



TRADITIONAL DWELLINGS AND SETTLEMENTS REVIEW

JOURNAL OF THE INTERNATIONAL ASSOCIATION FOR THE STUDY OF TRADITIONAL ENVIRONMENTS

THE SOCIALLY ENGAGED WORK
OF JANE DREW AND
MINNETTE DE SILVA
Inês Leonor Nunes

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THE HAND AND THE MACHINE
IN SOUTH INDIA
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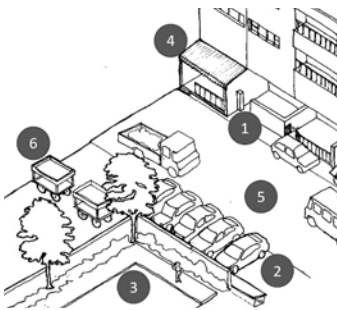
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Editor's Note

I write this editorial introduction to our Spring 2023 issue as plans for the next IASTE conference are underway, abstracts are being submitted, and the blind-peer-review process is about to begin. This will be our first conference held on an annual instead of a biennial cycle. The four-year hiatus we took from meeting in person because of COVID-19, combined with the success of the Singapore conference, convinced the IASTE Council to shift to this new format.

At the end of this issue you will find an announcement for the conference, IASTE 2024, to be held in Riyadh, Saudi Arabia, January 5–9, under the theme “The Dynamism of Tradition.” The event builds on IASTE’s definition of tradition as “a dynamic project for the reinterpretation of the past in light of the present and often in the service of the future.” Its theme refers to the adaptability and continuity of traditions as legitimate manifestations of socio-cultural and socioeconomic spheres, specifically as these evolve through space and time. The conference aims to spark dialogue on the process by which traditions have emerged in the contemporary world and how they may have changed over short periods of time to deal with the rapid pace of globalization. It also aims to assess which traditions can or should be sustained or discarded, and by whom. By placing tradition under critical examination, and by focusing on the vulnerable reality of traditional environments, we can go beyond standard preservation and conservation approaches, dig deeper into how traditions are invented and reinvented, and understand how traditions are a vital part of the dynamic project of creating the future.

This issue is partly devoted to some of the best papers presented at IASTE 2022 in Singapore: those that won our three best-paper awards. Our first article, “Women Architects Disrupting Tropical Modernism: The Socially Engaged Work of Jane Drew and Minnette De Silva,” by Inês Leonor Nunes, deals with two modernist women architects who did not receive their fair share of attention for contributions to socially responsible architecture around the world. An earlier version of this article won the Lifchez Berkeley Prize for best paper by a junior scholar dealing with the social and professional dimensions of the study of tradition in the built environment.

Our second article, “Rupturing Terracotta: Entangled Exchanges of the Hand and the Machine in South India,” by Priya Joseph, examines changing methods for making and using terracotta roof tiles and other earth-based building materials in South India during the nineteenth century. As part of a general shift from handmade to mechanized processes, it explains how local knowledge of building with these materials was appropriated by British engineers in the service of their own projects. And it argues that a decolonial reading of this process may provide a fruitful new approach to architectural history on the subcontinent. The article thus brings to the fore how the

indigenous-colonial encounter caused a rupture in the making of buildings that complicated the language and processes of architecture and construction in India forever. An earlier version of this article won the prestigious Jeffrey Cook Award for best paper contributing to the study of traditional environments in a historical or interdisciplinary manner.

The third article, by Francesca Vita, “The Entanglement between Traditions and Colonial Spatiality: The Resilience of Guinean Domesticities in the Ajuda Neighborhood, Bissau,” is based on a paper that won the Eleni Bastea Award for work on an urban theme in the study of traditional environments. It deals with local traditions in a West African context as these adapted to and survived efforts by Portuguese authorities to assimilate and modernize Africans to European domestic norms. The result today, in what was once a model neighborhood for local colonial civil servants, are hybrid environments that reflect “a process of negotiation between the past and the present, the former colonial spatiality and Guinean domesticities, urban and vernacular spatial organization, and aspirational and practical needs.”

The fourth article, “Breaking and Making Traditions: Disjunctures in Spatial Planning Paradigms for Delhi” came as a regular submission to the journal, but it makes a good companion to the three articles adapted from 2022 award papers. In it, Manas Murthy critically analyzes the discourse around three historic spatial planning regimes for Delhi, from the colonial era to the present. His intent is to highlight how the failure of the state to comprehend the complexities of existing morphological patterns and informal modes of production has itself become a “tradition” in the urban environment. As a result, successive formal plans for the city have found themselves both critically reliant on and deeply antagonistic toward pervasive practices of informal housing construction.

We end this issue with a special section by Huaqing Huang and Yushu Liang on the roundtable discussion they organized at IASTE 2022, “Reframing ‘Tradition’ and Its Practice in the Chinese Context: The Chinese Edition of *Traditions: The ‘Real,’ the Hyper, and the Virtual in the Built Environment*.” Huang and Liang were the translators of this volume into Chinese, and the report provides an edited and illustrated transcript of the well-attended session, at which a panel of distinguished scholars and practitioners commented on the book, the meaning of “tradition” in the Chinese built environment, and the general problem of translating the concept of tradition to other languages and cultures.

It is my hope that you will find this issue engaging and rewarding, particularly as it seeks to capture the spirit of IASTE 2022 in Singapore.

Nezar AlSayyad

Feature Articles

Women Architects Disrupting Tropical Modernism: The Socially Engaged Work of Jane Drew and Minnette De Silva

INÊS LEONOR NUNES

The legacy of Jane Drew and Minnette De Silva encompassed both rupture and tradition. As modernist architects working largely in tropical contexts, they mastered innovative technical repertoires. Yet they also counter-proposed a socially sensible approach to design through groundbreaking participatory methodologies that extended well beyond the climatic emphasis prevailing within the Tropical Architecture movement of the 1950s. Disconnected from the global, ahistorical, unornamental and achromatic principles suggested by the larger Modern Movement, their work also explored and promoted vernacular regionalisms. While Drew endowed modernism with a regional shell, De Silva excelled by critically disrupting its deep core. Furthermore, as women architects, they challenged restricted patriarchal fields. Through an exploration of their exemplary work in Chandigarh and Watapuluwa, this article discusses how the approaches of Drew and De Silva allowed mid-twentieth-century architecture to reinvent itself, embracing exciting beginnings while assimilating disruption.

The industrial innovations of the twentieth century propelled the world into a new era and established the basis for a new architectural discourse. This intended “modern” language elected a minimalist approach to represent the “essence of architecture.”¹ It thus became a matter of principle by mid-century that form should pursue function. Modernism likewise envisioned the past as a *tabula rasa*, excised of all its former aspects, including regional markers, decoration, ornament and color.² Eventually, the ambition for a global International Style was tested, spreading its wings from Europe to the rest of the world, creating a “modern diaspora.”³

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Tropical Architecture was one of the outcomes of this larger Modern Movement. Broadly defined as a technoscientific response and adaptation of the language of modernism to the climate of the so-called “tropics,” it came to embody groundbreaking devices, strategies, and intricate imperial power-knowledge networks.⁴ As a self-conscious approach to design, it was first institutionalized in London by a namesake conference in 1953 and a course in 1954. But its genealogy has since been traced to the eighteenth century by Jiat-Hwee Chang and to the West Indies by Iain Jackson.⁵

The starting point for the movement, however, is considered the appointment of Maxwell Fry — later joined by his wife, the architect Jane Drew (1911–96) — as town planner for the British colonies of West Africa.⁶ The mobilization of qualified manpower to the colonies was integrated into extensive construction programs in the region. Sponsored by the British welfare state as a way to deflect anti-colonial sentiment, London-based architects working in Africa considered the flourishing and (ideally) apolitical modernism as the most suitable expression for the identity of future independent nations in the region. However, what Drew and Fry described as the “burning sun alternating with torrential rains” soon exposed the inadequacy of modernism’s clear lines and immaculate white surfaces in locations beyond temperate Europe.⁷ And as the new Tropical Architecture movement sought to passively control the effects of this diverse climate, eaves were projected to harvest rainfall, floor plans and wall openings were orientated to maximize ventilation, covered walkways were deployed to prioritize shade, and glazed surfaces were replaced by perforated concrete screens.

Worldwide, the new climate-based approach soon came to fill the drawings of architects from Walter Gropius to Le Corbusier with cross-ventilation arrows, solar-path trajectories, and meteorological charts documenting rainfall and thermal comfort. And this quantitative methodology came to be regarded as the most appropriate approach to architectural design between the Tropics of Cancer and Capricorn. According to this orthodoxy, nature would become the main determinant of architectural form in the region. Besides the weather, however, the discourse disregarded the great diversity of architectural traditions in the region. By contrast, temperate-zone architecture had never been classified based simply on climate. So why were the uncountable architectural cultures in the tropical band reduced to a single salient feature — their tropicality? In hindsight, one might speculate that “temperate architecture” remained an omitted opposite, a nonexistent architectural style.⁸

In parallel, however, another modernist discourse did eventually come to maturity. Interested in autochthonous vernacular building techniques, it focused on understanding the typologies of traditional dwellings and settlements. Soon this new framework superseded the climatic trend, and tropicalization thereafter became the two-way transcultural

exchange that marked the first colonial encounters.⁹ As a result, the work of architects such as Otto Königsberger, Robert Gardner-Medwin, John Turner, and the couple Maxwell Fry and Jane Drew came to express social commitment.

Yet, while this social aspect has been fairly well explored with regard to the above-mentioned male figures, little has been written about Drew’s social approach. And, by extension, it is the novel perspective afforded by the socially engaged work of women practitioners within the framework of 1950s Tropical Architecture that informs this article and my ongoing Ph.D. work.¹⁰ This research necessarily entangles the broader literature on women architects and Tropical Architecture with the social sciences, particularly the fields of anthropology and gender studies.¹¹

Another concern that needs to be addressed here is that the word “social” is superabundant in contemporary dialogue. On the one hand this reveals how all human behavior has come to be considered, and studied, as such. Yet this ubiquity also dilutes its terminological essence, making it difficult to “assemble” in the sense developed by Bruno Latour.¹² For this reason it is important to establish that the “social” aspects of architecture I am concerned with relate primarily to issues pertinent to community design: an unevenness of access to resources and housing, a discrepancy in technopower arising from colonization, and an inequality in labor opportunities. Toward this end I seek to inquire: How did architecture tackle these topics? Through which spatial approaches and projectual design methodologies did it operate? And what was architecture’s contribution to improving social relations in the tropics?

As a partial answer to these questions, the article suggests that it was precisely the social approach of these architects, which favored local people and relied on time spent in their communities, that allowed them as practitioners to establish trust with the population and improve social relations. In particular, an emphasis on methodological fieldwork facilitated a panoply of contacts that enabled the development of socio-cultural sensibility and a political awareness. Such an approach also consciously engaged their architecture with a humane or humanitarian viewpoint, present in any discipline. A further result was to disrupt detached, institutional, “top-down” strategies in favor of what Jennifer Mack has called a bottom-up, “sensitive, piecemeal, and specifically participatory planning.”¹³

JANE DREW’S DETACHABLE *FILIÈRE*: THE SOCIAL WITHIN THE TROPICAL IN WEST AFRICA

In West Africa, Maxwell Fry and Jane Drew designed buildings and master plans for Gambia, Sierra Leone, Ghana and Nigeria (FIG. 1). The vast geographic expanse made dramatic changes unachievable. Their goal, rather, was to make simple investments in “primary” urban fields such as water supply, sanitation and laundering that would reduce the



FIGURE 1. Jane Drew and Maxwell Fry studying a model of a building in Ghana, 1950s. Source: RIBA Collections, reprinted by permission.



FIGURE 2. Library entrance, University College of Ibadan, Nigeria, 1955. Source: RIBA Collections, reprinted by permission.

time and physical struggle of daily chores. The expectation was that social change would follow improvements in the general health and quality of life of the population.

Notwithstanding their status as colonial officials, Fry and Drew were also supportive of the populations whose lives they sought to improve. For example, in their work on the Bathurst Plan (Gambia, 1946) they discouraged the relocation of European administrative facilities, which would have deserted the African community. Similarly, in their work on Tema Manhean (Ghana, 1958) their extensive consultation with future residents promoted a rich dialogue leading to a frank understanding of people's needs. Full-scale mock-ups were another method Fry and Drew used to foster inclusiveness in this and other projects. And, in this case, after local people were given the chance to interact with the models, it became apparent that the single housing type they initially proposed would be unable to accommodate future changes. The prototype was also rejected by local residents who claimed that its single-pitched shed roof was undignified. Thus, Fry and Drew amended their proposal to include double-pitched roofs and the option of three housing types, creating further flexibility within the compound.¹⁴

To foster goodwill among the local population through intercultural exchange, Fry and Drew also endorsed exhibitions, to which they “invited the local chiefs . . . who were quite quick at seeing what improvements town planning could bring.”¹⁵ In keeping with this approach, local craftsmen and artists were employed to bring the process of design closer to local communities. Such was the case, for example, with the inclusion of a mosaic by a local artist in the Accra Community Centre (Ghana, 1950s). Local symbols and patterns — from “pots, mats, baskets and cloth” — were likewise often integrated into architectural details.¹⁶ For

example, as Drew commented in 1955, in the design of “breeze permitting devices . . . an attempt has been made to design in a way which, without in any sense copying African detail, gives a response which is Africa.”¹⁷ Their design for the University College of Ibadan (Nigeria, 1949–60) was illustrative of this principle (FIG. 2).

Attentiveness to place was further pursued in their work using color, disrupting modernism's achromatism. Drew and Fry used regionally selected colors such as “terra cotta, yellow, brown, red and blue” to reinforce form, since “the strong blue of the sky, the black green of the foliage and terra cotta of the earth make pale colours seem insipid.”¹⁸ Yet, as Drew also noted, “colours suited to the hot humid tropics could not be used in the dry hot climate. . . . Each architect must be true to his own integrity, his own sense of form and color.”¹⁹

Drew wrote that she and Fry also believed “in respecting the good work of the past and conserving it, and learning from it. We were however, very socially conscious and felt that architecture and town, village or city design and landscape design were all interlinked.”²⁰ Their eighteen-month commission in Africa thus exposed them to the social systems of local cultures, allowing them to enter a common sociality with those for whom they worked — seeking “cultural intimacy” over a “militant middle ground,” according to the concepts of Michael Herzfeld.²¹ Recognizing the diversity of some forty tribal languages, Drew was able to effectively communicate through her grasp of dialects, employing ethnography as a form of social inquiry.

The formal corollary to these empirical observations and experiments was Fry and Drew's 1947 book *Village Housing in the Tropics*, which they imagined as “a guide to those responsible for locating and developing villages, and who have not at their disposal the services of an architect



FIGURE 3. Jane Drew, Chandigarh, ca. 1951–53. Source: RIBA Collections, reprinted by permission.

or planning officer.”²² As a manual, it sought to provide a handy, readable guide to communities *vis-à-vis* “town and village design, because here is the heart of architecture.”²³ Beside guidelines on suitable types of trees and “recipes” for building materials, it offered a number of drawings, charts, and cartoon-like diagrams. Its intent was to equip end-users with valuable tools to allow them to improve the quality of their housing and enable them to reshape their settlements. It thus reinterpreted the anthropologically derived concept of “urban design from below.”²⁴

Despite sharing a lifetime partnership with Fry, Drew, however, possessed an individual voice (FIG. 3).²⁵ Indeed, the further Fry’s and Drew’s careers progressed, the clearer became the particular architectural languages and lines of thought that distinguished them. Yet simultaneously, their different personas seemed to perfect their practice together. Drew thus developed her own themes and profound beliefs, and social sensibility became her detachable *filière*. According to colleagues and friends, Drew thus “was a very lively person and brought cheer during work and outside office.”²⁶ Fry, by contrast, “was the backroom-boy absorbed in his elevational treatments and literary prose — finding strength and solace through his drawing board.”²⁷

Drew worked for people, with people. Her motto could be “for any job it is worth consulting, where possible, all those who work in and use such buildings and get direct reaction.”²⁸ In this respect her socially sensible personality mirrored her architectural expression. Putting users and purposes first, her designs were primarily functional and efficient rather than formally expressive. The scope of her work was also devoted to less flamboyant programs. Drew once observed: “I have always been involved in the cause of the job. . . . It has always mattered to me tremendously that the object should be something very worthwhile.”²⁹ This very admission perhaps showed how she was aware her design inclinations could cost her a more glamorous career. Still,

there were countless times when stunning designs and details glowed through her larger oeuvre.

It is more fully possible to appreciate the significance of Drew’s achievement in hindsight. In essence, she recalibrated Tropical Architecture to include regional influences: a modernist core with a vernacular shell. More than a designer of forms, she also imagined the role of the architect as that of facilitator, improving living conditions for whomever she designed, in the sixteen countries in which she worked. As she wrote in 1988:

*In my own work, whether in Iran, India, Sri Lanka, or West Africa I have always tried to pay attention to the life styles and climate of the country, that alone has made architecture part of the culture especially when it has been possible to use local materials and incorporate the work of local artists.*³⁰

One of those who was acquainted with Drew’s social approach was the Ceylonese architect Minnette De Silva (1918–98). Recalling her interactions with the couple, De Silva highlighted “Max the gentle thinker and Jane the activist, raising the whole social level of the place by her humanity.” She thus emphasized that “Jane was always deeply committed to the sociology of architecture.”³¹ Her familiarity with Drew’s socially conscious character also derived from a certain proximity in their paths as architects (FIG. 4).

MINNETTE DE SILVA: A “SOCIAL” MODERN REGIONAL ARCHITECTURE IN THE TROPICS

Along with Jane Drew, Minnette De Silva was among the few women architects engaged in the field of Tropical Architecture in the 1950s (FIG. 5). In 1948, after Sri Lanka achieved its independence from the British Empire (in which it had formerly been referred to as Ceylon), De Silva returned to the city of Kandy, where she established her office, the Studio of Modern Architecture, in her family home.

As a modernist architect who had graduated from the Architectural Association of London (1945–48), she used a range of avant-garde techniques: free plans, flexible spaces, generous fenestration, concrete, and pilotis. Yet, attentive to the climate, her buildings were designed to be thermally suitable, ventilated, and open to the abundant nature of her island nation. De Silva also refused to follow the tenets of the Modern Movement uncritically, and disrupted its unornamental, ahistorical and achromatic principles while seeking flexibility in the application of its dogmas.

De Silva later observed that she returned to her home country to find a design milieu in which “a veneer of modernism was acquired at second hand, ill digested and bearing no relationship to Ceylon’s traditions.” She described her goal throughout her work as being to “absorb what we

FIGURE 4. Jane Drew and Minnette De Silva at CIAM VI in Bridgewater, England, 1947. Source: RIBA Collections, reprinted by permission.



absolutely need from the modern West, and to learn to keep the best of our own traditional forms . . . in order to develop an indigenous contemporary architecture.”³² Notably, in the plans of her houses, she thus avoided depicting furniture arrangements, a common practice in modernist layouts. Indeed, some modernist architects would go so far as to build key household furnishings in an attempt to transform the house into a complete *machine-à-habiter*. De Silva, instead, would mark the role of spaces on her drawings only textually, refusing to pictorially define how residents should live in them.³³

Additionally, De Silva observed that “the progressive architects of the West” planned such a “clean-out” that the result was a “sterile architecture . . . lacking the essential element of contact with the people and their regional life.”³⁴ Her views can thus be seen as an early summary

of common critiques of modernist design still prevailing today. By annihilating idiosyncratic regional specificities and disconnecting design from local communities, modernism has likewise been criticized in retrospect for prioritizing the ambitions of the architect over the needs of users.

To heal the “divorce” between modernism and “the needs of the people,” as well as regenerate the life of traditional settlements, De Silva proposed a new “marriage.”³⁵ Owing to her family’s political engagement, she had been exposed since childhood to the social, religious and ethnic dynamics of village life. And her familiarity with handicraft practices — among them the work of weavers, silversmiths, and brass makers — led her to make vernacular Ceylonese craftsmanship an integral part of her architectonic language. As she later reflected, these childhood experiences “seeped into my unconscious mind, later manifesting itself in my work.”³⁶ For the entirety of her career she thus employed locally sourced materials and manpower. She also worked with village artists and artisans, who painted murals and designed and produced tiles, furniture, cast-iron grids, lacquered pots, and other architectural elements, which were then placed throughout her buildings or integrated into their structure (FIG. 6).

In the end, working with local people and highlighting the specificities of traditional cultures — marrying the work of the architect to that of the artists and craftspeople — greatly enriched regional design. As she wrote about the importance of traditional crafts and craftspeople in 1966, “unless they are brought back into architecture in an authentic manner, they will cease to serve any useful purpose . . . [and] will remain only as a museum piece and eventually cease to exist.”³⁷ The skills of underpaid contemporary handicraft workers could thus be reintegrated into society and given pride of place, as they had been in early Ceylonese history. And the renewal of the vernacular could be part of a larger social initiative, uplifting the underprivileged and encouraging social mobility.

Alluding to Mahatma Gandhi’s reverence for time spent at a spinning wheel, De Silva went so far as to learn how to



FIGURE 5. Minnette De Silva. Source: Minnette De Silva, *The Life and Work of an Asian Woman Architect* (Colombo: Smart Media Productions, 1998).

FIGURE 6. Minnette De Silva in the lacquer craftsmen's village of *Palle Hapuwida*, Source: Minnette De Silva, *The Life and Work of an Asian Woman Architect* (Colombo: Smart Media Productions, 1998).



weave, and established her own weaving workshop. Employing up-to-date looms and other technologies, women artisans there were encouraged to produce traditional handicrafts for use in modern architecture. The weaving of traditional *dumbara* mats was especially dear to her. For centuries these handmade textiles, threaded with plant fibers and adorned with symbolic motifs, had been used as wall hangings, tapestries, rugs, or cushion covers. De Silva not only enriched their vocabulary but extended their usage, incorporating them into architectural elements such as door and ceiling paneling. Further, she promoted the use of these textiles in fashion, fusing them into the saris she personally wore.

The sophisticated relationship between “women and things” often goes unheeded or is even denigrated as a gendered practice.³⁸ However, De Silva promoted the refinement of this relationship as an important socio-cultural enterprise. As part of the Sri Lankan national independence movement, she likewise saw the revitalization of tradition as key to the creation of a new identity. In a political sense, then, the opening of new architectural grounds employed regional motifs as symbols of resistance.³⁹

Although De Silva’s family were part of the local elite — enabling her to pursue the unconventional path of a university education in the metropolis — they were also openly anti-colonial. De Silva’s work thus helped to build a sense of identity and pride in the new nation.⁴⁰ She also reframed Sri Lankan housing concepts by creating a rupture with the historicist, colonial culture that had imitated European and indigenous styles while neglecting the development of actual local hand skills. She thus stood against the “global form” of the European bungalow, designed and planned as a way to protect the fearful colonizer from the unruly tropical weather.⁴¹

De Silva’s initial commissions illustrated this process of deconstruction. In particular, her work on the Karunaratne House (Kandy, 1948-51) — the first building designed by a woman architect in Sri Lanka — embodied a perfect equilibrium between rupture and tradition. On the one hand, it featured modern elements such as glass brick walls; it used concrete applied according to pioneering techniques and experimental methods; and it featured a free plan that allowed for spatial flexibility during the large gatherings characteristic of Sri Lankan society. De Silva later also proudly called out the “introduction of a modern pantry-kitchen typical of the 1950’s.”⁴² However, conversely, regionalisms were also essential to its design conception. Thus, local wood and stone and traditional Kandyan arts and crafts stood out prominently, a signature of De Silva’s legacy. Likewise, detailed lacquer work was also employed on the staircase railing; terracotta tiles, with a *Ridivihare* temple dancer motif, were applied to the walls; and the design highlighted decorative earthenware jars in traditional designs and a mural from the local artist George Keyt (whose production was partially funded by De Silva). As mentioned above, *dumbara* mats were also unprecedentedly incorporated into door panels, furniture coverings, and curtains. Likewise, hemp (from which the fibers for the *dumbara* mat are derived) was planted in the garden. In sum, as she wrote at the time, “in this house the architect, the craftsman, and the artist have worked together” (FIG. 7).⁴³

De Silva’s descriptions of the design of the house were exuberant when describing the appeal of its details to the senses and when reflecting on the use of color. She thus described how the staircase was made of “concrete finished with polished Jack-wood treads and black cement risers. The balusters are Kandyan lacquered wood in the traditional



FIGURE 7. *Karunaratne House, Kandy: the architect (De Silva), the craftsmen (lacquered wood), and the artist (mural) worked together.* Source: Minnette De Silva, *The Life and Work of an Asian Woman Architect* (Colombo: Smart Media Productions, 1998).

colours of red, gold and black, with a black-stained wood hand-rail.⁴⁴ Historically, these tones had been present in ancient temples, such as the first-century-BCE Dambulla Caves.

As mentioned above in my discussion of the work of Jane Drew, such chromatism disrupted the *habitué* whitewashed walls associated with the Modern Movement. As Mark Wigley has observed, this whiteness was never consensual within early modernism — and it was never openly mentioned either, although it nevertheless became a chromatic decision.⁴⁵ Willing to “undress” the previous generation’s decorative paraphernalia and color, modern architecture thus “changed clothes” to a pristine *haute-couture* garment. In an intriguing debate, the multicolored and ornamental outfits of the nineteenth century were thus replaced by a sophisticated theory of surface for the sake of form.

Curiously, when De Silva defended ornament as an element of emotional depth in her designs, she quoted Le Corbusier. His views on the subject were notoriously ambivalent, ranging from his enthusiasm for color and ornament to his devotion to achromatic form. Regardless, De Silva made use of a full palette of colors in her approach to walls, earthenware, woodcarving, murals, tiles, and fabrics. In contrast with the Corbusian “well-cut suit,” tailored for civilized modern men, she dressed in sparkling saris, bangles, and beflowered hair.⁴⁶ This was entirely in tune with her culture, because, as she observed, “Ceylon and the East are generally alive with colourful decorative features.”⁴⁷

For her original and emancipated perspective on mid-twentieth-century architecture, Liane Lefaivre and Alexander Tzonis have thus hailed De Silva as “the first architect in the world to explicitly define what she called a modern approach to regionalism.”⁴⁸ And De Silva herself portrayed the work on

Karunaratne House as “an experiment in Modern Regional Architecture in the Tropics.”⁴⁹

De Silva resumed her pursuit of this vision in her design for the Pieris House (Colombo, 1952–56). As part of her marriage of modern and traditional elements here she employed a panoply of artisanal and local elements: local stones, woodcarvings, *dumbara* mats, ornamental clay tiles, *midula* bursting with plants and lotus pools, and an iron grille with metalwork in the shape of the sacred Buddhist bo-leaf. Yet, as a reflection of modern ideas, the house was designed based on a free plan, with a rhythmic geometric facade. And its windows, though framed in traditional lacquered wood, employed concrete louvers while striving to produce the effect of the modernist *fenêtre en longueur* (FIG. 8).

Supported by the most prominent contemporary engineering firm at the time, Ove Arup, De Silva’s design for the house likewise featured the first reinforced concrete flat slab in the history of Sri Lanka — “so the house was quite revolutionary at the time,” she later wrote.⁵⁰ Between rupture and tradition, the main living space in the house was raised structurally on *pilotis*, leading the British architect David Robson to observe it had been “inspired perhaps in equal measure by Le Corbusier’s Villa Savoye and by traditional elevated temples known as *Tampita Vihare*.”⁵¹ Indeed, images of this medieval Ceylonese religious typology are present in De Silva’s autobiography alongside technical drawings of the Pieris House.

As these examples show, De Silva created a language that selected between aesthetic references she believed were most suitable to her expression, avoiding a peremptory affiliation with any particular style. As she later summarized her approach: “Much of my work has been based on finding a workable synthesis of traditional and modern architecture.”⁵²



FIGURE 8. *Pieris House, Colombo: geometric facade, pilotis, and bo-leaf-shaped metalwork.* Photo by author, 2023.

Why choose between rupture and tradition if the best of both can be stimulating enough?

By inciting a dialogue between these ambivalent spheres — modern and regional, West and East, technology and craft, *avant-garde* and *arrière-garde* — De Silva’s strategy proved that rupture and tradition could coexist and generate an original architecture (FIG. 9). Such an expression was both characteristically hers and groundbreaking in the canon of modernism. And yet it is possible to see how her production anticipated attempts by others decades later to blend local and global influences. A handful of terminologies and concepts have since been envisioned to describe how architecture may be modern and functional yet include the peculiarities and nuances of particular places and regions. A “hybrid modernity”?⁵³ “An architecture of resistance”?⁵⁴ Arguably, De Silva performed “the earliest, clearest, most critical reformulation of tropical architecture,” anticipating the movement of Critical Regionalism by thirty years.⁵⁵

THE SOCIAL AS A DISRUPTION: CHANDIGARH AND WATAPULUWA

Jane Drew’s socially conscious design methodologies, developed in West Africa and applied worldwide, matured in her work India. After the partition of the subcontinent in 1947, the capital of the new Indian state of Punjab was lost to Pakistan. Responding also to an appeal from the new national government of India to address the larger postcolonial housing deficit in the region, the result was the creation of an archetypal modernist city: Chandigarh. In its design and construction the supposedly “noncolonial” aesthetics and methods of the “apolitical” Modern Movement



FIGURE 9. *Minnette De Silva inspecting the concrete pillars and slab work, Colombo, 1951.* Source: Minnette De Silva, *The Life and Work of an Asian Woman Architect* (Colombo: Smart Media Productions, 1998).

would, however, be imported through existing networks of “power-knowledge,” as these have been described by Foucault.⁵⁶ And its new urban forms and social spaces would thus ultimately entangle modernism with colonialism even in the postcolonial era.

Due to the scarcity of local experienced practitioners, the Indian government appointed an overseas team to design the new state capital. Assisted by Indian architects, this team was eventually composed of Le Corbusier, his cousin Pierre Jeanneret, Maxwell Fry, and Jane Drew. In their work on Chandigarh, Drew and Fry improved their “anthropological” approach. Leaving their successful London office, the couple moved *in situ* for three years. In India, they first engaged in a number of socially engaged discourses, including surveys and consultations with the population. Once again, they also worked to integrate regional patterns into the design of passive shading devices. And their efforts prioritized the use of local materials, like cheap and available brick, and local manpower. Since “building for the poor means building close together,” Drew observed, their projects were thus designed in close contact with the future inhabitants, and even “built with the aid of donkeys, men, women, and children.”⁵⁷ In all this work they also tested the inclusion of the Indian cultural elements while adapting modern housing design to traditional requirements, namely to the prevailing caste system (FIG. 10).

In a desire to work directly with the people, Drew arranged extensive meetings with future inhabitants to generate data to help in the team’s various projects — be it by talking with shopkeepers or “conferring with a young doctor

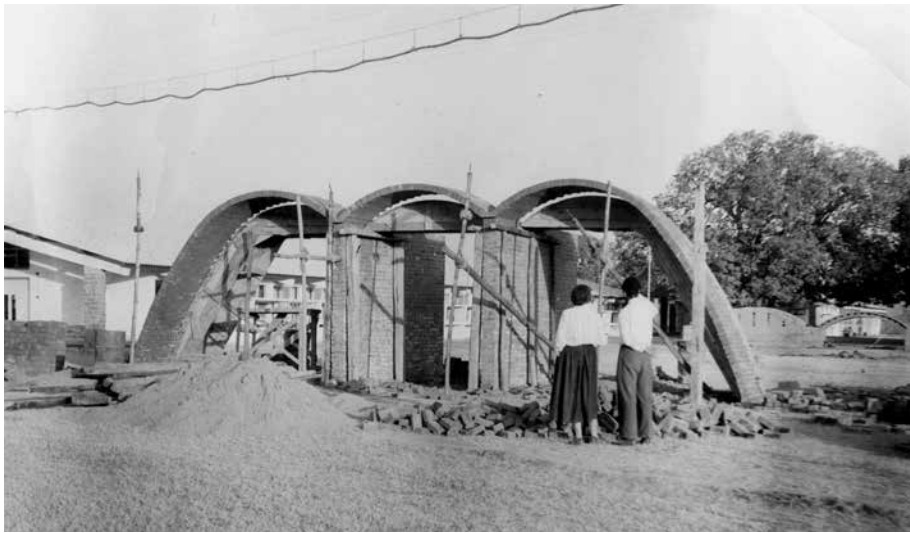


FIGURE 10. Jane Drew inspecting the construction of arches, Chandigarh, ca. 1951–53. Source: RIBA Collections, reprinted by permission.

... and designing [the Sector 22 Health Center] with him.”⁵⁸ She established a night school for Indian architects. And she even assumed the role of judge, solving community disputes — an activity for which Fry coined the term “Raj Justice.”⁵⁹

Drew eventually designed fourteen building types in Chandigarh, including government housing, education, recreation, commercial and health facilities. But it was her socially mindful housing strategies that had the most powerful impact. In the Chandigarh plan, government-supplied housing was labeled according to a hierarchized rank that reflected their future occupants’ salaries. The initial ranking system ranged from 1 to 13; however, this was later extended to include a Type 14 to accommodate those of even lower income who had been left out of the initial building program. In each house type’s final designation, this numerical rank was complemented by the first letter of the last name of the architect responsible for its design. According to Kiran Joshi, to “hous(e) the Government’s poorest, menial employees (nowadays euphemized as ‘Group D’),” Drew created

*... a pleasant, very livable bounded neighborhood . . . rather than simply keeping them out of the sight. She is also credited with the idea of the “cheap houses” (Type 14), a contribution significant for at least attempting to address the needs of the poorest who were not originally planned for at all.*⁶⁰

Characteristically, Drew organized Type 13 (406 units; Sector 22) into communities (FIG. 11). The same pattern was followed for Type 14 (572 units; Sectors 15, 19, and 24). Type 13 Peon Villages were further accessible by gates marking entry points to pedestrian streets, with a central public space (FIG. 12). The cost of building the single-storied houses was reduced by placing them back-to-back or by omitting roofs over their toilets. Each unit included two rooms, a bath

compartment, a cooking veranda, and a rear courtyard and toilet. These typologies — low-rise, low-density, in cubic forms and made of local brick — subsequently came to be known as the “Chandigarh Style.”

It is noteworthy that Chandigarh was the first city in India to be built from the outset with sewage lines, piped drinking water, and electricity service. Drew’s housing types contributed to this success. Indeed, Prime Minister Nehru is credited as complimenting them for being “the only cheap housing he had seen that did not look cheap.”⁶¹

Minnette De Silva’s dedication to social housing and traditional settlements was likewise fundamental. Indeed, it was one of her ambitions to design for the less wealthy and to offer tools for the unskilled to house themselves. Moreover, when building for a community, De Silva believed that the architect should be “thinking in terms of a village group and



FIGURE 11. Government House Type 13D in Sector 22D, Chandigarh. Photo by author, 2022.



FIGURE 12. *Type 13D Village in Sector 22D: the brick arches mark entry points, Chandigarh. Photo by author, 2022.*

trying to create the community atmosphere that these people are accustomed to, and not just creating industrial housing in Western terms where communal living has almost disappeared.”⁶²

De Silva discussed social theory extensively in the investigation “Cost-Effective Housing Studies” (1954–55), which she started when she was a graduate student at the Architectural Association in London. The research would later provide grounding for her social discourse on low-cost housing. Her social interest represented her commitment to the people of her home region in Sri Lanka. As part of this work she experimented with bamboo framing and rammed earth — construction techniques she later employed both in designs for tourist resorts and as suggested strategies for the renewal of slums in Colombo. De Silva also proposed these methods for the construction of her largest housing scheme, Watapuluwa (Kandy, 1955–58), which in many ways represented the culmination of her social housing ideas (FIG. 13).

As with Drew’s work at Chandigarh, the Watapuluwa project was initiated in response to a postcolonial housing shortage. In this case the Kandy Housewives Association invited De Silva to develop a scheme for an economic cooperative of two hundred and fifty houses. At the beginning of the project the site was divided into plots according to a master plan by De Silva. But thereafter De Silva sought to create a design and building process that would free the individual house designs to reflect the social melting pot of ethnicities that the overall scheme aimed to serve.

Employing a pioneering participatory approach, the “Asian woman architect” first conducted extensive consultations with future residents and collected information from them through questionnaires. These took two forms: a preliminary survey to establish general categories of design, and a more detailed follow-up to disclose more detailed preferences. The questions, which she hoped would



FIGURE 13. *Overall view of Watapuluwa Housing Scheme, Kandy. Photo by author, 2023.*

personalize aspects of the mass scheme, covered a range of topics, including family income, socio-cultural status, religious orientation, material preferences, vehicle usage, cooking methods, and children’s requirements. After she had analyzed the outcome of the questionnaires, she then scheduled group meetings during which she engaged in detailed discussions to further flesh out homeowner preferences. As a result of this process, De Silva drafted plans for five housing types, ranging in size and cost. Each family was then invited to select one and to adjust it according to their needs. The result was that no two houses were alike — a consequence not only of the sloping terrain and De Silva’s desire to accommodate user preferences but also of a self-building component (FIG. 14).

