

Editorial

Ten Years After, the Continent of Hope and Modern Heritage

A Tribute to Udo Kultermann

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The argument of this Docomomo Journal is Modern Movement in Sub-Saharan Africa and Tropical Architecture. **docomomo** is very pleased to gather the reflection of a range of skilled researchers in this issue, becoming to point a huge critical attention. Ten numbers and ten years after **docomomo** Journal 38, dedicated to Modern Heritage in Africa, the aim of this number 48 is to update the discussion contributing to “fill the gaps” identified by Jane Drew (1911–1996) and Maxwell Fry (1899–1987).

The expression “Tropical architecture” is frequently associated to Fry and Drew, due to an international diffusion of *Tropical Architecture in Humid Zones* (1956), followed by *Tropical Architecture in Dry and Humid Zones* (1964). Far from European production, African colonies created new architecture giving shape to a brand, the one of tropical architecture: “architecture in the humid tropics is collaboration with nature to establish a new order in which human beings may live in harmony with their surroundings”. The idea was “to fill a gap in general information for architects and town planners”.¹ Until then the edition was concentrated on French and British colonies.²

1960 seems to be “the African year” coinciding with the peak of the beginning of the African decolonization process, following a post-war circumstance and the foundation of the United Nations Organization in 1945 (having a huge reverberation on changes made to statutes of several African regions that were being shared by European states since 1884, as decided at the Berlin Conference), with the independence of 17 countries and the beginning of rebellion towards independence all over the continent.

Published in 1963, the book *Neues Bauen in Afrika*,³ by the art historian Udo Kultermann (1927–2013), constitutes a reference on the analyses of Modern architecture in Africa, stating that the new task was to build new nations, implying a new evolution on African architecture. Six years later, *New Directions in Africa Architecture*⁴ points a path and a future by analyzing typologies, identifying trends and establishing conclusions. In the book published in 2000 *World Architecture 1900–2000: A Critical Mosaic*,⁵ he regains the 1963 chronological setting and selects 100 buildings to illustrate the 20th century in sub Saharan Africa, assuming the Sahara frontier and defining a sub Saharan cultural unity to built his idea of the “continent of hope”. Kultermann’s progression emerges from optimism focusing on doubt in 1969 and on hope on the edge of the 20th century⁶. Kultermann’s approach by questioning the link between tradition and innovation on African architectural production has no precedents.

Since the 1990s architectural historians discovered Modern architecture in Africa as part of a cultural production related to colonialism.⁷ With the introduction of postcolonial theory in the historiography of architecture, an exclusively ideological critical sense has been developed preventing disciplinary autonomy or practice of architecture and finally

condemning any objective look. Recently, the development of concepts such as hybrid or the otherness⁸ has been promoting a nuanced historical analysis about architecture and politics in the 20th century in Africa.⁹ The recognition that a widespread awareness of Modern Movement architecture has always been serving colonization¹⁰ involves rethinking the basic principle of Modern welfare society and practiced architecture as a mission. How Modern principles have been exchanged, resulting from a Eurocentric culture, with the cultures from the East and Africa. In addition, it must be said that the case of sub-Saharan Lusophone Africa is now beginning to be studied in depth putting together peripheral universes.

It is time to keep on debating African's surprising Modernity and to reflect both on the lack of information, namely the one concerned with territories such as Angola or Mozambique, to re-evaluate the memory of the past, the present and the future with a wide range of issues dealing with documentation and conservation topics.

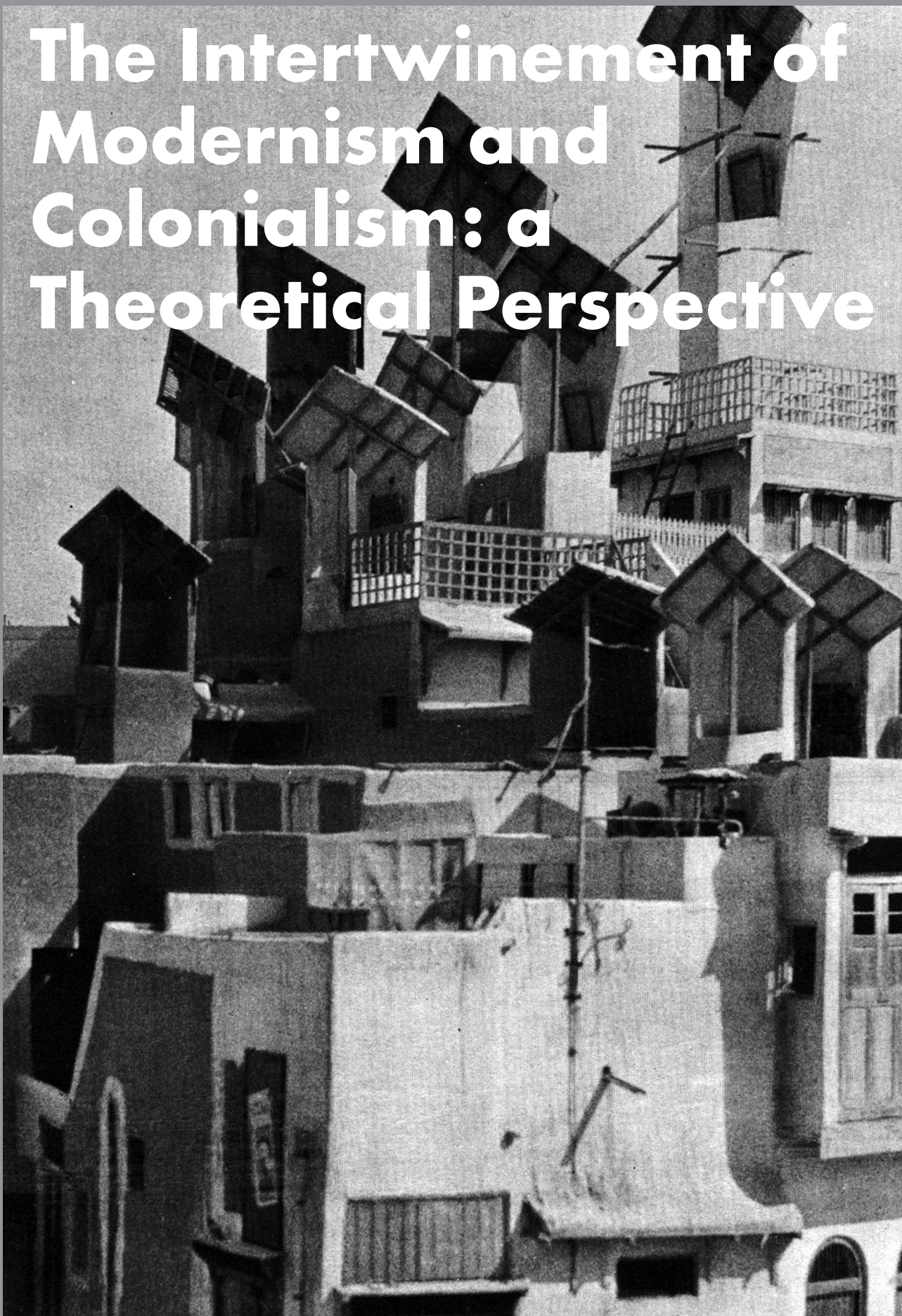
I wish to thank the skill of a brilliant range of researchers and critics that contributed to make possible this debate that starts with the acute reflexions on colonialism and orientalism conducted by Hilde Heynen. Antoni Folkers makes the necessary revision on the very early and native Modern African architecture; Ana Tostões deals with local culture and global influence highlighting the work of Pancho Guedes in Mozambique, introducing the Lusophone Africa which is followed by paradigmatic case studies analyzed in the scope of a heritage assessment by Margarida Quintã in Angola, Vincenzo Riso and Susana Gomes, followed by Zara Ferreira's contribution on Mozambique school programs in Conservation Issues. Heritage conservation's future is the question identified by Hannah Le Roux, Brendan Hart and Yasmin Mayat, followed by Ola Uduku who stresses the importance of education for the future of heritage. Finally, the tropical architectural education is analysed from two Mediterranean authors'—this is to say peripheral Europeans—point of views: Portugal and Greece, through Jorge Figueira/Bruno Gil and Petro Phokaides essay's updating the AA School Tropical Architecture Program.

