



Marion von Osten

**A Hot Topic
Tropical Architecture
and Its Aftermath**

FallSemester

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As far as practicable, and with due regard to expense, bungalows shall be located away from native quarters, clear of jungle, at a distance from stagnant waters, and where possible, on high ground. The settlement should be as perfect a health resort on the coast-line of West Africa where comfort, rest, change, and sea breezes are to be enjoyed - an improvement indeed upon the unhealthy town quarters of former times.

Indigenous People. Secret Societies. T. J. Alldridge, Macmillan: London/New York, 1901

Clouds

It was the year 1954 when the “Department of Tropical Architecture“ was founded at the Architectural Association (AA) London, by Maxwell Fry, Jane Drew and their colleague James Cubbitt. Tropical architecture had been a topic before the study programs foundation, large conferences like the “Conference on tropical architecture” March 1953 at University College, London or two years before in Venezuela had established the issue internationally. The AA Tropical Architecture study program ran till 1971 and was afterwards transferred to the University of London and proceeded there as the “Development Planning Unit” that is active till today. The AA program included lectures and reflections on Colonial Planning and Housing, studies on the architecture of North-Africa, models of low-cost housing, reflections on British Architects that had build

in the Tropics, so called African Studies, as well as regional studies conducted by British scholars in the West-Indies, India and West-Africa. It taught and reflected the “new” role of the western architect in the global south, building and teaching methods and climate specific materials and construction techniques before the background of the emerging international development aid programs in the era of decolonization.

The “Department of Tropical Architecture” at AA London was after its foundation famously lead by Otto Koenigsberger. Under his guidance the department became a think-tank for building knowledge and techniques related to development aid programs. Königsberger who fled Nazi Germany from Berlin to Cairo in the 1930's had himself working experience in tropical India. Königsberger worked as chief architect for the Mysore State, India from 1939 onwards. After 1948 the year of India's independence and the partition from Pakistan, he became the director of housing for the Indian Ministry of Health and designed the new city schemes for Orissa, a town later called Bhubaneswar and programs for refugee shelters and pre-fabricated houses.¹ With his profile he acted as a senior adviser to the Economic and Social Council of the United Nations from the 1950th onwards, and a speaker at the first UN Conference on Human Settlements in 1976². The AA departments founders Maxwell Fry and Jane Drew had likewise tropical experience. But other than Königsberger they had started to work during British colonial rule in West Africa - mainly in Ghana (1947 Tema Manhean, 1950 St. Francis College, Hohoe, und 1951 Adisadel College) and Nigeria (1949–1960 University of Ibadan). In 1951 Fry and Drew became part of the planning committee for the new town of Chandigarh where they worked together with Pierre Jeanneret and Le Corbusier on the concrete planning scheme.

The case of the new town planning of Chandighar has made

it to one of the most prominent example of the modernist approach on “Tropical Architecture”.³ But Fry and Drew not just developed a study program in London and were highly influential for the ‘Tropical Architecture’ discourse due to their work in India and West Africa but as well as due to their writings and publications. In 1956 “Tropical Architecture in the Dry and Humid Zone” was published that aimed to be an educational tool, a technical manual with a full range of practical advices and illustrations. The book had thus a paradigmatic influence over decades especially on European modern architects who recognized climatic and cultural contexts as relevant for new building methods and concepts mainly in non-European localities. Other publication were “Village Housing in the Tropics” based on their empirical studies in British West Africa during the Second World War. Today their books are often discussed as forerunners to ‘green architecture’ because of the knowledge gained for regional low cost housing in the tropics.

The new climate and cultural responsive approach in modernist architecture was in fact introduced by a younger generation of architects who were in part assisting Le Corbusier projects in colonial and post-colonial spaces, like Marseille, Casablanca, Algiers and Chandigarh. This colonial modern and proto-global architecture was in search for a new synthesis between modern, industrialized and vernacular building practices that were marked as indigenous or regional. A new perspective that was heavily debated at the ninth CIAM (*Congrès International d’Architecture Moderne*) meeting in Aix en Provence 1953 one year before the new Department for Tropical Architecture in London was founded. After WWII the CIAM as an organization had become more and more international, with new members from various locations and countries including project presentation of new architecture and urban proposals