In the immediate aftermath of World War II, the limits of the Modern Movement were tested as its practitioners sought to use industrial methods to solve a global housing deficit. In this context, gaps and opportunities necessarily arose, and aided self-building was one of them. The approach profited from the advantages of both “formal” and “informal” processes of architectural design. Thus architects could offer expertise as holistic enablers, while residents could ensure flexibility of outcome by formalizing their preferences directly during the construction process. As John Turner and Robert Fichter would later write in *Freedom to Build*: “When dwellers control the major decisions and are free to make their own contributions in the design, construction, or management of their housing, both this process and the environment produced stimulate individual and social well-being.”⁶³

De Silva’s work at Watapuluwa provided a vivid demonstration of the truth of this statement. The variety among the houses disrupted what might otherwise have been realized as a monolithic modernist housing complex. Yet the very act of self-building also called into question the concept



FIGURE 14. *Example of a house in Watapuluwa Housing Scheme, Kandy. Photo by author, 2023.*

of authorship that was so dear to modernism — as well as the meaning of “architect” as a semantic concept. The result perturbed the role of the modern architect as the sole author of a building, and it valorized practice and local skills over technocratic power-knowledge. In a participatory process such as at Watapuluwa, authorship became inconclusive, no longer the prerogative of the architect situated on a pedestal.

At Watapuluwa this approach raises important questions. Was the sense of authorship diluted or shared — or did it render the notion of authorship irrelevant? If an architect gave a design to the people who built it, was the architect still the author? The implications of these questions are probably why De Silva still included a press clipping emphasizing the success of the Watapuluwa project in her autobiography — even if the clipping did not detail her exact contribution.

Certainly aware of the worldwide scenario, De Silva consciously remarked in her autobiography how “This project is really an early example of ‘community architecture.’”⁶⁴ Toward this end she also explained how she had suggested that vernacular methods, materials, and local labor be used to complement the modern techniques that would expedite its construction. Nowadays, the residents of Mahaweli Uyana (the name by which the Watapuluwa project is known now that it is free from the housing-scheme terminology by which it was conceived) still recognize its success as a pioneering community initiative. However, the exact contribution of De Silva, as well as evidence of it on the ground today, remains largely unstudied. Her autobiography remains the only robust reference proving her involvement.

During my recent fieldwork in Watapuluwa I collected information that can contribute to identifying and documenting De Silva’s possible legacy in this housing scheme, and hopefully enable some new conclusions about it. Research is also required to shed light on how its impact

as a participatory process inspired other housing schemes around the island. The aforementioned aspects establish Watapuluwa as a project where “for the first time in Sri Lanka, and perhaps in the world, an inclusive beneficiary participatory process/approach was adopted in housing.”⁶⁵

WOMEN ARCHITECTS: A GENDER DISRUPTION AND AN INTERSECTIONAL VIEW

Modern architecture undeniably privileged male practitioners and masculine discourses.⁶⁶ As women architects working within its framework, therefore, Jane Drew and Minnette De Silva faced general adversities. The importance of their pioneering theoretical and practical contributions has consequently never received the attention it has deserved within architectural history.

Jane Drew led an internationally recognized office and had a celebrated career that lasted almost half a century (**FIG. 15**). She was the first woman to serve on the council of the Royal Institute of British Architects (RIBA) and the first woman to preside over the Architectural Association School of Architecture. She was also the first woman full Professor of Architecture at Harvard University and the Massachusetts Institute of Technology. Yet despite these successes only a handful of articles have been published about her work.⁶⁷ Some other publications focus only on her collaboration with Maxwell Fry.⁶⁸ Mention of Drew’s important work in Chandigarh is likewise scarce, appearing mainly in footnotes.⁶⁹ Moreover, Drew’s section in the “Fry and Drew papers” at RIBA, the most important archive of the couple’s work (and a crucial primary source for this article), is largely unpublished, or remains only in manuscript form.⁷⁰



FIGURE 15. *Jane Drew with the Indian team, Chandigarh, ca. 1951–53. RIBA Collections, reprinted by permission.*

FIGURE 16. *Minnette De Silva with Picasso and Mulk Raj Anand in the Peace Conference, Poland, 1948. Source: Minnette De Silva, The Life and Work of an Asian Woman Architect (Colombo: Smart Media Productions, 1998).*



For her part, Minnette De Silva would become RIBA's first Asian woman associate and Sri Lanka's first woman and first modernist architect. Yet, as with Drew, these pioneering feats are sharply dissonant with her place in history (FIG. 16). The lack of published work about her and the absence of a formal archive today have only been partly made up for by her autobiography.⁷¹ This work, *The Life and Work of an Asian Woman Architect*, was posthumously printed in a single edition, but it was forgotten as swiftly as her legacy was annihilated. Following her death, her office was plundered. And the majority of her buildings have either been demolished without mention or altered without remedy.

The unequal status of women, frequently debated within the field of gender studies, has been a prominent problem within the practice and theory of architecture. As Drew commented: "It was when I left the AA and sought work in an office myself that I first met the prejudice I did not know existed, about women architects. I had difficulty in even getting an interview."⁷² Afterwards, however, when she opened her first office, she attempted to employ only women.

Emblematic debate over the status of "the architect's wife" — as described by the American architect Denise Scott Brown⁷³ — was likewise coincident with Drew's career. Thus, in her work with Fry she was frequently accorded second place. "I was introduced to the Prime Minister as the architect's wife and he hardly noticed me," she once observed.⁷⁴ Moreover, Drew has commented on how she was

paid less in West Africa thanks to being a woman, how Fry chose to resign from the RIBA Council Club when he could not bring in a woman as a guest, and how Shell London was reluctant to even consider hiring a woman architect.

One anecdote today concerns Drew's experience with the Kuwait Oil Company. A week after her arrival in that country the company summoned her back to London, apologizing and confessing how "it had never dawned on us when we telexed London for a tropical hospital expert that they would send a woman."⁷⁵ Worthy of having a special award named after her (the Jane Drew Prize), she ironically received few architectural awards during her lifetime.⁷⁶ The exception was receiving the title Dame of the Most Excellent Order of the British Empire before her death.

Gender inequality also characterized the relationship between De Silva, who ran an independent female practice in the postwar period, with Ceylonese men architects, who were arguably driven in important new directions by her pioneering ideas. Her work, too, was largely unnoticed during her lifetime, except that she did receive a Gold Medal from the Sri Lanka Institute of Architects just before her death. De Silva was also only exempt from being seen as "the architect's wife" because she never married. Discouraged from pursuing an architectural education in the first place, her choice of work was later criticized as being unsuited to a woman. It was "an unheard-of impertinence for a girl of her country at that time," one commentator observed.⁷⁷

Introducing herself as an “Asian woman architect,” she confessed: “I was dismissed because I am a woman. I was never taken seriously for my work.”⁷⁸ In her autobiographical scrapbook, De Silva, however, thanked her first clients, “who braved . . . had faith in my pioneering projects, withstanding ridicule for trusting an unknown woman architect with impossible ideas.”⁷⁹

The enduring presence of titles such as “Mrs. Maxwell Fry” (one Drew promised she would never use) and “Miss De Silva” is evidence of the lack of seriousness given to the role of women in the archives, historic publications, and educational system of architecture. And the lack of research into the importance of their work is representative in general of how *le deuxième sexe* has been systematically ignored in male-orientated architectural narratives that overwhelmingly favor patriarchal strategies of knowledge. Yet, ever since women started studying architecture a century and a half ago, they have tackled the same challenges as Drew and De Silva — a reality that only further highlights the omnipresent gender disparity in the discipline.

In attempting to fully appreciate the work of these two women, however, it is not sufficient to focus purely on discrimination against them as a matter of gender. Intersectionality points out that multiple identity inequalities may interact and overlap with one another. Intersectional theories developed in the fields of social and gender studies are pertinent in this case in architecture. The biases arrayed against women were thus often not simply a matter of prioritizing the legacy of men but, among women, of advancing a Westernized and Eurocentric view of the architectural field. These “intersectional erasures” expose how gender can work together with other social markers to create unbalanced relationships — with power, reproduced, for example, in the preservation of the legacy of different architects.⁸⁰ Thus, where gender may have been the primary bias against which Drew had to contend, de Silva had to face a number of additional and deeper intersectional layers, namely race, geographic location/nationality, and even colonial rank.⁸¹

Drew could thus observe that in some respects gender even worked in her favor. Such was the case, for example, with her ability to gain access to restricted areas of households while in India or Iran. And at other times she was able to admit that her femininity was, in a professional context, irrelevant. But De Silva was penalized utterly by the conservative, male-orientated society of Ceylon. Here she was excluded, for example, from the embryonic Ceylon Institute of Architects, as this arose in Colombo.⁸²

Rising voices have recently been discussing the work of pioneering female architects. For example, Despina Stratigakos set off a global discussion with her 2016 book *Where Are the Women Architects?*⁸³ This also unveiled momentum for a welcome gender rupture in a field suffering from “Star Architect Disorder.”⁸⁴ Giving women architects a well-deserved place on the center of the stage may also

contribute to a more equal and plural architecture, where it will be possible “to be both a woman architect and an architect without ever having to choose.”⁸⁵ As Drew wrote, this would allow a practice where “women architects will be judged by their work like all architects.”⁸⁶ Celebrating women by recognizing and promoting a historiography of architecture “beyond the West” might also boost the confidence of women more generally, leading to greater levels of emancipation in more fair-minded societies.⁸⁷

Drew and De Silva’s careers show how women architects disrupted the widespread belief, first enunciated within the Modern Movement, that it would take “men – intelligent, cold and calm . . . to build the house and to lay out the town.”⁸⁸ Evidently, it was equally women that could do so. As Drew wrote, “So your battle, ladies, is on.”⁸⁹

CONCLUSION: DISRUPTION AS AN EXCITING BEGINNING

This itinerary through the life, work, and social heritage of Jane Drew and Minnette De Silva has attempted to illustrate their active contribution to significant disruptions within the Modern Movement, the subfield of Tropical Architecture, and the historiography of architecture more broadly. Despite their modernist affiliations, both women challenged its inceptive principles. And to its globalized target they counter-offered an emphasis on regional specificities. By seeking to include local history, culture and traditions in a decorative schemata highlighting vernacular elements and colors, and by respecting the existing settlement practices of local people, they thus brought diversity and life to a self-proclaimed ahistorical, unornamental, and avowedly achromatic design style. Recognizing, as Drew wrote, that designing in the tropics is bound to “be affected not only by climatic but psychological factors,” they also declared that Tropical Architecture’s purely climatic focus was inadequate and needed to be superseded by a more socially committed sensibility.⁹⁰

In architecture, a heightened consciousness of social change necessarily denotes political involvement. Both Drew and De Silva made a point of working closely with local communities and of respecting the point of view of the builder, the user, and the other *métiers* unified in their work of architecture. This approach thus also proved to be a way to empower people — namely the underprivileged of postcolonial societies — to develop their identities.⁹¹

The work of Drew and De Silva was focused on community engagement and the trust received from the regional communities. According to the rungs of the “ladder of citizen participation,” developed by Sherry Arnstein, and considering the particular time and era, their approach was groundbreaking, if not unprecedented.⁹² Their commitment to inviting citizen input went beyond any effort to merely inform them. And methodologies that

promoted participation ultimately legitimated end-user inputs and know-how, ensuring that the needs and desires of the population were considered along with more specialized architectural processes — and were materialized in the built result. The social journey of Drew and De Silva’s architecture thus transformed Chandigarh and Watapuluwa into what Kenneth Frampton has hailed as spaces with “a place-conscious poetic.”⁹³ They defied and reframed modernism to give it a more human aspect by allowing the aspirations of client populations to have genuine influence over the outcome of their designs. And their inclusive methodologies contributed to the creation of unique architectural languages.

It is also now possible to see how Jane Drew deconstructed the Saidian status quo, which represented the tropics as the “Other,” through methods of inclusiveness and respect for local cultures ranging from consultations to learning tribal languages.⁹⁴ Her celebration of genuine forms of place and her “people’s architecture” gave identity to her designs and allowed her to resist the placelessness of an International Style.⁹⁵ Through it, she transmuted Tropical Architecture into a “Regionalist Modernism.”⁹⁶ And in the process she sought “to produce towns and housing that will be loved, lived in and cared for.”⁹⁷

Minnette De Silva’s journey was even more diverse. She was born from an intercultural marriage of a Burgher mother with a Sinhalese father.⁹⁸ She grew up in British Ceylon and died in the Democratic Republic of Sri Lanka, while commuting constantly between her native town of Kandy and Europe. Possibly, because her pursuit of architectural individuality was intertwined with a search for her own identity, her disruption was deeper than that of Drew. Notwithstanding her profound bond with modernism and with what was called Tropical Architecture, as an architect designing in her own country, her discourse was able to navigate beyond the purview of other practitioners of the style. She was thus able to bounce further than Drew, tackling a distinct *filière*.

For De Silva architecture in the tropics was not about compliance with guidelines, stylistic dogmas, or the burdensome universalism of modernism. To competence in designing with the climate, she thus allied a respect for

regional character and tradition. It was hardly surprising then that she elected to employ a thriving hybrid language, both critical in her application of modernism and passionate about Ceylonese traditional vernacular vocabularies. An ambivalence of references empowered atmospheres where *pilotis* were wrapped in exuberant vegetation, where Corbusian clear lines winked at regional earthenware handicrafts, and where glass-brick walls stood in dialogue with *dumbara* mats in Kandyan tones. Her approach spoke of a “Ceylon-ness” as vibrant as the glittering saris and beflowered hair with which she colored postwar London and the conferences of CIAM. At the time, De Silva described her approach as being to create a “Modern Regional Architecture in the Tropics.”⁹⁹ But in hindsight it can be appropriate to understand it as one of the first demonstrations of Critical Regionalism. De Silva’s life and work thus provide a vivid materialization of how architecture can not only preserve tradition but also assume rupture as the starting point for inspiring new beginnings.

In this article I have sought to explore how the forerunner social initiatives of Jane Drew and Minnette De Silva, two women architects mostly neglected by masculine architectural historiography, illustrate how women promoted and participated in innovative social experiments during their *époque*. I have also sought to suggest that it was precisely by introducing a socially engaged methodology into Tropical Architecture that their fascinating narratives were created. While architects’ empathy towards social discourses and local experience is so commonly questioned and labeled as a total failure, Jane Drew and Minnette De Silva exemplified that, as Drew observed, “respect for another man’s way of life makes working with him easier.”¹⁰⁰

Their long careers, vanguardist writings, and built inheritance offer enough stimulating perspectives to research them as understudied figures. However, through their cheerful doctrine of social change through architecture, Drew and De Silva provide even more compelling historical perspectives. In a fierce diversity, they were women, architects and humanists who gave “people . . . the same care that we give when transplanting flowers.”¹⁰¹

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Rupturing Terracotta: Entangled Exchanges of the Hand and the Machine in South India

PRIYA JOSEPH

Through an examination of changing methods for making and using terracotta tile and brick this article explores the complex hybridity and productive tensions that emerged in the nineteenth century between indigenous and colonial systems of architecture and construction in South India. Outlining a general shift from handmade to mechanized processes, it further argues that a decolonial reading may provide a fruitful new approach to comprehending architectural history on the subcontinent. The article brings to the forefront how the indigenous-colonial encounter caused a rupture in the making of buildings that complicated the language and processes of architecture and construction in India forever.

The arrival of colonial agencies on the Indian subcontinent led to a stark, productive tension between colonial and indigenous processes, causing a rupture in the tradition of architectural “making.” To identify and appreciate this rupture fully, however, requires that nineteenth- and twentieth-century architecture in India be interpreted from a decolonial point of view. Existing knowledge about architectural production from the eighteenth and nineteenth centuries, when understood on the basis of colonial archives alone, frequently obscures the overlaps and intersections between the work of indigenous craftspersons and British engineers. To decolonize the reading of architectural production thus requires that traditional archives — such as manuals and treatises written by British engineers working for the Indian Public Works Department and articles in the journal *Professional Papers on Indian Engineering* — be read in a way that elucidates the biases of race, class and caste that reside heavily within them.¹

Western systems of knowledge have typically sought to associate themselves with pure reason in an attempt to establish their role as fiduciaries for the learning of other cultures. In the process, however, these systems have sought to invalidate other systems of knowledge. This was especially the case during the eighteenth and nineteenth centuries, as colonizers, traders, and imperial officials followed Western missionaries into the Orient.² In colonial India, through their practices of construction, British engineers

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became preeminent representatives of these Western attitudes. As the self-appointed custodians of scientific-engineering knowledge on the subcontinent, they authored extensive texts through which percolated biases derived from the systems of Western education in which they were trained. These texts imagined that indigenous knowledge systems were primitive and inferior simply because they didn't fit into Western frameworks. A key to decoding them today, however, is to reread them through a framework that recognizes the intellectual diligence of indigenous craftspersons and scholars.

Along with rereading colonial texts with a critical eye, it is likewise important to study the evidence of numerous extant architectural works from the nineteenth century (some of which are still in use). When these are measured to understand how they were made, both in terms of tectonics and materials, they yield surprising lessons. And when this research is juxtaposed against a new understanding of the archival texts, it is possible to begin to generate an alternate framework with which to interpret the architectural history of colonized lands — a decolonial framework.

In this article, I will explore how the use and production of terracotta roofing tiles and bricks serve as excellent case studies through which to understand the intersection between the colonial and the indigenous. My purpose, however, is not simply to emphasize the importance of “non-Western” geographies. Rather, I seek to provide an alternate lens to understand architectural history in the decolonial realm, through its rupture in time. While studying the changing use and manufacture of these materials through this rupture, it will further be crucial to understand the shift from handmade to machine-made architecture.

As complex as colonization was, the hybridity and productive tensions it brought to colonized lands were even more multifarious. As I will investigate here in terms of the tectonics and materiality of architecture, it is critical to understand these intersections and differences to make sense of the development of indigenous peoples and their cultures. In Homi Bhabha's words, “It is in the emergence of the interstices — the overlap and displacement of domains of difference — that the intersubjective and collective experiences of nationness, community interest or cultural value are negotiated.”³ Historical transformations thus emerge through cultural hybridity; and in India it was by means of negotiations between sameness and difference (and the various layers in between that colonization brought) that the built environment was changed.

As Nezar AlSayyad has written, this hybridity of the colonial and the indigenous is often most apparent in the realm of everyday practices.⁴ Thus the making of some of the most common elements of architecture — terracotta tile and brick — may provide a window into the question of hybridity and rupture that colonial-indigenous encounters brought about in India. As AlSayyad has further observed,

the hybridity or rupture created by the colonial-indigenous intersection is above all a consequence of conflicting positions of power, between peoples who have no choice but to cohabit.⁵

In India it is further possible to observe how eighteenth- and nineteenth-century colonial processes have continued to provide a basis for modern construction practices. Repercussions of the rupture created by colonial and indigenous intersections were thus apparent throughout the twentieth century. And even today engineers and architects in India follow some of the practices outlined in manuals written by British engineers in the nineteenth century.⁶

As I went about trying to understand this story through a decolonial framework, I first extracted excerpts about the processes of making and using terracotta tiles and brick from texts written by British engineers, by missionaries who set up factories in the south of India, and by other regional elites (kings and people in positions of power). My reading of this material, however, incorporated intellectual attentiveness to detail and a diligent approach to assessment. In particular, the voice of the craftsperson has typically been missing from these written records. But a careful examination of these texts, while juxtaposing them to primary data, measurements, and analysis of actual buildings, helped illuminate the contributions of local craftspersons.

Through a close examination of the making and use of terracotta tile and brick in Indian architecture I thus argue for a more nuanced narrative of architectural history, one that takes account of the mixing of indigenous and colonial techniques.⁷ Through the examples I provide, I also seek to demonstrate how a shift from handmade to machine-made architectural production was an important part of the historical transformation of building in the region. The introduction of mechanization as part of the industrial age that British colonizers brought to India thus also contributed to a rupture in the history of architecture there.

UNIFORMITY AND PRECISION IN TERRACOTTA TILES IN NINETEENTH-CENTURY INDIA

The nineteenth century presented a forecourt for the intermixing of processes in architecture on the subcontinent. As the Industrial Revolution reached its peak, it fueled a movement worldwide towards machines, patents, and mass production; and on the subcontinent these forces were combined with European colonial influences. Extensive mechanization in Britain and the introduction of these processes by British engineers thus created an overlap between handcrafted and machine-made architecture in nineteenth-century India.

The shift from the handcrafted to the machine-made is in retrospect starkly evident through the example of terracotta tiles. The making of cylindrical terracotta tiles on

the potter's wheel was a common sight across South India in the eighteenth century. These tiles were used extensively, adorning the roofs of large and small buildings alike. The arrival of the Basel Mission on the coast of South Canara, the area surrounding present day Mangalore, however, changed this practice forever (FIG. 1). The Basel Mission and the industries it set up triggered the production of machine-made tiles and bricks for architecture. And the change from handmade potter's tiles to tiles produced by machines in factories not only meant a change in production processes, scales and attributes, but a change in architecture itself.

The Basel Mission Seminary was established on August 26, 1816, in Basel, Switzerland, and was operational in the Madras Presidency in the south of India from 1831 onwards. From 1831 to 1920 the mission was involved in many industrial and commercial activities in the Malabar and South Canara regions.⁸ Starting with experiments in traditional crafts like agriculture and weaving, its efforts later switched to modern crafts like watch-making, bookbinding, printing, and tile-making. During this period the Basel Mission established handloom weaving establishments, tile factories, printing presses, and a mechanical workshop at Mangalore.⁹ These economic activities came in addition to the mission's very obvious and sizeable religious and social initiatives.

The Mangalore roofing tile was the most popular and widely used machine-made product of the mission. Prior to its appearance, potters would handcraft each tile on a wheel or with molds. According to the local soil used and the skill of the craftsperson, each handmade tile might thus vary slightly from every other one in shape and size. By contrast, every machine-made tile was precise and uniform. Basically, tile manufacturing in the region was thus completely altered by the techniques of industrial mass production introduced by the mission.

In addition to changes in production, demand for tiles also increased many-fold in South India in the nineteenth century, as British colonial agencies constructed new buildings for public offices, railways, and other large uses. The traditional tile-maker was handicapped in exploiting this new demand, however, because traditional tile roofs required a heavy structure to support them. The stage was thus set for the rapid expansion of the Basel Mission's machine-made roofing tiles.¹⁰

George Plebst was a mechanical engineer from Basel Mission who is credited with opening the first workshop for tile-making in Mangalore. Trained in typographic printing, Plebst first arrived in India in 1851, where he helped introduce letterpress printing in Kannada, and later in Malayalam and Tulu.¹¹ Ten years later, after overseeing the conversion of the Mission Press from a lithographic to a typographic system, however, he was forced to return to Europe on leave for health reasons. Before he left, he suggested that pottery might also be a suitable field for the mission to become involved in. He had noticed that Indian pottery and tiles were not glazed, and he asked to learn the necessary skills to make glazed earthenware products. Back in Germany, he then studied the entire tile-making industry, including the treatment of clay, techniques of glazing, the construction of a kiln, and the baking process.

While Plebst was studying tile-making in Germany, the transfer of knowledge on the topic between Europe and India also continued by other channels. In particular, the mission sent priests to network for information and business contacts.

A member of the Basel Mission Industrial committee wrote to Limoges, the center of fine China in France, to enquire about suitable glazes. The reply said somewhat condescendingly that no suitable information could



FIGURE 1. A potter's house in rural Karnataka, which is roofed partly with country tiles and partly with Mangalore tiles. Source: Dr. Kaup Jagadish, 1980.

possibly be found in Limoges, where porcelain, not earthenware, was made and glazed with almost pure quartz. The correspondent did however offer to have samples of Mangalore clay analyzed by the best specialist in Sèvres who might be able to help. The exchange of information, knowledge and know-how was constant during these times. The committee in Basel drew on priests and business networks to get information or arrange training for mission people.¹²

On his return to Mangalore in 1864, with the help of a proficient local master potter, Plebst built his own kiln and conducted experiments in tile-making, which were successful.¹³ Clay, the raw material for the manufacture of tiles, was found abundantly on the banks of the river Netravati in Mangalore. And the first tile factory, known as the Basel Mission Tile Works, was started at Jeppo in 1865. At the outset the factory employed two workers and bullock power, producing 360 tiles daily (FIGS. 2, 3). But it was soon expanded, employing 60 workers by 1871 and 131 in 1880.¹⁴ By 1870 it was making 209,000 tiles a year. And by 1873 it had paid back the Basel Mission's entire investment in it.

A major reason for its success was that Plebst's experiments had resulted in tiles that were lighter and more waterproof than local ones. As demand developed rapidly, manufacturing improvements and expansion continued. And, in 1880, just before steam power replaced bullock power, production in Jeppo had reached a million tiles per year. Eventually, the tile works would become the largest and most successful mission industry. In 1907 the Mission Trading Company employed 3,644 persons in trade and industry across India. By 1913 it was the largest industrial enterprise



FIGURE 2. 1860s photo of the first tile factory started by the Basel Mission at Jeppo. Source: Basel Mission Archives.

in South Canara and Malabar, and its profits covered about a quarter of the Basel Mission's yearly expenses in India.

Initially, mission workshops only produced flat tiles, which were different from the curved and grooved types then being used in the region for roofing. But subsequently the factories also produced ridge tiles, both plain and ornamental skylights and ventilators, ridge and hip terminals, finials of various kinds, grooved sphere tiles, hanging wall tiles, ceiling tiles of many different designs, *hourdis* (hollow ceiling blocks), common and ornamental clay flooring tiles, chimney bricks, salt-glazed stone and earthenware, drainage pipes, terracotta vases, and flower pots (FIG. 4). The market for tiles covered the entire British Empire, and the mission made extensive use of the trade channels that existed within it.¹⁵



FIGURE 3. Contemporary view of the tile factory started by the Basel Mission at Jeppo. Photo by author, 2018.



FIGURE 4. Various products of the Basel Mission tile factories in the 1860s. Source: Basel Mission Archives.

It was during this time that handmade half-cylindrical country tiles were largely replaced by the variety of flat tiles produced in the Jeppo factory (and subsequently elsewhere). And in general it was during these years that industrialization changed the way buildings materials were made and buildings themselves were constructed. Most significantly perhaps, the development of steam power and the use of gas to fire kilns allowed for a new uniformity in the manufacture of fired-earth products. In particular, conversion of existing kilns to gas enabled them to maintain the uniform temperature needed to produce other ceramic articles like salt-glazed tiles and terracotta ware. While other units of the Basel Mission specialized in mass-produced articles, however, the Jeppo factory continued to manufacture specialized products and remained an experimental center for product development.

Yet, while relating this story of the mechanization of the tile industry in Mangalore, it is also important to point out how certain elements of it have historically been suppressed or obliterated. As mentioned, Plebst was acknowledged as the originator of the new industry in the region. But the name of the local mason who worked with him was never reported. The records thus refer to the contribution of an anonymous potter, while widely proclaiming the identity of his/her European counterpart.

In the mid-nineteenth century, the use of half-cylindrical country tile was already dwindling across India and being replaced by different types of factory-produced tiles. These were produced by a number of colonial agencies, including British military engineers, missionaries, and others. Indeed, a few decades before the Basel Mission tile gained popularity, British engineers were already attempting to design and promote the use of other forms of terracotta tile. Some of

these were tweaked variations of traditional designs, while others were new designs that could be used in combination with existing country tiles. It is important to mention these other overlaps in the production and use of native and European tiles to fully understand the tectonic intersection. Among the most important advances in the mechanization of tile-making were Goodwyn tiles (first manufactured in 1850), Basel Mission terracotta tiles (first manufactured in 1864), and the Atkinson tile-laying system (FIG. 5). The Atkinson tiling pattern used flat and country tiles in combination to create a roof covering (FIG. 6).¹⁶

In general, British engineers had a bias toward standardized formats for architectural elements, and terracotta tiles were no different. Evenness and uniformity were thus attributes they associated with good tiles. Roofing tiles and systems for employing them were covered by PWD (Indian Public Works Department) manuals from 1850 onwards. For example, J.N. Sharp, a British military engineer working in India, wrote in an article in 1863–64 on Goodwyn tiles that country tiles made by local potters were uneven and imperfect. He noted they were also made in sizes that were too small, mounted on bamboo frames that were nonstandard, and were pervious to water.¹⁷

For British engineers the standardization of architectural elements was a progressive development in the history of technology. And in the nineteenth and twentieth centuries it led to the normalization of important building materials and methods, such as the laying of roofing tiles, plaster work, and even brick sizes. In addition, the standardization of tiles and bricks allowed the standardization of other tectonic elements. Thus, bricks of a common dimension allowed rooms to become modular; and doors, furniture layouts, etc., could also be standardized.

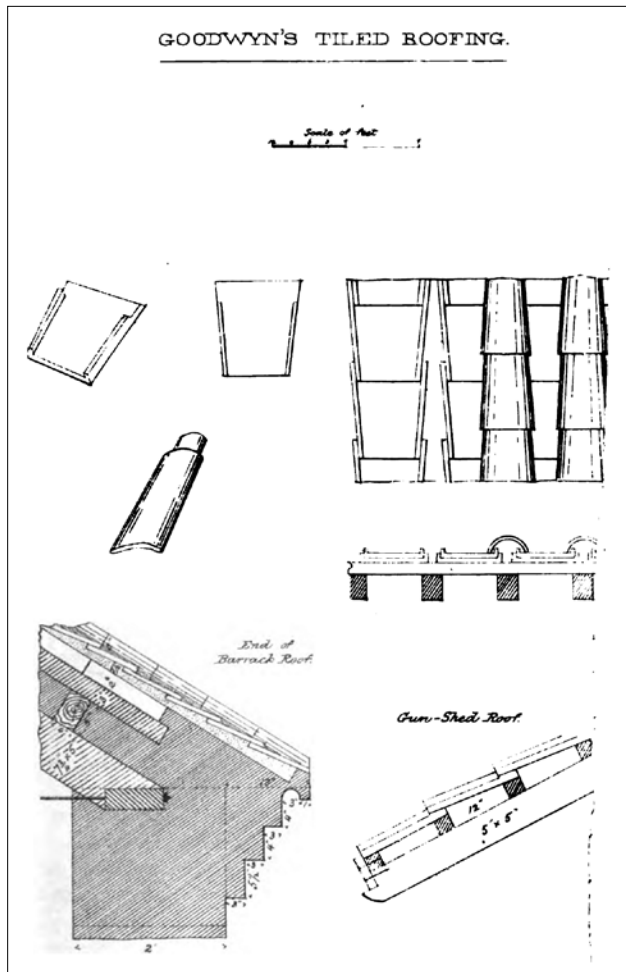


FIGURE 5. Goodwyn tiled roof drawings first published in 1864. Source: F.W. Peile, "Allahabad Specifications," in J.G. Medley, ed., *Professional Papers on Indian Engineering, Vol.1 (Roorkee: Thomason College Press, 1863–64), p.134.*

In the case of Goodwyn tiles, Sharp was thus able to describe the frames on which the tiles would rest as being of a prescribed, predetermined size:

Deodar battens 3" x 2" are nailed on the purlins at twelve inches from center to center on which are laid twelve inch square tiles, two inches thick, well fitted, cemented at the joints and pointed underneath; a layer of good mortar about one and a half inches thick is then laid, in which the pan-tiles and over them the round tiles carefully fitted and set. The eaves terminate in a masonry cornice, and the ridges are covered in with round and flat tiles, expressly made for the purpose; gable end have been adopted as better suited to this description of tiling; the slope of the roof 28 degrees.¹⁸

MECHANIZATION IN NINETEENTH-CENTURY INDIA: TILES, BRICKS AND MORE

In India, as around the world, processes of mechanization gathered momentum throughout the nineteenth century. Among the most significant advances were in railway engines, machines for raising water, and kilns and mixers in the brick and tile industry.¹⁹ Machinery was near the top of the list of requested imports into India by British engineers, and in the construction industry, imported machinery could comprise more than one-third the total cost of a building. In the various regions of India where it was overseen by British engineers, brick-making in particular was a task that intermixed local and European techniques, gradually introducing machinery and mechanized means of production in various forms.

In architecture, the impact of industrialization on local know-how changed both the materials and processes used to make buildings. The incorporation of new technologies, however, was not specific to any particular region. Rather, it reflected an amalgamation of knowledge pools from different cultures. Thus, in Mangalore, while construction drew its identity primarily from local sources, it had a more complex set of influences and origins. Two buildings in Mangalore are particularly illustrative of this shift, particularly as it involved the transition from handmade to machine-made technologies: the Basel Mission's printing press building and the Basel Evangelical School (FIGS. 7, 8). Both nineteenth-century structures still stand and reveal components of historical significance.

The printing press building is located in the present-day Balmatta area of the city and served originally as a knitwear weaving unit of the Basel Mission. Built by the mission in 1907, it has a rectangular plan of 32.5 by 16.2 meters and a maximum height of 9 meters. The building uses Mangalore tiles of 400 x 230 x 38 millimeters for its roof, and its exterior piers and bearing walls are made with bricks also produced by the Basel Mission. Its three-bay roof is supported by scissor trusses of a 5.5-meter span, with north lights inserted in each bay (FIG. 9). Each truss is built to a high level of precision, with wooden rafter members connected by scarf joints in some places and nailed connections in others. The rafters themselves are of very small section (50 x 150 millimeters), and the trusses are spaced at precisely 700 millimeters, center to center.

The fact that most elements of the building (including roofing tiles, bearing wall bricks, and terracotta flooring tiles) were factory produced to standard sizes encouraged the use of modular, rectangular geometries in all aspects of its construction. The repetitive, uniform module of the roofing tile thus required that the entire roof structure take the form of a precisely built grid. The consistent shape of each tile meant that the battens supporting them had to be placed a consistent distance from one another, and the rafters

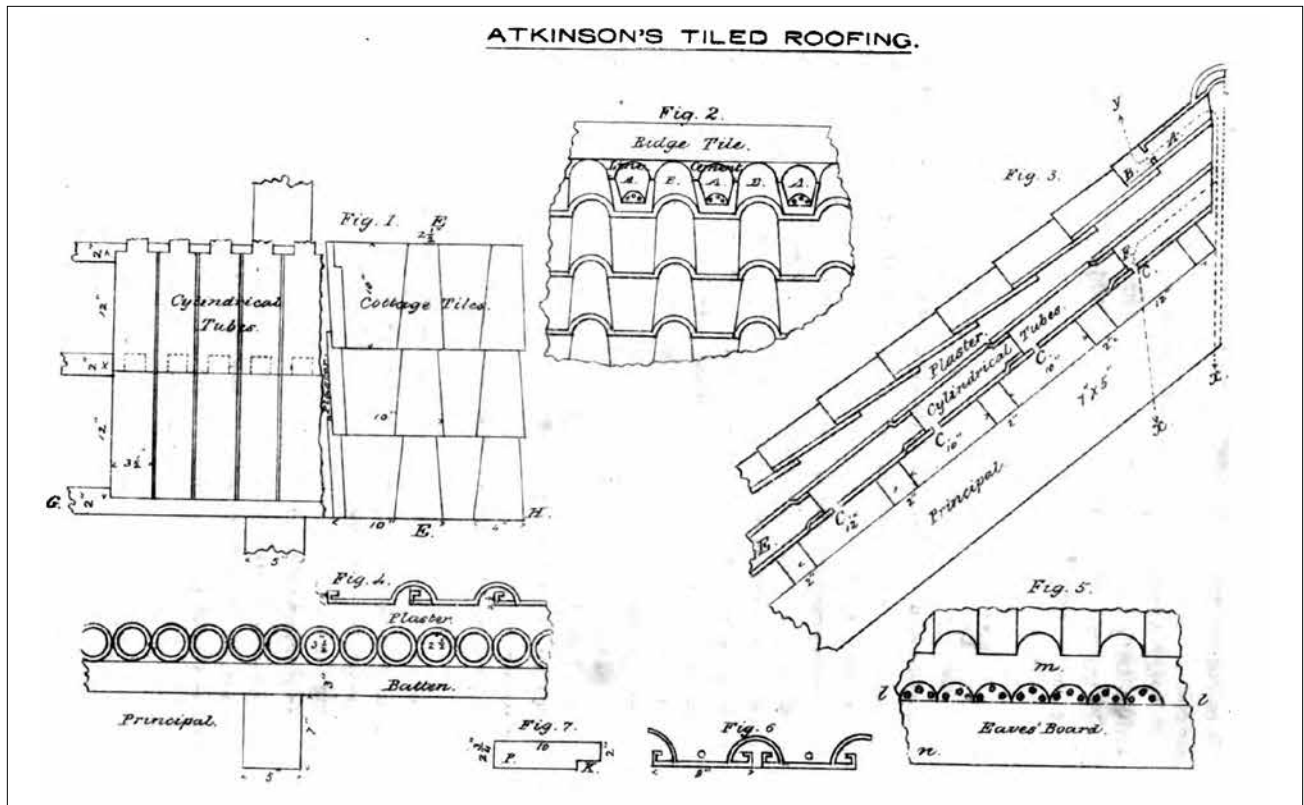


FIGURE 6. Atkinson tile roof drawings first published in 1864. Source: F.W. Peile, "Allahabad Specifications," in J.G. Medley, ed., *Professional Papers on Indian Engineering, Vol.1* (Roorkee: Thomason College Press, 1863–64), p.490.

supporting the battens had to maintain a consistent span. The walls the roof rested on also took a modular form, as did the details of the north lights and roof gutters.