Today, I wish to remember Udo Kultermann who passed away last February and to pay a tribute to his unprecedented work: African's architecture challenge, its current reality and its evolving process gathering together cultural heritage and the test of time. The case studies analyzed represent only a small example of African Modern architecture's potential showing in the iconic, tectonic and programmatic qualities of this singular heritage. If one may admit that this legacy begins to be recognized as a cultural heritage, it is important to consider the fact that this astonishing universe faces a lack of legal protection. However, even carrying the fragility of more than a fifty year-old construction and minimal maintenance, these buildings and cities still show a surprising sort of resilience. Perhaps due to the fact that Modern Movement architecture that has been designed and conceived with great consistency and climatic conditions awareness shows a spatial and tectonic worthiness, which has enabled it to survive the test of time. It is important to understand this production envisaged through a transformation process following a truly progressive orientation and the cultural dissemination of these pioneering works with plenty of social and urban significance. As I believe that heritage implies a collective sense of belonging, I wish to enlighten the utopia vision of Modern Movement architecture as a step forward for the improvement towards a better life for all and considering that this heritage may turn into a sustainable, cultural and economic resource.

Ana Tostões, Chair of **docomomo** International

1. Maxwell Fry ; Jane Drew, *Tropical Architecture in the Dry and Humid Zones*, London, BT Batsford Limited, 1964.
2. *L'Architecture d'Aujourd'hui*: "France d'Outre-Mer", n° 3, 1945; "Tunisie", n° 20, 1948; "Maroc", n° 35, 1950; "Afrique du Nord", n° 6, 1955; "Afrique Noir", n° 7, 1957; *Architectural Review*: "Commonwealth 1", vol. 126, n° 752 (1959); "Commonwealth 2", vol.128, n° 761, 1960).
3. Udo Kultermann, *Neues Bauen in Afrika*, Berlin, Wasmuth, 1963.
4. Udo Kultermann, *New Directions in African Architecture*, Omslog, 1969
5. Udo Kultermann, *World Architecture. A Critical Mosaic 1900-2000*, vol.6, Central and Southern Africa, Omslog, 2000.
6. Cf. Margarida Quintã, "Une Introduction à la recherche 2". EDAR.EPFL.2013.
7. Johan Lagae; Tom Avermaet, (ed.), *L'Afrique, c'est chic. Architecture and Planning in Africa 1950-1970*, OASE 82, Rotterdam, NAI Publishers, 2010.
8. *Other Modernisms*, 9th International **docomomo** Conference, Ankara, Proceedings, 2006.
9. Rasheed Araeen, "A New Beginning: Beyond Postcolonial Cultural Theory and Identity Politics", Third Text, n° 50, 2010.
10. Udo Kultermann, *World Architecture. A Critical Mosaic 1900-2000*, vol.6, Central and Southern Africa, Omslog, 2000.

The Intertwinement of Modernism and Colonialism: a Theoretical Perspective



Post-colonial theory, following the lead of Edward Said's *Orientalism*, holds that the discourse that justified colonialism was not marginal to European culture, but that it formed a core ingredient of European thinking about Modernity and Modernism. This thought-provoking argument has not yet been thoroughly processed in architectural history and theory. This article explores these issues by introducing some of Said's thoughts and by discussing how they might be relevant for an interpretation of Modernism in architecture. It looks at primitivism in architecture as encountered in the work of Loos, Le Corbusier and Rudofsky, arguing that its colonialist bias is undeniable. The conclusion stresses how much Said's analyses still give rise to difficult questions about our ideas and attitudes.

By Hilde Heynen

The historiography of Modernism in architecture has seen quite some additions the last couple of decades. One of the more important revisions of Modernism's history has to do with a postcolonial critique. This critique starts from the assumption that Modernity and colonialism are in some ways intertwined—that they cannot be seen as intellectual discourses that are totally separate. For one thing, this has to do with an economic context. Take for example the Van Nelle factory, one of the famous icons of Modernism. This was, in fact, a coffee, tea and tobacco factory—which means that this icon of Modernity got into the world as a result of colonial expansion, colonial policy and colonial production. It cannot be denied therefore that the Van Nelle factory was part and parcel of the whole colonial condition.

In the book *Back from Utopia*, which was edited by Hubert-Jan Henket and me, we tried to come to terms not only with the physical heritage of the Modern Movement, but also with its ideological heritage. In my own contribution I raised some issues, some questions of colonialism, which I summarized as follows:

In postcolonial theories the interconnections between the Enlightenment project of Modernity and the imperialist practice of colonialism have been carefully disentangled. Following the lead of Edward Said's Orientalism, it is argued that colonial discourse was intrinsic to European self-understanding: it is through their conquest and their knowledge of foreign peoples and territories (two experiences which usually were intimately linked), that Europeans could position themselves as Modern, as civilized, as superior, as developed and progressive

*vis-à-vis local populations that were none of that [...] The other, the non-European, was thus represented as the negation of everything that Europe imagined or desired to be.*¹

This is, in a nutshell, the argument that Edward Said developed in his seminal book *Orientalism* (1978). I will discuss the main ideas of this book in a first section of this paper. In the second part I will question whether similar logics are to be found in architectural discourses. Finally, by a way of conclusion I will try to make up a kind of balance as to what to think of Modern architecture in light of the insights developed from *Orientalism* and post-colonial theory.

Orientalism

Edward Said (1935–2003) was a Palestinian intellectual, born in Jerusalem, who became a scholar teaching at Columbia University, in New York, in the field of comparative literature. The central theme in his work is the relation between cultures. His book *Orientalism* starts from the assumption that the Orient is not an inert fact of nature: what we call the Orient is in the East because our point of reference is Europe. Men make their own history, he claims, they also make maps and these maps then structure our conception of reality:

*Therefore as much as the West itself, the Orient is an idea that has a history and a tradition of thought, imagery and vocabulary that have given it reality and presence in, and for, the West. The two geographical entities thus support and to an extent reflect each other.*²

In art, the term *Orientalism* refers to a whole series of images which form a certain tradition that depicts the fantasies of Western painters about the East. Famous topics are women in the harem, women making toilets, women

< Image from Bernard Rudofsky's *Architecture without Architects*. A short introduction to non-pedigreed architecture, 1964.

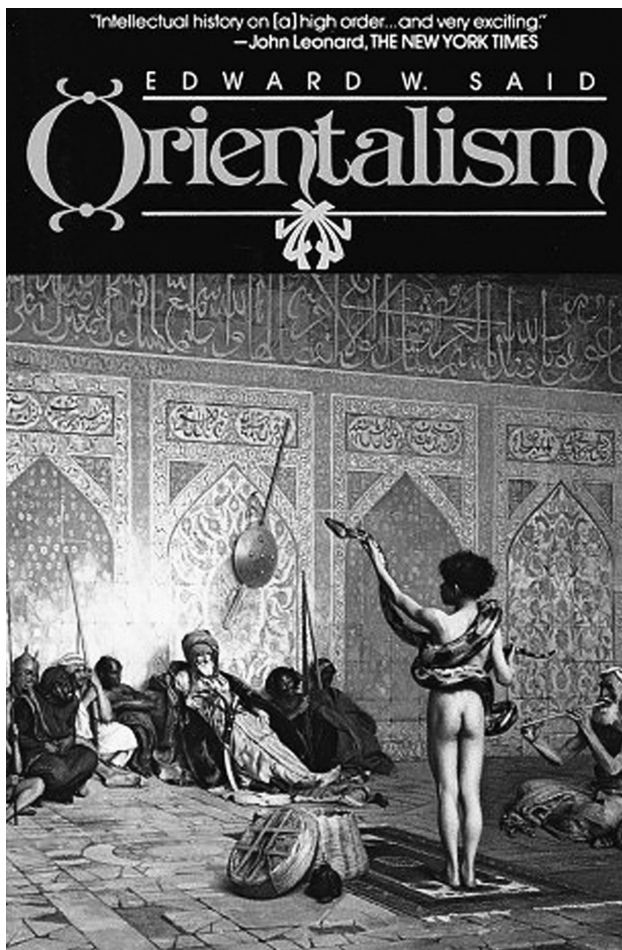


Figure 1. Cover of Edward W. Said's book *Orientalism*, 1978.

leading a life of luxury and laziness—or men, brave men confronting the desert alone on a horse (think of the imagery in films like David Lean's *Lawrence of Arabia*). Also in literature you have Orientalist works, just like academic studies of the East fall under Orientalism. The Orient in most of these examples captures the imagination, and evokes a very specific kind of image, with often erotic associations. Often the images suggest decadence and lascivity, a kind of looseness which is seductive, but at the same time there is an implicit moral message about the dangers of such luxury. The Orient is thus represented as full of mystery and secrets. Its people are represented as being very enigmatic, very indirect, as persons you cannot easily get to know and hence as individuals who might be unreliable. The implicit message these images and texts bring about is that the Orient might be threatening, and that, therefore, it needs to be brought under control. And that message acts as a kind of alibi for the civilizing mission of the West.

