

Introduction – ‘Tropicality-in-motion’: Situating tropical architecture

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One of the most fascinating aspects of tropical architecture is its material diversity and semantic density, that is, the different forms of built environment labelled as ‘tropical’ and the meanings these spaces potentially carry. The current diversity and density of tropical architecture contrasts with what it was during its ‘founding moment’. Tropical architecture was institutionalized in the mid-twentieth century with the establishment of educational and research units such as the Department of Tropical Architecture at the Architectural Association in London and the Tropical Building Division at the Building Research Station in Garston, UK, the publication of key texts such as Maxwell Fry and Jane Drew’s (1964) *Tropical Architecture in the Dry and Humid Zones*, and the completion of built exemplars in places such as Chandigarh and Ibadan (Wakely, 1983; Le Roux, 2003; Chang, 2010a). At its inception, tropical architecture was conceived as a ‘dialect’ of the so-called international style modern architecture adapted to the tropical climate, or what Fry (1959: 8) regarded as the ‘determining factor of architecture’, by incorporating ‘passive cooling’ strategies of cross-ventilation and sun-shading to ensure comfort and by specifying construction material that would resist fungal growth and corrosion caused by humidity (see also Atkinson, 1950; Koenigsberger *et al.*, 1974). In other words, tropical architecture was, in the mid-twentieth century, primarily constructed as a technical discourse by its metropolitan protagonists such as Fry and Drew, Otto Koenigsberger and George Atkinson.

From the late 1970s onwards, the discourse and practice of tropical architecture began to lose its relevance due to the onslaught of various social, cultural and economic factors. Chief amongst these was the widespread availability of cheap energy and the increasing reliance on mechanical air-conditioning to achieve thermal comfort (Cox, 2010). However, as energy profligate cooling displaced low energy modes of ‘passive cooling’, tropical architecture was reincarnated as various forms of regionalist architecture in the 1980s (Yeang, 1987; Tay, 1989; Powell & Tay, 1997). Its discourse was rearticulated as a sociocultural one that responded to the purported homogenization brought about by globalization on the one hand, and neocolonial western cultural hegemony on the other (Kusno, 2000: 190–204; Tzonis *et al.*, 2001; Chang, 2010b). This rearticulation was accompanied by a proliferation in tropical architecture’s manifold forms, many of which no longer derived from the international style.

While the climatic responsive passive cooling strategies of tropical architecture have been imbued with sociocultural significance in recent discourse, tropical architecture itself was ultimately reduced to a hotchpotch of formulaic architectural aesthetics. Thus, in the wake of tropical architecture’s diverse formats, architects and critics have sought to uncover its essence by debating what tropical architecture ought to be, more specifically, which architectural aesthetics had to be embraced (e.g. Chan, 2001; Tay, 2001). Not unlike the mid-twentieth century technical discourse of tropical architecture that played down the politics of decolonization which shaped its production (Crimson, 2003: 27–156; 2008; Chang, 2010a), recent debates on tropical architecture have similarly

ignored its history and historiography. This special themed section on 'Tropicality-in-motion': performing tropical spatialities' is crafted along the lines that tropical architecture as currently understood is oversimplified and insufficiently attentive to the diversity of discourses and attendant agendas. Rather than prescribe what tropical architecture ought to be, the papers here explore what tropical architecture has been under different geohistorical contexts, and discuss its entanglement with diverse social, cultural and political constructions.

Entanglements of self–other formations

In most architectural discourse, tropical architecture is presented as 'natural' in that it is determined by the environmental or climatic conditions of the tropics. The underlying assumption is that since the environmental or climatic conditions are arrived through purportedly value-free technoscientific means, tropical architecture should be regarded as an apolitical and asocial enterprise. This assumption, however, fails to explain why environmental or climatic conditions are privileged as the prime determinants of architectural form. Nor does it account for the taxonomic peculiarity in that although tropical architecture presupposes its opposite in 'temperate architecture' such a category does not exist. Furthermore, unlike the tropical region in which the heterogeneous architecture in diverse sociocultural contexts are subsumed under 'tropical architecture', architecture in the temperate zone is differentiated according to nation-states, historical periods and/or design approaches.