The building is representative of many new buildings of the time in which small, machine-made components were repetitively assembled into a larger structure. The use of machine-made materials also allowed changes to certain basic tectonic qualities. For example, the use of interlocking Basel Mission roof tiles in general enabled the construction of steeper-pitched roofs, changing a fundamental quality of the South Indian built landscape.

These building elements also gave buildings a very different character than those using handcrafted components, say potter's tiles and cob walls. Because potter's tiles were not standard, they could accommodate variations in the frame supporting them. Similarly, cob or wattle-and-daub walls could accommodate variations in angle, width and shape, whereas walls of factory-made brick could not. However, the assembly of a building made of uniform materials required less skill than one with cob walls and potter's tiles, because the latter typically required on-site adjustments to the roof frame and walls according to contextual needs.

The second building illustrating the intersections of handmade and machine-made components, the Basel

Mission School, was established as the Mangalore region's first formal school (FIG. 10). It was built using exterior bearing walls made from fired laterite brick, a king-truss-supported roof covered with Mangalore fired-clay tiles, clay-tile flooring, and exterior colonnaded walkways whose roofs were supported on columns made from sections of fired clay. The building thus used a variety of products from the Basel Mission factories.

Like the printing press building, the school was modular in nature, which allowed it to be divided easily into sections or extended using a consistent set of dimensions. In plan, it was L-shaped, and it was covered with a hipped roof. As discussed above, its roof was also steeper than that typical of native buildings at the time. The roofs of most buildings built for the British or the missionaries had a slope of between 30 and 45 degrees, compared to a typical pitch of between 20 and 30 degrees for the roofs of vernacular buildings using potter's tiles. It was the interlocking quality of the Mangalore tile that enabled steeper pitches, even if climatic conditions did not require them. Steeper pitches thus largely reflected a stylistic choice by the European colonizers, based on aesthetic rather than practical concerns.

The columns supporting the roof over the school's exterior walkways were also of interest. These were designed



FIGURE 7 (A AND B). Historic exterior and interior views of the printing press building in Mangalore, which was used as a weaving unit in 1916. Source: Basel Mission Archives.



FIGURE 8 (A AND B). Contemporary exterior and interior views of the printing press building in Mangalore, used as a printing press in 2018. Photos by author.

using the relatively conventional material of burnt earth (terracotta), but in an industrial way (FIG. 11). The base of each column was a relatively simple articulated cube, and its ornate Florentine-style capital was carved using the same material, i.e., terracotta. But its circular, fluted shaft was made of five to six cylindrical pieces of terracotta, each with a hole in the center. After these were molded and fired in a factory they were stacked atop each other around a cylindrical terracotta rod (FIG. 12). Each of the fluted pieces of the shaft was thus encrusted around the central rod, and the premolded terracotta capital was placed on top, completing the assembly.

This style of column had traditionally been made out of stone or burnt brick by chiseling it out of a solid block of material (FIG. 13). But here in the Basel Mission School, each column was made with modules, which were prefabricated in a factory and fitted together on site. This approach aligned with the mechanization and industrial production systems that the Industrial Revolution and European influence had brought to the region, but it

continued to employ a traditional material, terracotta. The overlap of conventional materials with mechanized systems and industrial means was thus evident in both the printing press building and the Basel Mission School.

THE REPURCUSSIONS OF INTERSECTION

The Mixing of Influences. The exchange and intersection of indigenous and colonial processes of building in nineteenth-century India ultimately changed the course of architecture and construction across India in the twentieth and twenty-first centuries. As noted above, new materials began to change the architectural forms they were used to produce. Interlocking systems of machine-made roof tiles thus not only allowed a change in roof slopes, but they encouraged each other element of the building to become more uniform and standardized. The result was a change in the built landscape of Mangalore and much of South India. Indeed, the use of red, flat roofing tiles soon created a new identity for

the architecture of the region. And across the subcontinent, precise machine-made elements such as terracotta tiles and bricks used in standardized sizes were soon normalized irrespective of context.

As part of this process, however, British engineers typically acquired knowledge without acknowledging its source from a workforce of local expert masons. In British India, these engineers also limited local practices and coerced skilled laborers to work for them through a system of taxation and licenses.²⁰ Until very recently, literature on eighteenth- and nineteenth-century architecture in India also did not engage with issues of construction expertise; nor did it consider the intermixing of native and European influences. Instead, its focus was primarily on art-historical narratives that avoided mention of how politics and patronage under British colonial control were manifest in architectural forms and building techniques.

Sten Nilsson's *European Architecture in India 1750–1850*, published in 1968, and *Splendours of the Raj*, by Philip Davies, published in 1985, are typical examples of the exclusion of Indian patronage from discussions of buildings and building practices during this era.²¹ Approaches such as evident in these books have now led to an almost complete ignorance of the intermixing of architectural styles, let alone construction

techniques and technology. In *An Imperial Vision: Indian Architecture and Britain's Raj*, Thomas Metcalf did mention local trends in Indian building in an appreciative way, but he still upheld the view that the British “revived” Indian architecture.²²

The very idea that a “revival” of Indian architecture was needed indicated how British colonial officers considered contemporary Indian architecture to be inferior to European architecture, and that they judged local expertise to be nonexistent. Indeed, the theory of Indian decline and European superiority was inherent to the *modus operandi* of the empire itself. Such attitudes percolated right down to the everyday work of engineers and laborers on a building site. It thus fundamentally suppressed any recognition of Indian expertise, even when this was deeply embedded in colonial construction practices. Even if such expertise was essential to the construction of public buildings (both minor and monumental), the mixing of techniques was rarely acknowledged.

Experiments in Brick. Apart from outright appropriation there were also more subtle instances of overlap of indigenous and colonial knowledge systems and practices of construction. This was especially true with regard to building with brick. One outstanding example was John

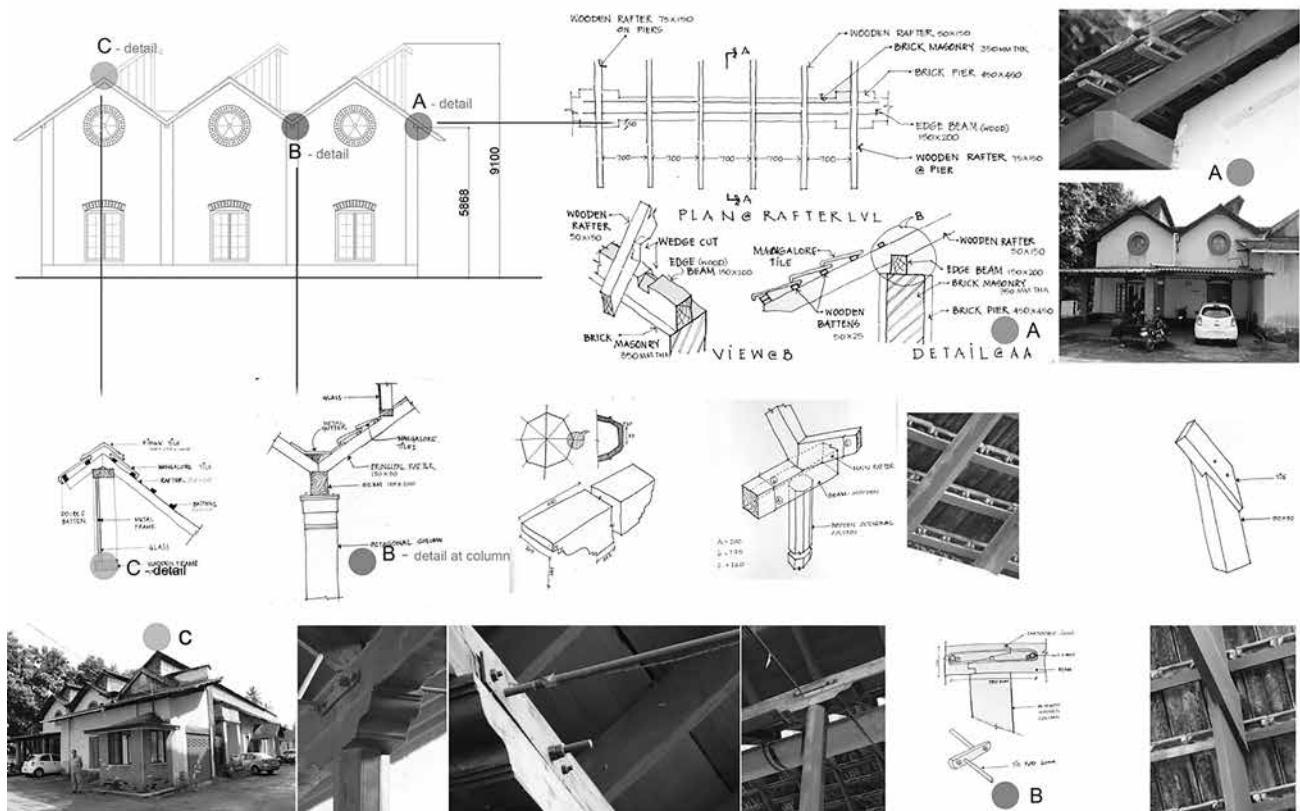
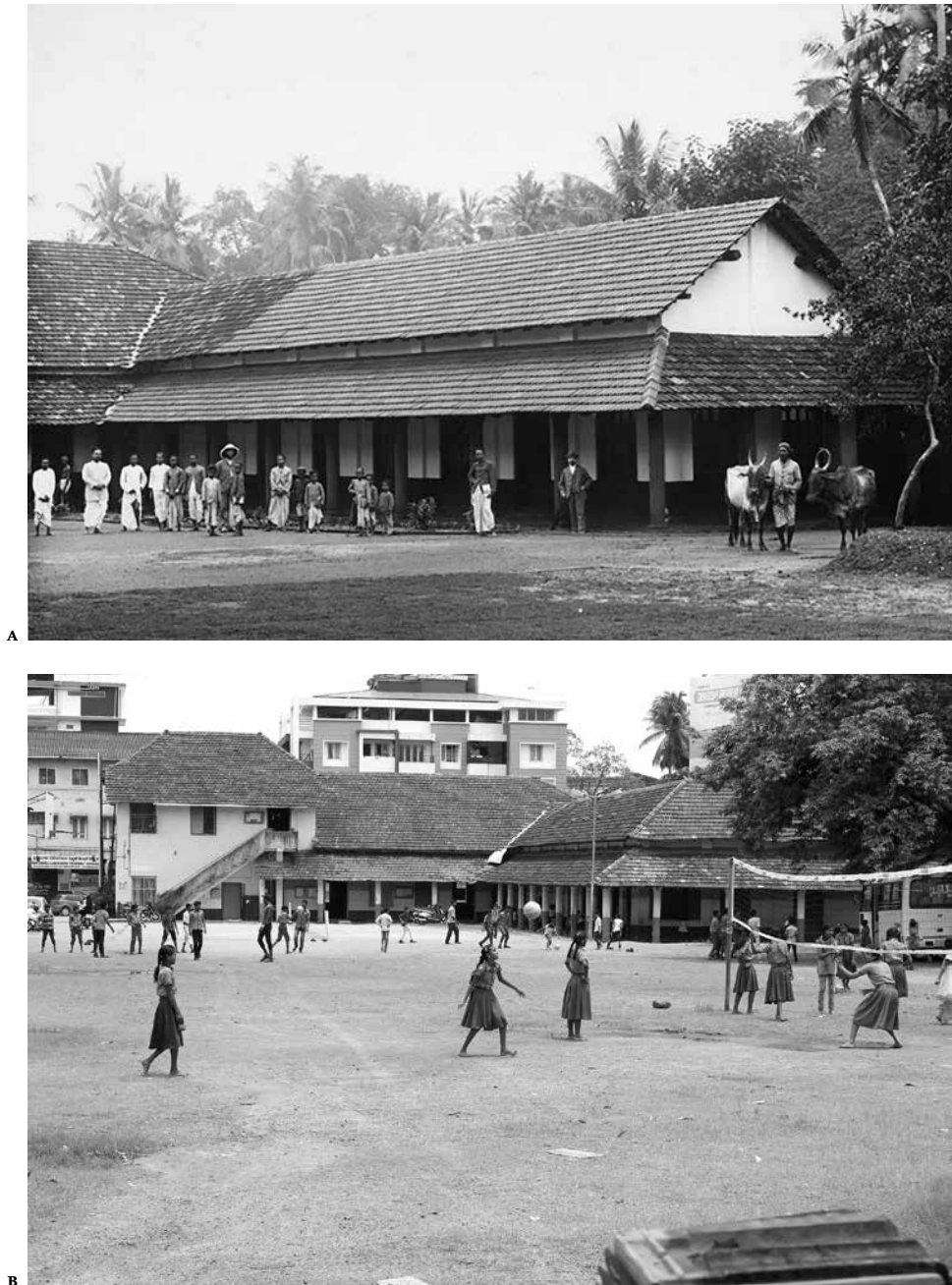


FIGURE 9. The details of the Printing Press building in Mangalore. Drawn and composed by Priya Joseph and Deepak Godhi.

FIGURE 10 (A AND B).
The Basel Mission School roofed with Mangalore tiles. The top photo (A) was taken in the 1880s; the bottom photo (B) was taken in 2017.
 Source: (A) Basel Mission Archives; (B) author.



Garstin's Gola, a circular granary built in 1786 on the banks of the river Ganges in Bankipur.²³ This structure included a brick dome with a radius of approximately 120 feet (36 meters). Interestingly, although the structure was meant to serve as a granary, it was never used as such. Instead, it was chiefly built as a way for Garstin to explore and adapt Indian building techniques to other projects. Its construction thus enabled the transfer of knowledge about dome design, vaulting techniques, and aesthetic forms to British engineers from skilled native masons.

At the time, Garstin's Gola was one of the biggest commissions of the Bengal Military Board, which was experimenting with vaulting at various sites such as the Fort Allighur barracks.²⁴ It thus represented one of the first endeavors by British engineers in the eighteenth century to appropriate local knowledge. But these engineers would go on to use state resources for other such "experiments" that would ultimately allow them to build some of the largest structures in India.²⁵ Typically, British officials, engineers and patrons would employ local expert masons and artisans

to build models or even small buildings with specific technical elements such as domes, vaults, or plastering techniques. They would watch these exercises, learn from them, and then apply the techniques they witnessed to larger projects elsewhere. The appropriation of local knowledge was essential to the British Empire as it sought to expand its control in the eighteenth and nineteenth centuries.

Aside from domes and vaults, well foundations were another area where native techniques were appropriated by British engineers. The British engineer Thomas Fiott de Havilland, for example, recommended that this foundation system be used instead of piles for the construction of St. Andrew's Kirk in Madras.²⁶ As the technique was not changed or modified, his decision involved a direct appropriation of a native technique, not a fusion or hybrid. Native well-sinkers of the region, who specialized in this work, also executed the entire job.

Today, de Havilland, who had a long career as a civil engineer and architect for the Madras Presidency, is known as the builder of this church. By contrast, the work of the native experts is hardly noted in any records — except for a brief, generic mention (without including their names) in Havilland's own description in 1817 of the making of the church. Such mechanisms of obliteration, ignoring the identities of the well-sinkers and accepting native expertise as their own, were typical British engineers' techniques of appropriation. Thus it was that native skills and techniques were employed to undertake an imperial building, and that engineers in imperial India, on account of their high social position, were able to peer into the lives of skilled Indian experts and workers.

In general in India it was the role of the British engineer to mediate between the English patron and the native expert. De Havilland, for one, made a career of acquiring knowledge from native builders, accessing a rich body of native knowledge to make vaults and arches by watching and learning from Indian craftsmen. In the process, local knowledge was passed to the domain of British engineering, many a time unacknowledged, while Indians were exposed to Western proportions and volumes and to systems of European ornamentation.

The British had been using the intricacies and techniques of native knowledge since at least 1678, when a dome was built as part of the construction of the fort church of St. Mary's. The church, in present-day Chennai, has a 5-foot-thick barrel vault roof, made with Indian material and knowledge. Its dome uses tapered circular courses near its base which slowly transform into true arcs near the crown. Another church built around the same time, in 1701, the Church of Zion, at Tranquebar in Tamil Nadu (the official church of the Danish East India Company), also had a wagon-vaulted roof rising above a very Indian-style parapet with turrets.²⁷

St. Andrew's in Madras was likewise meant to be a domed building. The superintending engineer of the

Madras Presidency had agreed it would have a circular plan with a domed roof, based on the unbuilt original design for London's St. Martin-in-the-Fields church by the famous Anglo-Palladian architect James Gibbs. The original roof design by Gibbs was to have been built of wood covered in metal. But when de Havilland was called to Madras to oversee the construction of St. Andrew's (on the basis of his familiarity with dome construction and the region²⁸), he persuaded his patrons to alter the material to brick, with which he was more familiar owing to his experiments with the local masons.

De Havilland first built a test structure in the garden on Mount Road before he went ahead with construction of the actual shallow brick masonry dome for St. Andrew's. In its final form, the dome had an internal diameter of 51.5 feet and was built with native techniques and knowledge. The thickness of the dome was 9 inches at its crown and 27 inches at its bottom cornice. This meant the dome tapered toward the crown and employed a corbelled mode of construction, as was the Indian tradition for building domes in Thanjavur. Three courses of flat tiles were laid over the Syrian cones, over which stucco was applied. The structure, including the flat roof, the shallow corbelled dome, and the "chunam" finish were thus all a reflection of South Indian vaulting techniques.

Brick masonry domes were not common in Britain in the eighteenth century. And Gibbs's final design for St. Martin-in-the-Fields was also built in wood and metal, not brick masonry.²⁹ But what makes it certain that de Havilland's experimental knowledge, gathered from native builders, was used is that there is no evidence of construction drawings. This meant that builders must have sketched out a plan for the dome on site, and used their inherent knowledge and expertise to make it.

Use of Colored Bricks. Colored bricks were another area where British engineers were forced to work with native knowledge and materials. Color was not used for bricks in India in the nineteenth century, but nostalgia for their use in Britain provoked many experiments by British engineers to reproduce them there. English bricks ordinarily had a deep red, yellow, salmon, blue or white color. All these were produced by a careful mixing of earths, not by chemical additives. For example, red was due to the presence of peroxide of iron in the earth; blue was obtained by application of greater heat to various earth mixtures; and white by a mix of plastic clay and chalk.

When interest emerged in the manufacture of colored bricks in India, the British engineer J.G. Medley — also the editor of various volumes of the *Professional Papers of Indian Engineering* — agreed to publish experiments and findings on the matter in his professional journals. He also brought specimens of colored bricks and samples of materials from which colored bricks might be made to India. He later used these bricks and material specimens in his own experiments

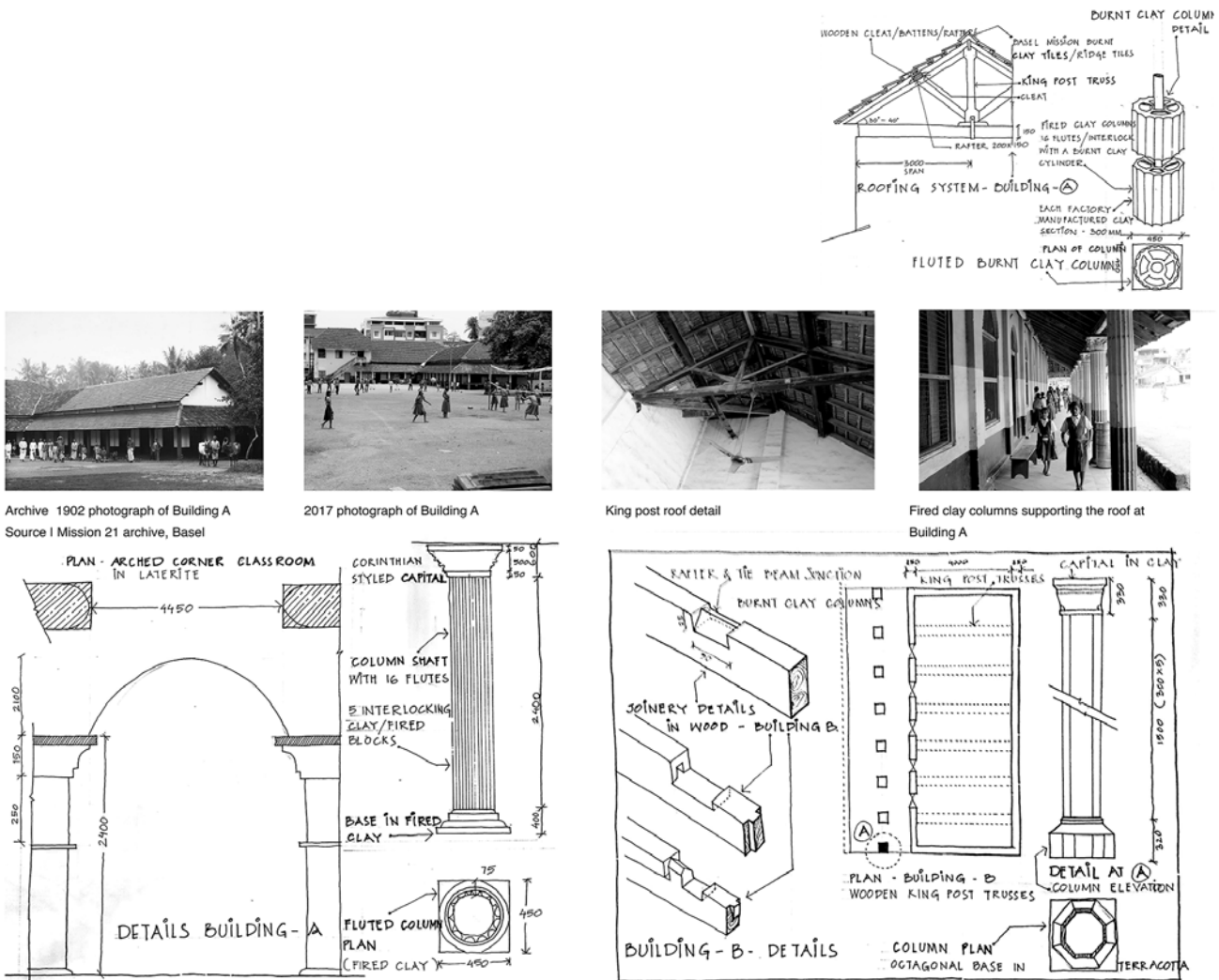


FIGURE 11. Construction details of the Basel Mission School, Car Road, Mangalore. Drawn and composed by Priya Joseph and Deepak Godhi.

to make a variety of colored bricks with Indian earths. As he wrote:

*Some experiments are also being made at Roorkee, and I have succeeded partially in making black bricks, but have not as yet been able to burn them white or yellow; should any of these trials be of sufficient interest to others they shall be duly recorded.*³⁰

Experiments to replicate qualities of British bricks were representative of a constant exchange of knowledge between British colonial officers and Indian masons. An important source on these matters is Dharampal’s research into colonial views of Indian plasters and mortar, published as part of his 1971 book *Indian Science and Technology in the Eighteenth Century*.³¹ Dharampal established that sophisticated

technological knowledge prevailed on the Indian subcontinent in the eighteenth and nineteenth centuries by examining the archival records of British engineers. For example, a paper written by the governor of St. Helena in 1732, reproduced in Dharampal’s collection, claimed that the mortar produced in Madras in the eighteenth century was superior to that produced anywhere else in the world, including plaster of Paris. The account elaborated the ingredients used and also the technique of mixing the concoction in great detail.

Two insights about the importance of exchanging information and borrowing techniques can be gained from this discussion of mortar- and plaster-making. The first involves how complex and fine a mortar could be achieved using the Madras process. South Indian mortar could thus be applied as a fine layer between bricks, unlike English mortar which was by comparison thick and rather crude.

Observe also, that the mortar here is not only to be well beaten and mixed together, but also laid very well, and every brick, or piece of brick, slushed in with the mortar, and every cranny filled up, yet not in thick joints, like the common English mortar; and also over every course of bricks, some to be thrown on very thin: And where the work hath stood, though but for a breakfast or a dining-time, before you begin again wet it well with this liquor with a ladle, and then lay on your fresh mortar; for this mortar, notwithstanding its being thus wetted, dries much sooner than one not used to it would conceive, but especially in hot weather.³²

The second insight involves a description of possible substitute materials that would allow the same plaster to be produced in England. Thus it was suggested that astringent barks be replaced with oaken bark, aloes with turpentine, jaggery with molasses, and that palm wine be used instead of toddy. This description is a sign not just of the superior quality of indigenously produced plaster, but also that knowledge flowed from India to Britain, not just from Britain to India. Such influence, of course, contradicted attitudes consistently pushed in British record-keeping. Indeed, most Britons at the time were unwilling to admit that any engineering and scientific know-how could be gained from Indian experts. This view was prevalent until as late as 1996.³³

Of course, while indigenous techniques for making mortars and plasters with lime and other natural ingredients were used consistently throughout the nineteenth century, they were subsequently altered when newer technology came to the attention of British engineers. Thus British engineers eventually borrowed a newer technique for creating artificial

hydraulic lime originally developed in the Treatise of U.S. Engineers and the Treatise on Calcareous Mortars and Cements. The method, while not novel in principle, had traveled around the world through the work of military engineers to reach mid-nineteenth-century India.³⁴

Throughout the nineteenth century, industrial techniques came to replace handmade ones in the making of mortars, bricks, plasters, and various other construction materials. Industrial production was quick, and it became economically much more viable during the course of the century, replacing even the best indigenous processes. Slowly but steadily, traditional vernacular techniques and materials would disappear. And, eventually, even lime and brick would be replaced by cement and steel.

CONCLUSION: MAKING HYBRID CULTURE(S)

The numerous cases I have elaborated on in this article together argue for a closer reading of nineteenth-century architectural “making.” This must include recognition of contributions of unknown craftspersons, artists and masons responsible for much construction at the time.

The arrival of colonial powers brought a definite rupture to indigenous practices of construction on the Indian subcontinent, and the repercussions of this rupture continued to be felt in subsequent centuries. Most significantly, a formerly contextual understanding of built form eventually gave way to a standardized system of working, where precision and uniformity were regarded as high virtues, even when there was no need for them.



FIGURE 12. Colonnade at the Basel Mission School, Mangalore. Photo by author.

Similarly, a growing disconnection between the hand labor of artisans and the making of buildings devalued the skills of larger communities with an appreciation for context. Instead, the work of building became a matter of centralized, standardized processing, a quality of production that was affirmed for its sophistication.

The appropriation of knowledge from the indigenous, without sufficient acknowledgement, combined with the complex transition from handmade to machine-made practices, likewise led to the highly colonial reading that dominates the history of architecture in South India. I have argued here that a decolonial reading of architectural production is necessary to understand the “making” of architecture in such formerly colonial lands. What is needed in current scholarship is a newer, more equitable perspective. Hybridity is more than just the combination of incompatible elements; it must be seen as opening a third possibility which brings irreconcilable realities to the forefront.³⁵ The making of the hybrid of the colonial/indigenous or the handmade/machine-made should therefore not be looked on not as a matter of hegemonic sequencing, but as the production of an entirely separate culture. And when hybrid identities and contexts lead to the origination of more than one such culture, the understanding of hybrid contexts becomes even more important.



FIGURE 13. Shaft modules of the terracotta column at the Basel Mission School. Photo by author.

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The Entanglement between Traditions and Colonial Spatiality: The Resilience of Guinean Domesticities in the Ajuda Neighborhood, Bissau

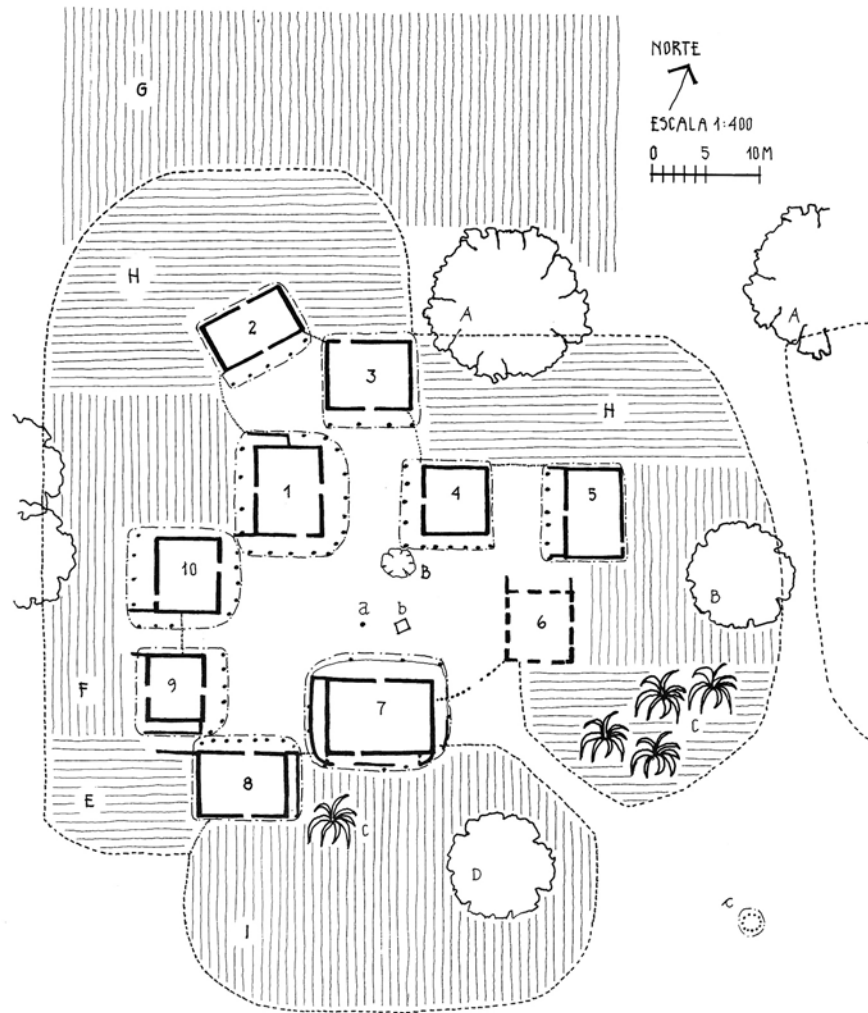
FRANCESCA VITA

Local traditions have always been endangered by colonialism and modernity. For centuries under Western systems of domination in Africa they were exploited for colonial purposes and even subverted, and in many cases they were reinvented under both modern and imperial discourses. Nevertheless, new traditions have also emerged from both colonial and modern legacies that today shape contemporary social and spatial landscapes. To explore these issues, this article examines the Ajuda neighborhood in Guinea-Bissau's capital of Bissau, which was built in the 1960s under Portuguese colonial rule to accommodate mainly public servants and their families from the African population. It aims to unveil how Guinean traditions related to dwelling space, reorganized within the colonial spatiality, have reemerged to shape and transform present-day domestic environments. Using the house as a critical tool, the article discusses how traditions may thus endure as long as they are negotiated in relation to new conditions that may derive from disruptive events, such as colonialism.

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Guinea-Bissau constitutes a case study par excellence with which to deepen understanding of the topics of rupture and tradition. The country is located in the precolonial region called Senegambia.¹ At the crossroads of cultures — nomadic and sedentary, Animistic and Islamic — it has a history marked by the convergence of different disruptive forces: immigration and invasion, slave trading, colonialism, wars,

FIGURE 1. Traditional *morança* from the Balanta ethnic group in the Quinara Region of southern Guinea-Bissau. Source: Blazejewicz et al., *Arquitetura Tradicional Guiné-Bissau*, 1983, p.59.



and emigration. Throughout the centuries, these forces have provoked processes of transformation, cultural disruption, and the ongoing negotiation of a diverse range of traditions, including those related to spatial practices.² Of the major events that have shaken the area of present-day Guinea-Bissau, however, Portuguese colonization, which lasted until the country achieved independence in 1974, was the one that most deeply transformed its domesticities.

The expression of Guinean domesticities is considered in this article to include a variety of spatial practices characteristic of the major ethnic groups of the region.³ These practices originated in rural environments where populations lived mostly according to a communal way of life based on agriculture and/or trade. In this “rural African cosmology,” the enlarged family provided a basis for both the group economy and the settlement.⁴ In particular, settlements were organized into clusters called *morança*, a term derived from the Portuguese word *morar*, “to inhabit.”⁵ This was a unit of dwelling that facilitated the common activities of each extended family (FIG. 1).

Between the numerous ethnic groups that live in Guinea-Bissau, the *morança* today varies in extension and organization. It can be fenced or not; it can be more compact or dispersed; and the number of buildings and houses within it can differ. It can be made using different construction techniques and materials, and its built spaces may vary in decoration. However, regardless of ethnic group, the domestic practices that occur in each dwelling cluster occupy both interior and exterior areas, expanding across both private and collective space. The houses mostly consist of bedrooms, which are used not only for sleeping but also to shelter animals and store food and materials, while other domestic activities, which are usually shared, take place in outdoor spaces.

It was during the twentieth century that the clash between Portuguese and Guinean ways of life became most acute. On the one hand, Portuguese colonization directly forced local people to adopt a different way of life, both in rural and urban environments. On the other, it indirectly introduced new referential dwelling models, consumer needs, and private and social spatial practices, particularly as these related to a certain ideal of Western domestic space and urban life.

Local traditions have always been endangered by Western colonialism and modernity. Scholars have explored how they were exploited for colonial purposes and even subverted by them.⁶ Others have examined how they were reinvented under both modern and imperial discourses.⁷ Nevertheless, new traditions have also emerged from both colonial and modern legacies.⁸ Instead of studying whether processes of rupture and resilience occurred, therefore, this article will explore the ongoing entanglement between traditions and colonial spatiality. With regard to the domestic landscape of the Ajuda neighborhood in Guinea-Bissau's capital of Bissau, it seeks specifically to question the legacy of colonial influence. It will do this by investigating the relationship of contemporary domestic space to formerly imposed colonial norms, both in terms of the physical dimension of architecture and the practices activated by its use and resignification.

What this study primarily reveals is that the construction of contemporary domestic space in the Ajuda neighborhood has resulted from a process of negotiation. As Homi Bhabha has noted, "Negotiation, rather than negation . . . convey(s) a temporality that makes it possible to conceive of the articulation of antagonist or contradictory elements."⁹ Among these oppositions, for example, are the colonial past versus the present, resistance versus appropriation, negation versus acceptance, and permanence versus transformation. The space produced by the negotiation of these conflicting dimensions can be considered hybrid space, a place of intersection that overcomes oppositions and categorizations.

In the case examined here, these oppositions can be rooted in dichotomies of vernacular and urban, past and present, and Western and African ways of life. Yet, as Nezar AlSayyad has observed, hybridity "does not simply involve the combination or merger of incompatible elements, but instead the insertion of a third possibility connecting originally incommensurable terms and irreconcilable realities."¹⁰ By studying the processes of negotiation between the colonial legacy, Guinean traditions, and contemporary aspirations and needs, the article seeks to unveil this third possibility, a hybrid spatiality which informs notions of both tradition and heritage.

The investigation conducted here proceeded according to a method of ethno-architectural survey.¹¹ Oral histories were collected through nondirective interviews and photographic surveys were combined with drawings and first-hand observations to reveal the complexity of a hybrid domestic space — the contemporary one. In this attempt to understand the process of spatial transformation, the idea of photographic development (a process by which a latent image is transformed into a visible one) also provided a useful tool to reveal the entanglement between colonial and contemporary domesticity. This process operated first by transferring the colonial house-type contours from paper to notebook by carbon-copy technique and then by revealing appropriation processes that occurred within the space. The result, both on

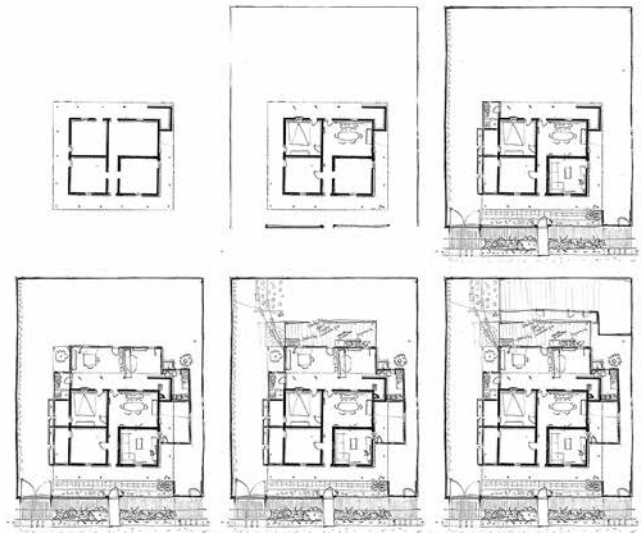


FIGURE 2. Survey drawings of the development of one house in the Ajuda neighborhood. Drawings by author, 2021.

paper and in reality, is a hybrid space, what Daniel Pinson has referred to as a "counter-type of house" (FIG. 2).¹²

DISRUPTION AND RESILIENCE OF TRADITIONS IN GUINEA-BISSAU IN HISTORICAL PERSPECTIVE

During the period of Portuguese colonial rule, the house was the place in Guinea-Bissau where the negotiation of traditions mostly occurred. As an indicator of dwelling habits, it was also used as a tool of discrimination by the colonial administration. For this reason the house is a critical site in which to decipher the impact of the negotiation of traditions during the colonial period.