According to Said, this type of analysis does not pertain only to paintings or to literature. He claims that Orientalism pervades our whole way of thinking:

*Orientalism is not a mere political subject matter or field that is reflected passively by culture, scholarship or institutions; nor is it [...] representative and expressive of some nefarious 'Western' imperialist plot to hold down the 'Oriental' world. It is rather a distribution of geopolitical awareness into aesthetic, scholarly, economic, sociological, historical and philological texts.*³

Orientalism is an organizing factor, a structuring factor which influences our frame of mind, our worldview, the way we think about the world. And the way Europeans think about the world, the way European or Western consciousness is structured has to do with the will or intention to understand. This primary drive however is only gradually moved from the will or intention to control, to manipulate or even to incorporate that which is manifestly different. Said:

*(Orientalism) is, rather than expresses, a certain will or intention to understand, in some cases to control, manipulate, even to incorporate, what is manifestly a different (or alternative and novel) world [...] it is, above all, a discourse that is by no means in direct, corresponding relationship with political power, but rather is produced and exists in an uneven exchange with various kinds of power.*³

His point is that all kinds of knowledge in literature and texts, and paintings, that are produced by Western scholars and artists and authors and architects and that address the East or the colonies, can never be seen as totally disconnected from the fact they are European. Europeans always already are in a kind of unequal relationship with the people they are depicting or writing about. When they write about the East, their interpretation becomes the dominant perspective. Dealings of academic, scholarly interest with other parts of the world cannot be abstracted from this unevenness in power. Unevenness in power produces some kind of awareness of the superiority of the West. And it is this conviction, the conviction of the superiority of the West, which justifies the colonialist enterprise.

That the West had a civilizing mission was an idea that was shared among many many layers of society until well into the 50s and even the 60s. Maybe the idea of the civilizing mission by now has become politically incorrect. This does not mean, however, that the idea of superiority has vanished. This superiority also has to do with what Said calls hegemony, the dominance of certain cultural forms over others. It simply has to do with matters of quantity, since there are many more books produced in

Europe and America about the rest of the world than the other way around. So there is a kind of unevenness also in the directions of the interactions.

*Orientalism is never far from what Denys Hay had called the idea of Europe, a collective notion identifying 'us' Europeans as against all 'those' non-Europeans, and indeed it can be argued that the major component in European culture is precisely what made that culture hegemonic both in and outside Europe: the idea of European identity as a superior one in comparison with all the non-European peoples and cultures.*⁴

In architectural history these notions have taken some root in the last couple of years, although still not enough. Therefore, in order to show how colonialist thinking works also in architecture, I want to take a look at the notion of 'the primitive' in Modern architecture, in order to see how Said's analysis about implicit colonialism in our discourses is applicable to architecture.

Primitivism in Modern Architecture

It is very clear that the notion of the primitive does carry a colonialist overtone in the discourse of Adolf Loos. He stated in 1908, in his famous essay on "Ornament and Crime", that:

*In the womb the human embryo passes through all the development stages of the animal kingdom. At the moment of birth, human sensations are equal to those of a newborn dog. His childhood passes through all the transformations, which correspond to the history of mankind. At the age of two he sees like a Papuan, at four, like a Teuton, at six like Socrates, at eight like Voltaire [...] The child is amoral. To us the Papua is amoral. The Papuan slaughters and devours somebody, he tattoos his skin, his boat, his oar, in short, everything that is within his reach. He is no criminal. The modern man who tattoos himself is a criminal or a degenerate [...] The urge to ornament one's face, and everything within one's reach is the origin of fine art. It is the babble of painting. All art is erotic.*⁵

What Loos is constructing here is a comparison between the Papua and the European as a legitimating or a justification for the superiority of his ornamentless Modern architecture. The justification for that idea comes from a notion that was popular in the 19th and early 20th century, namely that other (non-European) people are childlike. This conforms to a way of thinking that in an-

thropology is known as evolutionism: it looks at the differences between cultures as differences of hierarchy, as if all people are on an evolutionary ladder and some are further developed than others, but the others will get there in time. Such an evolutionist way of looking at the differences between the cultures is very much part of the colonial discourse.

Le Corbusier was also very much interested in the primitive, yet in his discourse other aspects prevail. Adolf Max Vogt wrote a book on Le Corbusier called *Le Corbusier, the Noble Savage*. He claims that Le Corbusier's work mediated between on the one hand rationality and geometric order, and on the other hand primary facts in archaeology and architecture. According to Vogt, Le Corbusier's preference for pure geometric forms came from his fascination for archeological findings and for the architecture that he encountered in his *Voyage à l'Orient*. He gives examples of buildings by Le Corbusier that testify of this influence (one of his houses in the Weissenhof Siedlung bears a strong resemblance in volumetric composition to one of the buildings he sketched in his *Voyage à l'Orient*; the Villa Savoye shares similar characteristics with another oriental building).

If one compares Loos and Le Corbusier, it is clear that for Loos the primitive was the pre-rational, the childlike, the one who loves tattoos. Thus the primitive for Loos is what has to be overcome. His cultural paradigm is evolutionism and social Darwinism—the idea that cultures that are further developed are stronger and that the others cultures will die out. For Le Corbusier on the other hand the primitive is rather the primary, the original, the authentic, that which has to be regained. The latter approach, it seems to me, became the most important in Modernist architecture: also later on we find again and again this idea of the primitive as the authentic that has to be reinstalled. That interpretation makes up the attitude of what we can call primitivism in architecture.

Now from a post colonial perspective primitivism is a questionable attitude. In architecture we didn't question it that much but it is instructive to look at another field, e.g. art history where this matter has been extensively discussed. The debate started because of the 1984 exhibition at the Museum of Modern Art in New York, called "Primitivism in 20th Century Art: Affinity of the Tribal and the Modern." That exhibition brought together a series of Modern art works with a series of so called 'primitive' objects from the non-Western world. The whole idea was that the exhibition would display that maybe there are more affinities and similarities between Western Modern art and these tribal arts. This show has raised an enormous amount of criticism. Thomas McEvelley summarized a few of the argument that have been made.

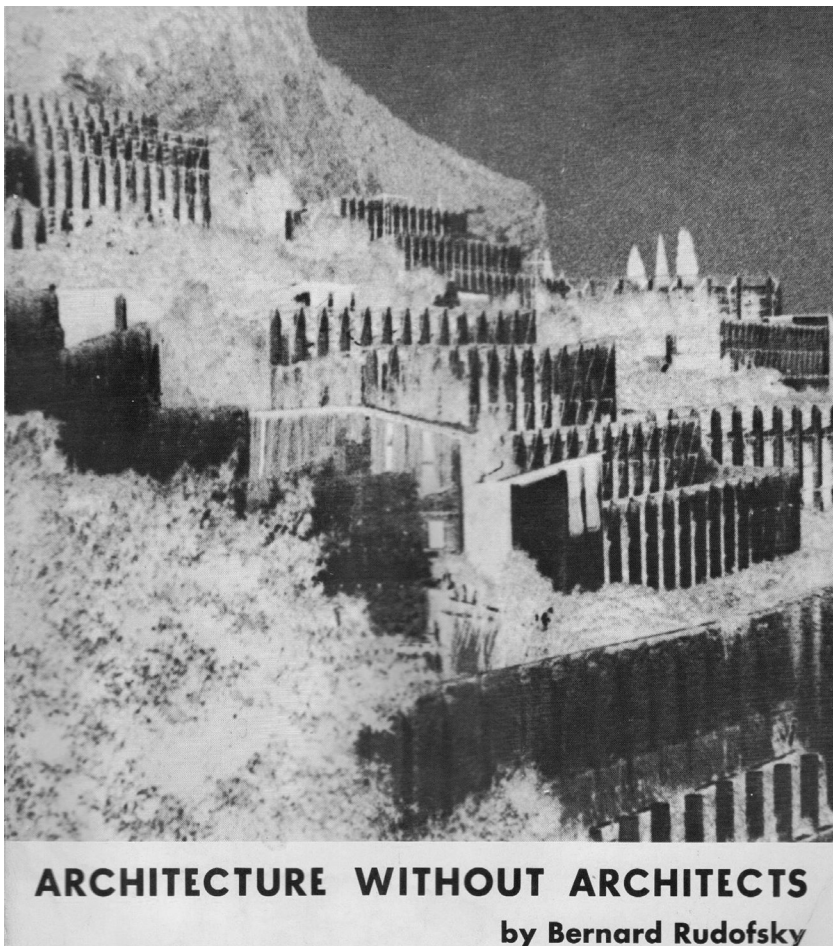


Figure 2. Cover of **Bernard Rudofsky's** book *Architecture without Architects. A short introduction to non-pedigreed architecture*, 1964.