conducted in non-western localities. This internationalization was already reflected in 1947 when Josep Luis Sert wrote in a letter to Siegfried Giedion: 'I think, we cannot continue to consider Central Europe as the main field of interest for CIAM.'⁴ Central concerns and debates of this CIAM meeting were circulating around on new building approaches that reached especially from architecture as urbanism (New Towns) to cultural and climate specific design solutions. This shift from single architecture solutions to the consideration to larger concepts of climate, culture and the emerging new town planning paradigm was expressed in a new CIAM guideline that was called the "Charta of Habitat", a paradigm shift that is today associated with an "Anthropological Turn" in architecture and planning discourses.⁵ In this new frame a younger generation of modernist architects presented at the conference not only architecture or modern infrastructure projects but as well ethnological and sociological studies of Mediterranean dwelling and building traditions as well self build practices of shanty towns of the colonial cities of Algiers and Casablanca. Presenting self-built environments (Gamma Group) and street usage in working class districts (Smithons) as models for understanding the interrelation between the public and the private sphere by younger architects was also an alternate interpretation of the CIAM's official conception of a "Charter of Habitat". For the older CIAM generation like Jaqueline Thyrwitt, Luis Sert, and Siegfried Giedeon the charter would have meant: "Walking radius as a universal problem; Means of expressing the connection and interaction between the human cell and the environment; Necessary degrees of privacy; Value of vertical integration of age groups; Advantages of compact planning versus continuous scatter; Relation of the Habitat to the core; Means of expressing this continuity with the past; Need for gaiety in the Habitat."⁶ Instead the new

understanding of the built environment through qualitative and quantitative studies presented dwelling as a social practice, which was a radical shift in the modern movement's conception of housing. For the Moroccan Gamma group, Habitat meant the idea of housing as an evolutionary, adaptive process, suited to local climate conditions and building traditions, starting with basic infrastructures and growing flats/houses with an expected rising standard of living. As Christina Linortner highlights, also the British group MARS objected to the official idea of a universal Habitat charter based on the assumption that different societies and places display the same needs. Fry and Drew were members of MARS and were studying low-cost housing on the basis of specific local building practices.

The 1953 Aix en Provence conference thus can be understood as a paradigmatic event for a shift in building discourses that became the blueprint for a wider approach of architecture as urbanism or the relation between modern building strategies and socio-politics. But in these new analyzes of a climate responsive, cultural contextual or regional or sociological approaches the political frame - in which the new knowledge were mainly conducted - the unjust system of colonial occupation and governance – in the very moment of the Empires decline, were consequently overlooked.

The new research methods introduced in the architecture discourse were mainly guided by the interdisciplinary approach of structuralism that became the central reference in the 1950ties and 60ties in which anthropology had become a new leading science. With this school of thinking interrelations of human activities were studied – e.g. dwelling - but likewise abstracted into comparable structures without reflecting their concrete historical or contemporary societal condition in which they constituted. This might be one of the many reasons why the colonial condition and the anti-colonial struggles became

almost blank pages in the studies of a “local climate and culture”, but that the concept of dwelling as a social practice, self- building and the vernacular could become the phantasm of critical local engagement.

Till today the insights and presentations of the younger generation presented at the 9th CIAM meeting are perceived as highly critical and this is for sure true in respect of their critique on functional separation within urban planning between housing, work, leisure, and transportation expressed before in the “Charta of Athens”. And it was the proposals about dwelling as a social practice, growing houses and regionalized schemes thus caused heated debates at the conference. The planned “Charter of Habitat” was thus never finished or written. This very famous dispute was also constitutive for a group of younger architects from different local backgrounds who would later meet under the name Team 10, as they were charged with organizing of the tenth CIAM congress in Dubrovnik, Yugoslavia.⁷ This conceptual opposition related to a Charta of Habitat marked a sign of the dissolution of CIAM as an organization of the modernist movement.

This process is not only remarkable as a ‘modernist scandal’ but seem to mirror the consequence of a paradigm shift in the subjectivity of the architect and planner who started to acknowledge local climate conditions and pre-modern building practices likewise techno-scientific approaches. Moreover, as Christina Linortner argues, with the end of CIAM as an organizational structure, “these debates promulgated in a global exchange of planning ideas through direct and indirect connections with international organizations (e.g. Ford Foundation, Delos Symposia) and led to the UN Conference on Human Settlements (Habitat 1976). After the dissolution of CIAM, Jaap Bakema, as a former member of

the Dutch delegation of CIAM, established, 'The Post Box for the Development of Habitat' in 1960 to maintain international correspondence including ties with the UN and UNESCO."⁸ The Habitat discourse and the climate and cultural responsive approach in architecture thus corresponded with UN concerns over global housing. Treated as a bio-political problem arising from 'the current needs of a growing population' like the UN ideology expresses, models for low-cost housing that would suit in southern global context were searched for and also gave the European modernists a new platform to realize and adopt their ideas again mostly on large scale. The increased global interest in local, vernacular forms of building in modern architecture since the end of the Second World War, a turn towards usage, everyday practices, vernacular and self-building techniques of inhabitants, and towards the relation and relationships between the private and public spheres indicate the change in perspective.⁹ These discourses were also popularized through Bernard Rudofsky's famous 1964 exhibit "Architecture without Architects" at the Museum of Modern Art New York. As a result, a number of regionalist concepts that utilized vernacular architecture and regional building traditions in various ways emerged around the globe.¹⁰ It was used for very different planning concepts and highly diverse practices. It became a style or basis for "climate sensitive" approaches in modernist housing programs. On colonial grounds references to the vernacular had bio-political implications and served colonial apartheid politics. In post-war Britain it affected non-plan movements that celebrated the self-builder and local building practices. By focusing on the specification of the contextual framings it is possible to understand the discourse of the vernacular as an agent with very different outcomes.¹¹ It is important to reconsider and to revisit these materials and discourses as this "regional modernism" or "Third World

