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Communications Building: Tropical Modern Architecture from West Africa to the Pacific

Despite the transnational nature of tropical modern architecture being well researched in many former British colonial territories little has been written on the Pacific region. This paper extends a biographical architectural history that spans British modernist beginnings in the UK to tropical modern translations in Nigeria, West Africa and the Solomon Islands, Oceania. It focuses on a network of communications buildings including a Post and Telegraph Technical Training School, telephone exchanges, regional and central post offices and broadcasting stations. Employing the techno-sociological concepts of Actor Network Theory and the Oceanic perspectives of Pacific scholar Epeli Hau’Ofa, in conjunction with Mikhail Bahktin’s notion of “different speechness”, this paper attempts to unravel the multiple and entangled translations of this architecture.

While exploring the transferences of tropical modern architecture between these diverse tropical regions, individual agencies within the networks of colonialism and tropical modern architecture are also revealed. This discussion examines not only the architect’s position within the Public Works Department, but also draws attention to the ‘agency’ of the architecture itself within its translation from one place to another. The functional and structural dependence of the buildings on modern technologies in transferences of colonial modernity is brought to light, as is their pivotal role in the progression and dissolution of modernity and colonialism. Furthermore, the position of the author as an artist-documenter of this architectural history permits a private voice. The architect of the buildings is the author’s father, and this paper refracts a personal oral history. Consequently translations of this architectural history engender multiple perspectives that complicate and enhance typical perceptions of tropical modern architecture.
Introduction: Documentary Translations

In late 2011, I revisited Honiara, the capital of the Solomon Islands, to document colonial British buildings that established the infrastructure of the town in the late 1950s and 1960s. Photographing the bright red and blue General Post Office in Honiara, a local man came towards me gesturing about Europeans coming to his country to take photographs. My father, Charles C. Stevenson, designed this building in 1968. He had been an architect in the colonial Public Works Department (PWD) in 1950s Lagos, Nigeria and then in 1960s Honiara, Solomon Islands. Following his colonial service, he established a private practice in Honiara and worked there for over thirty years. I was born and grew up in these islands. Returning home I discussed these buildings with Charles and our conversations informed my silent 22min loop 2012 film In Conversation with the Architect (Dad and I). My encounter in front of the General Post Office is revisited later in this paper.

For an artist coming to architectural historiographies via film and photographic projects, the tropical modern buildings in West Africa and the Solomon Islands perform as protagonists in a shifting play between colonial legacies and postcolonial realities. Today’s documentary processes of revisiting and reconstruction are augmented by personal positions; exploring locations, public and private archives and contemporary postcolonial conditions. Complicated perspectives of the architecture thus come into play with one another; and typical perceptions of the homogenizing nature of the work of architects in colonial Public Works Departments are challenged. Within translations of this architectural history between a father and daughter, varying attitudes are inevitable.

Architecture and Architect as Actors

The multiple translations of this architecture, from European modernism to tropical modernism in its diverse locations, are inherently entwined with the interconnecting networks of colonialism, modernisation and development. Developed in the 1980s by sociologist Bruno Latour and others, Actor Network Theory (ANT) offers a productive framework for exploring these architectural transferences. As a socio-technical platform, an Actor Network offers an enmeshed, net-like structure in which not only human, but also non-human elements ‘act’ together to produce innovation and progress. Colonialism can be viewed in this context. Strategic linkages between interconnecting agencies, both human and non-human, reinforced and promoted the modernising networks of colonialism. As power connections between colonially invested operations weakened, decolonisation gained momentum and tropical modern architecture also waned.

From this perspective, can tropical architecture be seen as an “entity that does the tracing and inscribing ... not a piece of inert matter in the hands of human planners, or designers”? Do the buildings themselves perform as actor-agents within colonialism, as much as the architects did? Across the multiple places and eras of colonialism, tropical architecture and its architects were intertwined in structures that connected and supported one another. Both commanded their own set of strategic connections: climatic and technical, as well as socio-political and cultural. In addition, while nevertheless remaining ‘continuously local’, tropical architecture collapses geographical distances to challenge the critical regionalist view of this architecture as a vocabulary primarily informed by local conditions. Tropical modern buildings in this way figure as active players throughout colonial territories, performing a strategic role in their own translation from one place to another, from the colonial to the postcolonial.

How strategic then was the role of the architect, or the buildings themselves, in the manifestation of tropical modern architecture, locally and globally? What connections did they exercise? As social theorist John Laws succinctly asks, “Is an agent an agent because he carries knowledges, skills, values, and all the rest? Or is an agent an agent because he or she inhabits a set of elements (including of course a body) that stretches out into the network”. In the following part of this paper, specific details documenting this architectural narrative explore these questions.

