): 6–18.

27 Norman Chevers, "A Treatise on Removable and Mitigable Causes of Death, Their Modes of Origin and Means of Prevention; Including a Sketch of Vital Statistics and the Leading Principles of Public Hygiene in Europe and India". V. 1 (Calcutta: Bishop's College Press, 1852); Birendra Nath Ghosh, "A Treatise on Hygiene and Public Health, with Special Reference to the Tropics" (Calcutta: Hilton, 1924); J. A. Jones, "A Manual of Hygiene, Sanitation and Sanitary Engineering: With Special References to Indian Conditions" (Madras: Printed and published by the Superintendent, Government Press, 1896); Henry King, "The Madras Manual of Hygiene", (Madras: Printed by E. Keys, at the Govt. Press, 1880); John MacKenzie, "Army Health in India; Hygiene and Pathology" (London: Bale & Danielsson, 1929); W. J. Moore and Cuthbert Allan Sprawson, "Moore's Manual of Family Medicine & Hygiene for India" (London: J. & A. Churchill, 1921); Kate Anne Platt, "The Home and Health in India and the Tropical Colonies" (London: Baillière, Tindal & Cox, 1923).

In the inter-war period, as architectural modernism intersected with hygiene and modernist European architects looked for opportunities to work in the colonial tropics, architects and planners increasingly began to produce knowledge on tropical architecture. From the 1930s onward, European modernist architects freely amalgamated architectural modernism with colonial discourses from the fields of climatology, sanitation, and architecture. Subsequently, a new tropical architecture produced by modernist architects began to emerge in the 1950s. As a consequence, the disciplinary home of tropical architecture shifted from sanitary engineering to its natural home with the inauguration of the department of tropical architecture at the Architectural Association School of Architecture in London in 1954. Tropical architecture as a professional practice in the colonies developed somewhat belatedly as the European Empires shrank and declined after the Second World War. While the nineteenth century discourses on tropical architecture were aimed at the prevention of communicable tropical diseases, the mid-twentieth century modernists stressed comfort, which was defined comprehensively in terms of thermal, hygrometric, ergonomic, acoustic, and psychological well-being. Tropical architecture thus emerged as a sub-field of environmental design and sought to create physiological comfort without using mechanical means of conditioning, or at least with minimal reliance on fossil fuels. While climate considerations became a central theme of this architecture, the disciplinary boundaries between architecture and landscape architecture were not called into question.

28 Crinson, "Modern Architecture and the End of Empire"; King, "Exporting Planning: The Colonial and Neo-Colonial Experience;" Uduku, "Modernist Architecture and 'the Tropical' in West Africa: The Tropical Architecture Movement in West Africa, 1948–1970."

29 Alexander Tzonis and Liane Lefaivre, "The Suppression and Rethinking of Regionalism and Tropicalism after 1945," in *Tropical Architecture: Critical Regionalism in the Age of Globalization*, ed. Alexander Tzonis, Bruno Stagno, and Liane Lefaivre (Chichester; New York; The Netherlands: Wiley-Academic; C. Fonds, 2001), 14–58.

30 José Gelabert-Navia, "American Architects in Cuba: 1900–1930," *Journal of Decorative and Propaganda Arts* 22 (1996): 132–49.

Existing histories, dominated by scholarship on mid-century modernist architecture in the tropics, define tropical architecture as a neo-colonial modernist discourse to maintain the imperial relationships between Europe and the tropics even after decolonization.²⁸ In post-modernist discourses, post-war tropical architecture—and its American counterpart, Bio-Climatic architecture—is viewed not just as climate-responsive environmental design, but as a critique of the universalizing tendencies of modernism, and as a place-making discourse that is homologous to critical regionalism.²⁹

The idea of tropical architecture as climatic design was well established in the Caribbean, from where it got embedded in the Floridian imagination. With the United States becoming a major influence on Cuba from 1900 onwards, a number of North American architects sought commissions in Cuba and the Caribbean.³⁰ In this intense cultural contact with the Caribbean, Floridian architects came in contact with the idea of tropical architecture as climate responsive modernism.