Modernism” as it is called today, is reflected in or as the genealogy to contemporary sustainability paradigms – that are running partially still under the flag of development aid programs. In texts by different recent authors specially “tropical architecture” is presented as an ecological forefather as a contextual regional approach that would have been conscious of resources and local conditions. It is debatable if this was its core concern as I will discuss in this article, still what it brought into the debate of architecture and planning is the most unpredictable agent: climate. But “Climate is what you expect, weather is what you get.”¹²

Climate

Rarely considered is that a discourse on tropical architecture is itself an effect of colonial occupation. Even after 1945 the sub-tropic and tropic belt was with the exception of most countries in Middle and Latin-America – governed by Britain, France, Portugal, Spain, Belgium, the Netherlands and the United States. In most parts of Asia and Africa independence was gained after WWII. India, followed by Libya, Tunisia, Morocco in the 1950ties and many of the new African states in the 1960ties with exceptions of Portuguese and Spanish colonies that became only independent much later or the world wide islands who are still occupied territories, a fact that Okwui Enwezor has called wisely a ‘Short Century’. The modernist building approaches and discourses by western architects in non-western localities have from today’s perspective thus to be discussed before this fundamental geopolitical changes: the decline of the European Colonial Empires and the emerging cold war imperialism.¹³

This acknowledgment of situating high-modernist discourses in the larger frame of decolonization includes a discussion of the term ‘post-war’ itself, as Hannah Feldman argues in her

book "From a Nation torn". She proposes to entitle the high-modernism time not as post-war but as a 'during-war' phase instead. Her shift in perspective clarifies that the end of the Empires - the era of decolonization- meant literally ongoing wars against decolonization, against the anti-colonial, anti-imperialist forces. The independence of former colonies as well as wars conducted before the background of the cold-war system competition included series of wars against parties and new leaders, wars against revolters, sympathizers and oppositional forces: Korea, Algeria, Kenya, Angola, Vietnam, Cambodia, Guinea Bissau, Mozambique. This series of colonial and imperial wars as well as the suppression of riots, manifestations and struggles in the heart of the Empire (the killing of Algerian protesters in Paris in October 1961) may – considering Feldman's suggestion - not allow to speak easily about the end of World War II but about multiple wars that shifted territories, discourses and strategies and continued to do so in the 21st century.

But the decline of the European colonial Empires meant not only repression of revolts or military interventions in the post-colonies but as well a whole set of new governmental strategies that were partially embedded in the paradigms of the Western democratic welfare state. This included public State programs for housing, education and the health system. Before this background it is important to remember that in the Euro-American context the architect's role had shifted from single house builders to a position of city planner and developer. With the defeat of Nazi Germany the modernist discourse becomes the dominant urban planning discourse. The social role of modern architects changed significantly. Architects throughout Europe in France, Sweden, Germany, England, Switzerland and Austria transformed into planners of the Nation and were

building large scale social-housing projects or even complete new town schemes. With this modernist architecture became an instrument of the Nation State and architectures and urban planning success or failure were becoming a matter of politics. This shift in the societal and political function of the architect is mirrored from the other angle in the new studies of the usage of the public space, the environment, and the dwellers. In the “during-war” phase modern architects became not only a governmental profession for special groups and needs. Architecture was addressed as a profession that could also bring solutions to social problems, thus societal concerns were now considered as a main part of the architectural profession. Often this carrier of modern architecture is seen as a overcoming of the Nazi banning of Modernism, as a belated acknowledgment. But many modern architects and planners were still highly active in their profession during the WWII and learned and practiced their craft of building increasingly in the global South under the conditions of colonialism and anti-colonial uprising, as the architectural historian Mark Crinson and other authors in the Reader “Colonial Modern. Aesthetics of the Past. Rebellions for the Future”, highlight.

In a second view, these new generation of architects were mostly working for the same Nation State at home and abroad. It was the Colonial Offices of the European Nations and Empires that designated the colonies as an “urban laboratory” like the French in North Africa, where building “for large numbers” was developed and tested.¹⁴ Findings conducted under colonial or post-colonial conditions in Africa and India was knowledge that flow into European suburban planning like in the cases of large housing projects by George Candilis and Shadrach Woods e.g. Thus colonial mass housing its knowledge and building practice wandered from the colonial cities back to the heart of European Empire¹⁵. This large scale residential complexes build in the

late 1950th and 1960th in Europe were from the beginning transnational contact zones in which the encounter between architecture, planning, government and inhabitants continue to this day - often conflictual. This might be an indicator of the power relations that the colonial techno-scientific approach of planning was creating as a lasting effect.

