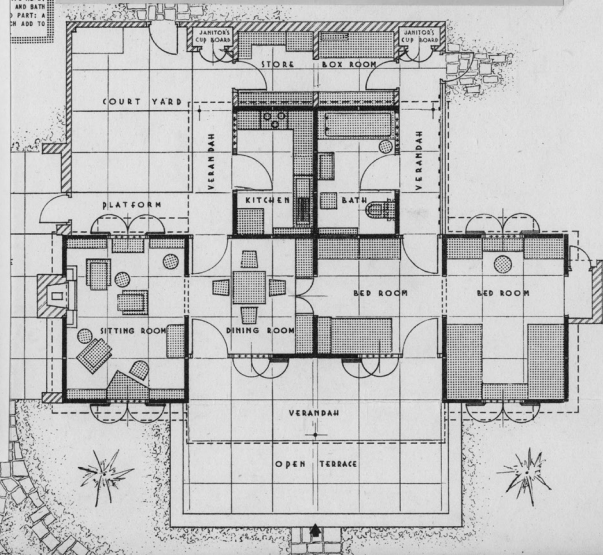


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Otto Königsberger and Global Architectural Histories

BY VANDANA BAWEJA

Otto Königsberger was a German émigré architect who worked as the state architect in princely Mysore in British India in the 1940s. Upon emigration to London in 1951, he subsequently became an educator of Tropical Architecture (1954-1971) at the AA School of Architecture. This paper examines how Otto Königsberger's career can illuminate "global" as a paradigm in Modernist historiography.

Organizations such as **docomomo** International, GAHTC (Global Architectural History Teaching Collaborative), IASTE (International Association for the Study of Traditional Environments), and INTA (International Network of Tropical Architecture) are actively engaged with "global" histories of Modernist architecture and its preservation. How do we theorize global as paradigm with respect to architectural histories, particularly the history of Modern Architecture? Architectural historians have engaged with global as paradigm through the histories of "non-western" architecture – a problematic Eurocentric term which defines regions outside Europe and North-America with respect to lack of the "West." As a geographic meta-category "non-western architecture," comprises geographic, political, and cultural categories such as – tropical architecture, colonial architecture, Asian architecture, South-Asian architecture, Chinese architecture, Middle Eastern architecture, African architecture, Latin American architecture, and Islamic architecture – each of which have entangled historical, socio-political, and geographic trajectories. With respect to Modernism, it became obvious that "non-western" as a paradigm simply reinforces the diffusionist narrative of Modern architecture, which is founded on the teleological trajectory of modernization of the "non-western" or the formerly colonized, under-developed world. Sebastian Conrad in his book, *What Is Global History?* enlists the paradigmatic methods of global history – one, global histories do not exclusively constitute macro-narratives; two, global histories reject political units, such as nation-states or empires as their spatial units of analyses; three, global histories are "inherently relational," that is they are based on the premise that any civilization, Empire or a nation-state never develops in isolation; four, global histories eschew the notion of endogenous chronicles and instead rely on narratives of networks of circulation and exchanges; five, global historians place emphasis on synchronic events across political territories and ideological divides; and six, global historians recognize that networks

of exchange are fluid – that is the networks are constantly transformed in time and space – as their geographic boundaries change with time and shift in centers of power, older networks overlap and intermingle with newer networks.¹ As a paradigm, global architectural histories of Modernism are not bound to a place as a spatial unit of analysis based on political boundaries, such as a nation-state. Further, these histories uncover how Europe was entangled in a highly globalized milieu that relied on the colonial mobility of goods, raw-materials, people, ideas, and aesthetics – therefore, architectural Modernism emerged in this context ought to be influenced by the cultural encounters with colonial territories and intercolonial networks across Empires. A multilateral flow of ideas and mobility are crucial to understating the global paradigm in Modernist histories.

Émigré and Immigrant Architects as Agents of Global Narratives of Modernism

As agents of globalization and the mobility of Modernism, émigré and immigrant architects have played a significant role in cross-pollination of ideas, experiments with new forms, emergence of novel ideas and hybrid discourses. Émigré and immigrant architects who moved to the USA such as Walter Gropius (1883-1969), Josef Frank (1885-1967), Mies Van der Rohe (1886-1969), Marcel Breuer (1902-1981), Josep Lluís Sert (1902-1983), Rudolph Schindler (1887-1953), Richard Neutra (1892-1970), and Julius Posener (1904-1996) are credited with transforming American Modernism. However, the life-experiences and transformation of émigré architects such as – Bruno Taut, Bernard Rudofsky (1905-1988), Ernst May (1886-1970), Erich Mendelsohn (1887-1953), and Otto Königsberger – who emigrated numerous times offer a unique lens into how travel, multiple sequential exiles, and sustained culture-contact with different societies exposed these architects to the limits and polemics of Modernism and modernization. Bruno Taut initially emigrated from Germany to the Soviet Union