**Tropical modernism and British Colonialism: the UK**

The trajectory of tropical modern architecture is synonymous with colonial development in British tropical territories between the 1940s and 1960s. Characterised as ‘acclimatizing’ Western modern architecture to the tropics, the passive cooling innovations made by these architects form
a significant legacy that remains relevant to discourses of sustainability in architecture today. This climatic and technical privileging makes claims for an apolitical architecture, however its relationship to British conceptions of health in tropical regions and the gathering of quantifiable tropical building data reveal inextricable linkages to colonial policies. This encompasses European self-other constructions of the tropics, imagining both paradise and a degenerative environment requiring systematisation. However, as the following outlines, such technical preoccupations perpetuated an already existing pragmatic British design attitude.

In the post-war conditions of Britain itself, significant factors informed the development of tropical architecture. At that time, re-industrialization was a priority to kick-start an economy dealing with the burden of re-constructing destroyed infrastructure and financing its wartime debts. Charles’ early experience included the conversion of tenement basements into bomb shelters, the modernization of textile factories in his native Scotland, and designing ‘Test-Beds’ in Northern England for commercialising the jet engine. Buildings were accordingly designed to accommodate technical components, whether an industrial textile machine, jet engine, or telephone switchboard. Traced in their circulation throughout modernising networks, these non-human components act as “quasi-objects” or “tokens” within an Actor Network: “[w]hat circulates and what makes the circulation (are) both co-determined and transformed”. Both architectural and technical agencies were mutually inter-dependant. Contributing to a pragmatic design approach, these non-human technical actors were pivotal in the work of post-war British architects.

The extension of these activities into large resource-rich and viable countries in its colonies also played a significant role in Britain’s re-industrialization. Importantly, the above pragmatism was applied to tropical modern building. Prior to the 1940s, Public Works Departments comprised of engineers until the introduction of post-war architects. A paper titled The Position of the Architect in the Tropics, presented at the seminal 1953 Conference on Tropical Architecture in London, remarks that such an architect “would deny there is any such thing as ‘pure design’.” Working with engineers, these architects implemented infrastructure, responding not only to climatic concerns but the modern technological imperatives that dictated the purposes of these buildings. At this same conference it was noted that British funding caused these buildings to be viewed as a political

problem, commenting that commercial practices should be employed instead. Colonial linkages to
this architecture were already being challenged.

However, considering distances between Britain and its colonies, it is extraordinary that British
tropical modernism was so cohesive. The pre-war dispersal of modernism throughout Western
metropolitan centres and its circulation in British architecture schools reveal formative beginnings.
Among others, the Architectural Association in London and the Glasgow School of Architecture
(where Charles studied) by that time integrated Bauhaus modernism, the work of Le Corbusier
and Frank Lloyd Wright, alongside that of Charles Rennie Macintosh. Journals circulated, featuring
architects such as Richard Neutra and Oscar Niemeyer. Operating actively through modern
communications, an international network of Western modernism was already well established by
the 1940s.

Communications Buildings: Nigeria

A communications network building offers a highly relevant framework with which to consider
translations of this architecture. “Tropical architecture emerged from linkages made possible by
modern communications within spatial systems of colonialism.” Communications technology
developed a new sense of nationhood in the colonies and connected peripheral sites with
metropolitan centres in Europe and America. Facilitating the cohesion of previously separate

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16 Ola Uduku, “Modernist architecture and ‘the tropical’ in West Africa: The Tropical Architecture Movement in West Africa,
communities, it was “pivotal in the colonial administration process” and critical in transferences of colonial modernity.\(^{18}\)

In March 1953 my father arrived in Lagos, Nigeria as a Public Works Department (PWD) architect to design a Post and Telegraph Training School. A decade followed in which he became Senior Architect of the Post and Telecommunications Development Programme, supervising the building of a modern communications network throughout Nigeria. This included regional post offices, the Lagos General Post Office, and telephone exchanges. He worked closely with Post and Telecommunications engineers in a client-like relationship and with a team of PWD architects.