From the sixteenth to the eighteenth centuries the house was an important symbol of self-identification in the region of present-day Guinea-Bissau. During this mercantile period of colonial influence, it was important to be identified as "Portuguese," because being seen as such granted the privileged social status required to engage in trade along the Senegambia coast. Portuguese identity was, however, not solely related with nationality. Rather, being "Portuguese" was associated with a range of attributes such as the Catholic religion, the occupation of trader, a spoken language (Creole), and the characteristics of the house one occupied.¹³

The house *à la Portugaise*, as it was known, was the building associated with those who could point to themselves as "Portuguese." This dwelling was a one-floor, dried-earth construction of rectangular shape, plastered with clay or lime to give an outer whitewashed effect and characterized by the presence of a welcoming vestibule and/or veranda.

As Peter Mark has noted, this peculiar form of domestic architecture was the result of a negotiation of traditions involving the “interaction between local construction techniques and building forms, and materials and techniques brought to West Africa from Europe.”¹⁴ As a dwelling model, it was fashioned by Luso-African traders, but it was also appropriated by local merchants and leaders for the social status it provided.¹⁵

The *maison à la Portugaise* can be considered elucidative of how processes of negotiation between traditions have always characterized the production of domestic space in the region of contemporary Guinea-Bissau. And the widespread endurance of this particular hybrid dwelling form was still reported in a survey of the Bissau built environment conducted in 1945 by the architect-engineer José António Guardiola. Throughout his report, however, Guardiola condemned the promiscuous and precarious living conditions of the Portuguese officers who still inhabited such dwellings. In particular, he referred to their domestic spaces as “insalubrious” in matters of ventilation, light, ceiling height, room dimensions, and corridors.¹⁶ What this survey thus indicated was that the model of the *maison à la Portugaise*, which had characterized the dwelling standard for Luso-Africans in Guinea-Bissau for centuries, had by then been rendered obsolete by a divergence in colonial policy. Specifically, this involved the expectation of a more rational, salubrious and clean domesticity based on “characteristic” Portuguese architectural features. This explicitly Western idea of domesticity had been introduced by the colonial state through the nineteenth and twentieth centuries, and it has affected the landscape of Bissau ever since.¹⁷

The condemnation of vernacular-based houses, built in the city center or in its proximity, was also triggered by the necessity of categorizing colonial society into “indigenous” and “nonindigenous” for the purposes of determining who benefited from different rights. The Political, Civil and Criminal Act of the Indigenous of Guinea, Angola and Mozambique Colonies (1929) had defined “indigenous” people as comprising all individuals belonging to, or descending from, the African population, and who did not differ from their kin on the basis of appearance and customs.¹⁸ “Nonindigenous” included all who did not belong to this group. To achieve this segregation of the population, however, it was crucial for the colonial administration to “code” and “categorize” the customs and habits of the indigenous African population. And this division was made largely based on the way people lived — i.e., in terms of the settlements, houses, and domestic environments they inhabited. Customs and habits related to dwelling space thus served as crucial evidence of belonging to one or the other category.

At the beginning of the twentieth century, this colonial administrative process was also indicative of how ignorant the central colonial apparatus, based in Lisbon, was of the autochthonous societies and cultures of Guinea-Bissau (as

well as in Mozambique and Angola). And in 1935, as a way to respond to the urgent need to unpack the specificities of both native populations and the country itself, Marcelo Caetano (then a young government official), would encourage a “new discovery” of Guinea-Bissau.¹⁹ To do so, however, he characteristically evoked the importance of a “scientific occupation” of the territory, to “unveil Nature in order to subdue it, describe man in order to improve him, and assess economically usable resources so that greater wealth may be produced.”²⁰

In line with this new initiative, over the course of a number of years during the mid-twentieth century, Guinean traditions, especially those relating to patterns of settlement geography and architecture, but also relating to means of subsistence, societal organization, and religion, were collected, categorized, coded, and subsequently used for colonial purposes.²¹ For example, ethnographic surveys of 1918 and 1927 were aimed at collecting information to ensure a “better knowledge of the native populations by the administrative authorities,” in order to elaborate the penal code for native population.²²

For the colonial system, the house in Guinea-Bissau also represented a tool to assess the negotiation of traditions between European and African culture. Great attention was thus given to it starting in the decade of the 1930s, when characteristics of dwelling came to be seen as a way to distinguish differences between native and European society. In 1933 the Colonial Act [Acto Colonial], which condensed the Portuguese colonial policy in foreign countries, was integrated into the Portuguese Constitution.²³ Among other things, it formally identified one of the fundamental purposes of Portuguese colonization to be the “civilizing mission.” Grounded on the idea that colonialism would provide an avenue for the transformation and social “elevation” of native populations, it would remain a fundamental aspect of Portuguese colonial discourse until Portuguese colonies gained their independence in the mid-1970s.

It was under the fever of the “civilizing mission,” that scientific expeditions were also launched to find evidence of the “assimilation” process. According to the Portuguese colonial narrative, “assimilation” was the means through which native population embraced European habits in daily practice. Of course, “assimilation” was only acceptable when it occurred from European to African society — never the contrary, which also happened. And the realm of the dwelling became the preeminent space in which to unveil and measure how the native way of life was being adjusted and reconfigured by means of contact with European culture, in a positive or negative way.

In Guinea-Bissau, Avelino Teixeira da Mota, a military officer hired as field assistant by Governor Sarmiento Rodrigues (1945–1947), subsequently became responsible for a range of surveys related to native settlements.²⁴ And his seminal 1948 book with Mário C. Ventim de Neves *The*

Indigenous House in the Portuguese Guinea contains several pages dedicated to the topic of the disruption of traditions within Guinean domestic space as a result of Portuguese colonization and contact with European culture. One of the examples that best illustrates this encounter involved the disappearance of traditional Manjaco patio-houses, which were characterized by multiple rooms facing an interior courtyard. As Teixeira da Mota reported, the cause of their disappearance was the tax known as “*imposto da palhota*” (*palhota* = native house with a thatched roof) that native people were obliged to pay to the colonial administration. Because the tax was based on the total number of houses and beds, Manjaco native groups started to simplify their ancestral dwellings and settlements to reduce the taxes owed to the colonial administration.²⁵

Although Teixeira da Mota pointed to the decline in this type of house as a negative outcome of a rupture of tradition, he described other positive examples of negotiations of tradition within domestic space as a result of contact with European culture. Among these were the custom of using interior furniture (chairs, iron beds, tables, chests, etc.) based on Western dwelling traditions, the use of mosquito nets, and the decoration of house interiors by hanging propaganda pamphlets, portraits cut from newspapers, and old and new calendars. All these were symbols of Western civilization, and their appearance was considered to positive step toward adopting a Westernized way of life.

Of course, the Guinean people against whom the processes of disruption were directed were not passive in their interaction with them. Indeed, they were often active agents when it came to deciding which influences to embrace and how they might take advantage of the “assimilation process” for their own ends. This was the case, for example, with the dwellings of the Manjaco chiefs, who built Portuguese-style houses to please the colonial authorities and to bargain for privileged social status, even if they weren’t used at all.²⁶

The later decades of colonial rule were thus characterized by an obsession with cultural contacts between the European and African population — either in terms of avoiding them or advocating for them for “civilizing” purposes. And in this controversial ideological frame, dwelling space played a crucial role. In architectural speeches and texts about housing projects for native population, it was thus common to find the idea that “in contact with the European civilization, the indigenous people would achieve a civilized mentality and habits.”²⁷ Likewise, it was “up to the European to instill in indigenous people the need for comfort and a higher standard of living.”²⁸ Housing projects for native populations also served the purpose of the “civilizing mission” efficiently, and the case study of the Ajuda neighborhood in Bissau was no exception.

THE AJUDA NEIGHBORHOOD, BISSAU

The Ajuda neighborhood was built in 1965 during the Colonial War (1963–1974) in an isolated area about six kilometers from the center of the city of Bissau. In both oral history and archival documents, the reason for its construction is blurred and almost mythical. Apparently, it was meant to accommodate people in need who had been displaced as the result of a fire in one of the native areas at the center of the city. Indeed, *ajuda* in Portuguese means “help, assistance.” However, field research confirmed that only a small percentage of the families who originally moved to the neighborhood belonged to the affected population. The majority of those who settled there were public servants (nurses, agronomists, office workers, etc.) and their families belonging to the colony’s African population. In this sense, the construction of the Ajuda neighborhood might have been part of a larger “demagogic policy” that comprised a range of propaganda efforts on the part of the colonial state aimed at gaining support among the African population during the war.²⁹ One of these efforts was to supply “better housing conditions.”

The construction of a model neighborhood for African people would have fit these purposes perfectly. In fact, according to archival material, both the Public Works Department and the Bissau Municipality had been struggling to implement a 1959 plan for the city prepared by the architect Mário de Oliveira, one of whose main purposes was to solve a housing crisis among the city’s African population. To address this situation, the plan proposed relocating 9,000 people into three new neighborhoods. It further proposed designs for several elementary house-types which, according to the architect, were inspired by native, self-built urban houses.³⁰ However, the municipality refused “to force . . . the local population to build types of houses that they could not afford.” Instead, it accepted that “on the lots each person was free to build, as their own custom, a simple and rudimentary ‘hut’” according to “their possibilities and free will.”³¹ In the end, the plan proposed by de Oliveira was never implemented. Nevertheless, the municipality agreed to build some of the model house-types as a way to encourage the suburban population to improve their own buildings and solve the housing issue indirectly, by imitation. And the Ajuda neighborhood offered a site on which to realize that ambition (FIGS. 3, 4).

The Ajuda neighborhood’s subsequent grid plan anticipated the *modus operandi* of resettlement villages later built in rural areas under the “A Better Guinea” propaganda campaign directed by Governor-General António de Spínola from 1968 to 1973. Its model house-type was also very simple, resembling designs in the 1959 Bissau urban plan by de Oliveira. As built, each house thus had a rectangular plan in which two bedrooms and the living room were organized around a central corridor, while a third bedroom could be accessed from the exterior veranda. Service facilities and the



FIGURE 3. The construction of the Ajuda neighborhood, aerial view (1965–1966). Photo courtesy of Prof. Sandra Mula.

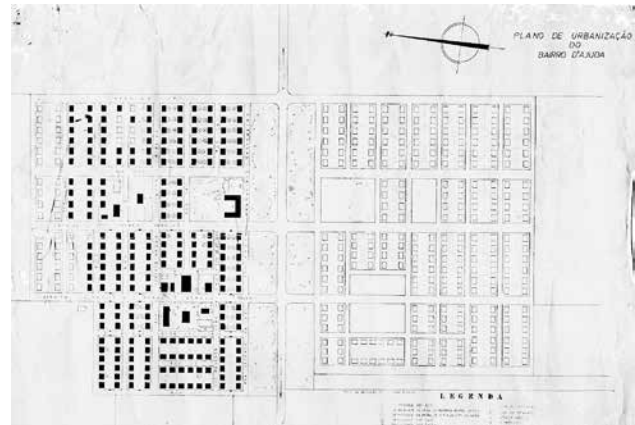


FIGURE 4. Plans for the Ajuda neighborhood (first phase on the left, second phase on the right), ca. 1965. Source: Ajuda Sporting Club, Bissau.

kitchen were located outdoors beyond a rear veranda, and the entire house was surrounded by a private garden.

During the colonial period these houses could not be modified by their occupants. Indeed, the intent of their design was to force Ajuda residents to behave in a certain way, especially when it came to their domestic activities. Thus homes had to be tidy, gardens clean and well kept, and beds properly made. Meals also had to be consumed using cutlery and on a table, and children had to be suitably dressed, especially with their shoes on. Disobeying these colonial rules might result in the expulsion of a family from the neighborhood.³² Recurring patrols were organized by the colonial administration to monitor how people behaved and whether they were following all relevant rules of conduct. Moreover, the “cleanest family” was rewarded with amenities such as blankets or bed sheets, and as remembered today by residents, everyone aimed to be the cleanest family.

After national independence was achieved in 1974 emancipatory processes started, and traditional domestic practices began to (re)emerge from the interstices of the colonial spatiality, reshaping spaces and redefining ancient traditions. During the war people’s movements had been restricted and controlled, but when it ended, families started to rejoin, grow again, and reorganize themselves according to traditional Guinean kinship patterns. Free to inhabit the houses in Ajuda as they wished, residents found themselves in a position to adopt, transform and hybridize foreign traditions, symbols and habits with their own. Ajuda’s residents have transformed the space in multiple ways ever since. The result today is a hybrid spatiality that can be observed both in physical spaces and in daily practices, shaped by a negotiation between Guinean domesticities, the colonial legacy, social aspirations, and practical needs.

Nowadays, Ajuda is mostly inhabited by the original families who settled there in 1965, who are now into a third

generation. The neighborhood could also be described as a middle-class area. Most families own their houses and possess private cars, and it is even common that they employ maids to help with housework. The first and the second generations of inhabitants were mostly employed as public servants but are now largely retired, while the third generation has been educated through high school and sometimes even to a university level. Additionally, people from the Ajuda neighborhood have family bonds that stretch to Europe (mainly in Portugal and France), and they are used to traveling abroad for health assistance or to study.

The neighborhood, however, is perceived as an exclusive residential area for other reasons as well. People in Bissau refer to it as an “urbanized” area, where “people are educated” and “know how to behave.” And this characterization is related to certain “formalities” or “customs” (terms used by Ajuda residents) rooted in colonial norms. Such behaviors have now been perpetuated by the residents in their public and private practices, fashioning a particular image of the neighborhood within the city of Bissau. Yet even if the Ajuda neighborhood still carries the reputation of being an exemplary neighborhood, its domestic spaces reveal a more complex story.

THE ENTANGLEMENT BETWEEN TRADITIONS AND THE COLONIAL SPATIALITY

Nowadays, houses in the Ajuda neighborhood intertwine public and private dimensions, indoor and outdoor spaces, African and Western habits, and urban and vernacular ways of life. In order to study the contemporary domestic space and to discuss how a negotiation between traditions has occurred, both in the built environment and in the spatial practices, the article will now focus on three elements of the domestic space: the plot, the kitchen, and the dining room.

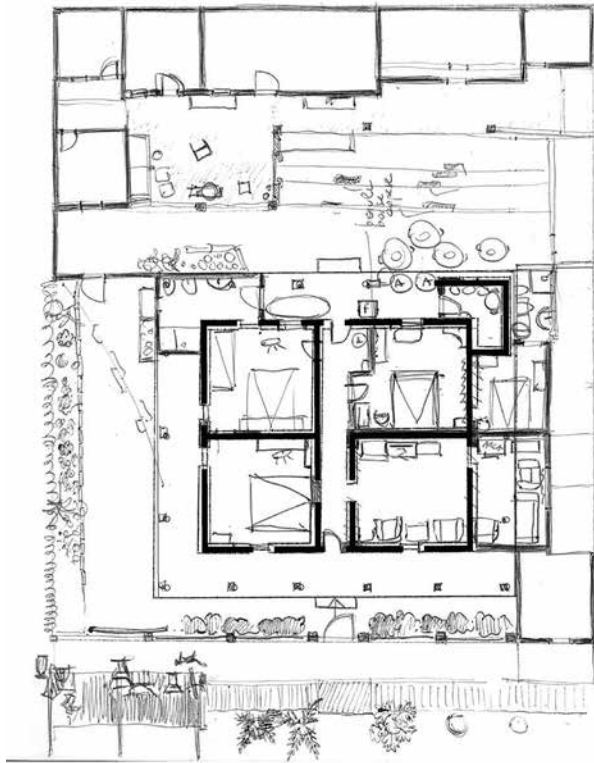


FIGURE 5. Example of contemporary house organization in the Ajuda neighborhood. Drawing by author, 2021.

The plot. Since independence, the original colonial house-unit in the Ajuda neighborhood has been expanded and fragmented into a more complex dwelling landscape that is more able to accommodate the typical polynuclear Guinean family (FIG. 5). This transformation of dwelling

space is largely invisible from the street, however. The reason is there now exists a strong polarization between the front and the back facades of the house, between what is visible from the exterior and what must be protected in the interior of the dwelling space. The street facade in most cases has thus been kept as it was originally designed so as to denote a certain will to conform to the collective “image” of the neighborhood. But the back facade has undergone a process of radical transformation. In fact, the main house-unit has typically grown outward here so that it now occupies the perimetral veranda and other areas at the back of the house.

This extension of the house toward the rear has allowed for the creation of new rooms connected by means of an outdoor patio. And the generous dimension of the colonial parcel has allowed families to expand the house by adding new construction in what had previously served as the backyard garden. These added spaces, in most cases rooms for young male members of the family, have provided new domestic areas for a polynuclear family, which typically now comprises on average ten people. Those attached spaces, together with the main unit, have also changed the focus of the house so that it is arranged around a central patio where a wide range of collective functions take place: washing and preparing raw materials, cooking, cleaning, doing laundry, etc.

The vibrant reorganization of the back yard of the plot may be seen as an adaptation of the traditional settlement unit, the *morança* — but in a form that allows it to be realized within a more confined urban space (FIG. 6). Not only has this dwelling practice displayed its resilience by being re-created in the backyards of the Ajuda houses, but it has become a common feature in the design of dwellings in other parts of the city as well. Today this adaptation of a traditional way for families to join together in small clusters within the



FIGURE 6. View of a courtyard in a house in the Ajuda neighborhood. Photo by author, 2021.

urban fabric is insufficiently studied. But it is safe to say that it embodies a hybrid urban spatiality based on the importance of community living, low-density organization, and outdoor activities. The enlarged family continues to represent, even in urban areas, the pillar of Guinean society and economy, while the low-density organization denotes a preference for an outdoor dwelling experience, even in the city center.

Such a hybrid dwelling organization already existed in urban areas of Guinea-Bissau during colonial times. In the 1960s an urban housing crisis aggravated by the Colonial War triggered a range of studies on urban space and dwelling environments in Portugal's African possessions. Its intent at the time was to find a way to relieve population pressure in the main cities there. Yet, while it found that the cities of Luanda and Maputo were characterized by self-built, high-density neighborhoods, the urban densification of Bissau was found to be below the United Nations (ONU) recommended standard for African cities.³³ According to the 1968 "Study on the Bissau Habitat," it was even judged to be possible to "achieve higher population density" without implementing housing programs that would displace existing residents, a recurrent practice during colonial times.³⁴ As reported by the author of the report, the relatively low-density environment of most the neighborhoods in Bissau was a product of their organization according to the traditional family unit, which privileged common outdoor space as the location for most daily domestic practices. And even if population growth in Bissau's urban environment now means this must take place at a smaller scale, the hybridity between a vernacular and an urban organization is still common — and has even been studied by a few scholars (FIG. 7).³⁵

The kitchen. In the search for contemporary dwelling practices in the Ajuda neighborhood, habits around the preparation and consumption of meals constitute a fertile area through which to understand the negotiation of traditions. In a traditional rural Guinean settlement, the functions typically thought to take place in a kitchen — preparation of raw materials, cooking, washing, food conservation, etc. — are scattered around the house or take place on the veranda. By contrast, the modern kitchen, characterized by a single furnished room, where all functions are concentrated in a *unicum* space, is a recent domestic innovation. This is true even in Europe, where its development was related both to the development of an urban way of life and to spatial limitations.

In the Ajuda houses, the space of the kitchen has now been fragmented across multiple locations according to the need to best accommodate the elementary functions of preserving, washing, cutting and cooking (FIG. 8). As in traditional settlements, the location of the kitchen within the domestic space and its organization must thus take into account the fuel used to cook each meal, the dishes cooked, and the ingredients needed. Additionally, meal preparation, the places where it occurs, the equipment used, and the fuel needed may vary depending on the time of day these activities occur, and sometimes even the season in which it takes place. Of the many factors influencing the space for meal preparation in Ajuda houses, however, the most relevant is the type of dish to be prepared and consumed. In modern European cooking, every dish may no longer need to be prepared differently. But in Ajuda the needs of the dish undeniably influence both cooking methods, the

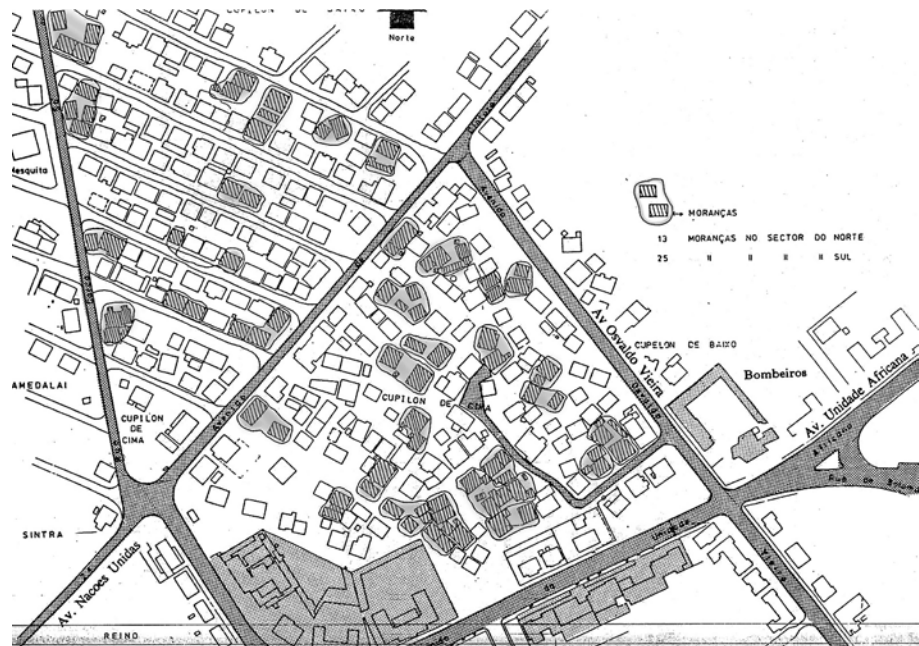


FIGURE 7. Traditional morança setting in the central area of Bissau, 1993. Source: C. Acioly, *Planejamento Urbano, Habitação e Autoconstrução: Experiências com Urbanização de Bairros na Guiné-Bissau*, 1993, p.308.



FIGURE 8. Meal preparation at a house in the Ajuda neighborhood. Photo by author, 2021.

place where they occur, and the tools used. To this end (and to accommodate both traditional and modern diets), the kitchens in Ajuda houses are in the most cases split between an interior and exterior space, each with different purposes, objects and tools.

The exterior space is equipped with small charcoal grills, called *fogareiro* (from *fogo* = fire), which may be set on the ground or mounted on a base. The role of the Western kitchen counter is here assumed by small tables that can be easily moved according to need. A variety of objects and tools may be scattered on the tables, but these may also be stored in a small room inside the house, which typically served as the original colonial kitchen. This exterior space for meal preparation is also recognizable not only on account of the presence of grills, but because it is usually covered by a roof (but one that allows for smoke to escape naturally), and because it is always located close to a water source. Sometimes the outdoor kitchen can also occupy the space of the rear veranda. The dishes cooked there are those of Guinean tradition based on rice, grilled vegetables, meat, and large amounts of fish.

The interior kitchen, by contrast, is marked by the presence of a gas stove, which may be located in different places inside the house — from the original indoor kitchen inherited from the colonial house-type, to the living room, to an enclosed veranda. The gas stove is used mainly for warming up dinner, usually composed of the daily leftovers, or to heat up soup. It may also be used to put together a quick breakfast, to heat milk for children, or occasionally to bake a cake. Even if some people justify the scarce use of the gas

stove for economic reasons, others confirmed that the cost of a bottle of gas is competitive with that of a sack of charcoal. Of course, the gas-stove kitchen observed in Ajuda houses is not very well designed, lacking, for example, an efficient means to exhaust smoke. However, the real reason why families have not abandoned cooking with charcoal likely relates to the resilience of traditional cooking practices.

The example of the kitchen space in the Ajuda neighborhood thus reveals how different domesticities may coexist and complement each other as a matter of daily practice. And it indicates how this has been reconfigured as the result of an encounter of dwelling cultures.

The dining room. If kitchen usage provides an example of a general hybridity of cultural practices, the dining room reveals a more specific tension between colonial legacy and Guinean tradition, and between social aspirations and practical needs. In many Ajuda houses dining functions have been doubled into two well-defined rooms: the “formal” dining room and the “small” dining room, called the *saleta* [small room] (FIGS. 9–10). The latter is located at the back of the house, usually in one of the spaces resulting from the expansion of the veranda. This small dining room is a bright and informal space, linked to the backyard garden and to the kitchen(s). Not much attention is given to its decoration and furnishing: sometimes chairs from its dining table may be missing, and in other cases evidence of its use as an eating area is simply given by the presence of a table covered with a tablecloth. In fact, it is typically a very flexible and functional space, used both for dining, relaxing, children’s homework, and general gathering in adverse weather conditions.

By contrast, the formal dining room is part of the original colonial plan, and is usually equipped with formal pieces of furniture and other items: laced tablecloths, cabinets for glasses and crockery, centerpieces, framed family photos, etc. Its static nature is what gives it a sense of formality, suggesting that a family gathers there for the main meals of the day, and that they consume their meals according to established rituals, using tools derived from Portuguese dining practice. But that imagined family does not correspond to the actual Guinean families that today inhabit the houses in Ajuda. These are typically larger than suggested by the room’s decor, and they do not follow the Portuguese habit of gathering together for daily meals. In fact, the routines of different members of a family in the Ajuda neighborhood are typically unsynchronized; everyone, from adults to children, follows his/her own routine, rarely meeting up for mealtime.

Additionally, while in Portugal the favored family meal is supper, the sacred moment when all family members gather after a long day of work, in Guinea-Bissau the main meal is lunch. The food for this meal is usually cooked in the morning by a servant or by members of the family, usually women. And once it is prepared, it may be consumed at various times of the day according to each person’s schedule.



FIGURE 9. *Formal dining room at a house in the Ajuda neighborhood. Photo by author, 2021.*

The entire Guinean family gathers only occasionally or during festivities, and rarely does this happen in the formal dining room, which is too small to accommodate everyone. Rather, in Guinean tradition, meals are consumed by hand from a common bowl in small groups, sitting on the floor or on little benches, often outdoors.

Even for rituals of eating, Guinean traditions have found ways to seize back domestic space in Ajuda, overcoming the rigid functional categorization typical of European culture. Thus, lunch has regained its prominence and is consumed in different places and by different members in an unsynchronized way. And dinner is not a relevant meal; it is quickly warmed up in the gas stove and commonly consumed in each individual bedroom.

However, even if Guinean habits have thus subverted modern notions regarding the specialization of rooms, families living in Ajuda have in most cases maintained the formal dining room for its symbolic significance. Under colonial rule, Ajuda residents were forced to adopt European domestic customs, including the use of a dining table, chairs, cutlery and dishware. And after independence they have continued to retain this colonial legacy, even if they don't practice it. Indeed, this is one reason why the image of the neighborhood as exclusive has been preserved until today.

The maintenance of formal dining room, together with the front facade of the house, thus denotes the desire of Ajuda residents to maintain a special social status — even if this element of the former colonial order was once established using the regulation of the domestic environment to establish systems of categorization and discrimination.



FIGURE 10. *Small dining room, or saleta, at a house in the Ajuda neighborhood. Photo by author, 2021.*

CONCLUSION: A NEW PLURIVERSALITY

During the colonial period Ajuda residents were forced to live according to the Western patterns and behavioral rules. However, since the country achieved independence, the neighborhood has undergone a process of transformation, which has entailed a negotiation with its colonial past. In the aftermath of independence, as Pierre Bourdieu observed elsewhere, “any innovation introduced by the West could (can) be adopted without its acceptance being considered as an expression of allegiance.”³⁶ And the contrary has also been true: the adoption of Guinean habits and customs has been made possible without discrimination being attached to it.

This analysis of the contemporary house in Ajuda has revealed precisely how — through a process of negotiation between the past and the present, the former colonial spatiality and revitalized Guinean domesticities, urban and vernacular spatial organization, and aspirational and practical needs — the process of establishing new traditions has managed to produce a space “in between.” This hybrid space has overturned certain colonial norms while retaining others, resulting in a new domestic environment characterized by a “pluriversality” of the domestic experience.³⁷

By approaching hybridity “in the context of everyday practices,” the Ajuda house can be interpreted as a collage of dwelling models and usages.³⁸ The addition of new rooms and attachments thus corresponds to daily practices rooted in the Guinean vernacular way of life. And yet the maintenance of the original dining room reflects a will to conform to certain codings of social status inherited from colonial times.

Meanwhile, a more informal space for eating has emerged that belongs neither to colonial nor vernacular tradition, being a space “in-between.”

This same negotiation has occurred with regard to the expansion and reorganization of the building lot. On the one hand, the polarization of the front and back facades somehow reflects a “‘desire’ of protection and isolation, a necessity of self-identification and self-affirmation” typical of some European suburban universes.³⁹ Yet, on the other, the way the backyard garden is now typically organized stresses the preference for an outdoor dwelling experience present in vernacular Guinean domestic environments. The intertwining of Guinean and European domestic habits is further evident in the multiplication of kitchen spaces. The result is a meal-preparation experience that may conform either to European traditions or Guinean ones.

Domestic life in the Ajuda neighborhood condenses the past, the present, and the future, “overcoming the given grounds of opposition . . . [in a way that] opens up a space of translation: a place of hybridity,” in Bhabha’s words.⁴⁰ It is thus difficult to categorize Ajuda domestic space into one or another category. The Ajuda house is neither urban nor vernacular, Western nor Guinean; all these dimensions exist simultaneously and are activated by the daily practices of its inhabitants.

The house is thus urban not because of its location, but because some of the domestic rituals that take place in it belong to urban society — such as neighboring rituals, including shared vigilance. Yet the house, to some extent, also facilitates a vernacular experience, since life there is characterized by communal and outdoor living as in a rural context. Its original plan (even if very simplified) was conceived according to a modern Western idea of dwelling space. Domestic activities were thus intended to be largely confined within the interior of the house;

functions were separated and well defined within different compartments; and doors and windows were fundamental elements to make the house a civilized dispositive. By contrast, the appropriation of the original plan today has resulted from a negotiation between interior and exterior boundaries and between different functional spaces. It is thus not uncommon for the living room to take over parts of the kitchen, and for the bedrooms to function as places to consume meals. The process of the Ajuda house’s hybridization has revealed overlapped stories; it has unmasked a new common sense in the area of domestic practices; and it has challenged the notion of domestic function according to a Western point of view. Ultimately, it has revealed that tradition is a much more dynamic, resilient and fluid category than what the colonial, modern or contemporary worlds have made it out to be.

Additionally, this analysis of the contemporary house in the Ajuda neighborhood has shed light on the lingering aspect of the colonial legacy. In fact, negotiation with the colonial spatiality within the contemporary domestic environment unveils the hybrid dimension of the notion of heritage itself. Colonial architectural heritage may thus be seen as a pluri-dimensional space of confrontation. In the context of the Ajuda neighborhood, it contributes to the construction of an elite social status, which is valued by its inhabitants. But it also constitutes the ground on which to fashion new domesticities, and these might inform future research on the dwelling landscape of Bissau.

Finally, this study of the entanglement between traditions and colonial spatiality in the contemporary domestic landscape in Guinea-Bissau has also provided a reminder of how notions of tradition and heritage cannot be generalized. Various research efforts with regard to these issues can only gain meaning when related to a particular context, circumstance, group of people, and their story.

REFERENCE NOTES

This article has been developed within the project “ARCHWAR — Dominance and mass-violence through Housing and Architecture during colonial wars. The Portuguese case (Guinea-Bissau, Angola, Mozambique): colonial documentation and post-independence critical assessment” (PTDC/ART-DAQ/0592/2020).

1. Senegambia was a region of West Africa located between the Sahara Desert and the tropical zone, extending from the Gambia River in the north to the Geba River, which flows through Bissau, in the south. Nowadays Guinea-Bissau borders Senegal to the north and Guinea (Conakry) to the south.

2. One evidence of the negotiation of traditions in Guinea-Bissau may be the Creole idiom, which resulted from a long process of *metissage* between local languages and foreign ones. On this topic, see M. Vale de Almeida, “Portuguese Colonialism and Creolization,” in S. Charles, ed., *Creolization: History, Ethnography, Theory* (Walnut Creek, CA: Left Coast Press, 2007).

3. The last survey published about the vernacular architecture of the main ethnic groups in Guinea-Bissau was in 1983 and resulted in D. Blazejewicz, R. Lund, K. Schonning, and S. Steincke, *Arquitetura Tradicional Guiné-Bissau* (Estocolmo: Swedish International Development Cooperation Agency [SIDA], 1983).

4. C. Lopes, *Etnia, Stato e Rapporti di Potere in Guiné-Bissau* (Bolonha: GVC, 1984), p.112.

5. In Creole, *moransa*.

6. P. Bourdieu, *The Algerians* (Boston: Bacon Press, 1961); and G. Wright, *The Politics of Design in French Colonial Urbanism* (Chicago: University of Chicago Press, 1991).

7. S. Henni, “From ‘Indigenous’ to ‘Muslim’: On the French Colonial Assimilationist Doctrine,” *Positions E-flux architecture* (2017); and K. Cupers, “The Invention of Indigenous Architecture,” in I. Cheng, C.L. Davis II, and M.O. Wilson, eds., *Race and Modern Architecture: A Critical History from the Enlightenment to the Present* (Pittsburgh: University of Pittsburgh, 2020), pp.187–99.