in 1932, then sought refuge in Japan in 1933, and finally, lived in Turkey from 1937 onwards, where he worked on numerous architectural commissions. In 1932, the Viennese architect Bernard Rudofsky emigrated to Capri in Italy, where he studied Mediterranean vernacular. In 1938 he sought refuge in Latin America to live in Buenos Aires in Argentina, and subsequently in Rio de Janeiro and to São Paulo in Brazil. He eventually arrived in the USA in 1941, where his most significant contribution was the MoMA's 1964 exhibit *Architecture without Architects* – an archive of Bernard Rudofsky's photographs in exile of vernacular and folk architecture. The exhibit was viewed as a critique of Modernist architecture and urbanism. The German architect Ernst May, initially emigrated to the Soviet Union in 1930, where worked on the planning of new towns. Subsequently, in 1934 he emigrated to East Africa, where he farmed on a coffee estate in Tanganyika (now part of Tanzania) and later moved to Nairobi in the neighboring nation of Kenya to work as an architect and a planner. He returned to Germany in 1953 and worked in Hamburg. Erich Mendelsohn emigrated to the USA in 1941, after a brief interlude in England in 1933 and working in Palestine in the late 1930s. These architects offer an interesting lens into Modernism's global trajectory and the postwar critiques of Modernism based on placelessness.

Otto Königsberger and his Many Exiles

Otto Königsberger was a Berlin-trained modernist German émigré architect who arrived in Mysore State (now part of the Indian state of Karnataka) in British India. Sir Mirza Ismail (1883–1959), the *Dewan* [Prime Minister] of Mysore from 1926 to 1941, invited Otto Königsberger. Mysore was a South Indian princely state under indirect British rule from 1799 to 1831 and subsequently, from 1881 to 1947. After independence from British rule in 1947, Otto Königsberger was appointed as a planner and architect to the Indian Federal government in 1948. The Partition of the Indian sub-continent in 1947 created a huge demand for housing for the refugees that emigrated into India from East Pakistan (now Bangladesh) and West Pakistan (Pakistan). Otto Königsberger proposed prefabricated housing units to produce high quality shelter quickly, which failed due to a poor case of technology transfer. In 1951, he emigrated from India to London and in 1954, founded the Department of Tropical Architecture at the AA School of Architecture. Tropical Architecture in the 1950s was rapidly emerging as a particular type of modern architecture that was suited for sultry climates in the decolonizing tropics and was a clear departure from older strains of tropical architecture, which comprised revivalist buildings adapted to the tropics. Otto Königsberger headed the Department of Tropical Architecture from 1957 until its closure in 1971. Subsequently, he established an academic home for the discipline of urban planning – the Development Planning Unit – at the University College London in 1971, which he led until he retired in 1988. He died in London in 1999.