In recent years an interdisciplinary scholarship that explores colonial environmental histories, medical theories, pictorial and literary representations, and geographical discourse from the eighteenth century onwards has compellingly argued that the tropics is as much an imaginative and representational space as it is a physically located or 'real' space. This representational dimension of the tropics, also known as tropicality, is understood along the line of Saidian orientalism, as a part of colonial self–other formation that sees the tropics as an environmental 'other' – simultaneously paradisiacal and fertile, pestilential and degenerate – to the normalcy of the temperate self (Arnold, 1996; Driver & Yeoh, 2000; Stepan, 2001). Drawing from the insights of tropicality, one could argue that tropical architecture is also entangled with diverse colonial sociocultural constructions of tropical nature that were obscured by the aforementioned mid and late twentieth century discourses.

Several contributors in this themed section foreground the obscured (post)colonial entanglements of tropical nature with various social, cultural and political alterities, and interrogate the self-evidentiality of tropical architecture. Jiat-Hwee Chang and Anthony King's paper on the genealogy of tropical architecture in the British colonies during the nineteenth and twentieth centuries shows that the tropical climate was elevated as the prime consideration in determining built form because it was inextricably linked to the biopolitics of colonial governance. The relationships between the tropical climate and the built environment varied at different moments of the genealogy – shaped by shifting medical theories about the effects of tropical climate on the health of the British colonists, changing self-constructions of British race in relation to the natives, and varying political rationalities of British colonialism. Some of these points overlap those raised in Andrew Ballantyne and Andrew Law's paper on the Singaporean black-and-white house. Ballantyne and Law argue that the Anglo-Indian bungalow, a precedent of the black-and-white house, was a material cultural manifestation of the British colonists' preoccupation with building a comfortable home in the tropics. However, comfort

was not just a physical notion linked to natural ventilation and sun-shading; it was also a social, racial and medical notion that depended on spatial exclusiveness and command over disproportionate economic resources.

While these two papers attend to entanglements of tropical nature and architecture with colonial constructions of health, race and comfort, those by Anoma Pieris and Abidin Kusno highlight the oft-ignored class politics of tropical landscape and architecture. In her paper on tropical cosmopolitanism, Pieris situates the changes in postcolonial Sri Lankan tropical architectural aesthetics in relation to shifting class politics and labour practices. She contrasts the tropical modernism of postindependence Ceylon with the regionalist 'tropical Asian' style of the 1980s and 1990s. Pieris argues that while the former represents the modernizing impetus of a postcolonial nation and the cosmopolitan aspirations of its emerging middle class, the latter represents a return to the elite culture of colonial feudal society and its labour intensive practices. Kusno's paper on green governmentality in contemporary Jakarta argues that tropical environmentalism, in terms of promoting green building practices and green spaces, has become the new technology of government deployed by the post-authoritarian Indonesian state. Kusno notes that tropical environmentalism, thus, becomes the basis on which claims and counterclaims have been made by different state and non-state actors in conjunction with varied citizen groups, typically divided along the lines of socioeconomic class.

Lilian Chee's paper explores tropicality's gendered notions, discussing this aspect in relation to a historical event occurring in the early part of the last century, when a tiger was reputedly shot under the billiard room of a leading hotel in Singapore. The tropics have been inextricably linked to the wild, the feminine, the native and the degenerate (Livingstone, 2000; Stepan, 2001), with these attributes taken as aspects which weaken the self-governance and integrity of the colonized tropical world. Challenging these stereotypes, as well as conventional perceptions of colonial masculinity and scripted history associated with this building, Chee argues that the tiger anecdote is a subversive tool which overturns such notions and critiques the insular modes of colonial architectural history reliant on specific authorized sets of knowledges. She demonstrates how the tiger story, which falls outside the applied norms of knowledge, opens up a contemporary debate on the epistemological routes into this tropical space.

Heterogeneous temporalities and circuits

The entanglements of tropical architecture with historical colonial contexts created specific concepts and assumptions that lingered on and were continually being reactivated even after the formal end of colonialism, as scholars in postcolonial studies have argued (Jacobs, 1996). What is assumed to be new and liberating could very well be founded on old colonial assumptions. This is especially true for tropical architecture. Although most histories of tropical architecture trace its origin to the mid-twentieth century, after it was named-as-such or institutionalized, the papers by Chang and King, and Ballantyne and Law show that the formations of key underlying assumptions of tropical architecture could be traced to the early nineteenth century, if not earlier. They show that systematic knowledge and practices which privilege climate as the prime determinant of built form first emerged at that time because of the colonists' preoccupation with maintaining comfort and health.