8. H. le Roux, "Lived Modernism: When Architecture Transforms," Ph.D. diss. (Architecture), Katholieke Universiteit Leuven, 2014; and H. le Roux, "Designing Kwathema: Cultural Inscriptions in the Model Township," *Journal of Southern African Studies*, Vol. 45 No. 2 (2019).
9. H.K. Bhabha, *The Location of Culture* (London: Routledge, 1994), p. 25.
10. N. AlSayyad, "Prologue: Hybrid Culture/Hybrid Urbanism: Pandora's Box of the 'Third Place,'" in N. AlSayyad, ed., *Hybrid Urbanism: On the Identity Discourse and the Built Environment* (Westport, CN: Praeger Publishers, 2001), p. 3.
11. Ethno-architectural survey is a multidisciplinary methodology that combines architecture research tools with ethno-sociological ones in order to study inhabited space. On this issue, see D. Pinson, "L'habitat, Relevé et Révélé par le Dessin: Observer L'espace Construit et Son Appropriation," *Espaces et Sociétés*, January 2016, pp. 40–67.
12. I borrow the expression "counter-type of house" [*contre-type de habitation*] from Daniel Pinson's study of the transformation and appropriation of "colonial inspiration" Moroccan economic houses. See D. Pinson, *Modèles D'habitat et Contre-Types Domestiques au Maroc* (Tours: URBAMA, Université de Tours, 1992).
13. P. Mark, "Portuguese" Style and Luso-African Identity: Precolonial Senegambia, Sixteenth-Nineteenth Centuries (Bloomington: Indiana University Press, 2002).
14. *Ibid.*, p. 33.
15. The historian Peter Mark has defined Luso-Africans as the offspring of the unions between emigrants from Portugal who settled in Africa and women from native societies. Mark, "Portuguese" Style and Luso-African Identity.
16. J.A. dos Santos Guardiola, *Relatório Sobre o Inquérito a Bissau e Outros Centros Populacionais da Guiné* [Report survey on Bissau and Other Population Centers in Guinea], 1945. [AHU/DSUH/2070/00994/00994].
17. On this topic, see A. Vaz Milheiro, "Africanidade e Arquitectura Colonial — a Casa Projectada Pelo Gabinete de Urbanização Colonial (1944–1974)," *Caderno de Estudos Africanos*, No. 25 (2013), pp. 121–39; and F. Vita, "Domestic Architecture in Dialogue: The Role of Portuguese Colonization in the Production of Domestic Spatiality in Contemporary Guinea-Bissau," Ph.D. diss., University of Porto (unpublished).
18. Decree n. 16.473 of February 6, 1929, was also known as the Political, Civil and Criminal Act of the Indigenous of Guinea, Angola and Mozambique.
19. M. Caetano, "Uma Crónica Nova da Conquista da Guiné" ["A New Chronicle of the Guinea Conquest"], *Boletim Cultural da Guiné Portuguesa* 1 (1946). Caetano would go on to serve as head of the Ministry of Colonies between 1944 and 1947. As prime minister from 1968 to 1974, he would also succeed António Salazar and become the second and last leader of the Estado Novo.
20. *Ibid.*, p. 2.
21. The author is currently researching this issue for the article "Between Coding and Decoding: Inquiring on the Late Colonial Need for Surveying the Native Settlements in Guinea-Bissau," which will be presented at the September 2023 Society of Architectural Historians Conference in Montreal (virtual event).
22. A. Teixeira da Mota, *Inquérito Etnográfico* [Ethnographic Survey] (Publicação Comemorativa do V Centenário da Descoberta da Guiné Bissau: Centro de Estudos da Guiné Portuguesa, 1947), p. 7.
23. Decree-Law n. 22.465, Acto Colonial [Colonial Act], 1933.
24. Teixeira da Mota, *Inquérito Etnográfico*; A. Teixeira da Mota, *Classificação e Evolução da Casa e Povoamento Indígena* [Classification and Evolution of Indigenous House and Settlement] (Bissau: Centro de Estudo da Guiné Portuguesa, 1948; and A. Teixeira da Mota and M.C. Ventim de Neves, eds., *A Habitação Indígena na Guiné Portuguesa* [The Indigenous House in the Portuguese Guinea] (Bissau: Centro de Estudos da Guiné Portuguesa, 1948).
25. "The shape of the dwelling used to be circular, but as a house of this type always had more than two rooms, the manjacos of Caió began to notice that the collection of the indigenous tax was applied on the greater or lesser number of rooms, hence this type fell into total disuse and was replaced by the rectangular one." A. Martins de Meireles, "Habitação indígena dos Manjacos de Caió" ["Indigenous House if the Caió Majacos"], in Teixeira da Mota and Ventim de Neves, eds., *A Habitação Indígena na Guiné Portuguesa*, p. 293.
26. Teixeira da Mota and Ventim de Neves, eds., *A Habitação Indígena na Guiné Portuguesa*.
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28. V. Vieira da Costa, *Luanda Plano para a Cidade Satélite n.º 3* [Luanda plan for the Satellite City n.º 3] (Porto: ESBAP, 1948), p. 26.
29. Lopes, *Etnia, Stato e Rapporti di Potere in Guine-Bissau*, p. 32.
30. M. de Oliveira, "Relatório da viagem à Guiné" ["Report on the trip to Guinea"] (1958), manuscript AHU/DSUH/2073/01004.
31. Correspondence between the Bissau City Council and the Public Works Department about the "Study of popular dwellings in Guinea — letter 1234 from the Municipality of Bissau," 1960, [AHU, PT/ /DSUH/2073/08297].
32. In Guinea-Bissau this type of policy was already implemented in the Santa Luzia neighborhood, built in the 1940s, to accommodate "people in the process of assimilation of European habits." Teixeira da Mota and Ventim de Neves, eds., *A Habitação Indígena na Guiné Portuguesa*.
33. The United Nations report "L'habitat en Afrique" (1965) is cited in M.A. de Sousa Chichorro, *Estudo Sobre o Habitat de Bissau* [Study on the Bissau habitat], 1968.
34. De Sousa Chichorro, *Estudo Sobre o Habitat de Bissau*.
35. As reported in C. Acioly, *Planejamento Urbano, Habitação e Autoconstrução: Experiências com Urbanização de Bairros na Guiné-Bissau* (Delft: Technische Universiteit Delft, 1993). Evidence of this dwelling organization can be found in the photographic survey in Bissau by the architect Manuel Fernandes de Sá (1988). Additionally, the author has also observed the endurance of this peculiar organization during field research on dwelling space in Bissau (2019, 2021).
36. Bourdieu, *The Algerians*, p. 158.
37. In contrast to a global order based on a monocentric, universal, unilateral objectivity and truth, Walter Mignolo has suggested the idea of "pluriversality" as being "a universal project to which all contending options would have to accept." I question whether it is possible to consider, in contrast with a universal idea of house, a plurality of dwelling space. Walter Mignolo, *The Darker Side of Western Modernity* (Durham, NC, and London: Duke University Press, 2011), p. 23.
38. AlSayyad, "Prologue: Hybrid Culture/Hybrid Urbanism," p. 2.
39. Referred as the "monde pavillonnaire," in H. Raymond, N. Haumont, M.-G. Dezès, and A. Haumont, *L'habitat Pavillonnaire* (Paris: L'Harmattan, 2001), p. 16.
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All translations from original documents in Portuguese are by the author.

Breaking and Making Traditions: Disjunctures in Spatial Planning Paradigms for Delhi

MANAS MURTHY

This article critically analyzes the discourse around three historic spatial planning regimes for Delhi from the colonial era to the present moment in order to highlight the failure of the state to either comprehend the complexities of existing typo-morphological patterns, work in concert with informal modes of production, or enfold the entirety of Delhi's urban fabric within its purview. The article, moreover, explores how these models of development were complicit in the proliferation of informal production, only to then capitalize on its surplus. Over time, this approach has resulted in a vicious cycle of breaking and making "planning traditions" that remain both antagonistic toward and dependent on the informal culture of building.

Crisis-ridden as well as crisis-inducing, chaotic, irrelevant, incompetent and exclusionary: planning in India does indeed seem to have "failed."

— Gautam Bhan¹

As admitted by the highest planning authority in the city, much of the contemporary building activity in Delhi is informal, illegal or unplanned. The Delhi Development Authority (DDA) estimated in 2021 that "only 53% (excluding squatter housing)" of all residential development in the city was institutional or planned.² Citing a 2015 study by the Delhi Urban Environment and Infrastructure Improvement Project (DUEIIP), the Centre for Policy Research (CPR) likewise observed that "the government of Delhi's own estimates place only 23.7 per cent of the city's population in what are designated as 'Planned Colonies.'"³ Meanwhile, the number of unauthorized colonies (UACs) — which the DDA has defined as "residential areas 'where no permission of (the) concerned agency has been

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obtained for approval of layout plan and/or building plan” — has increased from 118 in 1961 to nearly 1,800 today.⁴

One result of these trends is that unauthorized neighborhoods, squatter settlements, *jhuggi jhopri* clusters, and other unregulated settlements presently account for a considerable percentage of housing in the city.⁵ Indeed, while municipal records, the planning authority’s own estimates, and the Delhi government’s official figures vary, there is broad consensus that the proportion of the city’s population residing in planned neighborhoods is small compared to that living in informal/unplanned housing. Furthermore, as evident from these figures, much of Delhi’s ongoing spatial growth and development continues to remain outside the purview of formal planning.

As many have pointed out over the years, such a vast gap between plan and reality is symptomatic of a pervasive disconnect between professional visions of the city’s built environment and the reality of its production.⁶ Moreover, it offers a clear sign of the incompetence and apathy of the state toward the plight of residents of so-called informal settlements, which often includes the denial of urban citizenship rights and access to basic services and infrastructure. Yet such incompetence may also provide a way for the state to turn away from the problems of the informal masses — in effect, rendering them invisible or “semi-visible.”⁷ And, as I will argue in this article, this reality is not only indicative of the “failure” of planning to contend with the informal; it is also the outcome of the very planning regimes that seek to control the informal. Indeed, many formal urban planning regimes operate according to a logic that, either intentionally or incidentally, *begins* by fostering prolific informal production. They then malign and “other” it, before finally choosing to abandon their attempts to suppress informality in favor of adopting yet another model for formal development.

In order to establish this argument, I will analyze the discourse around three specific spatial planning models in Delhi’s colonial and postcolonial history. Drawing on secondary sources, I will show how, from the nineteenth century on, colonial municipal officials and émigré architect-planners, following traditions established elsewhere, attempted to establish new paradigms for urban planning and development in the city. I propose that a targeted analysis of these phases of development may help reconceptualize the relationship between planned development and informal production in the city. Analysis of the case of Delhi may also help illuminate how such approaches have affected urban development in the global South more broadly.

I begin with a brief recounting of current debates surrounding the proposed redevelopment of the former British colonial capital of New Delhi. Contention over these plans highlights a pervasive disjuncture between elite conversations around development and planning and contemporary lived reality in much of the Delhi metropolitan area. But the

discussion will also call attention to a general history of spatial inequality in the development of the city, of which the pending redevelopment of New Delhi is only an example.

Thereafter, I will discuss three spatial planning models that have been applied in the last hundred years and the way these have interacted with the contemporaneous informal production of space in the city. The first of these thematic sections will address colonial experiments involving the consolidation and speculative development of the hinterland of Shahjahanabad, or the “Old City,” which culminated in the construction of imperial New Delhi.⁸ The second will deal with the adoption of the “neighborhood unit” by planners as a way to encourage modern transportation and efficient land use during the post-Independence expansion of Delhi. Finally, a third section will briefly discuss the application of a forward-looking transit-oriented-development (TOD) model in the context of recent informal growth that is densifying the city’s residential fabric and creating a “parking crisis.”

THE PRESENT MOMENT

On September 2, 2019, the Central Public Works Department (CPWD), acting on behalf of the government of India, invited proposals for the redevelopment of the “Parliament Building, Common Central Secretariat, and Central Vista at New Delhi.”⁹ The designated structures and open spaces form a major part of what is popularly known as Lutyens’s Delhi. Currently the seat of the Indian central government, New Delhi was designed by Sir Edwin Lutyens and Sir Herbert Baker according to the Garden City concept of Ebenezer Howard to serve as the twentieth-century capital of British India.¹⁰

The decision to redevelop parts of this historic ensemble was justified by the Indian government based on an imminent need to modernize and enlarge ministerial facilities, as well as to improve a “nationally significant public space.” Yet almost immediately, a number of built-environment professionals expressed great concern over key features of the proposed effort. Among these were the tendering and selection process, a lack of public discourse and participation, proposed land use changes, and alleged disregard for environmental protections and heritage status.¹¹

Beyond its obvious significance as a setting for national politics, the design of the government precinct has been a subject of contention since it was first proposed in 1911.¹² Initial controversies surrounded the decision to shift the colonial capital there from Calcutta (Kolkata) and the decision by the British Town Planning Committee to appoint its architects from among a pool of eager contenders.¹³ However, in the context of this article, the present debate highlights other key issues related to the recognition of tradition and heritage, the instrumentalization of modernization rhetoric, and the relationship (or lack thereof) between the state, the elite, and grassroots residents of the city.

On the one hand, the “need” for modernization and upgrading of New Delhi’s government buildings has often been coupled with a larger debate about the development potential of the former colonial precinct. Proposals for its densification were considered as early as the first Master Plan for Delhi (MPD) in 1962. And several iterations of the Lutyens Bungalow Zone guidelines (in 1988, 1997, 2003, and in a Delhi Urban Arts Commission Report in 2015) have since revised the boundary of this precinct, offering development exemptions from its “restrictive” conservation guidelines both for specific property owners and for real estate developers in general.¹⁴ On the other hand, the conservation lobby has sought to enshrine the precinct’s heritage value, most notably through a proposal for its inscription as a World Heritage Site in 2014.¹⁵ This nomination was, however, withdrawn by the Indian central government, against the wishes of the state government — an action that emphasized how the present conflict between development and conservation interests is being played out on a world stage.

Although the identity of New Delhi is currently being fiercely contested, the actual ground on which this drama is being played out remains out of reach for the average Delhi citizen. Since its inception, New Delhi has provided an elite enclave for colonial officers, royals, and influential private individuals. Today the securitized halls of its ministries remain inaccessible to most people, while the going prices for its bungalow plots rival the cost of properties in lower Manhattan or Hong Kong.¹⁶ In keeping with its elite status, the area’s urban local body, the New Delhi Municipal Council (NDMC), also enjoys one of the largest budgets in the country while having one of the smallest jurisdictions (encompassing only 42 of the 1,484 square kilometers of Delhi). New Delhi, in effect, is not where the majority of the city resides — or to which it even feels connected, except perhaps as a symbol of national identity or as an abstract, touristic icon.

However, this disconnect was not solely brought about by the creation of New Delhi. During the years of British control leading up to its creation, a series of land reforms, planning schemes, and infrastructure interventions had already established a foundation for the city’s emerging dichotomous reality. In this sense they provided early evidence of the collision between a “universalizing, rational ideology from the West” and more “informal,” indigenous ways of being that ultimately led to what Jyoti Hosagrahar has termed the development of “indigenous modernities.”¹⁷

COLONIAL EXPERIMENTS

In the wake of the Indian Rebellion of 1857 (also known as the 1857 Revolt), the primary concern of British authorities was the protection of the colonial government and British citizens residing in India from any future uprising.¹⁸ Soon thereafter, however, the introduction of railways and the

construction of a major rail terminus in Delhi in 1860 allowed the city to become a major hub for commerce in grain and textiles.¹⁹ And although modern infrastructure came to Delhi much later than to other Indian metropolitan centers such as Bombay and Calcutta, its construction provided a significant catalyst for the rapid development of entrepreneurship in the capital.²⁰ In addition, as Hosagrahar has observed, “agricultural reforms and changes in the structure of land ownership and taxes further motivated people to migrate from the countryside to the city.”²¹ As a result, “suburbs” started growing organically around Delhi, transforming other areas of its hinterland (FIG. 1).

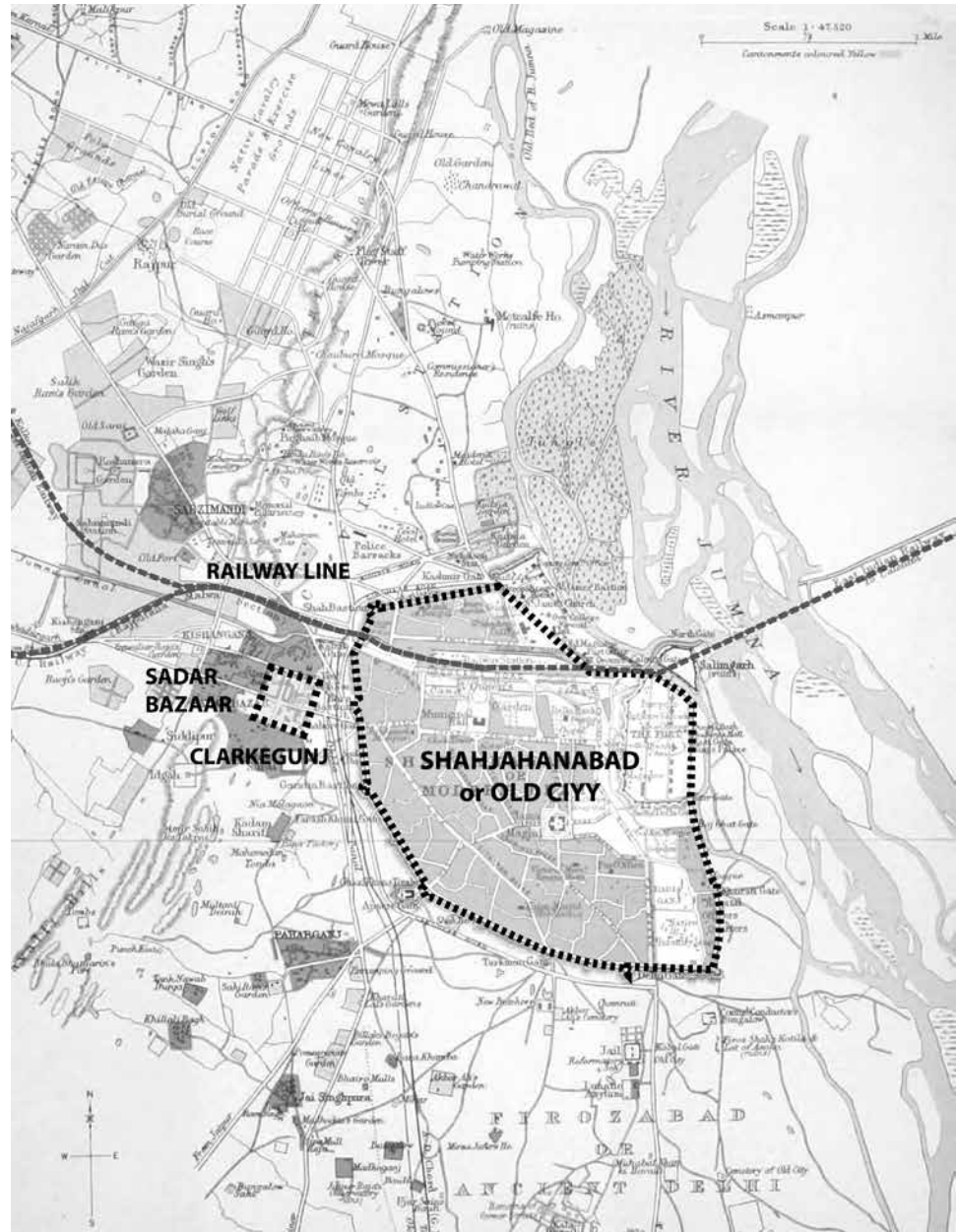
The colonial government also actively fostered entrepreneurial activity, which led to the rapid growth and densification of Shahjahanabad. But, at the same time, a depression in land values and the overall disorganization of local governance assisted in the informal occupation of land by “squatters.” As a result, according to Narayani Gupta, in the early years of the city’s industrial expansion, “both the wealthy and the poor managed to engross or occupy land, without the government being able to derive any benefit from it.”²²

Yet, even as the indigenous population crowded into the walled city and expanded out to areas such as Sadar Bazaar, the British continued to reside comfortably in the cantonment or in the Civil Lines (towards the north) with their open spaces and large plots. Such a pattern was indeed typical of colonial urban settlements across India. As Reeta Grewal has pointed out, in India, “the ‘anglicised’ or ‘western’ town was not superimposed on the existing one but sprang up initially as a suburb and extended in various directions to encircle the old city.”²³

In Delhi, the construction of railway tracks and the restructuring of the walled city and its hinterland thus entailed the acquisition of significant tracts of rural land and other indigenous properties.²⁴ As part of this process, the very activities of land survey and acquisition proved transformative, having a great impact on preexisting models of land occupation, ownership, and revenue generation. Historians have also traced the complexities that arose when agrarian and rural lands were exchanged between Mughal and colonial rulers after 1857.²⁵ In some cases, the presumed *taiul* and *nazul* status of lands (under control of the crown) were thus subsequently found to be based on false claims, creating disputes that could only be settled through the courts.²⁶ Eventually, municipal officials also problematized the congestion and unsanitary conditions that came along with successful economic development in the old city as justification for focusing new building campaigns outside its walls.

Such planned interventions beyond the walls of Shahjahanabad subsequently included the Lahore Gate Improvement Scheme, also known as Clarkegunj. Named after its founder, Robert Clarke, the deputy commissioner of the Delhi District, the 1888 plan sought to extend the city westwards following the clearing and demolition of the

FIGURE 1. 1911 map of Shahjahanabad and the beginnings of modern Delhi, showing early suburbs and the new planned area of Clarkegunj outside the Old City. Source: Wikipedia, John Murray, distributed under a CC-BY 2.0 license.



Lahore Gate itself (REFER TO FIG.1). The scheme thus proposed connecting the existing city with Sadar Bazaar, while adding new residential, commercial and public functions, “that were ‘constructed systematically with due regard to ventilation, drainage and communications, instead of haphazard as in the case of the present suburbs.’”²⁷

In this regard Clarkegunj was unlike all previous extensions to the city. Previous colonial suburban interventions had been driven by concerns for security, public health, ease of governance, and revenue collection. Clarkegunj, on the other hand, was a speculative development premised on “organizing undeveloped land

into orderly settlements for private Indian residents.”²⁸ The proposed layout spanned 800 feet between the site of the Lahore Gate and Sadar Bazaar, and “at the heart of the proposal was a market square (*gunj*) with a mosque in the center and shops around the edges.”²⁹ Plots were also laid out to maximize locational characteristics that would allow the generation of profit through the sale of properties. These steps added a new dimension to the modernization of urban development in India.

Since assuming his post, Clarke had argued against the repeated restructuring of the walled city, instead focusing on new development outside it. In the view of colonial officials

like him, extensive demolitions and the enforcement of no-build zones around the outside of the wall (a security concern following the 1857 Revolt) were expensive and controversial. Besides, communal land and areas under other forms of indigenous ownership in the hinterland could provide viable greenfield sites on which to impose a fresh vision for urban development. What emerged was a new paradigm, where the colonial state played the role of real estate speculator and land developer, where the relationship between land and owner was reconstituted, and where indigenous land occupation models such as *nazul* and *taiul* were eradicated. Furthermore, in a context where the “municipal official, squatter, speculator, and merchant” equally sought to capitalize on the prolific and informal transformation of land into private property, colonial interventions possessed an aura of legitimacy and authority that other preexisting development models lacked.³⁰

In hindsight, these efforts by the colonial rulers may be viewed as a series of experiments aimed at establishing specific kinds of technological, economic and cultural modernities — all the while contending with and dominating informal land occupation and indigenous land practices. And, eventually, they culminated in the abandonment and vilification of the Old City, followed by the decision to construct New Delhi. In effect, all the interventions by the British (in bringing railways, fostering entrepreneurship, institutionalizing land records, and speculating in real estate) contributed to this othering of the Old City and to its designation as outmoded. Likewise, a series of distinctions — such as between rural and urban, “old” and “new” city — resulted from colonial attempts to deploy a discourse of modernity to contend with preexisting patterns of settlement. Indeed, according to Mrinalini Rajagopalan and Madhuri Desai, these categories were largely colonial inventions, “spatial manifestations of the divide between the realms of the colonizer and colonized.”³¹

During his visit to India, Patrick Geddes similarly criticized the vilification by planners of local forms of settlement.³² Geddes insisted that the problem lay not just in the inability of planners to sufficiently address the technical concerns of old cities, but also in their emphasis on reinforcing the gap between European and indigenous areas, increasing the duality of Indian settlements. He also recognized that the congestion, haphazard land use, and poor quality of infrastructure within India’s old cities were, in many ways, born of colonial interventions such as “modern industries, railways, and spacious dwellings” in the first place.³³

Within this colonial worldview, of course, the construction of the colonial capital complex of New Delhi became the ultimate statement of othering. Its design differentiated itself in every way from the Old City: through its morphology, street patterns, plot configurations, as well as its intended residents. Generous in his praise of the newly built capital, however, the noted travel writer Robert Byron

described the scene in 1931 as composed of “. . . nearby, the ghost of an ancient imperial capital; and on every side a people who, from prince to coolie woman, possess an innate and living desire for what is proper and best.”³⁴

From its inception, New Delhi was intended to provide a new paradigm and a model approach both for its residents and future planners. It also set an unachievable standard for private living that was in many ways linked to the form of the private bungalow, or *kothi*.³⁵ And aspirations to reside in such dwellings proliferated in the decades post-Independence, much in the form of neighborhoods plotted for single-family dwellings. Thus, what had once been an exception, a formally imposed type of development, was adopted en masse by planners as a new avatar of middle-class life, reinventing “traditions” of planning in India.

Meanwhile, the exceptionalism emblematic of the former colonial enclave of New Delhi continues to this day. It remains an island of lush green avenues and overly generous bungalow plots in the heart of a vast metropolis that has grown up around it. And, despite its imperialist connotations — or perhaps because of them — it was appropriated as the seat of the Indian central government after Independence, and its residences are now occupied by the new nationalist elite.

THE PLAN AND THE NEIGHBORHOOD UNIT

The story of exceptionalism embodied by the planning and building of colonial New Delhi is not unique within the larger history of the city. Delhi had been a seat of political power, intermittently, for several centuries before its creation. The Delhi area has thus long been characterized by a social hierarchy between the ruling class and ordinary citizens. Those in power have also always enjoyed living in huge palaces and mansions set within beautifully landscaped gardens, while the masses have inhabited a dense, organic urban fabric. Yet, while such segregation — based mainly on class, caste and religion — had long been evident in the built traditions of the area, New Delhi introduced new kinds of political and administrative hierarchies. These became starkly manifest in the form of exclusive enclaves of the political and industrial elite and the relegation of the masses to “informal and organic” settlements. The vast post-Independence residential expansion of the city further concretized this separation.

The extents of metropolitan Delhi burgeoned after 1947, when the city was inundated with refugees from Pakistan, just as it assumed its new role as the capital of a young, independent India. This urban migration was unprecedented, and the government found itself ill-equipped to deal with its many impacts, including the provision of food, water, sanitation, and most importantly, housing. In the period between 1941 and 1951, Delhi recorded a 106 percent hike in its population, and soon afterwards it

was estimated that about 30 percent of its population was comprised of refugees.³⁶

To house these thousands of new settlers, what were initially imagined as emergency housing shelters and refugee camps were quickly turned into permanent locations for urban development. Discrete pockets of public land were thereafter allocated for planned, plotted neighborhoods and group housing (apartments).³⁷ Most such actions were operationalized through land endowments and leases to specific groups of citizens called cooperative group housing societies (CGHSs) or house building societies. These provided a framework for member households to construct their own dwellings after receiving the necessary approvals. Members and promoters of each CGHS had to be registered with the Registrar of Societies, and the society itself needed a set of ratified bylaws to undertake construction, manage membership, settle disputes, etc. As a guiding form for housing production, this approach was meant to build community among members and residents of a neighborhood and discourage “ghettoization” or haphazard development of residential property in the city. It also marked the birth of a new planning regime that would guide the residential expansion of Delhi.

Sanjeev Vidyarthi has described how Clarence Perry’s conception of a “comprehensive physical planning instrument for designing self-contained residential neighborhoods in

the 1920s” became the prevailing model for new residential planning in many newly independent nations following World War II.³⁸ Perry’s vision, however, had been firmly rooted in a developmentalist ideal strongly influenced by American urban sociologists. And in contrast to an urban expansion area such as Clarkegunj, where buildings typically included shops on the ground floor and residences above, the neighborhood unit carefully specified the distribution and segregation of land uses within it. In Delhi it thus represented a stark break with past traditions such as the mixed-use residential/commercial areas prevalent in the Old City and informal suburbs at the time. Instead, each plot in an ideal new neighborhood was to house a single nuclear family in a one-story structure, and the neighborhood itself would fulfill all its residents’ needs by providing them with schools, community centers, parks, and shopping centers (FIG. 2).

A new type by most standards of architectural typology, urban morphology, and spatial planning convention, the neighborhood unit had first made its way to India in the 1930s and 40s, where it was disseminated by the architects Otto Koenigsberger and Albert Mayer, among others. In keeping with Jawaharlal Nehru’s (India’s first prime minister) vision for modern India and its new towns, Koenigsberger designed Bhubaneswar, and Mayer would later design the neighborhoods of Chandigarh. These models were then swiftly institutionalized within the newly

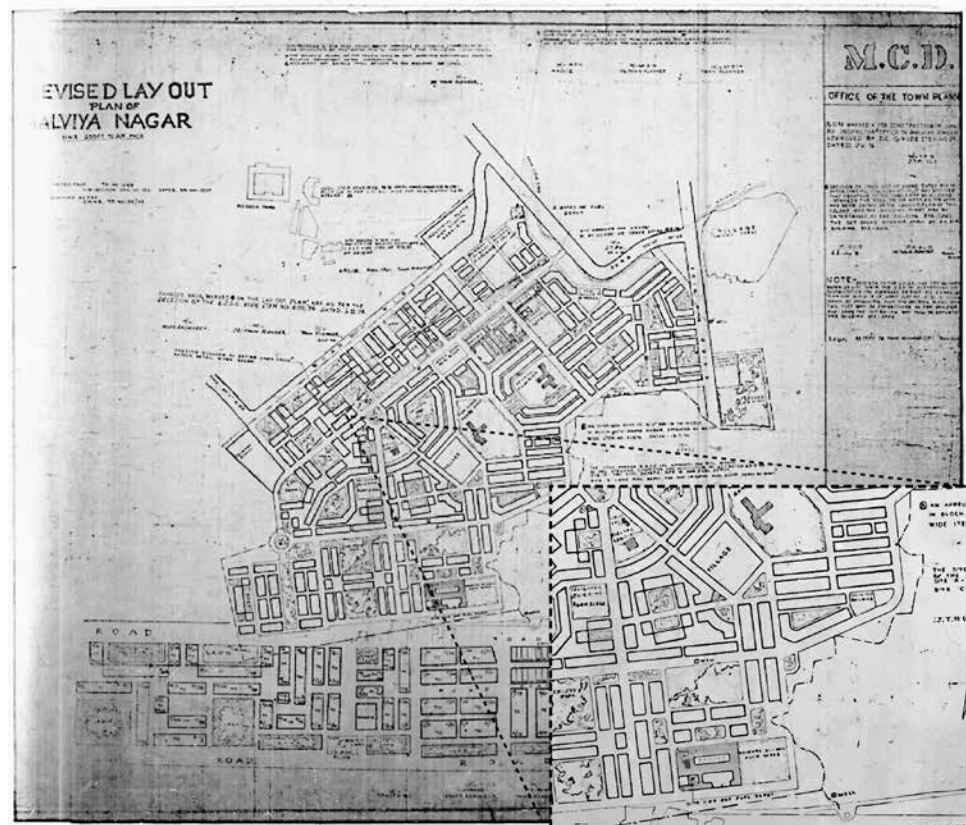


FIGURE 2. Layout plan of a typical new South Delhi residential neighborhood (Malviya Nagar). Source: Municipal Corporation of Delhi (MCD) Town Planning Department.

fashioned development authorities of towns and cities, and enshrined within newly minted and empowered planning documents. Such was the case with the Interim General Plan for Delhi, whose intent was “to use neighborhood units to prevent ‘ghetto-formation.’”³⁹

Among other things, as Vidyarthi has suggested, Koenigsberger, a German émigré, “believed that nonsectarian and standardized solutions, such as the neighborhood unit, could swiftly alleviate religious–political strife and the tensions around the scarcity of housing in post-independence India.”⁴⁰ His goal was to establish a new spatial paradigm, based on principles of modern urbanism. Secular, democratic and individualistic, “the plan” itself would represent the utopia. As Ravi Sundaram has argued,

*The plan’s important innovation was to set in motion an implicit idea of the city as a machine, which was regulated by a technocratic apparatus. This idea of the machine city worked with a schema of decentralization with cellular neighborhoods, zoning, district centers, factory areas — all regulated by law.*⁴¹

By the 1970s this new spatial planning tradition had taken root within the collective psyche of the professional and upwardly mobile middle class of the city. Members of this demographic aspired to own a *kothi*, a single-story dwelling with a front yard, with the ability to accommodate multiple generations over time. The new neighborhood planning ideal promised such a future and allowed them to buy into the vision of a nonsectarian, ordered city, while segregating them from the ongoing and equally prolific informal growth of the city.

Meanwhile, by promoting monofunctional zoning, the neighborhood planning regime also pushed the demand for new mixed-use and commercial areas to the margins — i.e., into pockets of informal production. And it thus proved to be an unwitting agent in their simultaneous explosive growth. On the one hand (much like colonial planning schemes), the new planning regime was dependent on the acquisition of vast tracts of agricultural hinterland containing Delhi-area villages and traditional settlements; and this meant dispossessing large populations through laws of eminent domain, such as the Land Acquisition Act of 1894. Yet, at the same time, the plan incentivized the intensification of informal development within remaining pockets of settled land through exclusionary zoning policies and a “hands-off” approach towards *abadi* areas in urban villages.⁴² In the end, urban villages thus adapted to a new mode of organic development, building vertically, subdividing properties into multiple dwelling units, and promoting a mixture of uses. This form of development was then further encouraged by the state through a 1963 circular that exempted properties within the village *lal dora* (the area not explicitly designated for agricultural use, and thus subject to seizure by the state through eminent domain for new urban community development) from building bylaws.⁴³

Once again, outside the purview and control of a formal planning regime, organic growth flourished. And throughout the post-Independence years, urban villages and other areas of marginal growth continued to attract migrant workers to the city, provide affordable housing for those who needed it, and support the many needs of more privileged residents who lived in nearby planned and ordered areas of the city.

MOBILITY CRISIS AND TRANSIT-ORIENTED DEVELOPMENT

For many decades following Independence, Delhi remained a low-rise, medium-density city where planned neighborhoods for the most part enjoyed an almost utopian relationship with the informal city. Urban villages and UACs continued to service these areas without contaminating them with their informal practices. The streets of newly planned and partially built neighborhoods were thus mostly devoid of cars, pavement, or designated parking. Children could play outside, unafraid of the odd passing vehicle, while parents would look on, enjoying the chance for impromptu conversations with neighbors who happened to walk by.

After economic liberalization in the 1990s, however, Delhi began to undergo a massive physical and societal transformation. As part of this shift, residential areas that had once been peripheral to the “city” were transformed into inner-city neighborhoods and began to experience a tremendous growth in property values. As the city grew around them, the owners of plots in planned neighborhoods were now able to pay a premium to convert lease-hold properties to “free-hold.” And their aspirations likewise changed as they started to see their homes as economic assets. Real estate development pressures only reinforced these personal aspirations, as the neoliberal ethic began to take hold and exert a strong influence on the so-called middle class.

As a result of these new forces, formally plotted neighborhoods saw rapid densification both vertically, in terms of floor area ratio (FAR), and horizontally, in terms of total building footprint — a trajectory similar to that experienced in the urban villages and UACs. And in the years that followed, neighborhoods that had initially been planned for automobiles (yet had scarcely ever had to deal with them) proved incapable of accommodating the unprecedented growth in the number of personal vehicles. Meanwhile, informal commercial activity continued to thrive on streets across the city. Eventually, as street space began to vanish under pressure both from increasing numbers of vehicles and the use of street space for informal commerce, the result was the creation of a “parking crisis.”⁴⁴

The accompanying graphic demonstrates some of the conflicts that typically arise on neighborhood streets and conditions that are commonplace in Delhi (FIG. 3). As it shows, paving is absent in many places; parking on-street

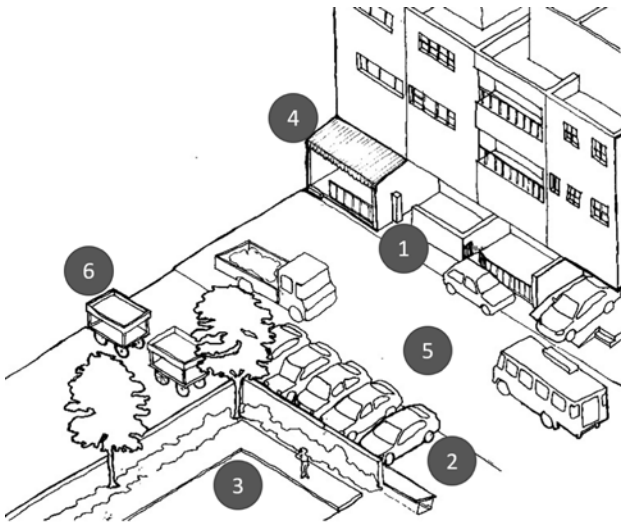


FIGURE 3. Present condition and conflicts within Delhi's planned neighborhoods. 1) Missing pavement. 2) Contested on-street parking. 3) Contested access to parks and public spaces. 4) Encroachments by property owners. 5) Right-of-way congestion. 6) Informal commercial activity, such as by hawkers. Drawing by author.

is haphazard and contested; commercial activity is often unwanted; and access to parks and public spaces is widely compromised. Meanwhile, encroachments onto the street by property owners leave little room for trunk infrastructure, streetscaping, or pavement interventions. Right-of-way congestion and road safety have also become a constant source of conflict between resident welfare groups and vehicle owners.

In historic terms, however, it must be noted that present trends of organic densification and increased encroachment of cars and commercial activity onto street space are for the most part an unintended consequence of the automobile-oriented planning that underlies the neighborhood unit model. And, once again, their appearance provides an example of how, in Delhi, formally planned spaces only tend to foster new informal practices, economies, and patterns of labor. State attempts to cope with the new demand for informal developments and services (generated precisely by new exercises in formal planning) have, moreover, only made matters worse. In particular, incremental additions to maximum ground coverage, allowable FARs, and the “notification” of residential streets for commercial activity have only resulted in areas being forced to accommodate even more cars.⁴⁵ Meanwhile, permitting the sale of real estate through General Power of Attorney (PoA), as opposed to registered property titles, led to a boom in property values.⁴⁶ This is true even for parcels without express development rights, or which are located within unauthorized development areas. Unregulated practices in property markets, as well as enhancements and

relaxations in building bylaws, have thus combined with the growing purchasing power of the middle class to bring informal development to the “planned neighborhoods” of Delhi, expanding the effective boundary of the informal city.

One particularly significant outcome of the informalization of planned neighborhoods and their construction markets has been the evolution of a new building type. In 2011 the Municipal Corporation of Delhi (MCD) issued an administrative order mandating the inclusion of a floor dedicated to parking in all proposals for the redevelopment of individual residential plots. The order was issued as an emergency measure to address the parking crisis, its intent being to ensure that all private vehicles could be parked on the premises of their owners rather than on the street. However, the provision of a mandatory floor for parking, other incremental enhancements in FAR, and a booming construction industry arguably fostered the widespread emergence of the “builder floor,” a new residential building type in Delhi (FIG. 4).

The term “builder floor” is generally used today to describe a four- or five-story residential building whose first living floor is raised on concrete stilts, so its ground floor can be given over entirely to parking and service use. The name, however, also describes the arrangement behind its financing and construction. Typically in these projects, a builder either collaborates with or buys an “undivided” share of a property from an owner in exchange for investing his own capital to cover the costs of construction. The newly built four- or five-story structure is then vertically subdivided, with the builder receiving one of the floors, which have been made into individual dwelling units.

Popularly recognized by the mass media, the builder floor has precedents and parallels in other cities, as Sarani Khatua has reported from Kolkata.⁴⁷ But its most significant impact in Delhi has been to subdivide property ownership on formerly single-unit dwelling plots among a number of new owners. Essentially, it thus transforms neighborhoods once characterized by single-family homes into ones dominated by buildings that offer an alternative to traditional multiunit apartment complexes.⁴⁸ As might be expected, this also increases local demand for parking, sewerage, electricity, and other public services. Yet, despite the absolute explosion of such activity in formerly planned neighborhoods, elite conversations about the role of the state in controlling such new development has been largely absent.