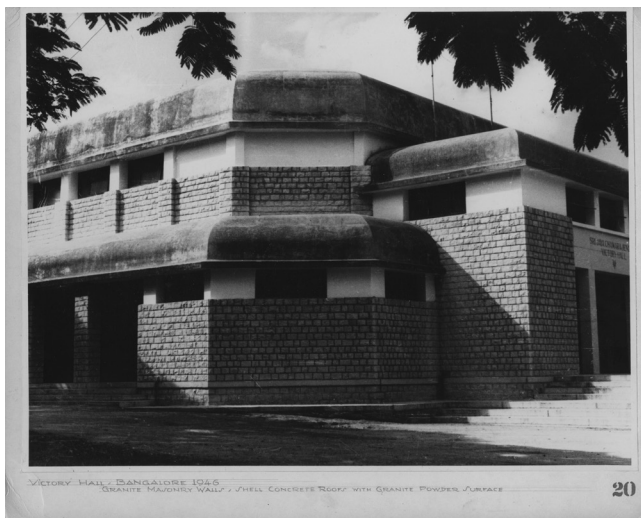
From Berlin to Cairo and Davos

Otto Königsberger's complex career included five broad phases. The first phase of his career comprised his training as a modernist architect from interwar Germany. From October 1927 to December 1931, he studied at the Department of Architecture and Town Planning in the *Technische Hochschule* [Technical College] in Berlin (renamed in 1946, as the *Technische Universität Berlin*) to acquire a Diploma of Engineering with a specialization in Architecture and Town Planning. From 1932 to 1933 he worked as an architect in the University Building Department, Prussian State Government in Berlin. On April 7, 1933 the Third Reich implemented the *The Law for the Restoration of the Professional Civil Service*, which required civil servants of “non-Aryan” descent to be dismissed from civil service. Being of Jewish ancestry, Otto Königsberger was fired from his job. The second phase of his career began in 1934, when he joined the German-Jewish Egyptologist Ludwig Borchardt (1863–1938) in Cairo at his archeological institute *Ludwig Borchardt Institute*, which is now the Swiss Research Institute on Egyptian Architecture and Archaeology in Cairo [*Das Schweizerische Institut für Ägyptische Bauforschung und Altertumskunde in Kairo*]. Borchardt studied structural engineering at the *Technische Hochschule* in Berlin, and was the director of the Imperial German Institute for the Study of Egyptian Antiquities in Cairo [*Kaiserlich ägyptische Altertumskunde in Kairo*] from which he retired in 1929 to establish his own private institute. Based on his work with Borchardt in Upper Egypt on the building history of the 18th Dynasty, Otto Königsberger completed a PhD Thesis titled *Die Konstruktion der ägyptischen Tür* [The Construction of the Egyptian Door] and earned a Doctorate of Engineering in February 1935 from the *Technische Hochschule* in Berlin. He developed Tuberculosis and came to recuperate in St. Josephs-Haus in Davos from 1936 to 1938. While in Davos, he also worked as an architect for J. Grasshoff in Germany and Switzerland.

From Europe to India

The third phase of his work in India as an architect and planner, was shaped by the Mysorean Regime which demanded that he build with restrictions on industrially produced materials, which he theorized in terms of how to produce Modern architecture without industrial modernization. In 1939, Otto Königsberger arrived in Mysore State as an émigré architect at the invitation of Sir Mirza Ismail, the *Dewan* of the State from 1926 to 1941. Otto Königsberger started working for the Government of Mysore on April 13, 1939. Otto Königsberger was appointed as a consulting architect in 1939 and later Chief Architect (1940–1948) in the Mysore Public Works. He began his career during the reign of Maharaja Krishnaraja Wodeyar IV (1884–1940), who ruled Mysore from 1894 to 1940. After Krishnaraja Wodeyar IV's death, Otto Königsberger continued working for his successor Maharaja Jayachamaraja Wodeyar (1919–1974), who ruled Mysore from 1940 to 1950.

01 Otto Königsberger, Victory Hall (now Bal Bhavan), Bangalore (renamed Bengaluru), Karnataka, India, 1945. © Otto Königsberger Archive, aa Archives, London.



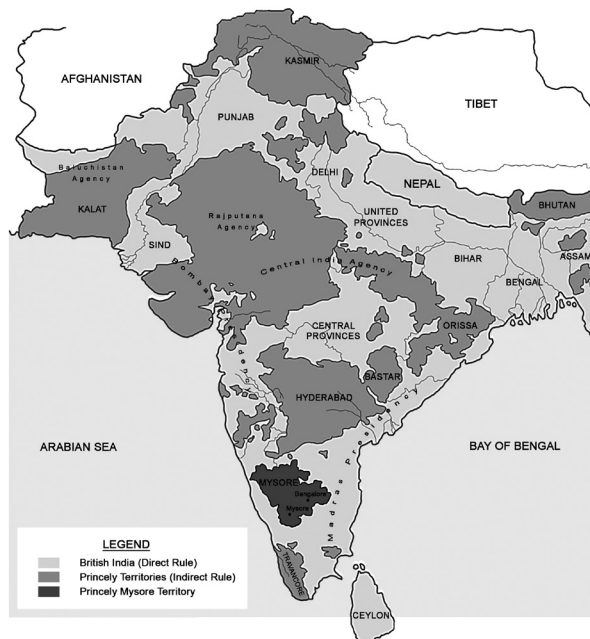
On September 3, 1939, the day Britain declared war on Germany, Otto Königsberger was interned as an enemy subject in the Bangalore Internment Camp and was released by the orders of the President of the Interrogation Committee issued on October 17, 1939. While in the Internment Camp, Otto Königsberger continued to work for the Mysore Government and receive his regular salary. As the state architect in Mysore (1939-1948), he designed large-scale projects such as factories, educational institutions, car showrooms, and hospitals. But a significant part of his *oeuvre* was numerous small-scale, low-end, simplistic buildings on frugal budgets – small schools, clinics, offices, police stations, palace extensions, garages, pavilions, and bus shelters. I use one project that best represents his work during his time in Mysore. In 1945, Otto Königsberger designed the Victory Hall (now Bal Bhavan) in Cubbon Park, Bangalore. He noted that the driving force in his design was the response to the shortage of cement and steel. He used locally abundant granite masonry for load-bearing walls and concrete vault shells for roofs over the lobby and the verandas.²