A not well known project by Maxwell Fry and Jane Drew was a late colonial village housing in the tropics Tema Manhean in Ghana (1947), in which also other central figures of the tropical architecture and UN housing discourse have been involved, namely Konstantin Doxiadis, who in 1961 would generate a complete new scheme for Tema after Ghana had gained finally independence from Britain. But before him Fry and Drew were already involved at Tema to create a new housing scheme for a village population that lived near the seafront. The general plan was conducted by the Colonial Office as the British planned to build a new harbor in the Gulf of Guinea. The villagers were asked to leave the site and to move in a new housing estate. The port was a central infrastructural project as Britain exported a variety of natural resources cocoa, ivory, diamonds, gold, grain, metal ore and timber out of Ghana. The so called Gold Cost was a British colony since 1901, its kingdoms and tribes were considered a single unit. For the British the Gold Coast colony was also a model colony for new governance.¹⁶ The British Empire had learned that they needed the local cooperation to stay productive in their colonies. They gave partial autonomy to local population and understood itself as a civilizing mission even that military occupation went with it. Formative in this governmental approach was the book *The Dual Mandate in British Tropical Africa*, which was published in 1922 by Frederic John Lugard, who proposed indirect rule and a state-sponsored colonization that would divide and

protect the colonizers from the colonized, the missionaries from local chiefs, the local people from each other and Britain from foreign powers. To be considered for the concept of indirect rule is also that West-Africa was the site for Ashanti and Dahomey kingdom both African kingdoms, that were involved in the slave trade and thus in contact with different European and African powers over centuries. But Lugard also proposed taxation of the whole population, vital import from British goods and exports from resources and an industrial development program for the region that also included the education and health sector.

Before this background of a state funded colonialism building projects in West-Africa have to be situated. In Tema, the displacement of the people and the proposal for a new build modernist estate farther away went –as Iain Jackson and Rexford Assasie Oppong point out –not without resistance against it. Fry and Drew thus not only had to develop a new scheme for the villagers but were also involved in mediation projects to convince the local population of the good design solution of their newly planned modernist village, a state led projects as it were later when Fry and Drew were designing school buildings and universities in Ghana and Nigeria. In 1957 Ghana became the first African nation to attain independence. Kwame Nkrumah, who later became Ghana's president was also largely involved in the Pan-Africanist movement but as well in negotiation with the British powers who proposed a step by step program for Ghana's independence that mirror the indirect rule concept mentioned before that might be understood as a smooth way to transform planning measures from colonial rule to development aid concepts a process that by anti-colonial thinkers has been called 'neo-colonialism'.

In 1963 Jane Drew expresses in one of her famous articles 'Indigenous Architecture: Architecture in the Tropics' the following reflection:

“Architecture for the developing peoples; as they are now well called-the millions of India, Africa, and the Middle East who are fast becoming part of the modern world-is a very great problem, particularly since education is acquired more quickly than wealth. An architect, if he wishes to devote part of his life to helping such people, should know the basic requirements of tropical building and the great difference in building for a hot-dry or a hot-wet climate. The subject is a complicated one, for there are differences not only in housing but town planning and the methods of siting buildings.” Lit: *Indigenous Architecture: Architecture in the Tropics* Author(s): Jane B. Drew Source: *Perspecta*, Vol. 8 (1963), pp. 57-58

Climate and education are her central concerns. This is also clearly mirrored in the manual like publications of Fry and Drew and the establishment of a study program in London that was in its evolution an important study site as well for many African students. The idea of educating the colonized to make local participation possible was one perspective followed by modernization programs and modernist design solutions that were after 1957 called development aid programs even that they were started under the British flag. Nevertheless, these two forms of governance were the central conditions and forces the British Tropical Architecture discourse was embedded in. Not named by Jane Drew – although she was very much known as the mediator of their projects and her social abilities in the building process - that it might have been highly complicated for the architects themselves to deal with an asocial process of displacement. To be involved in a process that caused

resistance by the local population and meanwhile studying the way of living and “habitat” might be at least feel double sided. This double sidedness is rooted in the conception of a regional modernist approach that took a local context into account by studying vernacular building practices meanwhile destroying them with displacement and new modernist housing projects. Housing projects were with the Habitat discourse understood as means of new socio-spatial organizations. A building practice that learned from and tried to overcome the past in the same moment. This paradox of modernist planning concepts needs to be situated in a time in which the clamor for independence and self-rule in West Africa became loud. Thus Fry and Drew’s projects, as well the better known ones in West – Africa like the design of the University in Ibadan, Nigeria in the late 1940th, had to face resistance against these British governmental initiatives.¹⁷