At the same time these changes have been taking place in planned neighborhoods, a new elite discourse has emerged around the evils of unchecked automobility and the need for alternative forms of urban transport. Although this had been a topic of discussion in professional circles since the 1970s, in 1988 a report by the National Commission on Urbanisation brought widespread attention to the impact of transport networks on the development of the city.⁴⁹ And while several issues highlighted in the report had already been recognized



FIGURE 4. The transformation of formally plotted neighborhoods with the emergence of the new “builder floor” residential typology. Photos by author.

within policy circles, it broke new ground by focusing explicitly on the interrelation between transportation policy and urban form, stating that “an urban transportation system can be developed optimally only when transport and land use planning are examined together.”⁵⁰

Emphasis on the importance of transport planning, specifically with regard to mass transit, was subsequently carried forward in research on sustainable mobility within Delhi. Much of this was eventually adopted as official policy, mostly in terms of the design of new road infrastructure and the initiation of mass transit projects such as the Delhi Metro. In this regard, concern by experts, activists, and civil society in India over urban mobility and environmental quality has proven effective in prioritizing a new formal development agenda based on theories and practices of sustainable transport.⁵¹ And the adoption of a sustainable mobility agenda at various government policy levels has now led to the formal embrace of a new transit-oriented-development (TOD) model for the city.

Based on principles of land use and transport integration, TOD is intended to both make public transport immediately accessible to commuters and address the city’s parking crisis through demand management and the creation of incentives for people to use public transport.⁵² Typically planned along major public transit corridors and around existing or future transit hubs, TODs have the potential to leverage significant infrastructure investment and attract capital. Additionally, as a spatial planning model, the TOD approach incentivizes the clean-slate redevelopment of vast tracts of public land in the heart of the city as high-density, mixed-use superblocks.

As Sidharata Roy has noted, “drafted with primarily Delhi Metro and railway stations in mind, the policy . . . enables node-based TOD around upcoming modes of public transit, such as RRTS, Metro Lite, Metro-Neo, BRT, LRT, making it ‘future ready.’”⁵³ The first major pilot project, called Kadkardooma TOD, has been proposed at a site in east Delhi. Situated at one of the end terminals of the Metro, it has been forcefully marketed by the planning authority and presented as the next major paradigm for urban development. And, though it is yet to be built, the TOD promises to deliver new, well-planned areas of the city on an unprecedented scale.

Yet, recent reports from a similar comprehensive redevelopment project in the city do not bode well for the future of such a more “principled” model. According to a recent news article, the East Kidwai Nagar project (built by the National Buildings Construction Corporation), has already broken with TOD norms, greatly underestimated traffic generation, and encountered problems with water supply to residents.⁵⁴ In addition, despite the official mandate to situate new development in Delhi within TOD catchment areas, the Kidwai Nagar project is not strictly located within such an area. And, despite its location next to a transit hub, neither does it seem to disincentivize car use by residents. Indeed, by all appearances, it has significantly added to the congestion along a nearby major arterial road. As reports suggest, a major problem in this regard is that much of the Kidwai Nagar housing is occupied by high-level government officials who often use government-issued automobiles rather than mass transit to commute to work.

A further general problem with the TOD strategy is that despite a government commitment to the production of affordable housing, most proposed TOD catchment

areas fall within the highest-demand areas of the city, where competitive housing markets are unlikely to favor affordability. At least on paper (looking beyond mass transit hubs such as Metro stations alone), the TOD policy in Delhi thus does not currently prioritize development in areas of the city where it might promote good connectivity, access, and affordable housing. Meanwhile, it fosters a development mindset that focuses on big infrastructure while discounting the prolific informal housing and rental market in the city — much of which comes from the very urban villages and settlements that formal planning maligns.

Besides, and perhaps most importantly, TODs tend to focus infrastructure investment along major arterial roads, further diverting attention from the problems of existing neighborhoods. Much as was the case under the rule of British colonial administrators with regard to the old city of Shahjahanabad, these have been relegated to the informal sector. In this regard, the new TOD model of urban development may prove to be yet another example of the abandonment of the preexisting in favor of a new (and ultimately inadequate) utopia.

FAILURE AS A PLANNING TRADITION

This article has reviewed the outcome and prospect of three major spatial planning paradigms in Delhi's history. In the first case, Delhi's colonial rulers sought to impose specific kinds of technological and cultural modernity through the introduction of infrastructure and the systematic capture and reclassification of land for urban development. In the process, however, they eradicated indigenous and informal practices that had governed the use of urban land for generations. The goal of this effort was to foster commerce and entrepreneurship among the indigenous population. But this ultimately also condemned the Old City as a consequence of the congestion and uncontrolled densification brought by the new development approach.

As the article has described, the Old City and “informal settlements” were eventually abandoned in favor of the construction of New Delhi. As a grand utopian scheme both physically and symbolically, its planning sought to establish a new modernist ideal while also separating the urban elite from the city's growing lower classes. Yet, given the pressures of rapid population growth, the post-Independence planners who succeeded the colonial powers proved unable to deal with the increasingly dense and fraught urban fabric of the city. And, following the same modernist ideals that had led to the creation of New Delhi, they continued to direct their attention away from the city's older areas. In this effort they also institutionalized and enshrined Clarence Perry's concept of the neighborhood unit through the development of vast areas devoted to single-family dwellings on rural land acquired in the name of public good.

Such a new, modern vision after the partition of India promised the realization of nonsectarian social order and a development trajectory away from the specter of “ghettoization.” Yet these ordered, planned neighborhoods made no room for the burgeoning informal economy of the city. Nor did they address the needs of the thousands of marginal and migrant workers who would keep its economic engine running in the years to come. The needs of these people and their associated commercial networks would rather be accommodated in informal urban villages and UACs.

Time would also reveal how the new post-Independence neighborhoods, which adopted an automobile-oriented model of planning, failed to anticipate their own potential for densification. With the neoliberal transformation of the Indian economy that began in the 1990s, these neighborhoods grew into congested containers for private vehicles, increasingly characterized by private encroachments into public space. Temporary and incremental attempts to address these problems using formal planning tools, such as by increasing allowable FARs and through commercial notification of streets, only made matters worse, eventually leading to the organic evolution of the new “builder floor” building typology. In the end, the effect of such developments has been to expand the boundary of the informal city to include many of its formerly planned neighborhoods.

Nowadays, a new planning regime based on TOD projects has been conceived in an attempt to harness the development potential of mass transit, with the ostensible corollary purpose of improving urban mobility for the masses. However, early evidence suggests that real-world implementation of this TOD strategy may focus more on the revenue-generating capacity and investment potential of clean-slate redevelopment projects. There is little evidence it is designed to address the reality of informal production as it is actually proceeding in the city.

Arguably, over the course of the last century, a “tradition” has emerged to plan for Delhi's spatial growth based on rationalist/modernist models, which are then abandoned when they fail to stem the tide of informal growth, only to be replaced by new models, which are themselves destined to fail for the same reasons. The introduction of each new formal planning regime has marked a new landmark juncture in Delhi's planning history, and they have proven transformative and generative of its most iconic built fabric. However, as this article has argued, in order to differentiate themselves, these formal planning paradigms have not only had to condemn the organic, informal past, but they have acted as catalysts in its dereliction. Meanwhile, they have sought to produce and delineate thresholds between the formal and informal, order and chaos, planned and unplanned.

Each of these formal planning regimes looked to replace Delhi's historic landownership and tenure patterns, traditional lifestyles, urban grain, and street networks, and their fraught conditions, with a new, imagined utopian future.

Yet each also failed when confronted with the challenge of contending with preexisting forms of land occupation, stewardship, production, and persistent morphologies. And in the end it has been their failure to control, direct or predict the future of Delhi's built environment that has led to the city's reputation as a place of runaway informal growth.

At the same time that the state has supposedly been unable to cope with this tide of informal growth, however, each of its

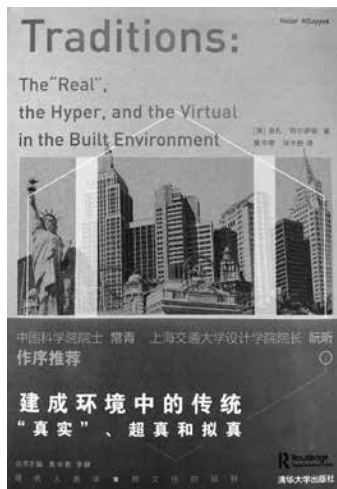
formal models of development has been dependent on prolific informal production to accommodate those sectors of the population whose needs have not been recognized by formal planning models. Each new planning regime thus begins by instigating the need for vast new informal developments in the city, only to marginalize these in favor of a new, formally planned utopia. The result has been a vicious cycle of breaking and making traditions in spatial planning practice.

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37. The term "plotting" may be used in India to describe the process of formal survey and subdivision known in the U.S. as "platting." A plat map typically shows the division of a new neighborhood into various private lots or parcels, as well as areas set aside for streets, parks, school sites, utility easements, etc. After adoption by a local government, it is critical to any process of formal development.
38. S. Vidyarthi, "Inappropriately Appropriated or Innovatively Indigenized? Neighborhood Unit Concept in Post-independence India," *Journal of Planning History*, Vol.9 No.4, 2010, p.261.
39. *Ibid.*
40. S. Vidyarthi, *One Idea, Many Plans: An American City Design Concept in Independent India* (New York: Routledge, 2015), p.19. Also see V. Baweja, "Otto Koenigsberger and the Development of Tropical Architecture in India, 1939–1951," *Arris: The Journal of the Southeast Chapter of Architectural Historians*, Vol.25 (2014), p.2–2.
41. R. Sundaram, *Pirate Modernity: Delhi's Media Urbanism* (London and New York: Routledge, 2009), p.19.
42. Residential area of the village, typically under communal ownership, often without individuated land titles.
43. "The term Lal Dora was first used in 1908 to define the habitation (abadi) land of a village. The land revenue department used to tie a 'red thread' (Lal Dora) around the village extension area to differentiate this land from the agricultural land. During land acquisition, this demarcation was held steady, and the state acquired only the land outside the lal dora, which was the agricultural land." S. Pati, "The Regime of Registers: Land Ownership and State Planning in the Urban Villages of Delhi," *SOAS South Asia Institute Working Papers*, No.1 (2015), p.19. See also S. Pati, "The Productive Fuzziness of Land Documents: The State and Processes of Accumulation in Urban Villages of Delhi," *Contributions to Indian Sociology*, Vol.53 No.2 (2019), pp.249–71, <https://doi.org/10.1177/0069966719836884>.
44. Recent news articles on the subject include "Delhi's Mega Parking Crisis," *The Patriot*, June 21, 2019, sec. Reports, available at <https://thepatriot.in/2019/06/21/delhis-mega-parking-crisis/>; and "Parking One of Delhi's 'Most Serious Problems,' Says Supreme Court," *NDTV*, September 3, 2019, available at <https://www.ndtv.com/india-news/parking-one-of-delhis-most-serious-problems-says-supreme-court-2094603>.
45. Notification of commercial streets is an incremental planning measure that allows specific kinds of commercial activity to occupy buildings meant for residential use along certain important roads and commercial corridors.
46. General Power of Attorney (PoA) is a legal authority, created under the Powers of Attorney Act of 1882 and the Indian Stamp Act of 1899. It is now being used to transfer the right to sell, buy, rent, collect rent, pay taxes, repair, conduct litigation, etc. with regard to a property from one individual to another without formal sale.
47. S. Khatua, "The Role of Small Promoters in Kolkata's Housing Transformation," India Housing Report 2021, available at <https://indiahousingreport.in/outputs/opinion/role-of-small-promoters-in-kolkatas-housing-transformation/>.
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52. To understand the basis for the new model, see, for example, R.B. Cervero, "Linking Urban Transport and Land Use in Developing Countries," *Journal of Transport and Land Use*, Vol.6 No.1 (2013), p.7, [doi:10.5198/jtlu.v6i1.425](https://doi.org/10.5198/jtlu.v6i1.425).
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Special Report on the Roundtable at IASTE 2022



Reframing “Tradition” and Its Practice in the Chinese Context: The Chinese Edition of Nezar AlSayyad’s *Traditions: The “Real,” the Hyper, and the Virtual in the Built Environment*

REPORT BY HUAQING HUANG AND YUSHU LIANG

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Huaqing Huang

Hello everyone. Today we’re here for a special roundtable session on the Chinese edition of Nezar AlSayyad’s *Traditions: The “Real,” the Hyper, and the Virtual in the Built Environment*, translated by me and **Dr. Yushu Liang**, my co-chair for this session. We are taking the publication of this book as a challenge, but also as an



opportunity, to refrain the concept of “tradition” and its practice in the Chinese context.

First, please allow me to give a short introduction to this book and the translation process. The project began in 2016, when I first met Nezar at the IASTE Kuwait conference. I was a Ph.D. student back then and I found the book quite relevant to my research. On returning to China, I talked with the editor from Tsinghua University Press, who was interested as well. In 2018 the press obtained the copyright for the Chinese edition. The translation then took us two years, and the publishing process took over one year. We also invited Prof. Qing Chang from Tongji University and Prof. Xing Ruan to write Chinese prologues for the new edition. I suppose many of you are quite familiar with the contents of the book. It covers almost all the themes and related fields around the concept of “tradition,” including tradition and vernacular, tradition and modernity, tradition and colonialism, nation state and tourism, the “real,” the hyper, and virtual tradition, etc. For me, it also provides an almost comprehensive summary of previous IASTE conferences.

Today, I will begin with this question: **what do we talk about when we talk about tradition in China?** In the English introduction to the book, Nezar already raised the question of the translation of “tradition” into different languages, such as Chinese and Arabic, where



Roundtable participants from left to right: Puay Peng Ho, Nezar AlSayyad, Xing Ruan, Huaqing Huang, Yushu Liang. Xiaodong Li joined via Zoom.

it might lead to quite different meanings. In Chinese, the most widely used parallel word is 传统 [*chuan tong*], which is itself a very complicated concept. The anthropologist Robert Redfield once framed culture as a matter of “great traditions” for the elite and “little traditions” for the common man. In China we similarly have a couple of dichotomous spheres to depict the scenes surrounding this word.

First, we have the “**classical tradition**,” as, for example, in the Foguang Temple in Shanxi Province (FIG. 1). Built in

857 CE, this is one of the oldest surviving wooden buildings in China. Tradition here refers to an architectonic system based on high-standard tenon-and-mortise joints, used only in important imperial palaces and Buddhist temples. But in terms of architectonics, there exist many more diverse presentations of tradition in vernacular architecture. Take, for example, the structural techniques used in a nineteenth-century wooden bridge built in the village of Tiandi in the mountains of Fujian Province (FIG. 2). When we compare



FIGURE 1 Foguang Temple. Photograph by Huaqing Huang, 2012.

the "classical tradition" to the "vernacular tradition," the former occupies the core of Chinese history, while the latter lies at its periphery. Nevertheless, they are both integral to the historic scene.

Second, if we see tradition in China as a constantly evolving scene, we may talk about the "traditional tradition" and the "modern tradition." This may become apparent, for example, in two images of Zhaoxing Village in Guizhou Province, shot at very different times. One depicts a hidden secret settlement lost in history, as photographed by Prof. Xing Ruan when he did field research there in 1993 (FIG. 3). The village here is set picturesquely against the backdrop of the high mountains of southwestern China. The other image shows the same village 25 years later, when it was chosen as a site for the National Gala of the Chinese New Year (FIG. 4). This event was broadcast across the country and made the village much more well known. At first it seems that nothing has changed. But actually, lots of things have changed. Instead of being a secluded site as in 1993, the village has now been tailored specifically for the taste of modern tourists. This may remind us of what Nezar discusses in his book about the relation between tradition and tourism, as well as the dynamism of tradition.

A third perspective on tradition comes from ongoing contemporary design practice. When we talk about tradition in China, we may be concerned with the conservation and inheritance of tradition, as in Prof. Puay Peng Ho's excellent work in the rehabilitation of an old police station into a green hub in Hong Kong (FIG. 5). But this is only one approach. We could also point to the project of Bridge School, designed by Prof. Xiaodong Li, where a modern but delicate gesture was used to create a form in dialogue with the famous Earth

Castles of Fujian, a UNESCO World Heritage site (FIG. 6). This distinction between the "inheritance of tradition" and the "intervention of tradition" points to how designers today may gesture towards tradition as a way to continue its effect in a contemporary context.

Finally, when we talk about tradition in China, we may refer to "real tradition," as evident in the famous Mogao Caves (FIG. 7). It provides us with embodied experience of a glorious distant past that is now faced with increasing threats brought by climate change and over-development as a result of tourism. Meanwhile, attempts are being made to explore the emerging experience of "virtual tradition," as, for example, in Prof. Puay Peng Ho's use of virtual reality technology to create a simulated experience of the Mogao Caves (FIG. 8). Through this practice he is challenging the dichotomy between reality and virtuality in the experience of tradition.

To add to this discussion, I might also here briefly translate some of the sentences from the two prologues that are new for this Chinese edition. The first is by Prof. Qing Chang of the Chinese Academy of Sciences, an influential scholar of heritage and a practitioner of heritage conservation. As he writes,

Prof. AlSayyad proposes that under the impact of "cultural hegemony" and "consumable tradition" brought about by globalization and urbanization, the "authenticity" of tradition, associated with specific regionality and sense of place, passed down from generation to generation as the source of identity and value, is currently going through a process of dissolving, transforming and ending. This judgment is undoubtedly a thought-provoking insight into the development of architecture.



FIGURE 2 Bridge near the mountain village of Tiandi in Fujian Province. Photograph by Huaqing Huang, 2021.

FIGURE 3 Traditional villlage as a secret settlement. Photograph by Xing Ruan, 1993. Cited in Xing Ruan, *Allegorical Architecture: Living Myth and Architectonics in Southern China* (Honolulu: University of Hawaii Press, 2006), p.95.



Chang also writes about four categories of architectural tradition in China:

First is the custom of construction and use, unconsciously manifested in the routine of the subject's thinking mode and behavior habits; second is the carrier of cultural symbols and identity, the "built heritage" formed through construction methods throughout the ages and protected by law; third is the revival of historic forms, commonly seen in modern buildings in historic style for nostalgia and cultural consumption; fourth is the representation of archetypal images, the inheritance and transformation of architectural cultural essence. . . .

As a practitioner, Chang is also intrigued by Nezar's key point in the book, that "a key question that frames this book is the interrogation of tradition as an essentially spatial project and process." I think this is an important topic to explore further today.

Prof. Xing Ruan, meanwhile, writes in his prologue:

. . . looking at the themes of previous conferences hosted by Prof. AlSayyad for over thirty years, we may observe two threads of gradually changing concepts: one is that tradition has moved from the "periphery" to the "center" at the same time as traditional settlements have turned into a kind of globalized consumer society; second, the "real" nature of tradition has gradually become hyper-real and virtual, giving rise to the title of this book. . . . It can be seen that the objects of Prof. AlSayyad's academic journey have transformed from an "unchanging tradition" on the periphery to a constantly changing, complicated and creative tradition. . . .

Ruan proposes to learn from this point, and he offers a very interesting proposal from the context of Chinese culture.

In the place of Prof. AlSayyad, we need to keep pace with the times. For the inheritance of Chinese tradition, we might as well try the method proposed by the monk Nan Huai-Chin: The way of Confucius and Mencius is a food store, which you must visit every day; Taoism is a drug store, and you visit it only when you are sick; Buddhism is a department store where you go shopping when you have money and leisure.

Today, we propose three topics for this roundtable.

Through these we will seek to bring forward how the interrogation of "tradition," raised by Nezar's book, may provoke debate around its historical foundation, theoretical framework, and practical implications in China — as well as in Chinese diasporas overseas.

First, we will discuss **TRANSLATION**. By this we mean to translate the discourse of tradition within the Chinese theoretical context and to reflect on its specificity, considering its pivotal status, profound meanings, and entangled contingencies.

Second, related to the theme of this conference, we will talk about **RUPTURE**. By this we mean to reconsider the implications of tradition in the Chinese built environment by reflecting on the ruptures, challenges and opportunities it engenders. We further mean to interrogate the norms around key concepts related to tradition, such as modernity, the vernacular, tourism, identity, the nation-state, etc.

And last, we will deal with the theme of **RESTRUCTURING**. By this we mean to reframe paradigms and approaches of practice around the spheres of tradition. Following



FIGURE 4 *Modern traditional village. The same village as in Figure 3, 25 years later. Photograph by Huaqing Huang, 2018.*

AlSayyad's interrogation of tradition "as an essentially spatial project and process" (p.9), we shall discuss solutions to these dilemmas in related spatial practices, including heritage conservation, urban renewal, rural revitalization, and the virtualization of traditional environments.

That's all for my brief introduction. Now let us proceed to the initial responses and reflections by the three discussants.

Xiaodong Li

Thank you, Huaqing. Today I will talk a little bit about tradition and also about history and culture based on how I define the term in my designs.

We see things from different perspectives due to the different educational and environmental backgrounds in which we grew up. We see things as we were told to see them, and sometimes we don't care what the reason for that is. For instance, a sphere is the most common and perfect geometric form in the universe. Yet we never challenge why all the stars take the form of spheres and how they hold this quality in common with grapes. Actually, it's very simple. The common character of all spheres is that they maximize content and minimize surface area. Since the surface of an object protects its contents, to maximize the efficiency of protection we arrive at this natural, perfect geometric form. With the same logic, we can understand the reason why leaves are planar: it is the most efficient way of taking energy from the sun.

While all architects know the work of Frank Lloyd Wright, very few know he was the first Western architect to use the bird's-eye perspective widely in representing his work. In Western philosophy, there's a subject and an object. A human subject typically looks at an object from a normal human level, so the human perspective is very important to

present reality. Yet on the other side of the world, in China, we don't differentiate what is subject and what is object. We see the world as a whole. Human beings are part of the universe and part of heaven, as we call it 天人合一 [*tian ren he yi*]. So, all drawings in Chinese history have been presented in bird's eye view, as if from the perspective of a god. As such, we can see things beyond things: we see buildings beyond buildings, mountains beyond buildings. We see the system, and we see layers of things. The story of an entire city can even be presented on one drawing.

Take another example that is more about cultural difference. In a Chinese garden we typically see pavilions, rocks, water and trees, but the most important element is the corridor. This never provides a straightforward presentation; rather, it takes the form of a more elongated walkway, because something is needed to create a dynamic experience, to change the angles by which we see things. Yet, in Japan, they learned Chinese culture, but somehow in garden design, they don't have elongated corridors. The experience is more like what we call 枯山水 [*ku shan-shui*], where you sit and appreciate the landscape in front of you.

The reason behind this is that behind the Chinese garden the landscape is represented by the Huangshan Mountains (黄山, or "the Yellow Mountains"). This is a changing landscape, so when you look at them from afar or close they are different. They are also different in different seasons, and from morning to afternoon they change. To understand the mountains whole, you thus need to experience them in a dynamic way. Yet, in Japan, mountains are represented by Mount Fuji, which is a volcano. Most of the mountains in Japan are volcanoes. They look the same from either far or close distance, and to experience their shape we don't really need to walk around them. Because the

artificial world is inspired by the natural world, the result is a difference between two cultures.

For centuries, cultures built their worlds differently — according to different lifestyles, climate conditions, materials, and so forth. Yet, from the beginning of the last century, we began to do things similarly because of industrialization and globalization. Architects tried to fight back using personal style, and in the last century this enriched architectural language. But is this the future? **My argument is that we need a connection, a dialogue between architecture and reality, history, culture and local conditions.** We need to have a **more efficient way of expressing architectural design, instead of a personal one.**

So, this is my solution. I try to play with local materials, climate conditions and lifestyles, and how local people see things. Yet my buildings also want to engage with modern technology and understanding. It's really about how contemporary lifestyles can be integrated with traditional understanding of the world, of space, of sequences, of how things can be done together as a complete dialogue. It's about how legendary stories can be translated into a contemporary thing. **It's about engaging critical understanding about how the local environment can be inspired to move forward.** It's about how contemporary ideas can be integrated as one piece of a package to explain what cultural identity is in a particular setting.

Huaqing Huang

Thank you. Prof. Li's approach presents a pioneering and enlightening path in contemporary Chinese architectural practice, especially in terms of so-called "critical regionalism." His practice has demonstrated this detouring path from a very direct representation of local materials and techniques, towards a more critical and more comprehensive response to what we call tradition, or what we call regionalism. Okay, now let's welcome Prof. Puay Peng Ho.



Puay Peng Ho

Thank you, Huaqing. When I look at the book and the topics that Nezar considers in it, it's almost like taking a journey inside IASTE since it was started 34 years ago.

It also coincides with my career and my academic interests. When I was doing my Ph.D., I was mainly concerned with subjects that touched on the custom of tradition as well as the artistic history of the city of Dunhuang. But when I started teaching in Hong Kong, I thought that I needed to be localized. So I took up the study of the vernacular architecture and villages there. Two years later I attended my first IASTE conference in Tunis, and I presented my study of traditional villages in Hong Kong. At that time (and I mean here to reflect on the title of Nezar's book), **I was more interested in form and space**, in understanding the structure of the villages, and in looking at the hierarchical relationship between different structures.

Obviously, I was also looking at the social dimensions — the people living there, their tradition, their rituals, and so on. And slowly from that my **object-based study moved more towards the conceptual.** I began to think about what tradition is as an expression from the physical component. I was beginning to pursue that reading when I went to the same village that Prof. Ruan photographed in 1993. I was there in 1998. At that time, I was still looking at the objects, but I was moving away from them to consider the idea of tradition. And today I'm getting more and more in line with Nezar's approach to tradition as a hyper-condition, or as hyper-tradition.

How do we see tradition not as something static, not only as something constructed, not as a tradition that will tie us down to a period of time, but as evolving all the time? As something evolving not only through time, but also with the changing social, cultural and geographical contexts of the times?



FIGURE 5 Police station as green hub in Hong Kong. Source: https://en.wikipedia.org/wiki/Old_Tai_Po_Police_Station.

Looking into the idea of tradition from Hong Kong, I studied vernacular architecture in a lot of villages in China. I also invited Hong Kong broadcast services to make a television program about one village. At that time, I was looking not just at the form of the village, because it was almost a dying village with nobody living there. I was also trying to look at the symbolism of the village structure and its relation to ritual. Quite coincidentally, the second time I visited with the TV crew, an opera troupe from the neighboring county came to perform at the Black Dragon Temple on an ancient stage to no audience. They were hired by someone who went to that temple to pray. I suppose his prayer was answered, and to thank the god, he invited this opera troupe from another county to come and perform on that stage. He did not have to be there; it was a performance for no one. But we happened to be there.

I remember this episode clearly because I interviewed the main actress. She had stayed at the temple for three days because there was no hotel in that particular village and she had to prepare to perform. And when I talked to her she was nursing her baby and at the same time putting on makeup. There was even one moment when I could not talk to her because she had to pray to the god before the performance. But I followed all that. I just kept wondering: it was a traditional art form, it was a traditional opera, it was a traditional religious practice to return the blessing given by the god — but there was no need to have an audience because the village was deserted? **What was tradition in that context? And how could you conceptualize it?**

The actress was also telling me that in that part of the province many villages were dying. However, in the past ten years they had been attempting a process of revival, trying to develop the villages for tourism. But all those efforts were failing because the villages were not close to any major touristic resources. So, they were trying to revive the tradition, but they had forgotten about the social context, about the society that was living there, about the living tradition that goes on changing and developing. I was interested in that and kept on looking. We stayed in the villages for many days at a time, with students participating in everything. I participated in a wedding ceremony, talking to a bride; I participated in funeral services, talking to the Taoist priest; I talked to the elders of the village, looked at the village genealogy, and so on. By doing so we were **trying to re-create the kind of social context that would allow us to understand tradition as a flux — a movement through time, space, different conceptualizations, and many imaginations.**

In his introduction, Huaqing also mentioned that I have been doing work on "virtual traditions." I was invited to give a keynote on that topic at the last IASTE conference. My thoughts here are related to what Prof. Li just talked about in terms of perspective, in terms of the way of looking. At the time I was interested in virtual presentations as a form of cultural preservation. But my main question was: **What**



Huaqing Huang addresses the audience and panel members at the beginning of the session.

tradition are we preserving and what are we presenting? What are we representing? And how might that representation and that presentation together only provide a snapshot of tradition at that moment of time? Moreover, who made up that tradition? Take for example the digitization of Dunhuang, the cave temples, or old Chinese paintings. These objects have been passed down from history to the present day. Are those traditions still related to us and our lived experience? What is our conceptual experience of them as tradition? All this relates not only to the form of representation, the nature of presentation, but also to the recipient of the presentation. This is probably very similar to what Nezar was thinking about in terms of "virtual traditions."

My take on this is that a lot of the time **we present an aesthetic view of everything.** Perhaps there should be a way for us instead to **understand tradition both as a snapshot in time and as a constant flux of changes.** Change is inevitable, and it is the constant. It is probably something we should define and should be used to define tradition. In that sense, what the virtual or digital offers is something that would be handy and appropriate to use to represent this flux in tradition.

Huaqing Huang

Thank you, Prof. Ho. Your case about the village reminds me of many things that I have been going through in recent years. You have also brought the discussion to a very critical context. In rural areas of China "tradition" is now faced with the most paradoxical of conditions because of the nationwide program of "revitalization." It also reminds me that Nezar's book has brought forward the question of *what* tradition and *whose* tradition we are preserving. I think this is a very good start for our roundtable. Now, let's welcome Prof. Xing Ruan.



Xing Ruan

Thank you very much, Huaqing. It's really a great delight to be here. This gives me the opportunity to have a face-to-face meeting with friends and colleagues, and it's a very rare opportunity to have a dialogue with

Nezar. What I can do today is to give you my own English translation of the prologue that I wrote for the Chinese publication. Huaqing has done a marvelous job, but I think I can elaborate on it a little bit. As Prof. Li has said, Chinese culture and tradition are so different, and I think we have agreement from the West that Chinese culture is distinctive. **But instead of presenting a "god's perspective," I might introduce you to some nuanced aspects.**

First, I will say a little bit about Nezar. I consider you a colleague, although we have only met a few times — once in Berkeley and probably once in Australia, in my old university in Sydney. **But I consider you a colleague because we seem to do things in parallel.** My colleague Prof. Ronald Knapp and I have been working on a book series titled "Spatial Habitus: Meaning and Making in Asia's Architecture," including traditional and vernacular architecture. This series has been going on for more than twenty years now. We have published more than fifteen titles with a good coverage. We have been quiet observers of this tremendous organization, IASTE. You have been making waves around the world, and we have been producing monographs. Interesting parallel, yet we have never had such an intersection.

When I attempted to situate your book in the Chinese context, I thought it was my obligation to help Chinese readers understand where it comes from. My guess is that all of you sitting in this room are able to read Nezar's book, the original English version, but not all of you are able to read the Chinese

translation. And translation is a strange thing. Take the concept of tradition as an example. Is "tradition" as you mean it what we understand in China? The answer is uncertain.

Let me give you one example. When we talk about calligraphy, as the fine Belgian-Australian Sinologist Pierre Ryckmans (better known by his pen name Simon Leys) reminded us, we are in fact talking about two totally different things. Calligraphy in the Western tradition, or in Indo-European tradition, actually means the embellishment of writing. But in China there's no such thing called "calligraphy." Calligraphy, or 书法 [*shufa*], if I translate roughly, is the law of writing. But the Chinese concept of law is different from that of your law. So, if we talk about rule and law, it is not exactly the same thing. That is just the first part. Law of writing in China is not just longhand; it is a way of living, and it is also about writing a book, etc. So, for too long, **when you consider the Chinese tradition of "calligraphy," your starting point and the Chinese starting point are far apart.**

Concerning IASTE, my sense is that its starting point had something to do with **the spirit of place at Berkeley.** UC Berkeley is well-known for positions which come from the periphery — marginalized positions. As academics from a minority group, making attempts to legitimize something different from the mainstream, I suppose that was important. This particular trajectory in recent Western intellectual history is well known to all of you. And I consider myself one of you. Once upon a time there were the kindred spirits or pupils of Edward Said and his "Orientalism." But, as Said himself said, Orientalism is a profession or a career. And this position has been to some extent accepted and maybe taken for granted by many of us. As academics, we see our obligation as being to do something like that, **to legitimate a marginalized position and make it a part of or an equal part of the mainstream.**



FIGURE 6 Bridge School project by Li Xiaodong: a contemporary insertion into a traditional context Source: <https://the.akdn/en/how-we-work/our-agencies/aga-khan-trust-culture/akaa/bridge-school>.

When this particular conference happened in 2000 in Italy, its question or theme was: Is there an "end of tradition"? This obviously paraphrased Francis Fukuyama's famous book *The End of History*. I think he jumped a little too early, and now COVID has completely dashed his hope. History has not ended. But the whole concept of the "end of tradition" follows this view in the West that history is progressive, that it is linear. **The sharp contrast to that particular understanding of time and space is that Chinese culture, for a very long time, never saw history as a progression.** Fukuyama's book, of course, would be regarded as something ridiculously passé in the Chinese context.

So, about the Chinese tradition. Prof. Ho emphasized several times that **tradition itself in China for a long time was very much in the center.** It was never marginalized until the nineteenth century. The reason why is that the nineteenth century was this important turning point — for example, the Opium War. But if tradition was always regarded as the central theme of a culture, then what did that mean? **What exactly was tradition in the Chinese mind?**

China has a long tradition of interpretation rather than the production of new knowledge. It is something from classical times (which happened to coincide with Classical times in the West) and it was held dear when Confucius was still alive, in 500 BCE. Confucius's job was a very simple one. He knew clearly it was not his job to invent any new knowledge. But it was important for him to give a proper interpretation of the fine tradition, which he thought had been lost. So he spent all his time working on classical literature, trying to give people a good explanation of that fine tradition from before his time. He knew that this effort would be ineffectual. He tried very hard to have an impact on real politics. But throughout his life, he only managed to hold a not-so-important position as a court minister for a very short period of time. If we use today's expression, Confucius was an utter failure; he did not have a successful career at all. But he managed to have excellent students. And he ran a consulting service to teach the aristocrats how to undertake ceremonies. But he did one important thing. Let me use this wonderful analogy from the end of the nineteenth century. The Chinese scholar Gu Hongming, who grew up in the West and then made huge efforts to turn himself into a Chinese man, described the true meaning of Confucius's work: Confucius basically produced the working drawings of the essential elements of Chinese tradition. And Confucius knew that the edifice had already collapsed. Whether or not this edifice has been rebuilt ever since, I think it is debatable. After Confucius, for a few thousand years, **has Chinese tradition been unchanged, static, or has it, in fact, been constantly changing?**

I think what we have gained from the work of Nezar, Prof. Ho, and many colleagues here is to **see a constantly changing culture as tradition, or to use the name tradition to legitimize what is good, what is new.** And then to see it as something dynamic. I think if I paraphrase this famous

title of the book edited by Eric Hobsbawn, *The Invention of Tradition*, we seem to think, yes, we have reached the conclusion, which is the discipline of history. But I was really quite struck by an analogy used by Pierre Ryckmans. He said, after having searched his entire life for this seductive nature of Chinese culture, he thought the best way to describe this strange relationship between the static nature of Chinese tradition and the constant changing nature of Chinese tradition may be to look at how the waterfall is represented in Chinese poetry or Chinese painting. **It is static when it's viewed at a distance, but is constantly changing when you move close.**

Huaqing Huang

Thanks to Prof. Ruan for the elaboration of his prologue. Now I will give my job as chair to Dr. Yushu Liang for from Nanjing University, who is the co-translator of this book. She will chair the roundtable discussion. And I will invite all the four guests to be here on the stage. Welcome!

Yushu Liang

Thank You Huaqing. Prof. Nezar, do you have any final words?



Nezar AlSayyad

In the first place, thank you both very much for translating the book. And thank you for the amazing commentaries. When one finds oneself in a situation like this, one cannot help but feel humbled and honored.

I have had my books translated to several languages. But this is the first time anyone who translated any of my books has decided to discuss it with me — and, in fact, to allow me the opportunity to learn how the book was understood in the context of this very specific culture.

I have a lot of things to say, and some of my response will actually require me to reflect a bit on history. You're absolutely right about your reading not only of the book, but of me and of my relationship to Berkeley, and IASTE's relationship to Berkeley. I'll start by saying that I recognize that tradition is actually very different everywhere. In fact, part of the reason that I got interested in writing this book is that the term itself has no equivalent. I'm multilingual — I know three languages, I speak them, and I can read them. The word "tradition" does not exist in what I would call my mother tongue, Arabic. It has no exact equivalent; the only equivalent terms are either "heritage" or "custom." So there is a fundamental difference in the concept itself as it exists in different languages. There is even a difference between the meaning of the term in the Romance and Germanic languages. And once you add Hindi, Chinese and Arabic, you enter a different realm altogether. So **what I have always been after is the meaning of tradition, or the practices of tradition, not the word or the concept of tradition as it has emerged in the Western context.** Language, in a sense,

determines what we say. I love your example of “calligraphy,” because this notion that it’s a law is a complete challenge to the notion of tradition as it exists in Western culture.