While serving as the chief architect of the Public Works Department in Mysore, Otto Königsberger also worked as an architect for private clients, which were often other Maharajahs, and as a planner for industrial entrepreneurs. In 1945, Otto Königsberger prepared plans for the industrial town of Jamshedpur for the Tata industrial group – a Parsi entrepreneurial family that established industries in British India. In 1948, he served as a planner for Bhubaneswar, the capital of Orissa (now Odisha) to create a master plan based on neighborhood unit planning. Later that same year, Otto Königsberger moved to New Delhi and became the Federal Director of Housing (1948-1951) for the Ministry of Health in the newly formed Union of India.

Indian independence was accompanied by the brutal Partition of British India into two nation-states – India and Pakistan. A total of seven and a half million non-Muslims

emigrated – five million people fled from West Pakistan (mostly Punjab), and two and a half million came from East Pakistan (Bengal) into India. Otto Königsberger's work in New Delhi involved both planning and architectural projects to resettle Partition refugees. He created the plans for the New Town of Gandhidham (1950) in Gujarat. In addition, he worked as a consultant for the plan of Faridabad in Haryana (planner: P. L. Varma, 1949) and Rajpura in Punjab (planner: Dharam Khler, 1950).

Jawaharlal Nehru, the first Prime Minister of India, was under immense pressure to rehabilitate Partition refugees and he sought Otto Königsberger's expertise for an expeditious housing project to resettle the displaced population. In 1949, Otto Königsberger set up a prefabricated housing factory in Jungpura, New Delhi, to mass-produce houses for Partition refugees. As the Federal Director of Housing, which was part of the ministry of health headed by Rajkumari Amrit Kaur (1889-1964), this project was part of the Nehruvian welfare state apparatus in which the state would provide housing to rehabilitate refugees who had emigrated to India to become citizens. Otto Königsberger designed an Alcrete prototype in collaboration with A. F. Hare, a British architect.³ The British Alcrete house was a two-story prefabricated semi-detached residential unit assembled from factory-manufactured modular components for walls, roofs, doors, windows, floors, and dividers.⁴ Based on the British Alcrete model, an Indian single-storied version was made with autoclaved foamed concrete panels. Foamed concrete is a kind of concrete that is made with aggregates, cement, and a foaming agent that causes the concrete mix to capture numerous small bubbles of air



02 Map of India in the early 20th century showing princely states and Mysore State. Drawing by Christopher M. Hostettler on the basis of a map of India from Sir Adolphus William Ward, G. W. Prothero, Sir Stanley Mordaunt Leathes and E. A. Benians, *The Cambridge Modern History Atlas*, London, Cambridge University Press, 1912.

or gas. Thus, it consumes less material and, with air or gas entrapped, provides excellent insulation. The prefabricated units were produced in collaboration with Structural and Mechanical Development Engineers (SMDE) Limited and the Building Research Station at Watford, UK. This project was meant to be the utopian embodiment of Otto Königsberger's notions of universal Modernism – a mass-produced, prefabricated, modular house with industrially manufactured modern materials. Unfortunately, the prefabricated units failed because the foamed concrete panels cracked. The episode resulted in a huge uproar in the Indian parliament, which led to Otto Königsberger's resignation in August 1951 and his subsequent move to London. His repertoire of buildings in Mysore shaped his ability to work with available materials and technologies. Through his career in India, he learnt to work with the limited availability of modern materials such as cement, steel, concrete, and glass. He studied how to design buildings that could function without fossil-fuel-generated mechanical air-conditioning in hot climates.