Figure 3. Image of the exhibition of the same name at the Museum of Modern Art of New York, 1964. © Museum of Modern Art, New York.

Figure 4. Image from the book with the wind-scoops (called *bad-gir* by Rudofsky) on the roofs of buildings, which channel air into their interiors.



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I have no doubt that those responsible for this exhibition and book feel that it is a radical act to show how equal the primitives are to us, how civilized, how sensitive, how 'inventive': indeed, both Rubin and Varnedoe passionately declare this. But by their absolute repression of primitive context, meaning, content, and intention (the dates of the works, their functions, their religious or mythological connections, their environments), they have treated the primitives as less than human, less than cultural—as shadows of a culture, their selfhood, their Otherness, wrung out of them.⁶

This is an argument that one encounters again and again, it is part of the criticism of how European colonizers dealt with the art and cultures of the people they conquered. Objects in colonial museums are typically the kind of objects that were taken away because they were admired by the colonial explorers, and very often one finds in Europe, in America or in Australia a lot of 'primitive' objects that have no history as objects, the origin of which is not exactly known, nor their function or social role or cultural meaning. All this information is abstracted; they are just there as aesthetic objects—nice to look at, to admire, but in fact devoid from their cultural contexts. I agree with Thomas McEvilley that it is very questionable whether it is justifiable to do that, to just see them as aesthetic objects.

Another argument is formulated by Hal Foster, who states that there is something very strange and contradictory about our Western, or Modernist, fascination with the primitive. Because one cannot escape that the observation that:

The Modern discovery of the primitive really means its death [...] no anthropological remorse, aesthetic elevation, or redemptive exhibition can correct or compensate this loss because they are all implicated in it.⁷

The fact that all these explorers and all these well meaning people ventured out to undiscovered parts of the world, collecting all these nice objects, resulted (unintentionally but nevertheless inevitably) in the extinction of the primitive that was investigated. And that is a moral dilemma that not many of those involved in these kinds of travels of discovery are truly recognizing.

Within architectural culture, the fascination for the primitive and the non-Western is also very much present. From the late 1950s onwards one can recall e.g. Paul Oliver's *Shelter and Society*; Bernard Rudofsky's *Architecture without Architects*, Amos Rapoport's *House Form and Cul-*

ture or Joseph Rykwert's *Adam's House in Paradise*. Such books are very often written by architects or architectural historians, whose point of reference is Modern architecture. The trope of authenticity therefore is of major relevance, as for example in the book by Bernard Rudofsky, who formulates his intentions as follows:

*The exhibition is not an exercise in quaintness not a travel guide, except in the sense that it marks a point of departure for the exploration of our architectural prejudices. It is frankly **polemic**, comparing, as it does, if only by implication, the **serenity** of the architecture in so-called underdeveloped countries with the architectural **blight** in industrial countries.⁸*

The whole idea is that Modern architects can learn something from this so-called primitive architecture, or the architecture in the so-called underdeveloped countries. They can learn something from it because of the qualities that are inherent to it: it is communal architecture instead of individual; it fits buildings into their natural surroundings; there is a desire for secure, well defined places instead of the sprawl of unchecked growth in the West; a rare good sense in the handling of practical problems; there is humaneness in this architecture and in general the people behind these buildings look at the good of everyone rather than at profit making.

The imagery Rudofsky displays is similar to the one in the "Primitivism" exhibition, in the sense that the images are not very well identified, not much information is given about them. There is usually a region but not more specific information as to dates or makers. Images are organized in a visually attractive way, but not as part of a serious investigation into the history of these specific places. The implicit message is that the primitive is 'the Other' of the Modern Movement. The primitive is our 'other'—as Said is arguing we construct the Orient to identify ourselves. Rudofsky's viewpoint can thus be summarized as follows: "the primitive is the 'other' of the Modern, Modern architecture has to regain the qualities it lost, and these qualities are mirrored in primitive architecture."

Now from a postcolonial perspective one can indeed criticize this kind of approach in the sense that it implies a sanitized, romanticized, sterile version of primitive architecture (this can be said not only about Rudofsky but also about someone like Aldo Van Eyck with his studies of Dogon architecture). McEvilley stated in his criticism of the "Primitivism" exhibition that the artifacts in it are sterilized—"the blood is wiped off them." The real history of these artifacts, the real and sometimes violent context in which they were functioning is absolutely ignored in

the way they are presented. The same is valid for a book as that of Rudofsky. It is basically a romantic viewpoint, since there is no real analysis of economic conditions or social inequalities—these are not addressed at all (unless for the notion that maybe poor people are more authentic). It is not geographically and historically specific, nor does it take the other seriously. Such books are typically produced by European or American intellectuals ‘about’ the others: there is no serious participation of the other, there is no interaction with the people who are depicted in such books. And also, following Hal Foster’s argument, such an approach does not take into account the complicity of the admirers in the process of extinction of the things that they are admiring.

This kind of criticism, it seems to me, indeed applies to Modern architecture’s fascination with the primitive and with the circumstances to be found in the so-called undeveloped world. There thus is, undoubtedly, a very real kind of intertwinement between the Modern discourse and the discourse that justified colonialism and imperialism. Does this mean however that we should denounce Modern architecture and Modern discourse, out of some sense of political correctness? I am not so sure about that.

The Hopes Embodied in Modernism

The main argument for a reconsideration of Modern ideas has to do, in my opinion, with its social ideals. The fact that the construction of Modernity and Modernism implies an interplay between the supposed superiority of Europeans versus the inferiority of all the rest, does not mean that everything about it becomes invalid. For we should also allow for the possibility that ideas of Modernity and Modernism can be opened up, that they do not belong exclusively to the West. Maybe it is this construction of the Modern as being equivalent to the West that needs to be criticized and deconstructed. If one tries to look at Modern architecture or to deconstruct the Modern discourse, opening it up for other possibilities then maybe some of its promises can be retained.

For me Modern architecture is most of all a social project, a social idea. It is not so much a matter of style, although it is very interesting as a style. The core of Modernist architecture for me lies in this whole program of social improvement, the idea that Modern architects were not just changing architecture, but through architecture they were going to change the world and to make it a better world. It can be summarized in the title of a publication of Giedion in 1929 *Befreites Wohnen*: what Modern architecture would bring to the people was liberation and emancipation. People would be liberated from oppression and deprivation. Instead of being confined to closed and dark environments, Modern architecture would open

up their world, let in light and air and make sure that people’s lives would be better. This program was translated in a whole series of manifestations of the program of the welfare state, and that is for me the most important part of Modern architecture, the part that deals with social housing and building schools and hospitals and providing infrastructure and by doing that improving the lives of many people. This is also the message Catharine Bauer’s book on *Modern Housing* (1934), in which she claims that Modern architecture is providing people with better housing, better environments, better amenities, all kinds of infrastructure. Modernism, as Bauer saw it and as I see it, is linked up with this idea of social emancipation and social progress.

If you take Modernism seriously in this sense, it indeed is absolutely open to be appropriated by other parts of the world. The argument that the idea of Western superiority is inherent to Modernism, should not be taken to imply that this whole ideology of liberalization and emancipation would be restricted to those people who recognize themselves as being superior. At a certain point some people have been criticizing Modern endeavors as for example Brasilia or Chandigarh, for being totally unconnected to the supposed cultural values and the way of life of the people they were built for. I would rather argue that in both cases there was a very conscious choice, a very conscious decision by politicians, by decision makers, to rely on this Modern glory in order to express the aspirations that they themselves formulate for the future of their country. It is clear to me that this kind of appropriations of ideas of Modernity is absolutely justified and is part of the whole dialogue and interplay that is the result of the process of Modernization.