When studying this materials one is confronted with the question of how to grasp and describe the transformation from a colonial modernity, in which European architects had once played a formative role, to a modernity of independence and decolonization along with its actors. How did this paradigm shift correspond with the post-colonial condition and its actors? Transformation from indirect colonial rule towards development aid programs becomes in Africa the hegemonic discourse and condition in this time. Many architects that had built under colonial rule were now asked to create housing projects and public buildings for the newly independent states under this newly created development programs initiated by the former colonial powers. The beginning of the development discourse is mainly marked by the second inaugural speech of US president Harry S. Truman in 1949. He promised to help people in “underdeveloped territories” with financial investments and by

promoting technical progress to create better living conditions. The concept of development became politically powerful after the Second World War, in the context of Cold War politics and the decline of the colonial empires. The discourse also mirrors the geopolitical and economic interests of the US and their allies, namely the former European colonial powers. But similar asymmetrical patterns are also found in the aid programs of the Soviet Union with its so-called brother states.

According to Aram Ziai, the concept of the post-war development discourse has its genealogy mainly in the colonial discourses. It can be found in documents such as the British Colonial Development Act from 1929 and throughout the French Civilizing Mission, with its origins in writings of Comte, the Saint-Simonists, Hegel, and Kant, etc. The project of civilizing the uncivilized turns “during-war” into a project for “developing the underdeveloped” in the era of decolonization. Still the development discourse divides the globe into developed and underdeveloped world. The division proceeds from an universal modernization ideal that understands the historical processes of social change in Western Europe and North America (and Japan) as mankind’s historical progress. But the development of a western, modern identity as such was, as Stuart Hall put it, already dependent on the demarcation of societies that were represented as backward and different.¹⁸ The basic pattern derived from this figure of backwardness; thus “the development discourse can be simplified as follows: The south has problems (underdevelopment, lack of capital, technology, etc.), the north has solutions (modernization, investments, experts)” argues Ziai. To conceive other societies as backward implies the continuation of the idea of western and colonial supremacy and the idea to modernize implies this concept of an almost moral intervention. The own society serves as the ideal historical standard. On the basis of this standard

other societies are defined as in deficit. Simultaneously to this diagnosis the therapy is implied: societies must become modern, industrialized, secular, and more productive.”¹⁹Out of the picture stays the very critique on Capitalism itself, that it constantly produces underdevelopment.

But the development discourse itself is highly interwoven with the concept of modernity as such and its conception of historical time and a past that would need to be overcome. As Johannes Fabian states in his book *Time and the Other*, “Space and time are ideologically constructed instruments of power.” Projecting the object of anthropology on an evolutionist time-line as “underdeveloped,” denies the existence of the coevalness of temporality and historical perspectives. Instead, the naturalization of hegemonic western time structures could therefore be seen as a way to colonize and govern the time of the other.²⁰

Modernist architecture and housing projects in non-western contexts played a highly symbolic role in this shifting concept from a “civilizing” to a “developing” colonial modernity. In French North Africa, so-called culturally specific building low-rise programs were developed for Muslim workers. High-rise housing projects were created for the *Evoluee*, a local group, which, based on French ideology, spoke French, followed French laws, and usually held white-collar jobs (although rarely higher than clerks).²¹ At the moment of decolonization at the end of the Second World War, the “civilizing” discourse had already turned into a “development” discourse, which was an effect of anti-colonial struggles and new concepts of colonial governance that reacted on the fact that the claim for independence had become louder worldwide. But the spatial and class division created with these building programs were and are still in place.

Some building projects adopted colonial building methods or modernist vocabulary of forms—as in the case of Chandigarh—and in their realization employed local methods of building and materials that were based on manual labor. And, at the same time, there was also a synthesis of regional architectural traditions and the modern language of form that could be read as well as a new aesthetic that mirror the further political interest of the former Empires in their former colonies as well as a rupture in the modernist language, that had - because of the decline of the Empires- to change into a more contextual approach. This asymmetrical power relation between the colonizer and the colonized was also overlaid with socio-politico-cultural power-relations in colonial and post-colonial societies, starting from ground floor schemes in Chandigarh in which the relation between local inhabitants and their servants as well on the planning level between European master and Indian office architects²². The division of labor was kept intact, known today as the global division of labor. Already expressed in Jane Drew's article Indigenous Architecture: Architecture in the Tropics:

*"We found in India that it was cheaper to use seven hundred people to excavate than to employ an excavating machine! Le Corbusier's High Court and Secretariat were built with the aid of donkeys, men, women, and children. For our own work in West Africa, mummies, as the mothers are called, often laboriously broke the stones used as aggregate for the concrete."*²³

Heat

The founding of the "Department Tropical Architecture" in 1954 takes place in the wake of anti-colonial uprising all over the world and new governing strategies and wars by the former colonial Empires and there allies. Maxwell Fry and Jane Drew

had generated their knowledge on building techniques first in the tropics under colonial rule at the “Gold Coast”. Maxwell Fry was in the early years a staff officer at the Royal Engineers what also brought him to West Africa first. And Otto Königsberger when coming back from India to Europe in 1953 started first as research fellow at the London School of Hygiene and Tropical Medicine before taking over the lead of the Department of Tropical Architecture at AA. This relation between Hygiene, Tropical Medicine and Architecture was not by chance, as discourses on sanitation and hygiene had explicitly been part of colonial settlement planning and were the foundation stones of any further projects in the mid-20th century.