Tropical Architecture as a Global Discourse

The fourth phase was his career in London as an architectural educator through which he actively theorized climatic design and planning paradigms for the tropics. In 1953 the AA School of Architecture formed an advisory committee comprising Otto Königsberger, George Anthony Atkinson, and Leo De Syllas to prepare a detailed curriculum plan for the Department of Tropical Architecture.⁵ In its initial stages of operation, the Department of Tropical Architecture was heavily focused on quantifying climatic design architectural components such as – sunshades, ceiling heights, windows, wall thickness, and plan-types that would create maximum comfort in hot and humid, and hot and dry climates. The department went through several programmatic transformations which were reflected in its name change to Department of Tropical Studies in 1961, signifying its shift to training educators in the tropics, and by 1969 the department leaned heavily towards developmental issues of tropical urban planning was therefore named Department of Development and Tropical Studies.⁶ For the purposes of this article it will be referred to it as the Department of Tropical Architecture. Apart from Otto Königsberger, the other teachers at the AA Tropical Department were – George Anthony Atkinson, Fello Atkinson (1919-1982), Hope Bagenal, T. Bedford, G. P. Crowden, Leo De Syllas, Jane Drew, D. Forde, Maxwell Fry, Alfred Harries, and J. McKay Spence.

Fello Atkinson graduated from the AA in 1936 and joined James Cubitt and Partners (founded 1948) – an architecture firm that accomplished several projects in Ghana, Sierra Leone, Nigeria, Libya, Iraq, Burma, Malaysia, Singapore, Brunei and Sabah. James Cubitt and Partners' work included the Kwame Nkrumah University of Science and Technology, Kumasi, Ghana (1953), built in collaboration with Kenneth Scott, which used natural conditioning techniques for cross-ventilation, shallow building plans, and lattice-wall structures that worked well without air-conditioning.⁷ Ghana, the first sub-Saharan

African colony to achieve independence, embarked upon an extensive tropical modernist building program in the service of nation-building. Ghana's first president, Kwame Nkrumah (1909-1972), embraced tropical architecture and welcomed British architects. Maxwell Fry, Jane Drew, James Cubitt, and Kenneth Scott, who had already built in Ghana since the end of the WWII, continued working on institutional projects with the new nation-state as their client. These architects often imported British manufactured construction materials – such as acoustic boards, adhesives, aluminum products, asbestos cement products, hardware, building paper, chemical products, cement finishes, cast-iron pipes and fittings, copper piping and brassware, patent ceilings, roofing felt, glass products, galvanized pipes, sanitary fittings, glazed wall tiles, water heaters, and insulating materials.⁸ In addition, they often imported mechanical equipment such as air-conditioning plants, electrical equipment, mechanical fittings, and firefighting equipment. As a consequence, their work stood in stark contrast to the existing building stock.

The career trajectories of the architect educators at the AA's Department of Tropical Architecture reveals the heightened intellectual mobility between the tropics and London in the development of tropical architecture as a discourse. Like Otto Königsberger, these architects were agents who brought the knowledge acquired through building in the tropics back to London, to be then disseminated along the networks of the Empire. However, Otto Königsberger's career trajectory differed from the British AA architects in Africa on three counts. One, the AA architects in Africa were based in the UK and treated the tropics as an extension of their practice at *home*, while Otto Königsberger was based in India during his architectural career. Two, they had been recruited for large-scale institutional projects and high-end residences that were *intended* to be modernist, while Otto Königsberger had worked on large-scale projects that were both revivalist and modernist, some where he had free reign to implement the tenets of Modernism, and several low-end, small-scale, and simplified projects that were built on frugal budgets. Three, while the AA architects often used British-made industrial construction materials in Africa, Otto Königsberger acquired hands-on experience by using local materials and low-end technologies. Except in the prefabricated housing project in New Delhi in which he used British-made products, in Mysore he was required to use state-manufactured materials. He also left India with the ability to work with a range of clients – including semi-sovereign actors such as *Maharajahs* with a notion of monarchical nationalism, independent entrepreneurs, and finally the newly formed Indian nation-state, where Jawaharlal Nehru, the first Prime Minister, embraced architectural Modernism with the intent of homogenizing the nation. Otto Königsberger operated in a small autonomous sphere at the margins of the colonial building enterprise, where he had to negotiate a vast range of ideological agendas that were associated with diverse ideas of Modern architecture and planning.