Let’s take as a focus the Central Bus station in Brasilia—designed by Lúcio Costa and for me today by far the most interesting site of the city. Lúcio Costa’s original urban design for Brasilia relates to the so-called pilot project, the part of the city that is now protected as heritage. Since its inauguration, however, the city has been growing enormously and the growth has taken place in satellite towns that are at a certain distance from the central city, which is really treated as a kind of unchangeable icon of Brazilian Modernity. The bus station is the place where it all comes together, where the people in the satellite towns commute and where there is a kind of turmoil of not just the official people—civil servants and the like—but also of inhabitants from the satellites, belonging to very different classes. The hustle and bustle in that bus station is for me where the real Modernity of a place like Brasilia is located—probably more so than in its very admirable Modern buildings. Similar things can be said about Chandigarh. I had the opportunity to visit Chan-

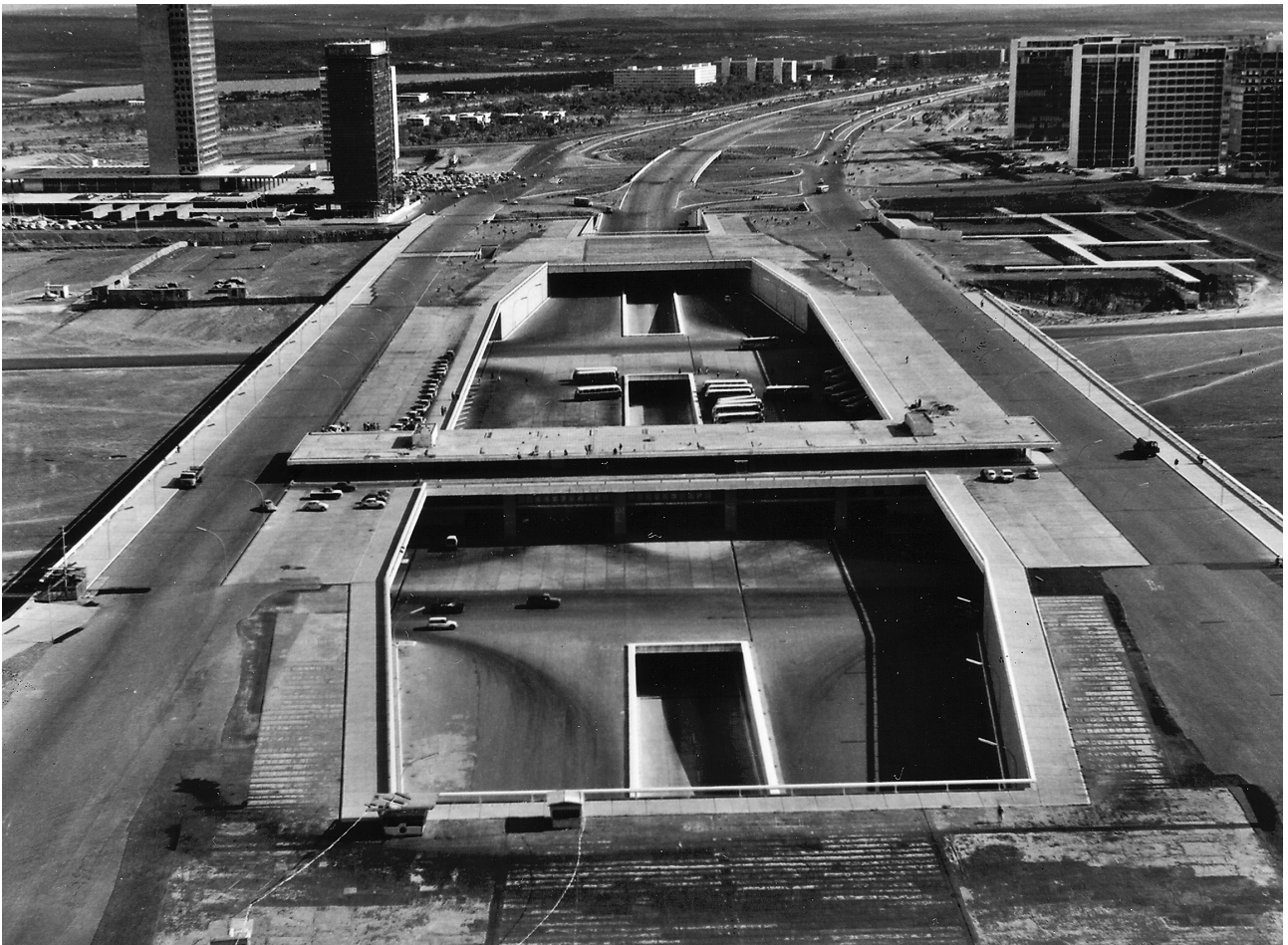


Figure 5. North view of Brasília's Rodoviária by Lúcio Costa in 1964.

digarh a couple of year ago, and when one visits the place the people (many people, not just architects and intellectuals) start telling you that the city has been developed by a very famous architect. They are clearly very proud of their city, and therefore I think it is absolutely irrelevant to assume that a place like Chandigarh lacks the Indian spirit or that it is foreign or not adapted to its context. Going there one sees clearly that, in one generation, people experience these cities as very self-evident places of their own—not as some foreign imposition that is alien to their own nature. Modernity indeed harbors the capacity to move, and to lose, to a certain extent, its all too easy association with the West.

Conclusion

It is proper that this paper, which is an exploration of the relevance of postcolonial theory for architecture, ends with some questions that are worth considering.

Does the acceptance of the Modern design principles imply an acceptance of the hegemony of Western discourse?

It seems important to me to think about this. I am not sure that I have an answer to this question. Post-colonial theory and Edward Said's analysis really make it clear that in our conventional discourses, notions of superiority are so inherent, so much part of our way of thinking, that it is not easy to develop a way around it. A possible trajectory can be found in what Jyoti Hosagrahar calls 'indigenous Modernities'. Her book *Indigenous Modernities. Negotiating architecture and urbanism* deals with Delhi and is about the indigenous Modernities that she sees emerging in India, not just recently but already since the 19th century. Her argument is that we should deconstruct the opposition between tradition and Modernity, because this opposition usually associates the Modern with the Western and the traditional with what is not Western. If one studies more closely urban realities such as those in Delhi one sees that that kind of neat opposition is not there at all. There is not such a neat division that would allow one to categorize certain phenomena as clearly Modern and others as clearly traditional. In the real messy life that makes up our cities one is confronted with all these things at the same time, they form alliances



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Figure 6. Chandigarh commercial center. Photo by the author.

Figure 7. The Rodoviária in 1976 with its hustle and bustle, the real Modernity of a place like Brasília. Photo by Waldir Pina, Brasília Public Archive.

and very hybrid phenomena. It is necessary and interesting to study these phenomena as very specific manifestations, or very specific forms of Modernity, that are not so much tied to images of what the West is supposed to be, but that are indigenous versions of a desire for Modernity that does not necessarily take its cue from the West.

Another question remains, one that is said to be central to the intellectual quest of Edward Said:

How can one know and respect the Other?

For Said building up knowledge of the other, understanding the other, studying the other is in fact very close to the desire to conquer the other, to control the other, to manipulate the other. It is clearly not an easy ambition, therefore, to know and to respect the other. Certainly for scholars and architects based in the West, it is good to reflect upon this. Why does one travel elsewhere? Why does one deal with Modern buildings and neighborhoods in other parts of the world? Should one continue to uphold the practices of the West—think e.g. about preservation guidelines, practices and technologies—as exemplary attitudes to be followed everywhere? What about the ‘shared heritage’ of so many colonial buildings? We should be careful not to fall into the neo-colonialist trap of thinking that the knowledge about conservation of Modern buildings is so much further advanced in Europe and America, and that we therefore simply can export this knowledge to other parts of the world and pose as ‘experts’ who can assess the heritage value of buildings regardless of their context. Neither, however, should we see that knowledge as totally irrelevant to Modern buildings in other parts of the world. We should not totally disqualify ourselves as architects, historians or intellectuals. What does it mean to respect the other? Where do we find that point of balance where we remain critical and honest as intellectuals and nevertheless respect the reality of other places and other viewpoints?