Since the enlightenment age the tropics included a whole set of European fantasies, fears and imaginations as well new forms of knowledge production and practices. Tropical climate as a southern climate was described as exaggerated, unhealthy and degenerating. It was contrasted by the temperate, modest climate that was related to the assemblage of cultivated, civilized. The tropics are one of the most enduring themes in the history of global imaginings. Governability of the tropical difference was a major problem to be solved by the colonial rulers. On the one hand the tropical was seen as a distinct set of nature, climate and human relations that were fascinating but enigmatic, dangerous, irrational. It caused unknown diseases for the colonizers (and due to colonization for the colonized). And the tropical belt was also hard to conquer because of its very climate and nature. The British tropical colonies thus had to deal with the problem that it was not possible to settle there. In the tropics the colonial officers were stationed only for a brief period of time, as the climate and its winds, rains, humidity, heat were unfamiliar and as it seems as the ‘West Africa Pocket book’ suggest for a Northern-European

hard to deal with. Their families came only for short visit and thus the emergence of Tropical Architecture under colonial rule was an attempt to make the unfamiliar familiar, the alarming harmless, the unexpected calculable. ²⁴

Discourse on hygiene and new building techniques had to solve the biggest problem in the tropics as many colonial officers were dying from yellow fever, typhus, cholera and malaria. The period in which Europeans conquered most of tropical Africa between 1880 and the First World War was also a time of rapid advance in tropical medicine.

“The microscopic proof that malaria was not produced by the deadly quality of foreign soils but the activity of microorganisms using mosquitoes as vectors to travel from human to human effected a formidable noise at the beginning of the nineteenth century that brought characteristics and agency of this tiny animals onto the agenda of international political and medical bodies, colonial offices, and local governments, making the supposed habitat of mosquitoes into a non-habitat for the colonized.”²⁵ says Fahim Amir, who states that an essential role of colonial town planning concepts was to control the spread of diseases caused by tiny swarm animals like the mosquito or bacterias. The separation of European reservations with a non-residential area called a building free zone was promoted by these medical discourses.

The “green belt” (or zone sanitaire) was implemented as an integral part of colonial planning in order to assure the division between the urban and the rural, between native quarters and the colonial hill stations that were implemented in West Africa as well as in India overlooking swampy regions and the local population. ²⁶ “Frederic John Lugard was one of the promoters of the urban apartheid concept. “The green belt or Zone Sanitaire is a tool to defend against all things coming from

'outside' such as robbery, wild animals, fire, migration, and diseases with the aim to encourage a high standard of living and promote a sense of citizenship, pride and enterprise."²⁷ Another feature was to create a park around the colonial quarters: "All the entrances to every town should be through a park, that is to say a belt of park of about a mile or two in diameter should entirely surround every town (...) This would greatly contribute to the health and pleasure of the inhabitants; it would render the surrounding properties beautiful and give a magnificent appearance to a town, from whatever quarter viewed."²⁸ Another colonial imagination was to create a health or tourist resort out of the "swampy jungle" to change the threatening climate into a nice town to visit: "on the coast-line of West Africa where comfort, rest, change, and sea breezes are to be enjoyed". A process that might have been influenced by Florida's occupation and inhabitation of a swampy region and coast line that was transformed into a tamed modernist paradise earlier before.

Moreover, the discovery of mosquitoes as carriers inspired also large-scale terra-forming projects, as Fahim Amir highlights and with this: (...)The U.S. military expansion in the Caribbean, especially with the building of the Panama Canal connecting the Atlantic and the Pacific Ocean, was now possible. The chief of the US Bureau of Entomology and longtime permanent secretary to the American Association for the Advancement of Science celebrated this success as "an object lesson for the sanitarians of the world and has demonstrated the vitally important fact that it is possible for the white race to live healthfully in the tropics."²⁹

It is very known that due to colonization of Non-Western localities the indigenous populations (as well in the tropics) have been killed and exploited and were also effected by

foreign diseases and died in high numbers. West Africa was in the 20th century known as well as the 'White Mans Grave', as colonial soldiers were dying there in masses on yellow fever and malaria. The new technologies that were largely studied and promoted including architectural solutions were thus attempts of survival of the possibility to be many enough to colonize the region and to finally just stay alive as colonial officer. This also explains the excessive amount of studies and writings conducted by colonial administration in West-Africa like the reports by Gardener Medwin in Sierra Leon and many others. This explains why West-Africa and India have become so central in the studies and teaching programs of the 1950's as knowledge about the tropics and settlement planning was very prominent in the Empire long before it became a teaching tool for modern architects in the era of decolonization.