If I were to go back and reflect on the origin of the association and on its first conference, we were, of course, engaged in an attempt to legitimate this discourse. When I went to Berkeley in 1985, the first conference I ever attended was for the Society of Architectural Historians. I was to present a paper about early cities of the Arabs as they moved west and conquered a substantial part of North Africa. But because this was material for which there is only written and archaeological evidence, no buildings, I had to give a talk without slides, which had never happened before at SAH. I was still a Ph.D. student in Berkeley, and the chair of my session was panicked, so he pulled a few slides, which were totally unrelated to my talk, but they were about Islamic architecture, and he said, why don’t you just use a few of these? I said no, because I felt it was not relevant. He was an old member of SAH, so he went around telling people at the conference about this young guy who is breaking all traditions and is likely to make a big fool of himself.

I actually got scared, yet I decided to stand my ground because I was talking about cities from the eighth and ninth centuries for which the only evidence was textual. So I did what architectural historians do: I turned off the lights. But I had this very little light on the podium, and I told the audience, look, you have a very specific tradition, which is we use slides. I am breaking this tradition. So now focus on the little light at the podium and use the darkness to imagine the images that could accompany my words. That day I got the first ovation of my career.

I mention this story because I think at times **it becomes important to challenge existing conventions when one is to engage with these kinds of subjects.** The spirit of the place, absolutely: Berkeley in the 1980s was a very revolutionary place. A lot of what had happened in the 60s continued all the way into the 80s. But it died completely in the 90s, and by the beginning of this century, Berkeley had become a neoliberal institution.

I started teaching in 1986 at Berkeley. Many of my students, many American students, were very interested in the vernacular, and Mui Ho, my colleague from Berkeley who is here, was also teaching a course on Chinese vernacular architecture. They had no outlet, there was no place to present. In 1986 I decided to attend the Vernacular Architecture Forum, which was a group of people like IASTE, except that everybody there was talking about small towns in America. There was not a single presentation out of sixty or seventy that dealt with anything outside the United States. That’s, in a sense, how IASTE was born. **It was born out of the concern of not only me, but others, to try to legitimate this discourse within the academy itself.** That’s why our first conference, which was very successful, had 400 people. We’ve never had a conference of that size since then. That

was 1988. The event had people as different as Spiro Kostof from art history, Henry Glassie from anthropology, Amos Rapoport from architecture, and Paul Oliver, who actually was a folklorist who initially came from studying music to studying buildings.

I wanted to reflect a bit on that, because I think the origin of some of these activities is relevant even today. **My attempt was to put some of these issues at the core of the discourse.** You used terms that were absolutely correct — the core and the periphery. I felt that what I managed to do at Berkeley, educationally and institutionally, was to bring the periphery to the core, because Berkeley was definitely the core back then.

I also want to reflect a bit about your statement regarding *The End of Tradition?* because that book came out of a very important conference held in 2000. There were six books that were published before it at the end of the twentieth century, all of which had “The End” in their titles. The first was by Daniel Bell, a very conservative writer, *The End of Ideology*. That was followed by *The End of History* by Francis Fukuyama and Kenichi Ohmae’s *The End of the Nation State*. So I decided to organize a conference along the same line to engage with but not necessarily respond to these books. At the time, globalization was being celebrated as a force that would liberate everybody. The Internet was also seen as a liberatory space. Nobody knew that two decades later Elon Musk was going to buy Twitter and Big Tech was going to control public discourse. So **I actually pursued the idea of “The End of Tradition” as a specific discourse, but with a big question mark.** Later, in fact, I even had a fight with my British editor, who said a question mark could not be placed in the title of book. But I prevailed.

What I meant by “**The End of Tradition?**” is one of the things I’d like to discuss with you, particularly in the Chinese context. **I never advocated nor believed that traditions can end — although some will always change and possibly disappear over time. What I advocated for and believed in at that time is that authenticity can no longer be the prime definer of tradition.** In a sense, there are lots of aspects to tradition, some of which may be more important than authenticity. Over the years, my own definition has been informed by the many conferences that IASTE has organized and by the works of my colleagues as well. **I define tradition as a dynamic project that always attempts to define and redefine the past for the purposes of the present within a particular political context and for particular ends.**

You have to remember that no people, no society, ever called themselves “traditional” until the modern was invented. So, in a sense, **the dualistic component of it is what I found problematic.** You cited a book which was very important for me intellectually, *The Invention of Tradition*, edited by Eric Hobsbawm and Terence Ranger. Another such book is by Benedict Anderson, *Imagined Communities*. Many students from Berkeley studied both in their first semesters with me. **Both of these books laid the foundation outside of**



FIGURE 7 Mogao caves: the real tradition. Source: <https://bulletin.hds.harvard.edu/the-mogao-caves-as-cultural-embassies/>.

our field to understand what it means to deal with something generated by a particular history. When we examine a tradition carefully, we discover that it's actually invented, that it may not necessarily have a particular origin. So there are practices that emerge at a given moment, and then over time they acquire a legitimacy independent of their origin.

From this perspective, **I was trying here to come up with a definition of tradition that applies to all aspects of material culture.** It's not necessarily to say this is about "traditional architecture." No, this is about the process of what Janet Abu-Lughod, at IASTE's second conference in 1990, called "**traditioning**": the process of making a practice traditional. I say dynamic because this never is the same. I'm fascinated by some of the examples you gave, and I would love to hear more about it. You suggested that history is progressive and linear in Western tradition, but in China it's not. So does that mean we are sitting at an East versus West divide? Or **can we actually engage in this discussion in a manner that operationalizes the concept of tradition in a way that we can all, independent of the different cultures we come from, understand?**

I want to end with an example that exists in many cultures. Many of you will be familiar with it because I have found it in different languages. It's about different material objects, but the one I will use here is the inherited family shovel. What does the shovel have? It has a handle made of wood; it has a head that was once made of stone; and the two pieces were in the past attached by rope. After 100 years, the head decayed, and the family had to replace it with something, so they replaced it with an iron head. A little while later, the rope frayed, so they replaced it with a nail. And finally, the wood handle itself rotted, and the family replaced it with a piece of oak. All the elements of this object are no longer the

same, yet it is still called "the family shovel" because it has been passed down from one generation to another. Even with all the elements changed, it is still a traditional object.

For me there are three components here of tradition. First, **the idea of transmission**, which is fundamental. Second is **the idea of a cultural meaning** as this is attached to a particular object and is transmitted. And third is **the value that happens with the passage of time, which is its authenticity.** That's the only part that I don't necessarily give value to. **I give value to the fact that the three components still exist**, even though they have fundamentally changed. That is what makes them traditional. It's not that the three objects that make this particular piece of material culture are each authentic; it's that the process that brought them together is imbued with value.

Now there is one thing I wanted to ask. What do you think of the sections I have used to structure my book? **Will people care about them in China?** I have structured it along lines you may actually even consider Western. I want to know **to what extent, for example, are my themes — modernity, vernacular, nation state, colonialism, authenticity — relevant in the Chinese context?** If one were to write a book about tradition as it applies to the built environment of another country, what would the subtitles of such a book be?

These are difficult questions because this book was just translated to Arabic, and I had a seminar about it in a university. The translation was extremely well done, but it forced me to invent terms. The book is called "Traditions." But what am I supposed to call it in Arabic? I came up with an invented term which translates to something like "the tradition of heritage" — which, of course some people objected to and others liked.

Xing Ruan

Well, you have asked quite a few questions. First, I liked your description of your experience giving a talk at SAH without slides. I must say, it's truly enlightening for me to give a talk here without a PowerPoint presentation.

There are many things that we have discussed, so let me begin with what I remember. You want me to say how the book would be received by readers in China. And my sense is that this beautiful book, very well translated by these two young colleagues of mine, is not going to be a bestseller. However, what I can assure you is that my colleagues will read it in China, mainly because tradition has always been the centrality. The attempt to **legitimize a marginalized concept or position, such as tradition, is something that we take for granted from the Western point of view. But in China this question is probably redundant because tradition is always taken seriously.** If you care about what is happening in China, you may hear this kind of rhetoric — such as “revitalization of the great tradition.” So as long as you have that word in your title, you're going to have a few readers.

The second part of your question is again a fascinating one. Am I setting up a dichotomy between West and East? **And can we reach some sort of common ground, to see marginalized, or not-so-marginalized, traditions as something that are constantly changing and dynamic, so that we are on the same page?** What is the problem with that? I think we typically believe that we have to be careful with stereotypes, because when we say “the West” and “the East,” in our academic tradition, we feel uncomfortable, for this is a gross generalization. But if you think about it twice, **there is often some truth in stereotypes.** You can debate that the concept of history in the Indo-European tradition is linear and about progress. The same applies to the Chinese cyclical concept of time. But because they are stereotypes, they are deeply rooted in the substructure of consciousness. So, when people go about their day-to-day life, they are always there. I don't think we should take this lightly, even from the academic point of view.

Now we return to the concept, and the state of understanding that we have reached. I think it is a wonderful moment of understanding about constant change and even nonphysical environments. They shape our consciousness and may change our view of the world. They may even have an impact on understanding of concepts such as “cyberspace.” When we think we have made some fascinating realization in the Western cultural context, it is useful to reflect upon the Chinese tradition of “cyberspace.” It may seem strange to say that Chinese had “cyberspace” 2,000 years ago, or even 5,000 years ago. You may be surprised by this because of the emphasis on the physical built world in the Western tradition as something solid, something you can touch, you can feel, you can lean on. But in the Chinese architectural tradition this has not been very important at all. Long ago the Chinese understood that the only hope for immortality lies not in stone and mortar, but in literature.



Xing Ruan addresses the audience and other panel members.

Let me give you an example. Recently I wrote a long essay to commemorate my old friend Yi-Fu Tuan, who passed away in August in Wisconsin. Yi-Fu was someone I regarded highly, mainly because he had this ability to describe architectural space and the way people are influenced by it in the first instance by perception — how there is some look, touch, feel, smell that could be magically elevated to understanding. His description of a Gothic cathedral is a classic example. He described it in English beautifully. Say, in the thirteenth century, two people from different ranks of society walk into a Gothic cathedral. The senses of both would be overwhelmed: by the smell of the burning candles, by music from the organ, by the cold feeling of the moist sandstone and the warmth of the timber bench . . . and then by this heavenly light filtering through rose windows from above. The social hierarchy at this moment would be dissolved. Someone from a lowly class and someone from the aristocracy would be equal.

So that kind of magical transformation from the senses to understanding would be very much a part of this physical environment. **But in Chinese consciousness and understanding,** when you describe a beautiful bridge under moonlight, or when you describe a courtyard house, the size of house, the shape of it, the location of it, even the color of the scenes would be quite irrelevant. **The power of literature, in my view, is as powerful as our cyberspace or virtual reality.** So I could make the argument that it existed a long time ago.

From this point of view, when you look at the change of aesthetics and tradition, it is no longer germane to ask whether or not we can have a dialogue between the West and the so-called East, or East-Asian cultures as represented by China, or whether this dichotomy is false. Instead, I suggest **we should look at whether or not the particular topic of conversation has yet to become a problem for you.** If we look at the fascinating (again gross) summary of Indian, Chinese, and Western

philosophy by Liang Shuming, a great Chinese scholar in the earlier part of the twentieth century, he said: the Indians realized the problems of life much too early, so they lived to die; and the Chinese wanted to prolong life; but the Western idea of life has been a progressive one. If you have not reached that point, the problem raised by the Indians is too early for you. So, whether or not we can hold a dialogue, I do not know . . . that depends on whether we share the same problem.

Puay Peng Ho

I think I just want to take up "The End of Tradition?" I feel the question is so rhetorical. If you look at whether it is linear or cyclical, whether it implies an Eastern or Western worldview — obviously, there is a lot in there. But **whether tradition will end? If we continue to live it, conceptualize it, or invent or reconstruct it, it will never end.** So as we look at tradition as a second goal, that is something that will never end.

The other aspect that I was wondering about concerns the translation of the title of the book. In English you use **"Traditions" in a plural form. But in Chinese, it is hard to translate plurality.** Therefore, the translated title has no plurality in it. I feel that probably is something we need to consider. In a sense, a lot of times when we talk about Chinese tradition, we are talking about 5,000 years of tradition. **We are talking about the singularly constructed tradition, rather than the multiplicity and plurality of traditions that we find in China or elsewhere.** If you look at traditions in the plural way, then obviously they will go on and on, right?

Nezar AlSayyad

The idea is that in many other languages, which I actually deal with in the introductory chapter, tradition is always plural. It does not exist as singular. That you say traditions cannot be plural in Chinese is very interesting. It is always a plural concept in most other languages and cultures.

Audience Question

I was very interested in your story of the shovel. The shovel is interesting because, as you said, the ingredients have changed. There's one thing which has been bugging me. I can call it program, or it can be called function. It would be interesting to see how one can bring this "function of" to the case of history. As a teacher but also as an architect, **do we deal with history and its function in different cultures and histories? Or do we actually work with it as a constant everywhere?** I mean, is the function of history a constant? Or would it be a function of history just in China, because it has nothing to do with the assumed linear history of the West? Would that function be the shovel?

Audience Question

Thank you, Nezar. At the beginning of your comments, you talked about change as different everywhere. Prof. Ho also talked about the dynamic nature of change. **I want to ask about the relationship between space or territory and tradition. Are these still tied together?** Especially when you talk about globalization as well as cyber society. So I am wondering, especially in relation to the title of today's session, "Reframing Tradition and Its Practice in the Chinese Context," what does "the Chinese Context" mean? And, if we see it in a dynamic way, are different territories or different locations, different spatial dimensions, still related with the notion you constructed of "tradition"?

Yushu Liang

Actually, I don't think the question is for me, because I also had this question. I was fighting during my time translating the book with a kind of confusion. Especially for the word "tradition." Can I find an appropriate equivalent word in Chinese? Because in different contexts of tradition, it is equivalent to different Chinese words or characters. Nezar's book



FIGURE 8 Virtual Mogao caves. Photo montage of VR experience by Puay Peng Ho.

accompanied me throughout my career as a Ph.D. candidate, and it became an important tool for me to analyze my field research in Inner Mongolia. I even titled my thesis with the Chinese word 传统 [*chuan tong/tradition*], and even used the 真实 [real] and 超真 [hyper] in the subtitle. But my advisor gave me the opposite opinion. Because it's dangerous. That's my conclusion.

So I have this question for Prof. Ruan as well. You have conducted both educational and architectural practice projects in Western and Chinese contexts. **What do you think is the real context of 传统 [*chuan tong/tradition*]? When we talk about tradition, what we are really talking about?**

Huaqing Huang

Maybe I will also have my final comments. Nezar asked about the reception of the book in China, and I guess what the two Chinese students just asked kind of expressed how the book is and would be received. They are kind of confused, like myself. But it struck me a lot actually during the translation, because as Prof. Ruan and Prof. Ho said, tradition is such a big word in China. **They ask about why we put in the title “the Chinese Context?” What is the Chinese context?** This also concerns the linguistic context in the Chinese world. But the more important things are the customs, habits, and cultural context of the Chinese world, and how they see tradition. For me, the most valuable point to take from the book is a plural and dynamic view of tradition. That relates to what the audience asked about the everyday tradition. That is very important and provocative as well for what is going on in China now. Actually, in the past thirty years tradition was put aside for a prevalent agenda of urbanization, but in recent years it has been brought back to the central stage. Thus, the starting point of my bringing Nezar's book to the Chinese context is for both academics and practitioners to shift from overly emphasizing symbolized tradition, to constructing a more inclusive, shared, embodied tradition that is related to everyone, to everyday life.

Xing Ruan

Dr. Liang, I think your question indeed is very large in the Chinese context. When we talk about tradition, what do we actually mean? But it might be useful to combine your question with this young man's question about the traditions that are created. I think on the one hand, it is, as I reiterated several times this afternoon, no problem for us to reach this realization to understand tradition as constantly changing and dynamic. And hence, it could be invented. I think even today, it's refreshing to see what the British have invented in their royal ceremonies.

But in my humble opinion, it is not enough to have this grand agreement. **I think it is probably more useful to look into nuances. And the nuances are very different.** So, let us return to a very fine Chinese tradition, or if you like the intellectual tradition, of 述而不作 [*shu er bu zuo* / interpret rather than invent]. Why did Confucius stick to it some 2,500 years ago? My guess is that, because of a very long tradition,

Chinese history has become a big collection of both treasures and rubbish. But on the treasure side, you do have many choices. So, for some very smart people, instead of investing a limited lifetime to invent something new, their obligation might be to focus on these treasures, to interpret their fine qualities so their life could be prolonged.

That's why at the end of my introduction, I have paraphrased Nan Huaijing's advice when it comes to Chinese tradition. Generally speaking, there are three major streams. One is Confucianism, the other is Taoism, and the third is Buddhism. The advice from this very wise man is this. Confucianism is a food store — you have to go there every day because you need it for survival. Taoism is a drugstore — when you are sick, you go there to look for something. There was this wonderful Chinese writer in the early twentieth century, Lin Yutan, who suggested that every successful Chinese is a Confucian, but when one becomes a failure, one becomes a Taoist. Buddhism, however, is just an interesting department store — when you have leisure and money, you will visit it from time to time. **So, is inventing tradition a big thing in China? Probably not, simply because making choices seems to be more important.**

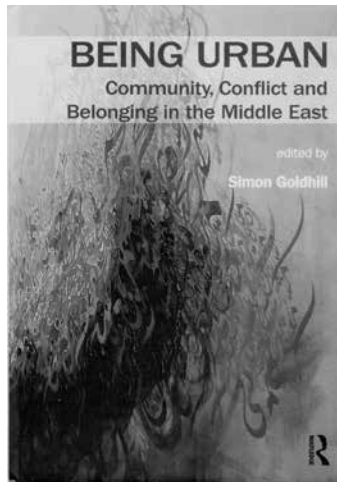
Puay Peng Ho

Finally, I think Prof. Ruan mentioned about translation being very difficult. I always write in English because I cannot express myself in Chinese adequately, even though I know Chinese well. But to me, it is important to understand **both the value of translation and the value of the “traditions” that you brought up.** You are talking about how much this book will sell. I would add that there is value in the book through the translation effort. It's really valuable to see and to discuss different forces, to offer a chance for a Chinese audience to think about and reflect on their own. And that has value, rather than just putting something up out there. It's very difficult to translate the word “tradition.” So it is a way for us. I hope in your introduction you can relate to that, and then just see **how difficult it is to translate what tradition is into Chinese. And in that sense, you can reflect on how we see tradition and maybe how we see translation.**

Nezar AlSayyad

Well, I know we've exceeded our time, so I won't really answer any specific questions other than to just respond by saying that I never talk about history. I'm not concerned whether it's cyclical or linear, as for me, this is an old argument. I always talk about histories. The books that I actually published are pure urban histories. And finally in answer to your question that you struggled with translating the “real,” the “hyper,” and the “virtual” concepts in the book, I find this fascinating as the same thing happened when the book was translated into Arabic. Not only for the main title, but they did not find equivalents here either. So in fact, maybe we should in the future have a conference about **“the translation of tradition.”** Thank you all very much.

Book Reviews



Being Urban: Community, Conflict and Belonging in the Middle East. Edited by Simon Goldhill. London and New York: Routledge, 2020. Xi + 265 pp., 40 b&w illus. ISBN 9780367549930.

From the Greek *polis* to the modern *metropolis*, the city has presented itself as a significant human creation. As a result, it has also been an object of scrutiny: as a political organization, a particular socio-cultural environment, and recently a factor of planetary (ecological) change. Thus the question “What *makes* a city?” — that is, what this particular entity *is*, specifically — remains one to be addressed and readdressed through various disciplinary lenses.

This volume edited by Simon Goldhill is a compelling contribution to this line of inquiry. It is based on a seminar series that he organized at the Centre for Research in the Arts, Social Sciences and Humanities of the University of Cambridge in 2015–2018. And, while it tackles the old and well-studied “urban question,” this is by no means to say it lacks originality. To the contrary, this thought-provoking book scrutinizes a wide array of themes, bringing together different approaches to the urban realm through chapters that often engage in dialogue with each other, albeit indirectly.

The Introduction is organized around several questions, which also establish the volume’s scope of inquiry. The first, “What is a good city?” links the city as a political body to urban planning, and it is largely addressed in the Introduction, itself. The following questions — “How does the city represent itself to itself?”; “How is the city experienced?”; “How could conflicts in the urban realm be reduced?”; and “What is the relationship between the infrastructure of the city and the political process?” — are then addressed in separate sections, each of which contains three chapters. Considering the structure of the Introduction, the reader cannot help wonder why the discussion of these questions was not organized in the same order in the body of the book. Strangely, if we leave aside the initial question addressed in the Introduction, the first of the following questions is dealt with in Part IV, the second in Part I, the third in Part III, and the fourth in Part II.

Part I, entitled “Engagement and Space,” focuses on *experience* in and of the city. The first chapter, by Richard Sennett, discusses closed and open systems of urbanism, where the former refers to “harmonious equilibrium” and the latter to “unstable evolution.” Sennett specifically examines the failure of the first (as the prime modernist strategy), and advocates for the second through a discussion of (individual) experience and the (professional) planning of public space. Ash Amin’s chapter follows these words of caution against an obsession with creating a “perfect” city. For Amin, the “city system” instead corresponds to an “urban machinic unconscious.” Thus, rather than trying to *avoid* failure by relying on technology (as with the “smart city,” which implies perfection of machinic control and automatization), he argues for a “careful and constant curatorship of [the city’s] socio-material relationships” (p.70). In Chapter 3, Nezar AlSayyad and Sujin Eom then discuss the possibility of “urban citizenship” through a comparative analysis of the spaces of minority groups — in this case, the Jewish quarters of Middle Eastern cities and the Chinese quarters of East Asian cities. Their purpose is to show how citizenship as a form of belonging is built through a dialectics of inclusion/exclusion and integration/

segregation. Ethnic, racial, religious or class-based difference is thus often maintained through levels of self-exclusion, which also serve as modes of integration. Referring to AlSayyad's earlier work with Ananya Roy, the authors propose to understand the fractured nature of modern citizenship through the concept of "medieval modernity" (p.85).

Part II, "Infrastructure and Affect," opens with Matthew Gandy's chapter on "urban atmospheres." Presenting a theoretical discussion linking the two meanings of "atmosphere" — i.e., (literally) the air surrounding us and (metaphorically) the mood of an environment — he traces the socio-politics of emotion in the city. And he argues that the relationship between space and subjectivity should shift its focus from "the bounded human subject towards more porous forms of urban sentience" (p.107). Sara Fregonese continues this theme in the following chapter, in indirect dialogue with Gandy (which we understand is based on a debate following her presentation at the John Harvard colloquia that was the source of the book). She argues for an "atmospheric urban geopolitics" at ground level, one that focuses on the connection between geopolitics and violence as they are experienced. In the last chapter of Part II, Mike Turner and Yonca Erkan address another significant term, "crowd," which is simultaneously an urban (public) phenomenon and one that produces its own atmosphere. They also revisit the concept of urban citizenship in its relation to public space through a discussion of three squares: Taksim Square in Istanbul, Tahrir Square in Cairo, and Rabin Square in Tel Aviv.

Part III, titled "Conflict and Structure," addresses the politics of the city in a more direct manner. Wendy Pullan's chapter tackles the concept of urbicide. Following related literature, she differentiates between urbicide by war and redevelopment, but she introduces terrorism as a third form. In a sense, Pullan's discussion presents a reverse approach to defining the urban. What is it that is targeted when the destruction of a city is the goal? What is "snatched away in urbicide," she answers, is "identity and difference in reciprocity with each other . . . [as] key aspects of the broader ethics of the city" (p.168). In the following chapter, Diane E. Davis (in parallel to AlSayyad and Eom) discusses whether the city, rather than the nation, provides a more consistent unit for sovereignty and political identity. Toward this end, she discusses a number of cities (Tel Aviv, Johannesburg, Kigali, Paris and Marseille) for their potential to build urban identities as "imagined community formations" (à la Benedict Anderson). And she argues it is necessary to think about ways to "connect the sovereignty aims of cities, nations and transnational communities so as to maximize inclusion, toleration, and belonging at the scale of the city" (p.196). In a similar way, Irit Katz then seeks to refocus a political problem, that of "refuge," from the scale of the nation(-state) to the urban. Proposing to consider urban refuge by "seeing like a city" rather than "seeing like a state," she specifically

looks at the treatment of forced migrants in Cairo and Tel Aviv and examines the protests of these refugees in response. She concludes that the city is simultaneously a "precarious place of refuge" and one that enables "acts of solidarity between different populations" (p.211).

The last part of the book, entitled "Curating the City," turns to the cultural manifestations of representations of the city. Here Nasser Rabbat discusses the historic Levantine urban culture of the Eastern Mediterranean, pointing out its doubly hybrid character. As he writes, it belonged "neither to the place of its dwelling and business nor to that of its aspiration and legal affiliation in Europe" (p.223). Additionally, it was shared by Levantines as well as members of native upper classes. While purposefully replaced by "political drives towards uniformity" (p.230), he observes how the cosmopolitanism of Levantine culture still provides lessons on "being urban." Somaiyeh Falahat next discusses gendered urban imaginaries of Tehran through a comparative analysis of the different female protagonists of two novels. Both are "symbols of modernization and emancipation," she writes, yet present distinct types of experiences with urban modernity, "oscillating between urban spatial liberation and confinement" (p.247). In the last chapter, Mezna Qato and Sadia Shirazi discuss the use of cinematic representations of Jaffa in Kamal Aljafari's *Port of Memory*. For the authors, Aljafari's Jaffa is "a place of habitation and rebellion . . . against gentrification and occupation" (p.253).

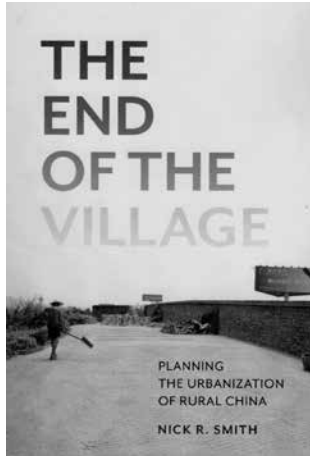
The strength of this book clearly stems from the range of topics it addresses, as well as the variety of approaches represented, particularly as these are skillfully used by some of the most influential urban scholars of the day. Through the links between different chapters it is also possible to detect the benefit of the discussions that took place in the lecture series that was its source. Indeed, it might have been worth giving more insight on this source material by expanding the note in the Acknowledgements into a brief Preface.

One small criticism concerns the emphasis of the book's subtitle on the Middle East. While some of the chapters tackle cases from the Middle East (some more centrally than others), some provide almost no mention of it. More critically, the Introduction does not provide any discussion on the specificity of the Middle East and its cities. Aside from this, this is a stimulating volume that will be of interest to everyone interested in urban theory.

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The End of the Village: Planning the Urbanization of Rural China. By Nick R. Smith. Minneapolis and London: University of Minnesota Press, 2021. 336 pp., 45 b&w photos. ISBN: 9781517910914.



Nick R. Smith's *The End of the Village: Planning the Urbanization of Rural China* is an exemplar of synthesizing storytelling with rigorous academic research. By examining China's experimental "urban-rural" development policies as applied in and around the city of Chongqing, this work successfully engages the reader in the intricacies and tensions of that

nation's ongoing urbanization.

The book expounds in particular on Smith's ethnographic and qualitative research undertaken in Hailong Village at the urban-rural edge of Chongqing between 2010 and 2015. This included interviews with around 200 key players in the process of urban-rural coordination, including municipal officials, village cadres, and local residents. Smith's ability to insightfully translate and interpret the reality and meaning behind their responses helps reveal the true impact of this experimental, top-down approach to planning, so typical of the Chinese system, on a small village community.

The End of the Village begins with an introduction that sets the scene by explaining "China's New Era of Urbanization" and the national policy of urban-rural coordination. This is bookended by a conclusion on "Disjunctural Urbanization" that articulates its lessons and implications to date, not just in China but internationally. In between, there are six empirical chapters that eloquently articulate Smith's analysis of the socioeconomic transformation of Hailong Village, as this traditional community at the rural-urban edge found itself at the mercy of territorial forces arising from the application of an experimental planning approach to China's rural development crisis. The first three of these chapters examine the challenges facing the three key groups of actors in the process — municipal officials, village cadres, and villagers — and how they made sense of and were affected by this attempt at urban-rural coordination. In the subsequent three, Smith explains the interactions and tensions between them, as Hailong was replanned, its lands were redeveloped, and its villagers were displaced. The book is thus intelligently organized in a narrative style that enables readers to immerse themselves in the intricacies and tensions of collaboration and competition experienced in the transformation of the village.

China's rapid economic development, largely the result of the "reform and opening-up" policy it has followed since 1989, has been shaped irrevocably by the development of a new real estate industry, tabula rasa physical development, and top-down strategies of urban (and now rural) revitalization. Led by city governments, much of this effort initially centered around maximizing the redevelopment potential of existing urban lands. More recently, however, the focus has shifted to engage with the issue of China's urban-rural divide and the potential for urban expansion to stimulate rural growth.

Smith's research gets "under the skin" of this process to reveal the intentions, motivations, implementation strategies, and impacts of this coordinated urban-rural policy on an "ordinary" village on the fringe of Chongqing's sprawling municipality of around 30 million inhabitants. The book provides an account of how Hailong's transformation under the new urbanization policy was initially envisioned as transforming a primarily agricultural settlement into a "glitzy" new urban center where contemporary apartments and businesses would sit amidst "verdant greenery and misty mountains." In reality, Smith observes, the result has been to create an unrecognizable village-in-the-city surrounded by urban development, heralding the "end of the village." Unfortunately, as in all urban redevelopment projects, there are "winners and losers," and the book details the harsh impacts on many families who had lived in Hailong for generations, as they were displaced and their homes were destroyed.

Overall, I cannot recommend this book highly enough to anyone interested in urban planning, urban and rural studies, Chinese studies, and the socioeconomic impacts of urban development. The book eloquently articulates the intentions and outcomes of top-down policies and their impacts on local people and communities. My only criticism relates to the relatively poor quality and limited quantity of visual material, which I suspect were restrictions placed by the publisher. Whilst many of us reading the book will be familiar with similar contexts in other Chinese cities, for those with little familiarity with China more photographs would have greatly assisted their understanding of the physical context. In addition, the quality and size of many of the maps in the book makes them difficult to read and understand. Nevertheless, Smith's writing style is absorbing and enables the reader to become immersed in the intricacies of the power struggles, cooperation, collaboration, and relationships between key actors in China's state-led urbanization drive. Importantly, *The End of the Village* also documents a living history of China's urban-rural transition and makes the reader question and critically appraise "how we think about urbanization."

Tim Heath
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Activism in Architecture: Bright Dreams of Passive Energy Design.

Edited by Margot McDonald and Carolina Dayer. London and New York: Routledge, 2020. 198 pp., b&w illus. ISBN 9780367665678.



Those of us on the academic side of architecture see many anthologies such as this one. With their many chapters by individual contributors following an introduction by the editors, they can be all over the map in terms of style, impact and cohesiveness. Some are tightly edited, trying to offer a single authoritative voice. Others are more

loosely constructed, allowing each contributor a great degree of freedom, with some light nudging and pruning by the editors to “synergize” the experience.

This delightful volume, loosely organized around the work of the pioneer of passive solar architecture Harold Hay, is an excellent example of the second type. And far from being a pastiche of self-promotion by individual contributors (the hidden danger of this kind of book), its examination of early activism in this important field provides a stimulating reading experience. Many of the stories it tells date from the 1950s to 1970s, but these remain relevant to the present era of just-in-time (or not) climate measures. I do take issue with some of the content; my copy is heavily marked up and my fingers are sore from tracking down ideas and facts. But that’s a good thing. Read this book: it is unlikely you will regret it.

I’ll focus here on highlights and several selected chapters to provide an overall sense of the ground it covers. My first observation is that this book unconsciously straddles the divide in architecture between building science and the social sciences. This is a place where I sit comfortably. Before studying architecture in the early 1970s, I loved both Victor Olgay’s writing as well as Amos Rapoport’s. This book may consider itself a building science volume, but it is also best read through the cultural lenses of politics, people and places.

Its Introduction uses the first Earth Day in 1970 as a framing device and introduction to the history of activism with which it is concerned. I disagree with many details, yet I very much admire it as a piece of writing. Was the first Earth Day really a huge turning point, as described? As someone deeply involved in the early environmental movement, I recall Earth Day as more of a culmination than a launch pad. It was incrementally important, yes. But earlier building blocks such as the writings of Rachel Carson, Paul Ehrlich, and Barry Commoner were the real launch pads.

After the Introduction explains the structure and purpose of the book, the first chapter consists of Hay’s written testimony to a U.S. Senate select committee during the depths of the energy crisis in 1975. It is unexpectedly revealing. Hay tries to convince the committee that ongoing government efforts to deal with the crisis are being completely counterproductive. And it offers a version of the disdain for “big” government, “big” oil, “big” you-name-it that surfaces in later chapters. But here, at the beginning, Hay’s reputation as a stereotypical cranky inventor/genius is fully reinforced. Above all, it highlights how he wasn’t experienced with public persuasion, which, to be effective, must be short, to the point, and start off with a bang. In this sense, Hay’s fireworks occur six pages too late, in his summary recommendations to the committee. I can only imagine that his audience was asleep by then. Collaboration with others from the social-science side of architecture might have helped him achieve a better impact.

Among the contributions that follow, two chapters by the architect and solar designer Ken Haggard provide an excellent introduction to the innovations and evolution of Hay’s patented Skytherm House, which used water stored on its roof in plastic bags for heating and cooling. In hot/dry climates in summer, Skytherm used this water to radiate heat to the cold night sky (if clear), while absorbing heat from the house and insulating it from the sun during the day. In winter, the system worked in reverse, using the sun to warm the water during the day, radiating it back to the house at night and insulating it from the cold sky. Haggard worked with Hay to build the second Skytherm prototype in Atascadero, California, in 1973, and was the point person for working out the hundreds of problems, large and small, that cropped up. Finishing the working prototype Skytherm was quite a feat, and it was very impressive that it worked as well as it did (FIG. 1).

Hay’s role as inventor and patent-holder, however, eventually proved to be at odds with the evolutionary nature of advances in homebuilding. And Haggard goes on to describe the ways that Hay’s possessive/protective personality prevented further development of his concept. For context,



FIGURE 1. Skytherm prototype, Atascadero, CA. Photo by John Reynolds.

I might point out that during the same years spanned by Hay's career many other innovations in residential building flourished, such as plywood sheathing, gang-nailed roof trusses, glu-lam beams, 2x6 studs (to create a deeper insulation cavity), prefab I-joists, and rainscreen principles for exterior cladding.

Other notable chapters include that by University of Oregon Emeritus Professor John Reynolds, which describes the evolution of his passive solar designs. These culminated in his research into traditional Andalusian and Mexican courtyard precedents. Perhaps due to their cultural and climate appropriateness, these models continue to have more influence than Hay's Skytherm concept.

Engineer and researcher Dick Bourne's chapter also describes how he took Hay's concept through several evolutionary designs to make the system more robust and appropriate to more climate zones, and then finally disconnected the water storage from the roof of the building. The principle was later used in Esherick Homsey Dodge and Davis's elegant design with Peter Rumsey for the Carnegie Department of Global Ecology on the Stanford University campus. Later it also evolved to include systems for harvested rainwater during winter to provide the water used to maximize cooling.

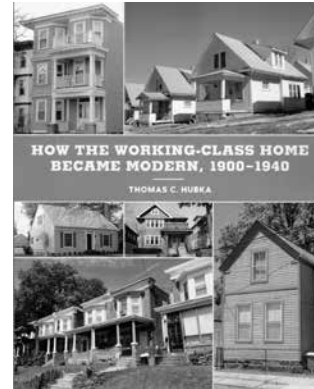
Also notable is Cal Poly Professor William Siembieda's chapter that looks at Skytherm through a planning lens. It explores areas such as real estate markets, economics, and public perceptions as reasons why Skytherm didn't advance beyond prototypes. For me, this was one of the more revelatory chapters.

Although not explicitly stated, my prime takeaway from this book is that Harold Hay's Skytherm prototype failed to catch on for four very simple reasons. First was the quirky personality of its inventor — a patent-owner, not a collaborative designer. Second was Skytherm's relatively odd appearance compared to public expectations of how a house should look (explore Google StreetView for 7985 Santa Rosa Road, Atascadero). Third was the counter-intuitive nature of living beneath a large volume of water. And fourth was that the design was specific to hot/dry climates and was untested in the many ways that humans occupy space. It thus lacked engagement with the norms that reassure potential developers and home buyers.

I'll conclude with an aside about the publishing industry and the effect of distracting typos, illegible figures, syntax issues, and so on that appear in the book. Did the publisher provide any editorial assistance? If so, those involved should blush. As the output from academic publishers begins to resemble that of DIY vanity presses, I dearly hope for a revolution that will reverse this trend and return academic publishing to proper craft status.