The declaration of a new kind of domestic architecture for Florida—the Tropical Home for Florida emerged at the *Homes of Tomorrow Exhibition* at the *Century of Progress Fair* in Chicago in 1933. Robert Law Weed, a

Miami based architect, designed the Florida Tropical Home for this exposition (fig. 1). This home at the World's Fair Homes also became an opportunity for Floridian architects to declare a departure from the older Spanish Mediterranean styles of architecture and embrace an architecture that was informed by Southern outdoor living, emergent modernist discourses, and imagined ideas of tropicality — since Florida is really sub-tropical and temperate. Even though Florida was not really tropical, it was constructed as a tropical paradise in the popular imagination primarily through landscape, imagery, tourism, and architecture.³¹ The notion of 'resort living' combined architecture and landscape architecture. The Florida Tropical Home also became a national platform for broadcasting an architectural manifesto for tropical architecture and landscape architecture for Florida. A report published in 1933 in *Arts and Decoration* declared:

At the Chicago Fair this summer, Florida presents its architectural manifesto. It has evolved its own version of a "modern" house, adapted to the Florida climate and to the conditions of resort life. *It presents, in short, a house which brings the indoors out, and the outdoors in.* [Italics by the author]. In a sense, this Florida house is a manifesto for the whole subtropical world, or for any place where open-air living is the universal pattern. With honest steel and concrete construction, functional structure, simplicity, and comfort, it declares a moratorium on speculative gingerbread and fake Spanish.³²

In 1933 the Florida Tropical Home inaugurated two intertwined architectural trends, which would subsequently become the driving forces for several architectural innovations that followed. The first phenomenon was a series of experiments that would transform the conventional inside-outside relationships, the external envelope that is the building boundary, and thresholds. The Florida Tropical Home at the Chicago exposition was surrounded by loggias and, as a consequence, was extremely open, but the plan did not subvert the conventional inside-outside relationships and thresholds (fig. 1). The second phenomenon, as Allan Shulman notes, was that in mid-twentieth century Miami, the home became the site upon which architects experimented with new tectonic and material conditions that were crucial in the formulation of Floridian Tropical Architecture.³³ The avant-garde group of architects who led these experiments were Marion Manley, Robert Law Weed, Igor B. Plevitzky, Rufus Nims, and Alfred Browning Parker.

The Florida Tropical Home Type in 1940

Prior to these architects' design of an unconventional Florida Tropical Home, the tropical home had several meanings in the popular imagina-

31 See Allan T. Shulman, "The Tropical Home: Modernity and the Construction of Authenticity," in "Miami Modern Metropolis: Paradise and Paradox in Midcentury Architecture and Planning", ed. Allan T. Shulman (Miami, Florida and Glendale, California: Bass Museum of Art, 2009), 104–33; and Henry Knight, "Tropic of Hopes: California, Florida, and the Selling of American Paradise", 1869–1929 (Gainesville: University Press of Florida, 2013).

32 "Manifesto for Florida Modern Home," *Arts and Decoration* 39 (June, 1933): 44–47.

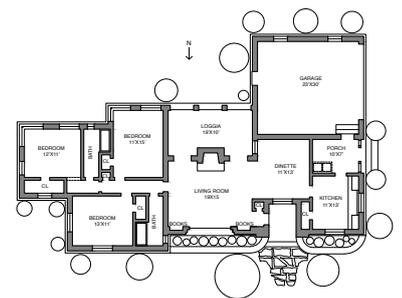


Fig. 6 Pattern book plan of the "Tropical Colonial" home by A.L. Klingbell. Drawing made by Kaylee M. Delhagen based on a plan published in H. L. Blits, "Homes of the Year" (Miami, Florida: H. L. Blits, 1940), 87.

33 Shulman, "The Tropical Home: Modernity and the Construction of Authenticity."

34 H. L. Blits, "Homes of the Year" (Miami, Florida: H. L. Blits, 1940), 5, 8, 12, 29, 87, 91.

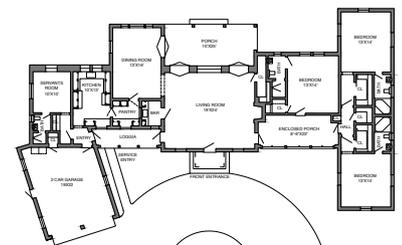


Fig. 7 Pattern book plan of the "Tropical Colonial" home by John Skinner and Coulton Skinner. Drawing made by Kaylee M. Delhagen based on a plan published in: H. L. Blits, "Homes of the Year" (Miami, Florida: H. L. Blits, 1940), 5.