In Britain two institutions were important to promote this knowledge and to bring it into practice the Royal Engineers and the Schools of Hygiene and Tropical Medicine that Fry and Königsberger had also worked for. These two colonial techno-scientific institutions had designing and campaigning for improved sanitation, new building forms like specific bungalow forms and methods of cross-ventilation. Malaria from the Italian "Mal Aria" meant bad air. And thus all the central paradigms of modernist architecture are to be found in this studies and proposals: Light, Air and Circulation.

Thus the colonial tropical architecture caused and promoted many new studies, research topics and sciences but as well knowledge on architecture and planning that would directly flow into modernist building concepts and ground floors. May be not by chance one of the most emblematic buildings of modernism is the Ministry of Education and Health Building in Rio de Janeiro, build by Julio Costas and Le Corbusiers.

But even if West Africa was known as the “White Mans Grave” the imaginations that went along with it belong to the myth of creating the colonial apartheid regime that was justified with disease and healing metaphors and was prolonged in the concept of indirect rule promoted by Frederic Lugard, everybody is protected from everybody including tiny things, from mosquitoes from bacteria ³⁰ The two worlds that colonialism had created as Franz Fanon has stated, are still haunting the post-colonial city and its surrounding worlds and rural landscapes today. The green belts or sanitary zones were in many African countries after independence the first territories to be settled and to be connected to all other settlements again, a field of intervention in which the modernist vocabulary was re-introduced by European but also African and Indian architects who went through the colonial modern education system or were able to establish new ones in their own countries.

Climate as an agent for architecture and planning and ventilation and hygiene as techno-scientific solutions were forming and preparing the modernist movement globally. In the worlds of ‘Tropical Architecture’ the idea that architecture could act as a remedy against infections and a solution for social and political problems has largely informed modern development politic and the relation to the so called Third World. Like in ‘the Tiger of Eschnapur’ a film directed by Fritz Lang in 1959 and a popular European children narrative: The German modern architect who runs against Tropical irrationality, a wild tiger, synonymous for the excessive climate and untamed emotions, the heat and the disease. He is there to fall in love with the beautiful foreign Princess (much more rationally as the crazy opulent Indian Prince) and proposing a scheme for a modern style new hospital, temperate, clean and full of modern promises to overcome the threads.

This gendered stereotypes still run vividly through popular post-colonial narratives. Blank stays that the hospital and the modernist conceptions of buildings, tropical medicine and hygiene was meant first of all to rescue the colonizer from tropical death. It is in the last phase of colonialism when independence is inevitable as the resistance against the Empire is too loud to stay unheard that this modernist hospital, the colonial university and school can be finally taken over by the colonized. This are just a few institutions and not many in the tropics, as the West-African example explains this system of techno-scientific improvement was located in the former colonial centers. Education after independence was thus still strongly bound to the former Empire. It is this division of the colonial city, the two worlds of colonialism, that still runs through contemporary catastrophes, like the one West-Africa is facing today in the Ebola crisis.

(Endnotes)

¹ The handbook “*Manual of Tropical Housing and Building*” by Otto Königsberger from 1974 is still considered a standard work and is based on his experiences in Mysore.

² Königsberger was also the editor of “Habitat International” till 1993. See: Vandana Baweja : *A Pre-history of Green Architecture: Otto Koenigsberger and Tropical Architecture, from Princely Mysore to Post-colonial London*, Michigan, 2008

³ See: Iain Jackson , Jessica Holland (2014) *The Architecture of Edwin Maxwell Fry and Jane Drew: Twentieth Century Architecture, Pioneer Modernism and the Tropics*. Ashgate Studies in Architecture

⁴ Quoted by Susanne Kohte, in “Tropical Architecture” In: *Archithese*, Issue 6/2009. 66-71. 2009.

⁵ In her article “The Concept of Habitat: Écochard in Morocco,” published in *Colonial Modern. Aesthetics of the Past*. Rebellions for the Future, Monique Eleb argues that the notion of “Habitat” “was borrowed from ethnologists, geographers and anthropologists, who addressed the issues of shelter, housing and environment, the concept of geography and terrain, and the links with civilization as opposed to rural areas.” She states that before the 1950s, the term habitat was already in use during colonial rule to refer to dwellings of non-Western societies. (156)

⁶ Quoted in Eric Mumford. *CIAM Discourse on Urbanism, 1928-1960*. Cambridge, MA: MIT Press, 2000.p. 226

⁷ See: Smithson, Alison. *Team 10 Primer*. Cambridge, MA: MIT Press, 1968

⁸ See: [www.transculturalmodernisms.org / Habitat Chart/ Habitat. The unwritten Charta](http://www.transculturalmodernisms.org/). Christina Linortner, 2012

⁹ After the last CIAM (International Congresses of Modern Architecture) in Helsinki, a multidisciplinary group met in 1958 and started to publish, *Le Carré Bleu*’ a magazine concerned with this new perspectives. The

production moved to Paris in 1963 and started publishing in French and in English before adding, in 2001, Italian too.