‘How can one know and respect the other?’ It is especially the respect, the interaction, the cultural dialogue, that is not made easy by the fact that there is often an undeniable unevenness and unbalance in so many respects between the people who are participating in this type of interaction. It is often there as a kind of structural difficulty, when students or experts from Europe or from North America are working on the built environment of places in other parts of the world. Attitudes of primitivism or exoticism are notoriously difficult to suppress, but being aware of this flaw in our intellectual make-up is probably a necessary first step to go in the direction Edward Said pointed to.

Acknowledgement

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Notes

1. Hilde Heynen, “Engaging Modernism”, Henket, Hubert-Jan; Heynen, Hilde. ed., *Back from Utopia. The Challenges of the Modern Movement* Rotterdam, O10 Publishers, 2002, 388.
2. Said, Edward, *Orientalism*, London, Routledge & Kegan Paul, 1978, 5.
3. Said, Edward, *Orientalism*, London, Routledge & Kegan Paul, 1978, 12.
4. Said, Edward, *Orientalism*, London, Routledge & Kegan Paul, 1978, 7.
5. Lecture by Adolf Loos, “*Ornament und Verbrechen*”, 1908.
6. Thomas McEvilley, “Doctor, Lawyer, Indian Chief” [1984], Flam, Jack; Deutch, Miriam ed., *Primitivism and Twentieth Century Art. A Documentary History*, Berkeley (California), University of California Press, 2003, 335–350.
7. Hal Foster, “The ‘Primitive’ Unconscious of Modern Art” [1985], Flam, Jack; Deutch, Miriam, ed., *Primitivism and Twentieth Century Art. A Documentary History*, Berkeley (California), University of California Press, 2003, 368.
8. Rudofsky, Bernard, *Architecture without Architects. A Short Introduction to Non-Pedigreed Architecture*, Albuquerque, University of New Mexico Press, 1964, 3.

References

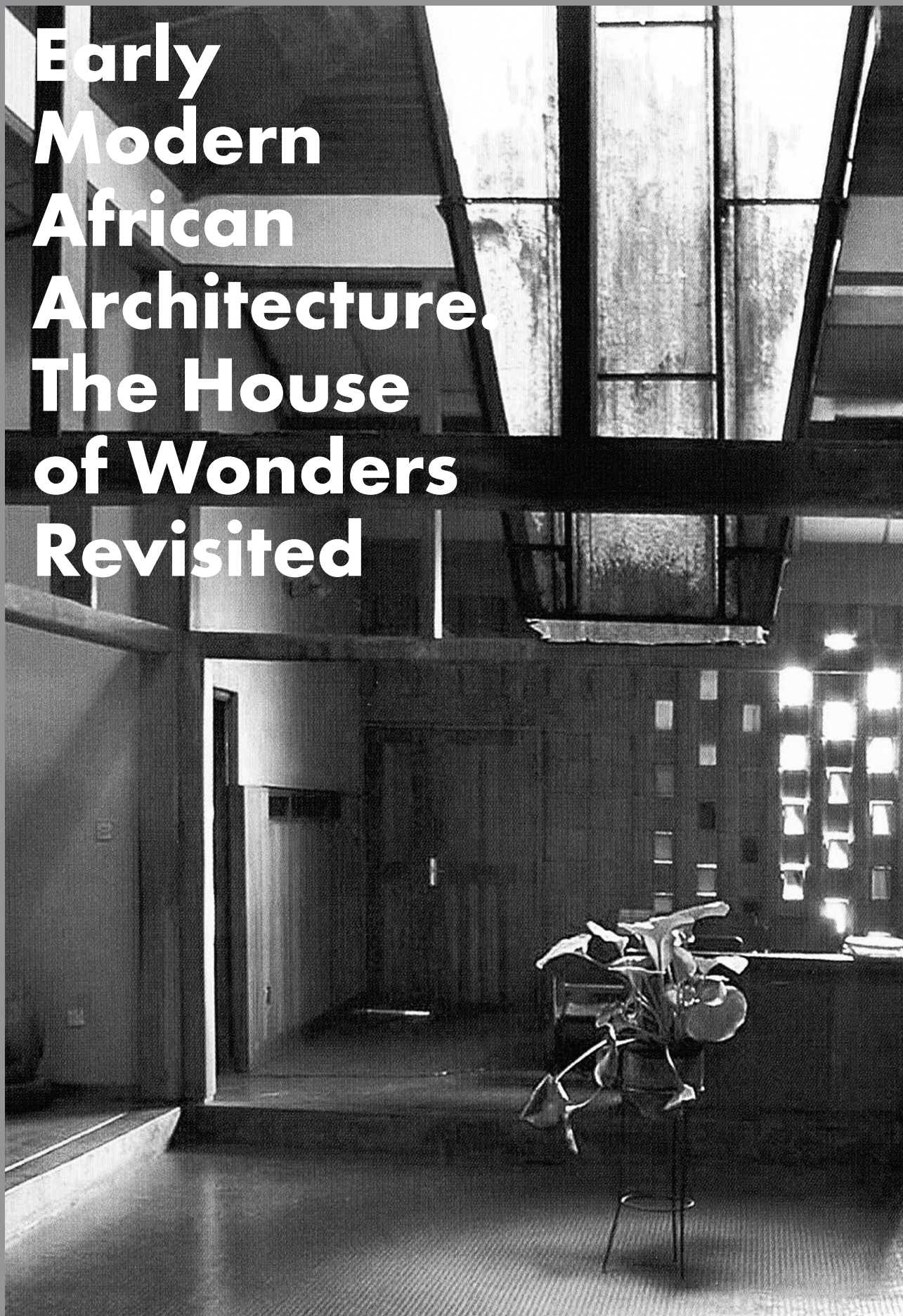
- Bauer, Catherine, *Modern Housing*, Boston, Houghton Mifflin, 1934.
- Hal Foster, “The ‘Primitive’ Unconscious of Modern Art” [1985], Flam, Jack; Deutch, Miriam, ed., *Primitivism and Twentieth Century Art. A Documentary History*, Berkeley (California), University of California Press, 2003, 384–394.
- Giedion, Sigfried, *Befreites Wohnen* [1929], Frankfurt, Syndikat, 1985.
- Henket, Hubert-Jan; Heynen, Hilde. ed., *Back from Utopia. The Challenges of the Modern Movement*, Rotterdam, O10 Publishers, 2002.
- Hosagrahar, Jyoti, *Indigenous Modernities. Negotiating Architecture and Urbanism*, London, Routledge, 2004.
- Adolf Loos, “Ornament and Crime” [1908], Safran, Yehuda; Wang, Wilfried ed., *The architecture of Adolf Loos. An Arts Council Exhibition*, London, 1987, 100–103.
- Flam, Jack; Deutch, Miriam ed., *Primitivism and Twentieth Century Art. A Documentary History*, Berkeley (California), University of California Press, 2003.
- Rudofsky, Bernard, *Architecture without Architects. A Short Introduction to Non-Pedigreed Architecture*, Albuquerque, University of New Mexico Press, 1964.
- Said, Edward, *Orientalism*, London, Routledge & Kegan Paul, 1978.
- Vogt, Adolf Max, *Le Corbusier, the Noble Savage. Towards an Archaeology of Modernism*, Cambridge (Massachusetts), MIT Press, 1998.

Hilde Heynen

Professor of architectural theory at the KU Leuven, Belgium. Her books include *Architecture and Modernity. A Critique* (1999) and *The Sage Handbook of Architectural Theory* (2012, co-edited with Greig Crysler and Stephen Cairns). She publishes in journals such as *Home Cultures* and *The Journal of Architecture*.

Early Modern African Architecture. The House of Wonders Revisited

20



This essay explores the various strands of the advent of Modernity in African architecture. It starts from the assumption that the history of Modernity in African architecture is a complex and rich subject that merits increased scientific attention.