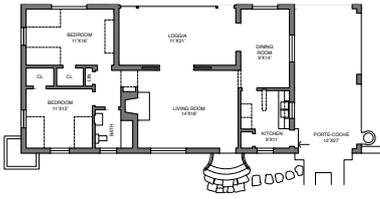


Fig. 8 Pattern book plan of the “Tropical Modern” home by Montgomery Atwater. Drawing by Kaylee M. Delhagen based on a plan published in: H. L. Blits, “Homes of the Year” (Miami, Florida: H. L. Blits, 1940), 91.

34 H. L. Blits, “Homes of the Year” (Miami, Florida: H. L. Blits, 1940), 5, 8, 12, 29, 87, 91.



Fig. 9 Pattern book plan of the “Tropical Modern” home by J. Edward Peterson. Drawing by Kaylee M. Delhagen based on a plan published in: H. L. Blits, “Homes of the Year” (Miami: H. L. Blits, 1940), 29.

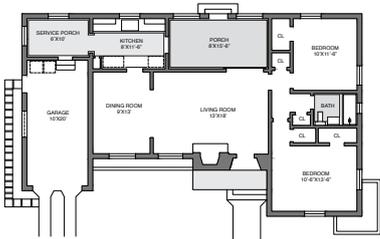


Fig. 10 Pattern book plan of the “Florida Tropical” home in 1940 by architect Curtis E. Haley. Drawing by Kaylee M. Delhagen based on a plan in: H. L. Blits, “Homes of the Year” (Miami: H. L. Blits, 1940), 12.



Fig. 11 Pattern book plan of the “Tropical Bungalow” in 1940 by architect Robert M. Little. Drawing by Kaylee M. Delhagen based on a plan in: H. L. Blits, “Homes of the Year” (Miami: H. L. Blits, 1940), 8.

tion. In a pattern book of architect-designed homes titled *Homes of the Year*, published in 1940, various versions of the tropical home were presented for prospective homebuilders. The tropical home types included in this book were the Tropical Colonial (two designs by A. L. Klingbell, John Skinner and Coulton Skinner), the Tropical Modern (two designs by Montgomery Atwater and J. Edward Peterson), the Florida Tropical (architect Curtis E. Haley), and the Tropical Bungalow (architect Robert M. Little).³⁴ These tropical house types were conventional in the sense that they had a clear boundary defined by a wall with predictable thresholds — doors, windows, and porches attached to the main body of the house (fig. 6–11). Indeed, in Polevitzky’s early homes, he used a conventional understanding of inside and outside, the external boundary and thresholds, and architecture and landscape architecture not too different from the houses being designed by other architects. In an unnamed house published in 1938, the wall defined the external building boundary, and the thresholds — doors, windows, and a small porch — interrupted this boundary, thus resulting in a conventional understanding of the distinction between inside and outside, and architecture and landscape architecture (fig. 12). The porch in this house is traditional, it is a threshold that is very much part of the architecture, clearly discernable from landscape architecture. Allan Shulman notes that in the 1940s Polevitzky deconstructed the “basic rectangular house-box” by transforming the porch in relationship to the house from a mere appendage to an all-encompassing screen that enclosed the house.³⁵

Polevitzky, along with the other tropicalists, developed the idea of indoor-outdoor living which he first elaborated through the Hartman Residence called the “Indoor-Outdoor house,” in 1944.³⁶ This house achieved a gradual transition from complete indoors to complete outdoors through thresholds that comprised both architectural and landscape architectural spaces in the form of enclosed terraces and screened porches.³⁷ The indoor-outdoor house was designed to establish a gradual progression from architecture to landscape architecture while still keeping the two categories distinct. This house was clearly based on paradisiacal notions of Florida landscape, thereby transforming landscape — which was subject to the outdoor hazards of bugs, heat, and humidity — into an object of consumption associated with sensory pleasures. The idea of the Florida landscape as a source of pleasure was based on notions of Florida as an Edenic paradise — invented and perpetuated largely by tourist writing, literature, and images in travel ephemera.³⁸

In 1951, the *Architectural Forum* published a new tropical house type that had developed in Florida as a consequence of the experiments that began with the Florida Tropical Home in 1933. Marion Manley, Igor Polevitzky, and Alfred Parker published their recently constructed houses that were suited to the emerging ideas of indoor-outdoor living. In an article titled

“A New Architecture for Tropical Florida: How to Be Comfortable (Summer and Winter) Despite Heat, Glare, Rains, Rot, Hurricanes, and Bugs,” Manley, Plevitzky, and Parker documented their house designs which were aimed at creating comfort, living in the landscape, and solving the challenges of sub-tropical living. The invented notions of Florida as a tropical paradise informed ideas of “Florida-living,” which translated into a tropical house where the differentiation between architecture and landscape architecture was muddled through the blurring of distinctions between boundaries and thresholds, and indoors and outdoors. The tropical house with very permeable boundaries also provided simple solutions to excessive sun, rain, hot nights, hurricanes, bugs, and rot — some of the difficulties of living in Florida.³⁹