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How the Working-Class Home Became Modern, 1900–1940. By Thomas C. Hubka. Minneapolis: University of Minnesota Press, 2020. 320 pp, 148 b&w photos. ISBN 9780816693009.



Thomas Hubka's books are characterized by a refreshing combination of deep, careful scholarship and the elucidation of major scholarly themes. It is therefore no surprise that his three major books have all won the most significant awards from the Vernacular Architecture Forum: the Henry Glassie Award

for his book *Resplendent Synagogue*; and the Abbott Lowell Cummings award, twice, for *Big House, Little House, Back House, Barn* and the book reviewed here. Based on decades of research and observation in U.S. cities, this book deals with the houses of the “middle majority” — the 60 percent of the population that lies economically between the well-off and the poor “working class.” In the first several decades of the twentieth century, these people expressed their entry into the middle class through changes and improvements to their houses, not least technical improvements that were remarkably similar all over the country.

One idea that helps form the context for this book is that of being precise about the extent of the phenomenon under consideration. Vernacular architecture scholarship is too often based on the use of highly selective examples, often chosen from among those buildings that have simply survived over time. This is true, for example, of much scholarship on the colonial era in the U.S., for which well-known structures such as the Fairbanks House in Massachusetts are offered as the most important exemplars of the vernacular building of an entire era, without reference to population, economic class, or geographic distribution. But in many cases their survival principally reflects the fact that they were built well enough to survive, by people who had the means to do so. Their supposed representative quality thus relies on there being much less evidence of less-well-built houses that may once have been more plentiful.

The body of this book is composed of five chapters, starting with a discussion of eleven common assumptions that have been preventing, until now, the careful study of houses from the first part of the last century. These assumptions are as follows: an emphasis on larger houses with familiar styles; an emphasis on people at the “top” or “bottom” of the economic ladder rather than in the middle; the importance of remodeling and repair (which has played a large role in the transformation of U.S. housing markets but has not been extensively written about); the role of industrial

production of building components (such as plumbing and light fixtures) and the failure of architectural historians to deal with it thoroughly; the changing meaning of “middle class”; a failure on the part of scholars to take the middle-class house seriously; the importance of “kit houses” (such as those sold by Sears, which turn out to be much less important than often implied); the exaggeration of the role of owner-builders; the continuing high percentage of rental housing (despite emphasis in the literature on homeownership); the effects of the Great Depression; and post-World War II technological developments. These issues, and many misunderstandings associated with them, have skewed the story that Hubka is trying to tell more accurately in this book.

Subsequent chapters seek to describe house types and housing conditions at the beginning of the twentieth century — including descriptions of room use in the context of extant technologies, the effects of working at home, the impact of boarders, and the way objects owned by a family might signal their aspiration to be part of the middle class. They deal with new “standards of living,” with an emphasis on utilities, kitchens and bathrooms, and when various improvements tended to have been made. And they deal with such other issues as the size of houses, the dining room, the car and the garage, and other features that marked entry into the middle class. These attributes came together in a variety of types, described largely through their plans rather than through the outward appearance of a house in terms of style. Indeed, it is plan and architectural organization that Hubka finds of primary importance in connecting houses with the daily lives of their inhabitants.

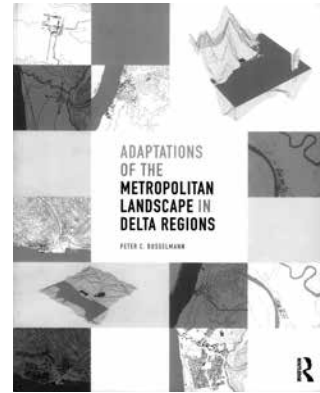
The book is beautifully illustrated with Erik Larson’s exemplary drawings. These provide diagrammatic clarity to the issue(s) at hand without losing carefully represented architectural detail. In this regard, Hubka’s approach to architectural history has been strongly informed by his original training as an architect. And here he has again produced a book in which visual representations — diagrams, drawings, photographs — work hand-in-hand with the text, helping the reader understand the strong relationships between social and architectural change.

This book is an important contribution to the up-to-now imperfect scholarship about the history of modern American housing. But also, by reinforcing the idea that vernacular architecture is the building of the “common folk,” and by rejecting common assumptions about people and their dwellings, Thomas Hubka helps set up a new challenge for scholars. This is to carefully examine their own assumptions in order to bring the material lives of people more fully and accurately to light.

Howard Davis

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Adaptations of the Metropolitan Landscape in Delta Regions. By Peter C. Bosselmann. New York and London: Routledge, 2018. 210 pp., b&w and color illus. ISBN: 9781138551961.



The management of coastal ecologies is a critical concern today. Advances in technology and globally exported patterns of development have hardened, infilled, and streamlined delta regions. Simultaneously, these regions are at risk of sea-level rise and have natural borders that inhibit expansion. The

result are rapidly changing environments, which Peter Bosselmann shows in *Adaptations of the Metropolitan Landscape in Delta Regions* often fall victim to forces of neoliberal development, increasing economic segregation, degrading their ecology, and limiting the prospect that they can still serve as sustainable human environments.

In *Adaptations* Bosselmann uses a case study structure to investigate the urban history, present-day development patterns, and design recommendations for the San Francisco Bay Area; the Pearl River Delta in southern China; and the Rhine, Maas, and Scheldt Delta in the Netherlands. This work is especially important to discourses of tradition in the built environment, because it takes a wide historical view of each region, investigating the entire record of human intervention in these landscapes throughout history. Designed as mechanisms of trade, economy and transportation, control of these regions has long reflected vectors of power and domination. And Bosselmann’s exploration of these forces offers valuable information to policymakers, engineers, scientists, planners, architects, and landscape architects who will play important roles in rethinking them and visualizing them as part of future resilient built environments.

In “Part I: The San Francisco Estuary and Inland Delta,” Bosselmann (with contributions by Sarah Moos) shows that urbanization around San Francisco Bay was never guided by historic Russian or Spanish prototypes. Rather, the development of small towns along its waterways was initially shaped in response to landforms, water and climate. Bosselmann and Moos build on this history to show how three types of limits to spatial expansion will eventually be forced on these cities. They support their claims with a series of figure-ground diagrams and 3D modeling depicting an exaggerated topography and bathymetry.

Bosselmann then ties this historic analysis to contemporary processes of urban development by asserting, “it is only now that the siting of urban form in relation

to landform provides a new lesson as well address the consequences of climate change.” He makes observations about the estuary’s spaciousness and causes of overcrowding such as auto-dominated planning patterns. And he illustrates this argument with examples from the work of graduate students showing how reforms could support a sustainable and affordable way of life in an urbanized regional metropolitan landscape.

Adaptations then moves the scene of investigation to China in “Part 2: The Pearl River Delta,” where the first case study concerns Dadun, a typical water village. Again leveraging the work of graduate students, Bosselmann shows how alternatives existed to demolishing the village to integrate it into its ever-metastasizing mega-urban surroundings. These included important policy and stakeholder engagement strategies that could have led to incremental renewal of its former agricultural buildings. But the case study is also important because it reveals the connection to water-quality data — in particular showing how demolition of the village and industrialization of the canals on which it was located led to the toxification of the water it relied on for daily life.

Bosselmann’s second case study then illustrates ambitious design alternatives to the business-as-usual eradication process for the historic Xinxi village on Whampoa Harbor. Again leveraging students’ work, he makes a case for the value of incremental modification and/or regulated transformations of spaces over time, which would have allowed families to retain land rights and for development to have worked with the local hydrology. Finally, Bosselmann addresses the intersection of historic preservation with low-income housing through a third case study on Jiangmen village.

“Part 3: The Dutch Delta” opens with a lengthy review of the history and mapping of the region, emphasizing the political and economic stakes in surveying and in access to survey data. Using a morphological approach to describe five delta towns based on visits, observations, and archival data, Bosselmann finds a now-dead tradition of resilience across the towns that is connected to their former planning orientation toward water. “Water, with its capricious nature, taught the Dutch to adapt, an important lesson in delta locations everywhere,” he observes. He concludes with reflections on urban adaptations as a creative process with which to examine a landscape of patches for future viability, and so identify their necessity in an era of climate change.

Recent work on coastal architectures and sea-level rise includes *Structures of Coastal Resilience* (2018), by Catherine Seavitt Nordenson, Guy Nordenson, and Julia Chapman, and Stefan Al’s *Adapting Cities to Sea Level Rise: Green and Grey Strategies* (2018). Nordenson et al. provide a survey of approaches and a way to understand how changes in hazards and risks affect every project, and how designers might respond to them. Al introduces design responses to sea-level

rise, drawing from examples around the globe that provide cautionary reflections on the impacts and outcomes of coastal planning projects from the twentieth century.

Adaptations complements these other works by grounding its case studies and by using a historical lens to look back several hundred years to show how civilizations have successfully been living, and even thriving, with nature in coastal areas. It also brings cultural sensitivity to the field by showing how technical aspects of development may be deeply embedded in the political and economic interests of a city. Without this perspective, the knowledge provided by the work of Nordenson et al. and Al might be blind to issues of social equity, and so only further promote the present trend of segregated development of delta regions. Other works such as Maurizio Tiepolo et al.’s *Planning to Cope with Tropical and Subtropical Climate Change* also use a comparative-case-study model to investigate adaptation planning and best practices. However, *Adaptations* is distinct because it takes a decidedly historical perspective, which allows readers to make connections between place-based patterns and its proposed incremental development solutions. Only with this wide lens can the cultural and ecological fit be fully assessed.

Adaptations also prompts me to mention the July/August 2016 issue of *Architectural Design*, titled “Designing the Rural: A Global Countryside in Flux.” Here the editors Joshua Belchover, John Lin, and Christiane Lange investigated broad developmental issues through a series of place-based case studies that also used rich architectural graphics to conceptualize applications and suggest solutions. In this same vein, Bosselmann has curated decades of student work from the Master of Urban Design (MUD) program at University of California, Berkeley, to communicate analysis and design strategies rooted in place. He is a founding member of the MUD program team and a longtime advocate for graphic analysis of urban conditions. With a clear style and selective use of color and form, the graphics in his book promote understanding of development in delta regions as a clear design issue. Student work is credited through an acknowledgement section at the front of the book and when, applicable, through chapter-heading acknowledgements and individual image credits.

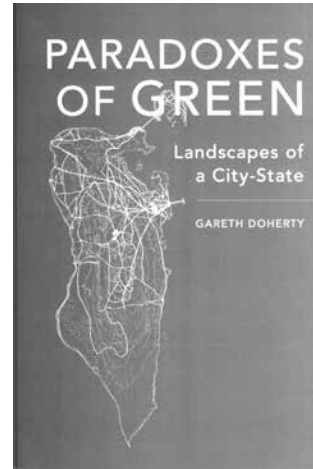
While the graphics were an asset, I found that the historical prequels, however, wandered a bit from the focus of design. Filled with dates, passionate accounts, and historical records, they sometimes obfuscated the relationship between new and old patterns. I felt overwhelmed at times and longed to see diagrams of the analytical process reflected within the historical sections of the book.

Nevertheless, at the heart of this book is the role incremental design needs to play in devising creative processes to encourage future sustainable and resilient development with nature rather than against it. Climate change is a defining challenge of the twenty-first century.

It will affect critically important issues: income inequality, education, healthcare, economic growth, and energy. *Adaptations* asks readers to imagine and recycle older forms of incremental development and draw on concepts of tradition to imagine the future of deltaic regions. In this sense the book recalls Mike Robinson's description of change in IASTE's 2017 edited volume *Whose Tradition?* as a "complex and randomizing process that challenges certainties and problematizes tradition. . . . What we once conceived of as solid is now fluid and harder to isolate, situate, and interrogate; it is within this fluidity that we can locate tradition."

Lyndsey Deaton
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Paradoxes of Green: Landscape of a City State. By Gareth Doherty. Oakland: University of California Press, 2017. 216 pp., 26 color illus., 3 tables. ISBN: 9780520285026.



Twenty years ago I remember watching a TV program titled "Sabah el-Kher ya Masr" ["Good Morning Egypt"] that began with a song titled "We want it to be green — the land that is not green." As an undergraduate landscape student at that time, I remember disagreeing with this daily message about "the desert land." In particular, I felt there was a need to distinguish between

"green" (the color) and "greening" (the concept).

In this book about the cultural life and landscapes of the Kingdom of Bahrain, Gareth Doherty provides a sophisticated narrative of these two approaches to the urban environment — green the color and greening the concept — and how they are currently diverging on opposite trajectories in arid regions such as the Gulf. Doherty describes shades of green as they signal attitudes toward both manmade and natural settings, evoking differences between the sea, palm trees, greenbelts, street trees, the water of the Gulf, the desert, and areas of reclaimed land. At the same time, he paints informative and comprehensive pictures of specific social events and their array of colors. Indeed, he seeks to anchor a complete, multidisciplinary study of the cultural landscapes of Bahrain around color schemes covering shades of green, red, blue, white and beige.

Doherty indulges in telling stories and sharing experiences he had during his fieldwork. The book thus incorporates thorough descriptions of the people he met, his days in the ministry, his walking routes, the festivals he participated in, and the plazas he photographed. And his many encounters reveal how natural and built environments are tied together with human livelihoods and values. This comprehensive ethnographic inquiry conscientiously explores the history of Bahrain in a way that will, for example, allow readers to understand the historic importance of the palm trees to the locals through time.

This is a significant strength of the book and one that caters to readers with little such exposure to the Gulf region. And although much of this material may not be new for the readers familiar with countries of the GCC (Gulf Cooperation Council) or the larger MENA (Middle East and North Africa) region, his detailed ethnographic research is conducted nearly to perfection. The book also lays out a

foundation for the use of the term “landscape” in the region. “Landscape” is a word that doesn’t exist in Arabic. Yet this is one of a very few books that uses the term appropriately and comprehensively with regard to the Arab world.

In the process of his research Doherty also ventures through multiple social encounters to discover their ties to the country’s sectarian society. And in doing so, he establishes and reconfirms the importance of color in politics and religion. Whether in the form of a dominant color, or set of colors, this has tremendous symbolic power. In celebrations, in religious rituals, in the flag, in the lights of a mosque minaret, in dresses during festivals, in sheep’s blood on the asphalt, or in prints on walls — color cannot be separated from people’s identity and daily life practices.

His description of the Shi’a “Ashura” festival serves as a culmination of this collective experience. Yet while the description of these events rightly asserts that green is not only the color of Shi’a but rather the color for all Muslims, it requires more subtlety when attributing the importance of Ashura to the Shi’a sect only. In fact, Sunnis also celebrate Ashura. Fasting on Ashura, the tenth day of the Islamic month of Muharram, was a practice established by Prophet Mohammed in the early days of Islam and is likewise celebrated by Sunnis, but according to slightly different rituals.

If one is to find fault with Doherty’s approach it is that this ethnographic work at times seems to take over the entire narrative, leaving little space for quantitative analysis that might have added greater depth to his study. One might likewise have expected more in terms of actionable findings from Doherty’s journey, a stronger basis from which to propose policy changes. For example, Doherty is clearly relying too much on description when he restates the obvious by attributing the local shades of sea and sky to attributes of soil, water, light, and particulate matter in the air. These are not processes that are unique to Bahrain but are applicable to most shorelines and skies around the world. Also, while the book does justice to the quality of Bahrain’s streetscape greenery, one would expect a book about the landscape to highlight other major areas of green that would appear to violate the concept of greening, such as the design of city parks and golf courses.

Doherty’s narrative sometimes also stresses the importance of maintaining a distance from “whiteness.” Yet, while this stance may have been commendable during the conduct of fieldwork, when such a neutral stance extends to the narrative it only highlights the need for a more fully decolonized reading that embraces the local perspective. In this regard, the narrative also seems to fall back too easily on a duality of white vs. native. One sees this, for example, in discussions of punctual vs. loose time and official vs. real answers. These are the realities everywhere, and we must accept there are typically great complexities hidden along the continuums between these supposed attitudinal binaries.

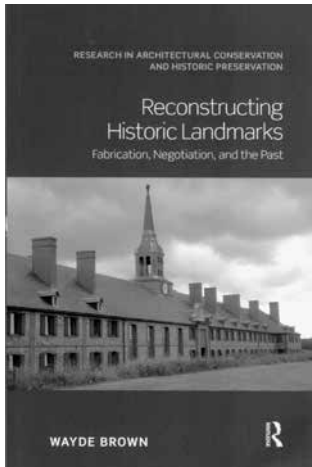
Moreover, people who reside in the capitals of GCC countries such as Dubai and Doha see themselves as just as metropolitan as residents of Chicago or New York. Indeed, many “native” residents of these capitals have more in common with resident expats than with members of local tribes. At this moment of time this seems to signal how an urban-rural continuum may be more important than that between expat and local.

This book navigates a region that is only thinly explored in Western narratives. Doherty also has the intellectual capacity and breadth of vision to explore a range of cultures through the complex lens of landscape studies. Indeed, it would be enjoyable to see this perspective applied to other nations in the MENA region; the world would benefit from more writing about their landscapes. More importantly, the timing of this book is important, considering that the entire MENA region is going through a period of dynamic political change. This will ultimately require fresh observations regarding its landscapes and public spaces, the symbols that define its different movements, and the character of its various ethnic groups. This will provide an attractive field for authors with Doherty’s talents in the future.

Amir Gohar

University of California, Berkeley

Reconstructing Historic Landmarks: Fabrication, Negotiation, and the Past. By Wayde Brown. London and New York: Routledge, Taylor & Francis Group, 2019. Xii + 214 pp., 75 b&w illus. ISBN: 9780367532222.



A friend of mine once drove through Las Vegas with his children in the back seat of the car as they screamed with excitement: “Wow, this place is great! Everything here is fake!” One would expect a child to be excited by a replica of an object or a reconstructed lost site. Full knowledge that it is not “the real thing” is exactly what children like most about toys, mock-ups, and reconstructions. But

why are some grownups, intellectuals, and even heritage professionals so passionately opposed to the reconstruction of historic buildings that have fallen into ruins or even totally disappeared? A *bona fide* heritage professional would most probably disagree with reconstruction and refuse to accept it as a category of conservation, or “historic preservation” as it is called in America. Even a nonspecialist intellectual would likely feel cheated by a reconstructed historic building because it is not “authentic.” Only a less sophisticated person might be likely to appreciate such a project — except he or she might not even notice it is “not authentic.”

Wayde Brown is a conservation architect who is not afraid to say the “R” word. And his treatment of the subject in this book also sheds light on the specificity of the American context and the place of tangible and intangible heritage in the “New World.” *Reconstructing Historic Landmarks* offers three different, even opposing, motivations for the reconstruction of historic buildings in the context of Canada and the United States: nostalgia for European colonial past; anchoring the official discourse of nationhood; and challenging the official national narrative in order to replace it with a different one that favors of a subnational group. In terms of content, it tells the stories behind ten reconstructions driven by these motivations. Along the way, Brown delves into details of rationale, theory, politics, fundraising, historic and archaeological research, materials sourcing and craftsmanship, as well as the passion of the individuals and groups behind each effort.

Altogether, the book consists of five chapters. Presentation of the specifics of the ten projects are contained in the middle three, each of which takes up one of the motivations above. The reconstruction of Fort Ticonderoga, Port Royal Habitation, Mission La Purisima Concepcion de Maria Santisima, and Louisbourg are grouped in chapter two, “Looking Back: Europe

and the Civilized Frame.” Chapter three, “Making Nations: Two Histories and a Landscape,” includes discussion of the reconstruction of New Salem, Graff House, Fort George, and Fort Clatsop. And chapter four, “Taking Stories, Reclaiming Stories,” tells the stories of New Echota and the Africville Baptist Church. Each of these chapters also concludes with a discussion titled “Sites in Context,” in which Brown explains the overall motivation for each group of projects and dives deeper into discussion and critique of its different layers.

Two short reflective chapters, at the beginning and end of the book, round out Brown’s presentation. Chapter one provides a short theoretical introduction to the history, theory and practice of historic reconstructions. And Brown’s fifth and last chapter reflects on the subject and offers an epilogue. As might be expected in any theoretical discussion of reconstructions, the central subject of both the first and last chapters is authenticity. Here, however, heart-breaking narratives of colonialism and slavery add a grim layer to the discussion. And Brown does not shy away from the painful subject. As he writes, “. . . fundamental questions remain; can the presentation of something as evil as slavery ever be authentic? And if not, then do reconstructions of slave cabins, no matter how ‘rough’ or crude, inevitably mitigate the degree of that evil? Do they inevitably present the life of the enslaved as less horrible than the reality?” (p.193). This may be an important question to consider with regard to the critique of monuments to racists and slave merchants currently being led by the Black Lives Matter movement in the United States, Europe, and South Africa.

Brown notes that attempts to maintain the authenticity of place are a major aspect of all ten projects. Some also observe an authenticity of process — by making new bricks *in situ* using historical methods, for example. Others focus on authenticity of materials by incorporating remaining pieces of an original construction into a reconstruction effort. In this regard, the last of the ten reconstruction projects, “Africville,” provides a “finale” of sorts. Brown uses it to suggest that “a growing interest in intangible resources, combined with a greater role for community within heritage conservation, suggests a future role for reconstructions, a role demonstrated at Africville” (p.202).

This is an enjoyable text that brings together meticulous historical research and critical theoretical discussions from many angles related to the difficult topic of reconstruction of historic buildings. Brown skillfully furbishes the books with a wealth of historic photographs, facts and narratives. He then goes one step further by discussing the motivations and arguments for and against each reconstruction. One might hope his book will encourage others to tackle a discussion of the reconstruction of historic buildings in other geographic and cultural contexts around the world.

Hossam Mahdy

Independent Researcher, Oxford, U.K.



IASTE 2024 RIYADH

THE DYNAMISM OF TRADITION

JANUARY 5-9, 2024

RIYADH, SAUDI ARABIA



CONFERENCE THEME

There is no doubt that globalization and the borderless dissemination of information due to new communication technologies have had significant impacts on cities all over the world. This change can be particularly observed in the built environment of more traditional societies with conservative social structures and values. However, as we have learned from previous IASTE conferences, values are ever-changing and identities can never be fixed. It is precisely this dynamism of culture and tradition that we seek to explore further. Previous IASTE conferences have thus focused on the sweeping changes of globalization and its effects on traditions, both in the socio-cultural and socioeconomic spheres, as evident by the conferences "The End of Tradition?" in Italy, "Post Traditional Environments in a Post Global World" in Dubai, "Whose Tradition?" in Malaysia, and "Legitimizing Tradition" in Kuwait.

The theme of IASTE 2024, to be held in Riyadh, is "The Dynamism of Tradition." It builds on IASTE's definition of tradition as "a dynamic project for the reinterpretation of the past in light of the present and often in the service of the future." We refer to the adaptability and continuity of tradition to evolve as a legitimate manifestation of the socio-cultural and socioeconomic spheres through space and time. We aim to spark dialogue on the process of understanding how traditions emerge in the current modern world, and how they may have changed over a short period of time to deal with the rapid pace of globalization and information technology in the 21st century. We wish to assess which traditions can or should be sustained or discarded, and by whom? By placing tradition under critical examination, and focusing on the vulnerable reality of traditional environments, we hope to go beyond the standard preservation and conservation approaches and dig deeper into how traditions are invented and reinvented, and what traditions represent as part of the dynamic project of creating the future.

The organizers of IASTE 2024 invite participants to closely examine the capacity of specific traditions to mitigate the tensions between past cultural legacies and present policies to make different futures. By examining the role of tradition to encapsulate, mitigate, and inform such tension, we encourage participants to submit papers that consider a wide spectrum of issues that relate to the dynamism of tradition. As in past IASTE conferences, we invite scholars, professionals, and practitioners from anthropology, archaeology, architecture, architectural history, conservation, design, folklore, geography, history, planning, urban design, landscape architecture, urban studies, and related disciplines to submit papers that address one of the following tracks:

continued

TRACK I: THEORIZING TRADITION AS A DYNAMIC PROJECT

Is tradition viewed as synonymous with all that is retrogressive? Or is it dynamic and forever recharging itself? IASTE has always defined tradition as a dynamic political project for the reinterpretation of past norms and practices in the service of the present, and as projections of future needs and desires. From this perspective, tradition must also be seen as “dynamic.” Accordingly, such dynamic traditions will always depend on

time and space, and in a technological fast-moving world it has become clear that the idea of traditions as place-based or temporally situated is a static, authoritative position that belongs to history. Papers in this track are invited to question the variables that constitute the constant state of change in traditions and address the extent to which societies are able to invent and reinvent traditions.

TRACK II: THE DYNAMISM OF SOCIO-SPATIAL PRACTICES AND THE MAKING OF BUILT ENVIRONMENTS

From a historical perspective, changes in people’s behavior are much slower than changes in the built environment. Is this still the case in the era of globalization with its evolving communication technologies and social media? These new innovations have expedited the dynamism of people’s

interactions with each other, and hence their behavior, and brought different cultures closer to each other. Papers in this track should address the impact of such dynamic socio-spatial practices in shaping contemporary built environments and in guiding their future..

TRACK III: OPEN TRACK

As with previous IASTE conferences, IASTE members and scholars who have produced new and innovative work on popular, vernacular, indigenous, spontaneous, and other forms of traditional dwellings and settlements that may not directly

address the theme of the conference are invited to participate in this open track. Papers in this track will be selected on the basis of quality and will be assigned with other similar papers in theme sessions.

SPECIAL SESSIONS/PANELS

Over the past few years, IASTE conferences have included special sessions and panels related to conference themes, collectively organized or sponsored by specific groups or institutions. Such proposals are welcome again in 2024 to facilitate outreach to researchers from disciplines not normally engaged with IASTE or to introduce new topics or debates.

an overall abstract in addition to abstracts and CVs from all proposed speakers. IASTE may accept the panel as a whole or only accept individual abstracts and place them in appropriate tracks. All papers must be written and presented in English.

Contributors whose abstracts are accepted must preregister for the conference, pay the registration fee of \$450 (which includes IASTE membership for 2024), and are expected to prepare a full-length paper of 20–25 double-spaced pages. Registered students and spouses may qualify for a reduced registration fee of \$250 (which also includes IASTE membership for 2024). Please note that expenses associated with hotel accommodations, travel, and additional excursions are not covered by the registration fee and must be paid directly to the hotel or designated travel agent. The registration fee covers the conference program, conference abstracts, and access to all conference activities, theme sessions, keynote plenary talks, receptions, and a walking/bus tour of the city.

CONFERENCE SCHEDULE

May 1, 2023Deadline for abstract submission
June 15, 2023Notification of acceptance of abstracts
September 1, 2023.....Deadline for registration
November 1, 2023Deadline for paper submission
January 5–9, 2024.....Conference
January 10, 2024.....Complimentary post-conference tour

POSTER GALLERY

Scholars who register for the conference and who prefer to display a poster of their research rather than present a paper are welcome to submit a 24"x36" vertically-oriented poster mounted on a foam-core backing for display during the conference. Poster abstracts (500 words describing the poster along with any applicable images) must be sent to IASTE by May 1, 2023. If accepted, the final poster must be sent to IASTE (see address at right) no later than November 1, 2023.

SUBMISSION REQUIREMENTS

Please refer to our website (iaste.org) for detailed instructions on abstract submissions. A one-page abstract of 500 words and a one-page CV are required. For further inquiries, please email IASTE at coordinator@iaste.org. Proposals for complete panels of four to five papers are also welcome. Please indicate the track in which the panel fits. Panel submissions must include

CONFERENCE SPONSORS

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Haifa Alhababi, Assistant Professor of Architecture at Prince Sultan University.

Mohammed Bagader, Associate Professor of Architecture at Umm Al-Qura University.

Bader Alhamdan, Director of Urban Heritage at the Ministry of Culture.

Adnan Aljaber, Consultant of Urban Heritage at the Ministry of Culture.

Fahad Alotaibi, Assistant Professor of Architecture at Al-Qassim University.

Abdulaziz Alosaimi, Riyadh Region Municipality & Assistant Professor of Architecture at King Saud University.

Abdullah Alkadi (Advisory Member) Professor of Urban and Regional Planning at Imam Abdulrahman bin Faisal University.

SESSIONS COMMITTEE

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IASTE PAPER AWARDS

Three awards will be given for papers presented to the conference: the Jeffrey Cook Award for the best paper by a scholar dealing with traditional dwellings and settlements; the Eleni Bastea Award for the best paper on an urban issue; and the IASTE- Berkeley Prize for the best paper by a student or junior scholar. The winners will receive a monetary award, and their papers will be published in the IASTE journal *Traditional Dwellings and Settlements Review (TDSR)* after appropriate review and revision. Eligible papers should be concerned with the subject of traditional dwellings and settlements in a manner that challenges traditional scholarship as explained per the different award categories.

CONFERENCE WALKING TOURS

Day 1: King Abdulaziz Historical Centre and The National Museum

The King Abdulaziz Historical Centre is an incredible representation of traditional Saudi Arabian and Riyadh architecture. Not only does it contain the Darat al-Malik Abdulaziz, the King Abdulaziz Mosque, and Al-Murabba Palace, it also houses the National Museum, which offers a captivating account of the region's history.

Day 2: Tradition and Modernity

The first part of the walking tour will take participants to the Alfaysaliah Tower, designed by Sir Norman Foster, which offers a breathtaking panoramic view of the entire city. The second half of the tour will take participants to the UNESCO World Heritage Site of Turaif and the Diriyah project, which is considered one of the most extensive historic preservation projects in the world.

POST-CONFERENCE TOURS (Complimentary)

Tour: Ushaiger Heritage Village

Located in the north of Riyadh, Ushaiger is a prime example of efforts to conserve local heritage. Visitors will have the opportunity to witness traditional Najdi architecture and town planning firsthand. The tour will include a visit to the Qasab Salt Flats.

CONFERENCE VENUE

The conference will be held at the **Hyatt Regency Hotel**, a 5-star hotel in the heart of Riyadh. Conference attendees will have a special rate of \$150 per night for the duration of the conference.

MAILING ADDRESS AND INQUIRIES:

IASTE 2024

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Guide for Preparation of Manuscripts

1. GENERAL

The editors invite readers to submit manuscripts on a rolling basis. Please send all initial submissions through the Oxford Abstracts system (<https://app.oxfordabstracts.com/stages/157/submission>). Please follow the instructions there carefully and remove the author(s)'s name from the manuscript. Submissions are circulated for review without identifying the author. Manuscripts are evaluated by a double-blind peer-review process.

2. LENGTH AND FORMAT

Manuscripts should not exceed 7,500 words and 20 images.

3. APPROACH TO READER

Because of the interdisciplinary nature of the journal, papers should be written for an academic audience that may have either a general or a specific interest in your topic. Papers should present a clear narrative structure. They should not be compendiums of field notes. Please define specialized or technical terminology where appropriate.

4. ABSTRACT AND INTRODUCTION

Provide a one-paragraph abstract of no more than 100 words. This abstract should explain the content and structure of the paper and summarize its major findings. The abstract should be followed by a short introduction. The introduction will appear without a subheading at the beginning of the paper.

5. SUBHEADINGS

Please divide the main body of the paper with a single progression of subheadings. There need be no more than four or five of these, but they should describe the paper's main sections and reinforce the reader's sense of progress through the text.

Sample Progression: The Role of the Longhouse in Iban Culture. The Longhouse as a Building Form. Transformation of the Longhouse at the New Year. The Impact of Modern Technology. Conclusion: Endangered Form or Form in Transition?

Do not use any numbering system in subheadings. Use secondary subheadings only when absolutely essential for format or clarity.

6. REFERENCES

Do not use a general bibliography format. Use a system of numbered reference notes, located at the end of sentences, as indicated below.

A condensed section of text might read as follows:

In his study of vernacular dwellings in Egypt, Edgar Regis asserted that climate was a major factor in the shaping of roof forms. Henri Lacompte, on the other hand, has argued that in the case of Upper Egypt this deterministic view is irrelevant.¹ An eminent architectural historian once wrote, "The roof form in general is the most indicative feature of the housing styles of North Africa."² Clearly, however, the matter of how these forms have evolved is a complex subject. A thorough analysis is beyond the scope of this paper.³ In my research I discovered that local people have differing notions about the origins of the roof forms on the dwellings they inhabit.⁴

The reference notes, collected at the end of the text (not at the bottom of each page), would read as follows:

1. E. Regis, *Egyptian Dwellings* (Cairo: University Press, 1979), p.179; and H. Lacompte, "New Study Stirs Old Debate," *Smithsonian*, Vol.11 No.2 (December 1983), pp.24–34.
2. B. Smithson, "Characteristic Roof Forms," in H. Jones, ed., *Architecture of North Africa* (New York: Harper and Row, 1980), p.123.
3. For a detailed discussion of this issue, see J. Idris, *Roofs and Man* (Cambridge, MA: MIT Press, 1984).
4. In my interviews I found that the local people understood the full meaning of my question only when I used a more formal Egyptian word for "roof" than that in common usage.

7. DIAGRAMS, DRAWINGS AND PHOTOGRAPHS

Illustrations will be essential for most articles accepted for publication in the journal, however, each article can only be accompanied by a maximum of 20 illustrations.

Since *TDSR* is printed in black and white, grayscale images are preferred but color is acceptable. Digitized artwork should be in one of the following file formats.

Rasterized artwork (photos): TIFF or JPEG files, 300 dpi, source file size should be between 4 and 6 inches wide (let the length fall), or 1200 x 1800 pixels. Source size is the file size when the image was taken. Images that are enlarged to a specific size will lose resolution in the enlargement process and may reproduce poorly.

Line art, including charts and graphs: 1) TIFF or JPEG files, 1200 dpi; or 2) vector EPS or AI (Adobe Illustrator) AI file with fonts outlined. If submitting EPS or AI files, please remember to convert any fonts to outlines.

8. ELECTRONIC IMAGE RESOLUTION AND FILE TYPE

All images accepted for publication should be submitted as separate grayscale TIFF or JPEG files of at least 300 dpi at the actual size they will appear on the printed page. Images taken directly from the Web are unacceptable unless they have been sourced at 300 dpi.

9. CAPTIONS AND FIGURE CALLOUTS

Please include all graphic material on separate pages at the end of the text. Caption text and credits should not exceed 50 words per image. Use identical numbering for images and captions. The first time a point is made in the main body of text that directly relates to a piece of graphic material, please indicate so at the end of the appropriate sentence with a simple callout in the form of “(FIG. 1).” Use the designation “(FIG.)” and a single numeric progression for all graphic material. Clearly indicate the appropriate FIG number on each illustration page.

10. SOURCES OF GRAPHIC MATERIAL

Most authors use their own graphic material, but if you have taken your material from another source, please secure the necessary permission to reuse it. Note the source of the material at the end of the caption.

Sample attribution: If the caption reads, “The layout of a traditional Islamic settlement,” add a recognition similar to: “Source: E. Hassan, *Islamic Architecture* (London: Penguin, 1982). Reprinted by permission.” Or if you have altered the original version, add: “Based on: E. Hassan, *Islamic Architecture* (London: Penguin, 1982).”

11. OTHER ISSUES OF STYLE

In special circumstances, or in circumstances not described above, follow conventions outlined in *A Manual for Writers* by Kate Turabian. In particular, note conventions for complex or unusual reference notes. For spelling, refer to *Webster's Dictionary*.

12. WORKS FOR HIRE

If you have done your work as the result of direct employment or as the result of a grant, it is essential that you acknowledge this support at the end of your paper.

Sample acknowledgement: The initial research for this paper was made possible by a grant from the National Endowment for the Arts [NEA]. The author acknowledges NEA support and the support of the sabbatical research program of the University of Waterloo.

13. SIMULTANEOUS SUBMISSION AND PREVIOUS PUBLICATION

Submission of a manuscript implies a commitment to publish in this journal. Simultaneous submission to other journals is unacceptable. Previously published work, or work which is substantially similar to previously published work, is ordinarily not acceptable. If in doubt about these requirements, contact the editors.

14. ELECTRONIC SUBMISSION

PDF files are acceptable for initial submission and peer review. All accepted article texts must be submitted as MS Word files. Submission of final artwork for accepted articles may be by CD, e-mail attachment, or electronic file transfer service. Accepted artwork must comply with the file-size requirements in items 7 and 8 above.

15. NOTIFICATION

Contributors are usually notified within 15 weeks whether their manuscripts have been accepted. If changes are required, authors are furnished with comments from the editors and the peer-review board. The editors are responsible for all final decisions on editorial changes. The publisher reserves the right to copyedit and proof all articles accepted for publication without prior consultation with contributing authors.

16. CORRESPONDENCE AND CONTACT INFORMATION

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TRADITIONAL DWELLINGS AND SETTLEMENTS REVIEW

is the official publication of IASTE. As a semi-annual refereed journal, *TDSR* acts as a forum for the exchange of ideas and as a means to disseminate information and to report on research activities. All articles submitted to the journal are evaluated through a double-blind peer-review process. Subscription to the journal is available only with membership in IASTE.

Subscriptions are payable in U.S. dollars only, through PayPal platform (by check drawn on a U.S. bank, U.S. money order, or international bank draft). Please refer to <http://iaste.org/membership/>. Orders should be addressed to:

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