By Antoni Folkers

The historiography of Modernity in African architecture is so far dominated by the focus on the advent and development of European Modern Movement¹ on the continent. This Modernity hesitantly commenced in the 1930s and gained serious momentum after World War II with the widespread application in the building of the backbone of the late colonial African Welfare State and the early independent nations.²

However, despite the apparent abnegation of African culture by Europeans in the 19th and 20th centuries, it has been stated that 'Modern architecture' is by no means an exclusively European project. Giles Omezi takes this intriguing stance in suggesting that the Modern project is as much African as it is European. In his exposé on the work of Demas Nwoko he writes "[...] Demas Nwoko's architectural resolution of the ideology of Natural Synthesis sought to place Modernity beyond the ethnocentric confines of a purely European narrative, having successfully decoded its cynical nature through his art. The dwelling space he decided was also not subject to the constraints of this narrative. He sought to resolve in his architecture, a crisis at the heart of contemporary Africa; the nature of its Modernity. He seems to have understood, that the process of Modernity is not the sole property of Eurocentric thought and actions."³ Omezi continues in quoting Demas Nwoko himself "the nature of technology is such that it is not the preserve of any race or time"⁴ [figure 1].

Omezi's positioning is not a mere thought to be discarded as will be shown. In taking a distanced view on the development of Modernity in African architecture in the 19th and 20th centuries, it does not need an expert to discern multiple strands that divert from and complement the advent of classical Modernity as described above.

Some important strands of Modernization in African architecture might be identified as follows:⁵

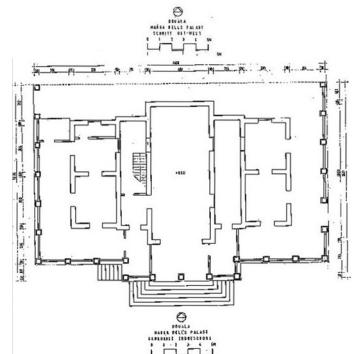
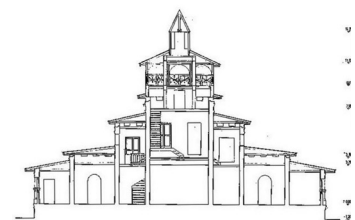
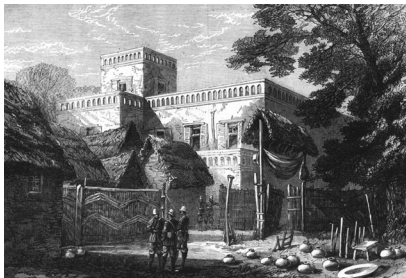
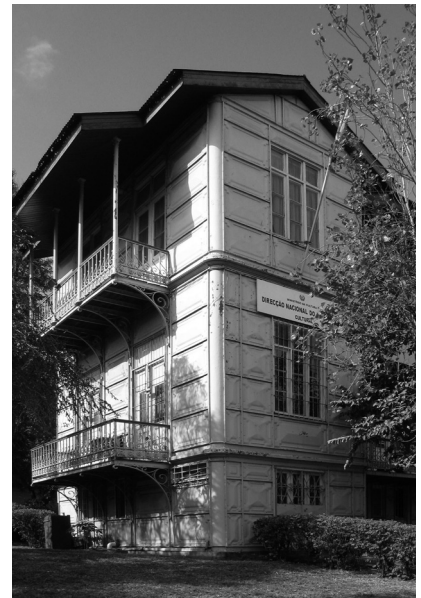
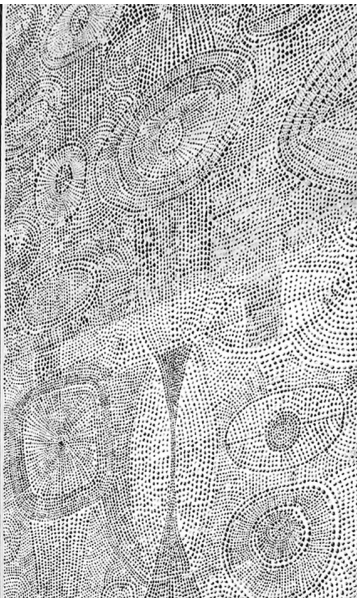
Classic Modernity in Africa. Modernity came relatively late to Africa due to many reasons. To the rare exceptions of this late coming belong the building of Asmara by the Italians,⁶ the masterplanning of Casablanca by Henri Prost⁷ and the work of Rex Martiensen and his colleagues

in South Africa.⁸ Great momentum in the spread of Modern Movement in Africa was gained through the continent-wide investment in building and infrastructure in the late colonial period (1945–1965). Building in this period was an almost exclusive Modern affair, leaving Africa with a fantastic heritage of late Modern architecture. The work of Maxwell Fry, Jane Drew and colleagues in West Africa, of Ecochard, Candilis, Shadrach and Woods in Morocco, Le Corbusier in Algiers, Simounet in Addis Ababa, Claude Laurens in Congo, Ernst May in East Africa—just to name a few—proved Africa as a fertile laboratory and true playground for a Modern Movement that was not hindered by historical ballast or impeding context.⁹

African-track Modernity. European Modern Movement was reacted upon and taken further on an 'African track' in the 1960s and beyond by a new generation of architects that were based in Africa, as well as by the very first generation of African-born architects.¹⁰ This 'African track' Modernity is the next best known strand of African Modern Movement in architecture through, in particular, the work of Amancio d'Alpoim Miranda Guedes (born in 1925), better known as Pancho Guedes, in Mozambique¹¹ [figure 2]. Amongst other architects that advocated an African 'critical regionalism' in their work and writings are Anthony Almeida (born in 1921) in Tanzania, Jean François Zevaco in Morocco, Norman Eaton in South Africa and Demas Nwoko in Nigeria.

Engineering Modernity in African Architecture. Preceding any academic architectural involvement in Africa was the engineering Modernity in architecture exported by the European colonists in the second half of the 19th century and the first half of the 20th century. The need of the fresh African colonies, the vast majority created after the 1884 Berlin Conference, commanded buildings that could be erected swiftly and yet befitted European pride and comfort. It were engineers and not architects who responded to this demand and who were responsible for a wide range of highly efficient and functional buildings that were often erected in imported materials and components.¹² The authors of these buildings are often unknown, although, for instance, the prefabricated Casa de Ferro in Maputo is said to be signed for by the enterprise of Gustave Eiffel [figure 3].

< Figure 1. Living area of the Idumuje House by Demas Nwoko.



Popular Modernity in African Architecture. Much less attention has been given so far to the development of Modernity in vernacular or popular architecture. In terms of quantity, informally built popular architecture makes up a vast majority of the African built substance. It cannot be stated at this time when Modernity gained influence in the informal building sector, but it probably started as early as the 1920s. The traditionally thatch-roofs proved to be of high fire risk and at an early stage thatch was replaced by corrugated metal sheets. By the 1960s, popular architecture in most African cities had completely changed in terms of typology, formal language and use of materials. A highly efficient and modern building system had silently developed, consisting of.

Figure 2. Mac-Mahon building and square in Maputo by **Pancho Guedes**.

Figure 3. **Casa de Ferro (Iron House)** in Maputo is said to be signed for by **Gustave Eiffel's** company.

Figure 4. The King of Ashantee's Palace at Kumasi (Ghana), viewed from the east.

Figure 5. King Obong Eyo Honesty IX's house in Duke Town or Old Calabar. Photo by Jide Bello, <http://www.naijablog.co.uk/>

Figure 6. **Wolfgang Lauber's** book *Deutsche Architektur in Kamerun 1884 - 1914* with the Pagode proudly shown on the front cover.

Figure 7. The Palace of the King of the Cameroons or the Pagode. Photo by Richard Harding Davis, ca. 1902.

Figure 8. Plan and section of the Pagode in Douala, Cameroon, built by King Auguste Manga Ndumbe in 1905.

standardized building materials such as corrugated roof sheets, cement blocks and timber façade elements that show an amazing similarity throughout the continent.

Traders' Art Deco. The introduction of Art Deco in the trading quarters of the African cities is of predominantly Indian origin. It characterizes itself through pastel colored concrete and plastered masonry façades applied to often quite straightforward and simple buildings. Most of these buildings have a combined commercial and residential use. In East Africa, these are called the *duka*, shops kept by the Indian trader, the *dukawalla*, who lives in the apartment above his shop. This typology and style remained popular throughout the 1930s to the late 1950s

Elitist African Modernity. A separate strand in the development of Modernity in African architecture is witnessed in buildings that have been erected by the African ruling class in the pre- and very early peri-colonial period of the second half of the 19th century.