In addition to teaching at the AA, he worked as a planner on United Nations housing missions with the American

planner Charles Abrams (1901-1970) to advise new governments on planning in tropical cities. His collaborations with Charles Abrams on United Nations Housing missions included Ghana (1956), Pakistan (1957), The Philippines (1959 and 1978), Singapore (1963), Zambia (1964), Lagos (1964), Ceylon (1966), Brazil (1968), and Penang (1970). Based on his planning assignments, Otto Königsberger theorized the planning paradigm called “Action Planning”, which acknowledged the limits of the British master-plan-based planning methods in the tropics and the need to develop more nimble, fast-changing action plans that were more suited for cities that were exploding in population.⁹ Theoretically speaking, Action Planning was a critique of a global top-down planning paradigm. The fifth phase of his professional life comprises his career as a planning educator at the Development Planning Unit at the University College London. It is based on his Indian experience and his UN housing missions with Charles Abrams that Otto Königsberger would eventually declare that universal architectural and planning paradigms do not work, which formed the intellectual foundation of the *Manual of Tropical Housing and Building* (1974).

Manual of Tropical Housing and Building

Otto Königsberger's career resulted in a treatise on tropical architecture, *Manual of Tropical Housing and Building*, which was written in collaboration with his AA colleagues T. G. Ingersoll, Alan Mayhew, and Steven Szokolay; and published after the closure of the Department of Tropical Architecture in London.¹⁰ The *Manual* is based on the key problems that shaped Otto Königsberger's career – questions of urban housing delivery, climatic design, and vernacular architecture – which continue to be heavily contested in contemporary debates. The *Manual's* key questions were: one, how to solve the unrelenting demand for housing in the rapidly urbanizing cities of Asia and Africa that required quickly mass-produced houses, without an industrial infrastructure and a large capital; two, how to build urban housing within energy and material limitations; and three, how can vernacular architecture, if at all, be used in solving the housing problem in the tropics. The *Manual* starts with the notion that “western” ideas of welfare-state housing and masterplan-based planning have not produced the intended results in the Asian and African regions, which is something that Otto Königsberger and international planning experts acknowledged widely in the 1960s. The treatise is focused on architectural solutions for urban housing and a large part of the book is devoted to climatic design. *Manual of Tropical Housing and Building* offers an interesting lens to examine the global histories of Modern architecture. It is a palimpsest of, not only Otto Königsberger's career, but, an archive of the changing contours of the relationship between Modernism and globalization of technologies.

Otto Königsberger's career trajectory is a consequence of macro-historic global events such as the ideological transformations of Germany, WWII, Indian independence, the disintegration of the British Empire and the formation of the Commonwealth, the end of *Pax Britannica* and

beginning of *Pax Americana*, the establishment of transnational organizations such as the United Nations, and the Cold War.

As an agent of globalization, Otto Königsberger's architecture and planning paradigms were constantly shaped and reshaped through his interactions and work with a variety of global actors – Egyptologists; Public Works engineers, and architects under Maharajahs; entrepreneurs; nation-states; his students at the AA, and the inhabitants of the cities – who eventually provided constant critiques of the global top-down planning and architecture paradigms.

Notes

- 1 Sebastian Conrad, *What Is Global History?*, Princeton, Princeton University Press, 2016.
- 2 Otto Königsberger, “The Victory Hall at Bangalore”, *Marg*, Vol. 4, No. 3, Bombay, The Marg Foundation, 1950, 25-26.
- 3 Anon., “Factory Produced Housing in India”, *Architect and Building News*, Vol. 197, No. 24, London, Building and Contract Journals Ltd., 24th February 1950, 217-218.
- 4 Anon., “The Alcrete, Permanent, Prefabricated, Two-Storey House”, *Architect and Building News*, Vol. 190, London, Building and Contract Journals Ltd., June 1947, 210-215.
- 5 J. McKay Spence, “The New Role of the Architect in the Tropics”, *Architectural Association Journal*, Vol. 71, London, AA, July-August 1955, 56-50.
- 6 Patrick I. Wakely, “The Development of a School: An Account of the Department of Development and Tropical Studies of the Architectural Association”, *Habitat International*, Vol. 7, No. 5, Elsevier, 1983, 337-346.
- 7 Anon., “Recent Buildings in the Gold Coast”, *The Architectural Review*, Vol. 119, London, EMAP Publishing Limited, May 1956, 230-241.
- 8 John Godwin, “Architecture and Construction Technology in West Africa in the 1950s and 1960s”, *docomomo Journal* 28 – “Modern Heritage in Africa”, *docomomo International*, 2003, 51-57.
- 9 Otto Königsberger, “Action Planning”, *Architectural Association Journal*, Vol. 79, No. 882, London, AA, May 1964, 306-312.
- 10 Otto Königsberger, T. G. Ingersoll, A. Mayhew, S. V. Szokolay, *Manual of Tropical Housing and Building*, London, Longman, 1974.

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