However, accommodating modern equipment in diverse tropical territories was entirely different from modernizing buildings in Britain. “Young architects were given a terrifying but stimulating amount of responsibility in colonial territories at the time.”\(^{19}\) Such a position significantly afforded unprecedented opportunities. Charles points out that, in Africa, they were designing modern, purpose-built buildings, while in the UK, buildings were primarily renovated. Engendering a sense of individual agency, the colonial territories allowed far greater architectural experimentation; not only of private practicing architects but also PWD architects. In her research on Nigerian postal architecture, Yemi Sakala makes an argument for such “innovative” PWD architecture. She cites the 1959 Lagos General Post Office, which was supervised and partly designed by Charles.\(^{20}\)

Nevertheless, how did an architect fresh to the tropics begin to understand how to design buildings in this unfamiliar environment? Charles’s response to my question describes a supportive expatriate network. In Nigeria there was, by that time, a well-established construction industry including major contractors such as expatriate British firms Costains and Taylor Woodrow, the Italian-Nigerian firms Cappa D’Alberto and G. Cappa Ltd, and consulting engineers Ove Arup. The Lagos PWD circulated technical booklets, building specifications and architectural journals. Informally, architects exchanged experiences at expatriate gatherings at places like the Lagos Yacht Club.\(^{21}\) Critically, this social network was grounded in expatriate displacement and engaged technically with the location. From Charles’ perspective, this support facilitated leading design and building on an impressive scale in Nigeria.


This Nigerian communications network occupies a distinctive position within West African tropical modernism. Fundamentally informed by modern communications technology itself, these formal gridded structures were based on the dimensions and requirements of switchboards, cable switching racks, air-conditioning plant and generator machinery, sorting and post office box capacities, and the radio receiving capacity of sites. This is especially evident in the tall structural lines and enclosed aspect of the telephone exchanges as a direct response to technical components and air conditioning requirements. These were instrumental buildings, active in the networks of colonialism and transferences of modernity.

Particular architectural details, however, speak to contrasts between local sites and individual subjectivities, alongside the unifying character of tropical PWD architecture. Distant locations throughout Nigeria, along with individual sensibilities, informed singular features. In hot, dry Northern regions a double concrete roof absorbed direct heat, allowing shade and ventilation to the structural roof, while in wet, humid Southern and Eastern regions a pitched fibre-cement roof was suitable. Evocatively, different shades of sand coloured many buildings; a ‘Tyrolean mix’ of cement and locally sourced sand surfaced exterior walls. Individual sensibilities too were expressed in architectural detailing. A junior PWD architect designed the unusual yellow wall of the 2000 line telephone exchanges. Due to air-conditioning requirements this used recessed glass blocks to mimic a breezeblock wall. In addition, random stonework creates the magnificent retaining wall at the Jos telephone exchange site, while on the Kano exchange smaller stones are set in orderly rows. Such architectural details highlight subtle transgressions of individual places and architects confronting a cohesive style of architecture.

Transferences to the Pacific: the Solomon Islands

A 1963 Pacific Island Monthly article title refers to the British Solomon Islands Protectorate as “The Elysian Fields at the End of the Line”. Decolonization was well underway. With African
colonies newly independent, many colonial service personnel transferred to the Pacific. However, in contrast to the vast opportunities which Africa presented in its resources and proximity to Britain, the Pacific was further away, both spatially and temporally; in distance and modernization. A different set of conditions challenged the colonial administration of the Solomon Islands. Nonetheless, in the decade preceding Solomon Island Independence there was impetus to build infrastructure, largely funded by the 1959 Commonwealth Development and Welfare Act.

In 1963 Charles arrived in the Solomon Islands as a PWD senior architect to build a government secondary school. However circumstances were far more testing in the Pacific. At that time, the PWD in Honiara had an acute shortage of architects and qualified draughtsmen to fulfil the demands of the building programme that the administration expected. In addition, the construction industry in the islands was very limited. All materials were imported, held in government stores and supplied to four contractors who quoted for transport, construction and labour costs only. Timber mills and concrete block manufacturing were just being established, and equipment, materials and fittings depended on monthly shipping freight. As well, there was a shortage of skilled tradesmen with carpenters, mechanics and plumbers brought in from an established Fijian industry. Heavy earth moving equipment, salvaged in some cases from American WWII dumps, was scheduled around job priorities. Furthermore, in Nigeria, PWD provincial engineers oversaw much construction supervision, while in the Solomon Islands this responsibility fell to the architects. Finally, there were significant climatic and environmental factors, including cyclone seasons, earthquakes and invasive termites. For Charles, this situation contrasted sharply to Nigeria.

The King George VI Secondary School was Charles’s first assignment in the Solomon Islands. This complex merits discussion in its relationship to his 1953 Nigerian Post and Telegraph Training School, highlighting ways in which certain features transferred seamlessly to the Pacific while other idiosyncratic adaptations were called for. Both schools were orientated across a flat site in long teaching and dormitory blocks capturing the prevailing breeze. North and South elevations featured open access corridors, breezeblock walls, and pivoting glass louvers, while East and West facing walls blocked morning and afternoon sun. Timber sunscreens and concrete window canopies provided further sunshade. Concrete and steel at lower levels resisted termites. Such features are seen as defining tropical modern architecture, especially in West Africa.