The solutions to all these problems, and designing a home that would enable residents to live in the landscape, were proposed through a radical reconfiguration of thresholds — doors, windows, and porches. One of the most far-reaching transformations was the metamorphosis of the screened porch into an element that could no longer be categorized as architecture or landscape architecture. The architects proposed wide overhangs to shade and cover the boundaries and thresholds of the house, use of smaller windows, and wooden louvers that enabled ventilation despite rain and sun — all with the intent of protection from the sun and the rain. Keeping the house well ventilated with large screened boundaries would protect the house from rot. The openness of the house would let hurricanes pass through. The architects utilized the Venturi principle of aerodynamics, that is keeping large screened areas towards the side that the breeze came from, and smaller openings on the opposite wall, to let the breeze flow with some pressure through the rooms in the house.⁴⁰

Plevitzky designed two residences for Michael Heller on two adjacent lots on Biscayne Isle in Miami, between 1947 and 1949.⁴¹ Allan Shulman notes that the first Heller House was a bold attempt in the use of a sizable screened porch to extend the living space.⁴² The first Heller House had an outdoor living room constructed of an aluminum frame that was covered with a stainless steel mesh and roofed with a sliding aluminum awning.⁴³ The living porch in this house was radically transformed from being a mere appendage into the outdoor living room. Two elements made this transformation possible — its scale (19 by 30 feet) and the vanishing boundary between the indoor living room and the porch. A careful examination of the plan will show that this was a significant step in diminishing, but not fully eroding the impermeable boundary between the house proper and the outdoors (fig. 13).

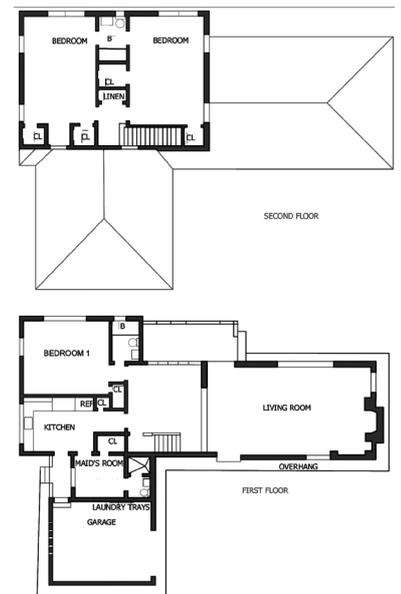


Fig. 12 House designed by Igor Plevitzky and T. Trip Russell in 1938, with a conventional appended porch. Source: Drawing by Kathryn Feller based on a plan in: “Florida House Planned to Suit Climate and Location: Igor B. Plevitzky, T. Trip Russell, Architects,” *Architectural Record* 86 (1939): 49.

35 Allan T. Shulman, “Igor Plevitzky’s Birdcage Houses,” in *Miami Modern Metropolis: Paradise and Paradox in Midcentury Architecture and Planning*, 384–390.

36 “Four Stages of Indoor-Outdoor living,” *Architectural Record* 96 (Nov. 1944): 68–69.

37 Ibid.

38 Nicole C. Cox, “Selling Seduction: Women and Feminine Nature in 1920s Florida Advertising,” *The Florida Historical Quarterly*, 89, no. 2 (2010): 186–209; Jack Emory Davis, and Raymond Arsenault. “Paradise Lost?: The Environmental History of Florida” (Gainesville: University of Florida, 2005); Nicolaas Mink, “Eating the Claws of Eden: Stone Crabs, Tourism, and the Taste of Conservation in Florida and Beyond,” *The Florida Historical Quarterly* 86, no. 4 (2008): 470–497; Anne E. Rowe, “The Idea of Florida in the American Literary Imagination” (Baton Rouge: Louisiana State University Press, 1986).

39 “A New Architecture for Tropical Florida: How to Be Comfortable (Summer and Winter) Despite Heat, Glare, Rains, Rot, Hurricanes, and Bugs,” *Architectural Forum* 94 (February, 1951): 131–139.