These attempts at tracing the history of tropical architecture back in time should however not be confused with seeing tropical architecture as an immutable entity, part of the timeless tradition of 'climatic design' and vernacular architecture. Rather, the

papers collected here should be seen as moments of a Foucauldian genealogy (Foucault, 1980), which emphasizes discontinuities as much as continuities in order to foreground colonial power-knowledge configurations. Furthermore, they situate tropical architecture in relation to heterogeneous temporalities, combining resurgences with discontinuations, in which different postcolonial actors evoked, reconfigured, repeated but also transformed various forms of temperate selfhood and tropical otherness. By doing so, they expand tropicality in a manner not dissimilar to how Saidian orientalism was extended by scholars who explored practices of orientalism-in-reverse, self-orientalizing and occidentalism (Coronil, 1996; Dirlik, 1996; al-'Azam, 2000). For example, Pieris argues that while the tropical modernist houses of Ceylon/Sri Lanka's postcolonial middle class were influenced by both the tropical modernist architecture designed by European architects and the colonial bungalows introduced by the Public Works Department for the colonists, they represent a form of vernacular cosmopolitanism that differed and departed from these influences in important ways. Likewise, Kusno suggests that urban environmentalism in contemporary Indonesia, especially the ways squatter settlements or *kampung* were dealt with, draws from Dutch colonial tropical planning practices but reconfigures the original issues of race and class.

Though problematic, the taxonomic category tropical architecture offers opportunities of linking up regions across the tropical belt, connecting and comparing localities in Africa, Asia, America and the Caribbean that are typically segregated by the division of labour in area studies. Furthermore, if we understand the tropics as part of a self-other construct, we would also take into account the temperate zone as an intrinsic part of the mutually constitutive, albeit asymmetrical, relationship. Thus, a study of tropical architecture could also offer opportunities to study the imperial network and to see the metropole and the colony as a single analytical field, moving beyond the parochiality of focusing narrowly on nation-states (Stoler & Cooper, 1997; King, 2004). These opportunities are taken up by the contributors in this themed section, who not only examine tropical architecture across different nation-states in various parts of Asia, but also explore interesting and sometimes surprising interconnections between and within transnational empires. Ballantyne and Law examine the circulation of the Anglo-Indian bungalow and its hybridization as the Tudoresque black-and-white house in the imperial network encompassing Britain, British India and Malaya. Chang and King take a similar multisited approach in their study of British colonial tropical barracks and housing, taking examples from the West Indies, British India and Malaya in their genealogy.

The existing discourse tends to see tropical architecture as epitomizing either the particular or the universal; one school hails it a form of critical regionalism that resists the homogenizing effects of globalization while the other sees it as a fundamental part of a neocolonial international project of modernization and development. By examining tropical architecture in diverse sites and evaluating how its knowledge and practices travel, translate, circulate and transform across different timespaces, the papers in this themed section rework and destabilize the opposing and presumably static categories that accompany the discourses of self-other and temperate-tropics.

Situating tropicality

Collectively, the papers in this themed section argue that the meanings associated with tropicality are not *a priori* but, rather, grow from sets of bodily practices and situational contexts. Tropicality in such terms is a politicized approach as opposed to something natural. Thus, tropical architecture, which seems to connect with and connote the

natural environment, is conversely a complex cultural construction that has been subjected to various networks of power marked by race, gender and class.

Rejecting the essentialization of the tropical built environment, the papers attempt to critique existing discourses of tropical architecture that have defined the field as unproblematically essentialist or nostalgic in relation to local climate and tradition, or alternately objectified its forms as exotic artifacts for passive consumption. Contributors reconsider how tropical spaces in their documented or narrated formats may operate as modes of criticism and/or transform the ways in which we understand tropicality. For example, Chee's paper also proposes that the tiger anecdote transforms one's architectural knowledge by decentering it from architect to user, or storyteller, thus reinforcing the idea that tropicality is a mobile rather than fixed construct since the animal story performs this space anew through the inevitable variations which accompany each narration.

Ultimately, this themed section strives to map out the expanded field of tropical architecture with particular attention to its tenuous conceptual scaffolding. It exposes a multidimensional territory constituted by a complex web of material facts and buildings, discursive ideas and their languages, as well as competing imaginations and ideologies. The work of situating the multiple contexts of tropical architecture needs to be done for it is this work which constructs and defines anew the category we call 'tropical architecture' in its manifold built, drawn, documented and narrated forms.

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