However, other King George VI Secondary School details demonstrate alternative solutions to contrasting, as well as similar problems in West Africa. Different breezeblock designs illustrate

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Pacific blocks needed to prevent driving rains, while open African blocks sufficed for Nigerian downpours. To this end, the island classroom blocks had a return that, when alternately laid, formed a channel for breeze-flow yet prevented incoming rain. As well, the idiosyncratic Pacific use of galvanised steel water pipes for structural posts prevented termites, while, in the kitchen, ‘washboilers’ were used to cook rice, which due to the thin metal tubs regularly burnt through. Charles remarked that he finally sourced industrial rice cookers from Holland like those they had used in Nigeria. Such details evidence nuanced translations of this architecture to the Pacific.

The expansion of tropical modern architecture into the Pacific region provokes critical questions about strategic colonial network connections at that time. In his valuable essay “Building a Colonial Technoscientific Network”, Jiatt-Hwee Chang notes that the colonial office identified discrepancies between physical building difficulties on the ground and construction programmes in the colonial territories. Consequently, Building Standards were considered a means to reducing escalating costs of “somewhat extravagant schemes”. However, while colonial networks disseminated such standards for this cost-effective alignment, systems in the Solomon Islands were more ad-hoc.

The Colonial Office sent copies of the Model Regulations for Small Buildings in Tropical Countries to Honiara in 1963, and colonial officer A. F. Daldy of the Tropical Division of the Building Research Station visited the fledgling capital in 1965 to advise. In spite of this, Charles' personal copies of PWD standards from Nigeria and the UK, as well as Earthquake code specifications from New Zealand informed his writing of the Solomon Island Standard Specifications. Here, an individual agency combined with the broader colonial network in a mutable manner. Given the distance of the Pacific from metropolitan centres in Europe and America, combined with the acceleration of decolonization, perhaps the connections that reinforced once cohesive networks were beginning to loosen. As Charles noted, tightened colonial purse strings resulted in a humble and smaller scale of architecture in the Solomon Islands.

The General Post Office in Honiara notably reiterates, then, the formal structure of tropical modernism. Designed in 1968 it was Charles' first commission in private practice in the Solomon Islands. This building maintains an obvious relationship to the communication buildings in Nigeria, not only in its design but also in its response to its technical components and functionality. The distinctive aluminium sunscreen along the west-facing front of the building protected computer equipment from the hot afternoon sun and hid unsightly air-conditioning units. Windows in non air-conditioned rooms featured typically tropical modern concrete canopies and pivoting glass louvers, while stonework and terrazzo flooring similarly recall African features. Pacific features are difficult to identify in this building. However, imagining the structure transplanted to Africa, the distinction would be in elements such as the fine undulating pattern of the aluminium screen and the mosaic detail in the steel columns.

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Communications as a system linked to colonial modernisation was more unreliable in the Solomon Islands. The oceanic nature of the islands plays its part in this. Sites for broadcasting stations, seen as an effective means of establishing communication throughout the hundreds of islands in the Solomon’s archipelago were at times difficult to attain, land ownership being a highly contentious cultural issue. As Oceanic scholar Epeli Hau’Ofa so evocatively puts it, “There is a world of difference between viewing the Pacific as ‘islands in a far sea’ and as ‘a sea of islands’.”

On one hand there is a sense of distance and isolation, while on the other an expansive, fluid spatiality. In the face of “a sea of islands”, perhaps the western perspective of “islands in a far sea” acts to condemn the colonial understanding of communication in the Pacific to one of perpetual long distance. Compounded with an expatriate sense of double displacement, given that many had served in other colonies, reiterations of colonial social and technical practices remained strong in the last years before Solomon Island Independence. However, over time, Pacific tropical architecture increasingly displayed transgressions of this cohesive attitude. In Honiara, since Independence, such transformations have engendered an entangled hybrid sensibility.

Transformative Narratives: Postcolonial Realities

“...Their universe comprised not only land surfaces, but the surrounding ocean as far as they could traverse and exploit it, the underworld with its fire-controlling and earth-shaking denizens, and the heavens above with their hierarchies of powerful gods and named stars and constellations that people could count on to guide their ways across the seas....”