40 Ibid.

41 Shulman, “Igor Plevitzky’s Birdcage Houses.”

42 Shulman, “Igor Plevitzky’s Architectural Vision for a Modern Miami.”

43 “Tropical House with Aluminum Screened Porch for Outdoor Living,” *Architectural Forum* 88, 40 houses: *Architectural Forum’s Special House Issue*, no. 14 (1948): 119.

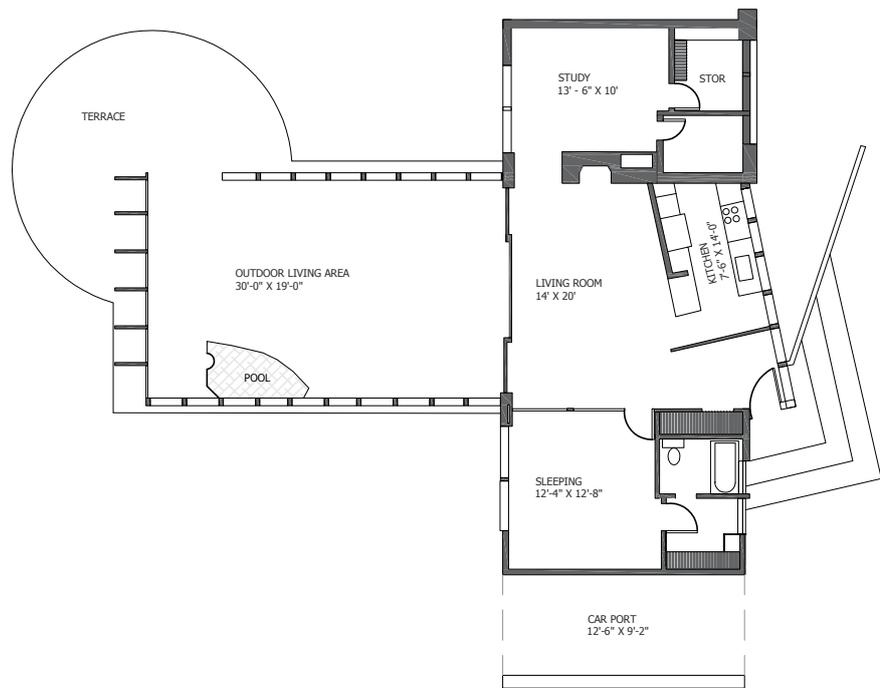


Fig. 13 Plan of the first Heller House designed by Igor Polevitzky in 1948. Drawing by Kathryn Feller based on a plan in "Tropical House with Aluminum Screened Porch for Outdoor Living," *Architectural Forum* 88, 40 Houses: Architectural Forum's special House issue, no. 14 (1948): 119.

44 "Bird-Cage House," *Life*.

45 "Wrapped in a Plastic Screen," *House and Garden* 98, (July, 1950): 52–57.



Fig. 14 The Birdcage House was enclosed in a Lumite screen box that measured 20 by 76 feet in plan. Architect: Igor Polevitzky, 1949. Photograph by: Rudi Rada Photography, HistoryMiami, Archives and Research Center © HistoryMiami.

46 "Bird-Cage House Built inside a Screened Patio, is Tailored to a Tropical Climate," *Architectural Forum* 92 (May, 1950): 138–141.

47 "Wrapped in a Plastic Screen."

48 "Bird-Cage House Built inside a Screened Patio, is Tailored to a Tropical Climate."

49 *Ibid.*

The second Heller House by Polevitzky, which became known as the Bird-cage House, was featured in *Life magazine*, where it was applauded for its novelty:

On Biscayne Isle in Miami, Florida, there is a novel modern house that goes a long step beyond most of contemporary architecture efforts to "bring the outdoors indoors." Two thirds of the house is actually outdoors, exposed to the sun and the rain, partly roofed simply by plastic screening on a timber frame.⁴⁴

The Birdcage House was enclosed in a Lumite screen box that measured 20 by 76 feet in plan (fig. 14).⁴⁵ The box was constructed of a wooden frame structure made out of 2' by 8' timber members, which were pressure treated with chromated zinc chloride and left unfinished (fig. 15).⁴⁶ The Birdcage was a ingenious climate responsive solution to outdoor Florida living — the owners lived outdoors at least 360 days a year.⁴⁷ The screen provided protection from bugs, the deep overhangs on the deck provided shade, and the large screened space made it possible to capture the southeast breeze — the only source of comfort without air-conditioning (fig. 16).⁴⁸

The *Architectural Forum* noted that:

Instead of concealing the patio inside the house, it conceals the house inside a two-story screened patio, with the whole south and west sides nothing but screen over a wooden frame.⁴⁹

Allan Shulman notes that in the Birdcage Home Polevitzky completely disrupted the conventional spatial relationships between the house and porch, building and landscape, enclosure and openness, solid and void, and inside and outside.⁵⁰ In order to explain these observations on the relationships between the house and porch, architecture and landscape, and inside and outside, it is important to examine how the Birdcage House dissolved the distinctions between boundaries and thresholds. The Heller residence achieved a stronger relationship between inside and outside because the screened porch dissolves the distinction between architecture and landscape architecture and therefore negates the idea of the landscape as outdoor spaces. In addition — and in contrast to earlier examples — it achieves a stronger relationship of inner spaces with the landscape by overlaying elements that belong to the house with those belonging to the landscape.

For example, in earlier houses the stairs were added to the porch to get into the garden. In the Heller House the stairs are in the middle of the screened area so that half of this area is the elevated ‘porch’ while the other half is already the ‘garden.’ The pool — which is regarded as an element of landscape architecture — is inside the screened area. This blurring of the boundaries between architecture and landscape architecture becomes even stronger in the Birdcage House where one pool is elevated inside the screen and a second outdoor pool is outside the screen. In addition, the trees are both inside and outside the screen, further dissolving the traditional understanding of architecture and landscape architecture.

50 Shulman, "Igor Polevitzky's Birdcage Houses."



Fig. 15 Birdcage House. Architect: Igor Polevitzky, 1949. Photograph by: Rudi Rada photography, HistoryMiami, Archives and Research Center © HistoryMiami.

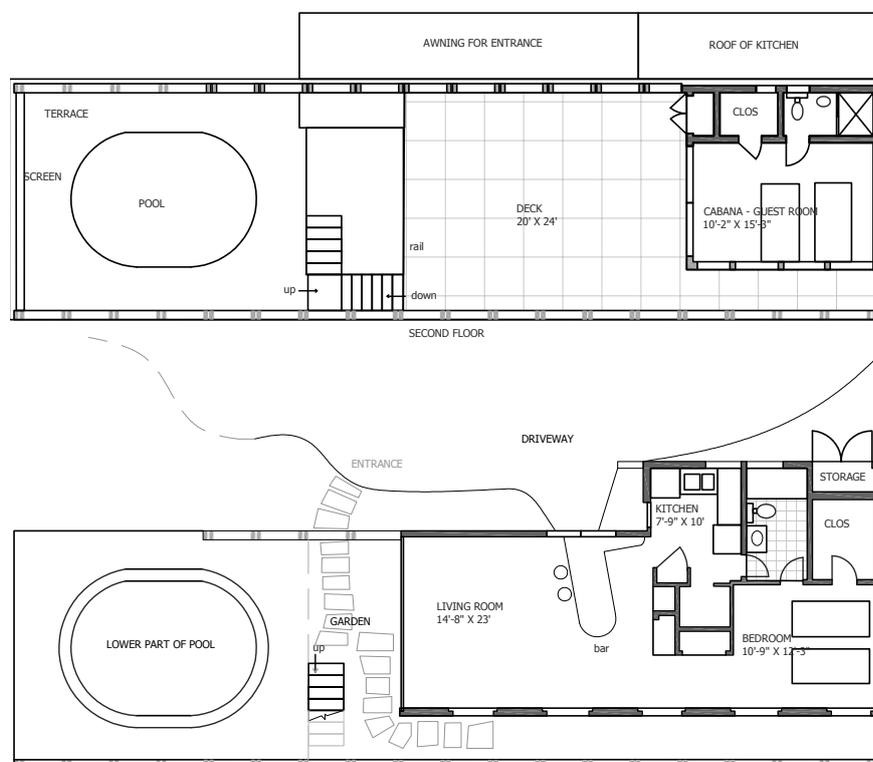


Fig. 16 Plan of the Birdcage House. Architect: Igor Polevitzky, 1949. Drawing by Kathryn Feller based on a plan published in "Wrapped in a Plastic Screen," *House and Garden* 98, July (1950): 54.

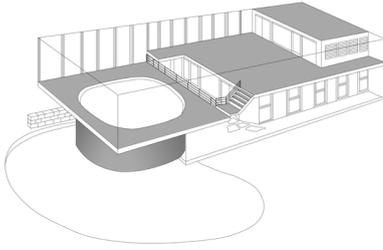


Fig. 17 Isometric of the Bird Cage House. Architect: Igor Polevitzky, 1949. Drawing by Mitchell C. Clarke based on a plan published in "Bird-Cage House Built inside a Screened Patio, is Tailored to a Tropical Climate," *Architectural Forum* 92, May (1950): 139.