¹⁰ See: Bruno Stagno, Alexander Tzonis, Liane Lefaivre. *Tropical Architecture. Critical Regionalism in the Age of Globalization*. Chichester: Wiley-Academy, 2001.

¹¹ See: *Transcultural Modernism. Model House* Research Group. Sternberg Press, 2013.

¹² Quoted from: National Weather Service Office Tucson, Arizona. Retrieved on 2007-06-01.

¹³ The British colonies that fought first for independence were the 13 British colonies in North-America end of the 18th century, followed by Latin America from Spain or the East Mediterranean from the Ottoman Empire in the 19th century. A question debated is if America can be considered decolonized, as not the indigenous but the colonist and their descendants revolted and declared independence from the Empire. Similar concerns are raised for Australia and New Zealand.

¹⁴ *Colonial Modern: Aesthetics of the Past-Rebellions for the Future*. Tom Avermaete, Serhat Karakayali and Marion von Osten. London: Black Dog, 2010.

¹⁵ See: Paul Rabinow. *French Modern. Norms and Forms of the Social Environment*. Cambridge, MA: MIT Press, 1989

¹⁶ See: Mark Crinson. *Modern Architecture and the End of Empire*. Aldershot, Hants, England and Burlington, VT: Ashgate, 2003.

¹⁷ Mahmood Mamdani. *Citizen and Subject: Contemporary Africa and the Legacy of Late Colonialism*. Princeton University Press, 1996.

¹⁸ Hall, Stuart. *The West and the Rest: Discourse and Power*. In: Hall, Stuart/ Gieben, Bram (Ed.): *Formations of Modernity*. Cambridge: Polity Press, p. 275-320, 1996.

¹⁹ Aram Ziai. *Zur Kritik des Entwicklungsdiskurs*, In: *Aus Politik und Zeitgeschichte*, APuz 10/2010. Online Version: <http://www.bpb>.

de/publikationen/H4BWP,0,Zur_Kritik_des_Entwicklungsdiskurses.html

²⁰ Johannes Fabian. *Time and the Other. How Anthropology Makes Its Object*. Columbia University Press, 1983. And : Jameson, Frederic, *A Singular Modernity: Essay on the Ontology of the Present*. London and New York: Verso, 2002; Osborne, Peter. *The Politics of Time: Modernity and Avant-Garde*. London and New York: Verso, 1995

²¹ See: Abu-Lughod, Janet. *Rabat: Urban Apartheid in Morocco*. Princeton, N.J.: Princeton University Press 1980. And: Pierre Bourdieu. In *Algerien. Zeugnisse einer Entwurzelung*. Graz: Camera Austria, 2003.

²² See the articles by Moira Hille: *From around a modern house*; and Vikramaditya Prakash: *The many names of Chandigarh. An Index for Heritage Planning*. In: Model House Research Group. *Transcultural Modernisms*. Sternberg: Berlin, 2014.

²³ *Indigenous Architecture: Architecture in the Tropics*. Jane B. Drew. *Perspecta*, Vol. 8 (1963), pp. 57-58

²⁴ The unpredictability of the tropics had on the other end effects for its central role for anti-colonial counter-narratives by authors like Glissant, Césaire, Fanon, Hall and many others (e.g. Aimé Césaire. *Discourse on colonialism*. New York: Monthly Review Press, 2000.)

²⁵ *Dwellers and Strayers: Modernist Zoopolitics in Post/colonial Worlds*. Fahim Amir. In: Model House Research Group. *Transcultural Modernisms*. Sternberg: Berlin, 2014.

²⁶ See: Anthony King. *Colonial Urban Development. Culture, Social Power and Environment*. London: Routledge, 1976 / 2006.

²⁷ *The Dual Mandate in British Tropical Africa*. Frederick John Dealtry Lugard, Baron Lugard of Abinger. London, 1926.

²⁸ Home, Robert. *Of Planting and Planning. The making of British colonial cities*. London: E & FN Spon, an imprint of Chapman & Hall, 1997:17

²⁹ Howard 1916: III-IV, quoted in: Sutter,

Paul. *Nature's Agents or Agents of Empire? Entomological Workers and Environmental Change during the Construction of the Panama Canal.* In: *Isis*. Vol. 98, No. 4. 2007: 725.

³⁰ See: "The White Man's Grave:" Image and Reality, 1780-1850, P. D. Curtin, *Journal of British Studies*. Vol. 1, No. 1 (Nov., 1961), pp. 94-110, Cambridge University Press

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