Pertinently, an Actor Network contemplates a dynamic structure resonant with that of the Pacific as described above by Epeli Hau’Ofa. As Latour explains, “Instead of thinking in terms of surfaces ...one is asked to think in terms of nodes that have as many dimension as they have connections.” He adds, “Loci, contingencies or clusters are (more) like archipelagos on a sea...” In these shifting conditions a network is...
not static, nor a reified representation; rather it is concerned with “what moves and how this movement is recorded.” These fluid territories point to processes of transformation and modes of representation. No longer direct actors within colonial networks, these tropical modern buildings have become players within shifting postcolonial realities.

![Image](image-url)

Fig. 5. General Post Office, Lagos, Nigeria, 2013. Photograph courtesy of Yemi Sakala.

Provocatively, both the General Post Offices in Lagos and Honiara evoke the contemporary postcolonial conditions within which they exist. During colonial times they were predominately white, however over time, due to the hot humid conditions the buildings became mouldy and black. At some point both buildings were repainted. The Lagos General Post Office now recalls the green and white Nigerian flag, while the bright red and blue Honiara General Post Office speaks to its tropical location.

Does the re-colouring of these buildings enact a fundamental break with the colonial legacies of tropical modern architecture? The reflective properties of white as espoused by earlier tropical modern architects are no longer required, given the embracing of air-conditioning in both buildings. Such units now populate the exterior of the buildings. Ironically, the climatic preoccupation of tropical modern architecture becomes invalid and dissipates. Has the air conditioning unit gained such status, that the sensibility of Western comfort is now ingrained in the local culture of tropical urban centres?

Or, on the other hand, were the buildings still too uncomfortable despite their modern cooling innovations? Either way, the colourful transformation of these buildings extends them into a contemporary hybrid space in which multiple and dialogical dimensions are at play. What future ways of creative inhabitation will transform these buildings?

Encountering the Solomon Island man outside the red and blue Honiara General Post Office, as a European woman otherwise alone, I retreated. My personal permission in relation to this building was altered. Intimately familiar with the Post Office, as a child frequently accompanying my parents to the family post box, a poignant sense of my position was heightened. Furthermore, as a major first commission for my father in private practice, this building was celebrated as the “New G.P.O 1970” on a British Solomon Island 23cent stamp. On seeing its new colours in my images of the building, my father was taken aback, further questioning the ANZ ATM in the corner of the building.

This private encounter condenses complicated postcolonial, as well as personal dilemmas. The limitations of my position, including Charles’, highlight that an idea of a space is not necessarily a fixed location. Literary theorist Mikhail Bahktin, in his concept of “different speechness”, similarly recognises simultaneous, co-existing, yet differing and conflicting voices, including the author’s, in multiple characters within modern conditions.36 Bahktin offers an open-ended perspective, importantly indicating creative potential for postcolonial discussion in the gaps and aporias within, and between, generational difference, geographical distances and cultural contradictions. Historical and postcolonial translations of this architecture are dialogical, fluid, uneven and asymmetrical.

**Conclusion**

“Modern Architecture is the product of machinery and the use of new materials, but to be modern does not necessarily suggest that it should turn it’s back on everything else. Nothing could be more mistaken than to regard modern building as architecture of steel, concrete, plate glass and machinery. That would make a cold forbidding world. Warmth and mellowness are expected of good architecture and the development of modern architecture could be towards its humanisation, chiefly by the greater use of natural materials and in Scotland is there a more natural material than stone.”37 Charles wrote these words in his Diploma of Architecture thesis from the Glasgow School


of Architecture. Speaking of future development it also looks to the past. Perhaps this accounts for tensions within the multiple translations of this architecture. The ‘random rubble’ formation of indigenous Scottish stonework has found expression in many of Charles’ buildings, in Africa and the Solomon Islands. As a material component each single stone of varying dimension and character acts as a connector for the cohesiveness and strength of a wall. Individual agencies, human and non-human, social and non-social, adhering together in a building, can be seen to depend on the strength or weakness of their connections. Oscillations between attitudes of the past, present and looking to the future entwine these buildings materially and ideologically.

Revealing the under-documented transference of tropical modern architecture to the Pacific this architectural narrative traces the agencies of its various actors: social and non-social, technical and human, building and architect, to examine its complex shifts from practical and technical beginnings in post war UK, to tropical modern translations in Nigeria, West Africa and hybrid postcolonial transformations in the Solomon Islands. While exposing both architecture and architect as strategic within the networks of colonialism and modernism, unevenly and asymmetrically in their different locations, fluid processes of translation within shifting contemporary postcolonial conditions pronounce other dialogical dimensions to this architecture.