51 See Jay Fellows, "Janusian Thresholds: 'The Horrible (and Fortuitous) Inside-Outside that Real Space is,'" *Perspecta* 19 (1982): 43–57.

52 Jeffrey Ellis Aronin, "Climate and Architecture" (New York: Reinhold, 1953); Fry and Drew, "Tropical Architecture in the Dry and Humid Zones"; Baruch Givoni, *Man, Climate, and Architecture* (Amsterdam; New York: Elsevier, 1969); Otto H. Koenigsberger et al., "Manual of Tropical Housing and Building" (London: Longman, 1974); Douglas H. K. Lee, "Physiological Objectives in Hot Weather Housing: An Introduction to the Principles of Hot Weather Housing Design" (Washington: U. S. Housing and Home Finance Agency, 1953); Victor Olgyay and Aladar Olgyay, "Design with Climate: Bioclimatic Approach to Architectural Regionalism" (Princeton, N.J.: Princeton University Press, 1963).

In the Birdcage House, the porch that was the traditional threshold space in domestic architecture is transformed into both a boundary and a threshold (fig. 17). In other words, the boundary and threshold conditions in the Birdcage House became akin to a Möbius strip, where you can hope to distinguish between boundary and threshold, but never can.⁵¹ The screen is an environmentally permeable boundary that is wrapped around the house, and it also works as a threshold space, depending on where the person is in the house. Instead of architectural boundaries, the residents would perceive constantly changing environmental boundaries—for example, light and shade created by the movement of the sun would divide the space during the day and covered and uncovered space would create boundaries while it rained. Polevitzky rendered the topological distinction between inside and outside, and architecture and landscape architecture, ambiguous. Further, the material, tectonic, and spatial differentiation between boundaries and thresholds was transformed into an ephemeral distinction that could be perceived visually, through constantly changing conditions of daylight, and physiologically, through temperature, humidity, rain, and breeze. The dissolution of the architectural boundary between the house and the porch meant that the screened porch, which was conventionally the threshold, now became indistinguishable from the inside, or outside.

The Birdcage House as a Discursive Threshold

The 1950s inaugurated the emergence of several environmental design treatises – Douglas Harry Kedgwin Lee's *Physiological Objectives in Hot Weather Housing: An Introduction to the Principles of Hot Weather Housing Design* (1953), Jeffrey Ellis Aronin's *Climate and Architecture* (1953), Jane Drew and Maxwell Fry's *Tropical Architecture in the Humid Zone* (1956), Victor Olgyay and Aladar Olgyay's *Design with Climate: Bioclimatic Approach to Architectural Regionalism* (1963), Givoni Baruch's *Man, Climate, and Architecture* (1969), and Otto H. Koenigsberger's *Manual of Tropical Housing & Building* (1975).⁵² These treatises examined the relationship between vernacular architecture and climatic design within the larger field of environmental design. Architects debated the efficacy of vernacular architecture as a model of climatic design. This generated scholarship that critically examined the relationship between modern architecture and climate through the lens of the relationship between vernacular architecture and climate to define regionalism. Proponents of treating vernacular architecture as a model for modern climate responsive architecture, such as the Olgyay brothers and Koenigsberger, critiqued the universalizing tendencies of modernism, thus creating an opposition between universalist modernism and regionalism.

The Olgyay brothers proposed Bioclimatic architecture as a method of design that would work synergistically with nature to produce architecture that best used the available natural resources such as natural light, sunlight, and locally available materials.⁵³ In the introduction to their book *Design with Climate: Bioclimatic Approach to Architectural Regionalism*, they wrote:

53 Olgyay, "Design with Climate: Bioclimatic Approach to Architectural Regionalism", 1–10.

The desirable procedure would be to work with, not against, the forces of nature and to make use of their potentialities to create better living conditions. The structure, which in a given environmental setting reduces undesirable stresses, and at the same time utilizes all natural resources favorable to human comfort, may be called "climate balanced." Perfect balance can scarcely be achieved except under exceptional environmental circumstances. But it is possible to achieve a house of great comfort at lowered cost through reduction of mechanical conditioning. We will do well to study the broad climate layout, then apply the findings, through a specific region, to a specific structure. And one must be ever alert to regional variations.⁵⁴

54 Ibid., 10.

Likewise, Otto H. Koenigsberger (1908–1999)—a German émigré architect who worked for the *Maharaja* (king) of Mysore state and for the government of India, and later founded the Department of Tropical Architecture (1954–1971) at the Architectural Association School of Architecture—argued against universal architectural prototypes. Koenigsberger is best known for his treatise on tropical architecture, titled *Manual of Tropical Housing and Building*, which he co-authored with his colleagues T. G. Ingersoll, Alan Mayhew, and S. V. Szokolay. Koenigsberger's experience in Mysore and New Delhi informed his ideas on tropical architecture in London and led to the publication of the *Manual of Tropical Housing and Building*, which was written for architects practicing in the tropics.⁵⁵ The text addresses the problem of modernizing architecture for the fast-emerging cities in the tropics and successfully transitioning from older vernacular rural to a new urban modern architecture. The manual is an environmental-design treatise that includes such topics as thermal comfort, lighting, and noise control. Koenigsberger defines the tropics in terms of three climate zones—hot-dry desert, warm-humid equatorial, and monsoon—and suggests passive-design techniques such as shading, orientation, and natural ventilation. Like the Olgyay brothers, he encouraged the use of passive-design methods for each climate zone by referencing the environmental design of the regional vernacular architecture. Koenigsberger's life work was riddled with the question of how to build in the tropics, where the modernization trajectory does not replicate the cultural, technological, and economic conditions of the West.⁵⁶

55 Koenigsberger et al., "Manual of Tropical Housing and Building."

56 Ibid.

57 Tzonis and Lefaivre, "The Suppression and Rethinking of Regionalism and Tropicalism after 1945."

Alexander Tzonis and Liane Lefaivre propose that debates about regionalism dominated the postwar architectural discourse, and critics of globalization of architecture such as Minnette de Silva, Richard Neutra, and Paul Rudolph, produced architecture that defied the universalizing tendencies of modernism.⁵⁷ The work of the Florida tropical architects — Marion Manley, Robert Law Weed, Igor B. Plevitzky, Rufus Nims, and Alfred Browning Parker — served as the precursor to Paul Rudolph's Florida houses. Rudolph became known for his climatic design through a number of houses — the Revere Quality House, Walker Guest House, David and Elene Cohen Residence, and The Cocoon House. These houses had deep roof overhangs, open plans, sliding doors, and engaged the landscape through deep thresholds such as porches, patios, and verandas.

58 Shulman, "Igor Plevitzky's Birdcage Houses."

Allan Shulman notes that the Birdcage House exemplified the International Style through the creation of architecture as volume rather than mass, its simplicity, openness, and transparency.⁵⁸ This is where this paper departs from Shulman's reading of the Birdcage House. This paper proposes that the Birdcage House was both an exemplar of the universalizing tendencies of modernism and its opposite strain, the postwar regionalist notion of using climatic design inspired by vernacular architecture. The Birdcage House functions like a Seminole *Chickee* — the open stilt huts of Native American tribes located in Florida — in its minimalist solution for climate control. Further, the *Chickee* dissolves the distinction between threshold and boundaries — its boundary enforced by the roofline is also its threshold. It would be safe to speculate that the Seminole vernacular architecture and other Florida vernaculars such as the "Cracker Home" influenced emerging ideas of postwar climate responsive design in Florida. In terms of the competing postwar discourses, the Birdcage House then became the discursive threshold where these opposing trajectories of postwar modernism, the universalizing and regionalizing tendencies, intersect and fuse to dissolve the boundary between these two opposing discourses.

Author

Vandana Baweja is an assistant professor in the School of Architecture at the University of Florida Gainesville. She got her Ph. D. in history and theory of architecture at the University of Michigan in 2008. Trained as an architect in New Delhi, India, she received a masters in history and theory of architecture at the Architectural Association (AA) School of Architecture in London. She is the book reviews editor for *Arris: The Journal of the Southeast Chapter of the Society of Architectural Historians*. Her areas of research are: global histories of Tropical Architecture and Sustainable Archi-

ecture, and the translation of global paradigms of architecture and urbanism in India, particularly their representation in film and photography. She is a recipient of a 2015 grant from the Florida Humanities Council to organize a symposium on the histories of modernism in Florida. She also received a grant from the Global Architectural History Teaching Collaborative (GAHTC) in 2015 to produce teaching materials on Global Cities in Cinema.

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