It is this sixth strand—elitist African Modernity in African architecture—that forms the core of this essay. Preliminary research on late 19th century African architecture has unveiled a number of unique buildings, palaces that were erected by the (independent) African elite, prior or simultaneously to the 'Scramble for Africa', that display unmistakably Modern tendencies.

The reason that these buildings have not become known as 'Modern African' is that this African Modernization process was curtailed and subsequently appropriated by the colonial powers—Ethiopia excluded. Ola Uduku and Alfred B. Zack-Williams go as far as speaking of the colonial expeditions that were to subdue these emerging African modern powers as "ransacking and plundering of the African capitals by primitive colonial expeditions."¹³

Early Modern Palaces in Africa

No rigorous research has yet been carried out to substantiate the existence and similarities in the building of these Modern palaces. A comprehensive inventory of these buildings is awaiting documentation and no analysis has been made of the relationships between the commissioners and designers of these palaces.

In this essay, the development of elitist African Modernity in African architecture is presupposed and analyzed in the case study on the Beit-el-Ajaib, the House of Wonders, in Zanzibar. Before touching base in Zanzibar, a quick journey is proposed along some other Modern palaces built by African royalty during the second half of the 19th century: Douala in Cameroon, Tananarive in Madagascar, Addis Ababa in Ethiopia and Ibadan in Nigeria.

Ghana: The Ashanti Palace in Kumasi [figure 4].

Another great city, contesting European colonial power in the 19th century was Kumasi in Ghana. The palace of the Ashante King of Kumasi was destroyed by the British in 1874 on their conquest of Ghana.

Nigeria: The Palaces in Calabar, Ibadan and Afin Ikere.

King Obong Eyo Honesty IX's house in Duke Town, or Old Calabar, was erected in the early years of the 20th century. It can be qualified as a late example of Victorian architecture and it diverts from the traditional and makes use of Modern materials and technology [figure 5].

Ibadan was founded in the 1820s and quickly grew to a great city, which was even called 'the Black Metropolis' at some time.¹⁴ By mid-19th century, it became a centre of Yoruba power and was strewn with royal and noble palaces. Following the 1886 Treaty, the city was 'pacified' under British colonial rule. Of the pre-colonial palaces, only few remain now, and recently a plea was made to protect the last remaining palaces such as the Adebasi Palace, probably dating from the mid 1860s.

Certainly there are earlier examples of palaces that were erected in Nigeria that divert from the traditional. An important source for Modernization was the so-called Brazilian style, introduced in the 1840s by freed Yoruba slaves who had spent time on Brazilian plantations and who returned to Nigeria. An example of this is King Ogo-ga's Palace in Ikere.¹⁵

Cameroon: The Pagode at Douala [figures 6, 7, 8].

King Auguste Manga Ndumbe built his palace in Douala in 1905. Due to its strikingly uncommon appearance, it was christened 'le Pagode'. King Ndumbe studied economics in Bristol and is said to be influenced by British colonial architecture in the Indies.¹⁶ Cameroon became a French Protectorate after World War I, and the Pagode was converted into the offices of the Compagnie Forestière de Sangha-Oubangui. Louis Ferdinand Céline was employed by this firm and wrote about the Pagode in his famous book *Voyage au bout de la nuit*.

In 1940 the Paradis Cinema was built as a lean-on structure to the rear of the palace. In 1995 this cinema was converted into the Doual'art Cultural Centre by Danièle Diwouta-Kotto.¹⁷ The President of Doual'art is the great granddaughter of King Rudolf, Princess Marilyn Douala Bell.

The palace is qualified as an important example of German colonial architecture notwithstanding the fact that the client was an African King, nor that this king was inspired by British rather than by German Modernity.¹⁸

Madagascar: The Royal Rova Palace complex in Antananarivo [figures 9, 10].



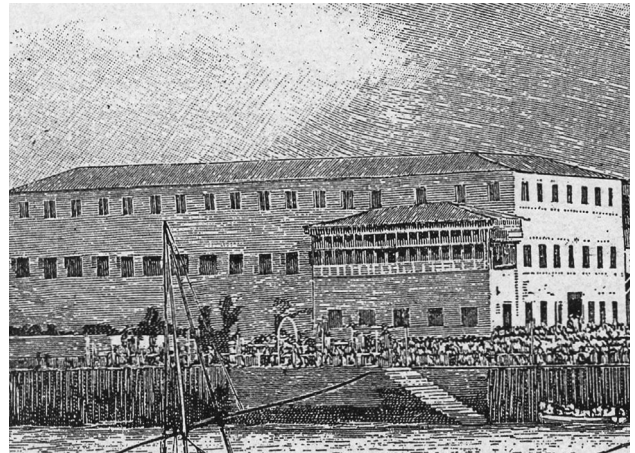
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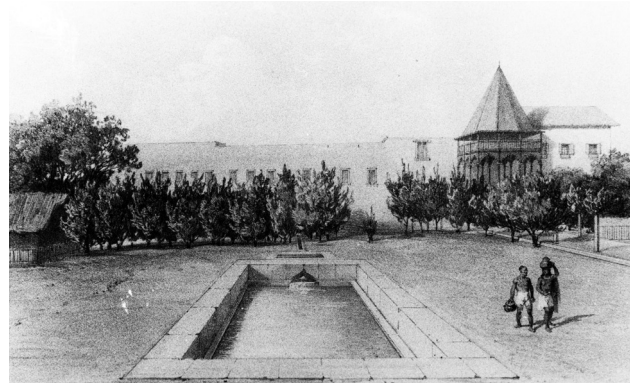
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Figure 9. The Royal Rova Palace complex in Antananarivo around the year 1900.

Figure 10. Queen's summer Palace at Ambohimanga Rova in Madagascar, from the last years of the 18th century.

Figure 11. The Menelik Palace in Addis Ababa. Photo by filippo_jean, <http://creativecommons.org>

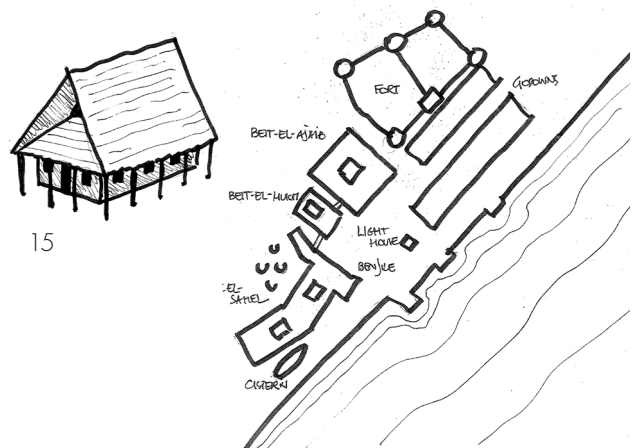
Figure 12. Engraving of Beit-el-Sahel.

Figure 13. The Ibadhi mosques are often plain white cubes with flat roofs and without minarets. Drawing by the author.

Figure 14. Beit-el-Mtoni Palace with benjile on the right

Figure 15. Swahili traditional house with typical shaded baraza. Drawing by the author.

Figure 16. Zanzibar Palace complex scheme. Drawing by the author.



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The history of the Royal Rova Palace complex commences in the last years of the 18th century. In the palace complex, the various stages from the traditional timber buildings to Modern interpretations in stone and iron buildings can be seen.¹⁹

Addis Ababa: The Menelik Palace [figure 11].

Addis Ababa was founded as capital of the Ethiopian Empire in 1886. Emperor Menelik II built his palace in the late 80s and it was later extended, but the original core, consisting of a number of two-storied pavilions, still remains. These pavilions are based upon the traditional Ethiopian housing typology such as the *tukul* and consist of single-room stories connected with bridges and stairs. In the materialization and technology they are Modern. The light-weight steel and cast iron structures are clad with timber boarding and corrugated metal sheets.

Case Study: The House of Wonders (Beit-El-Ajaib) in Zanzibar.

From Beit-el-Mtoni to Beit-el-Ajaib: Typological Developments

Seyyid Said of Oman ruled a vast empire at the beginning of the 19th century (1804–1856), stretching from Oman in the north to the Mozambican borders deep south. For strategic reasons, he decided to transplant his throne from Muscat in Oman to Unguja, the main island of the Zanzibar archipelago. He built his new palace, Beit-el-Mtoni, as an almost copy of Bayt-el-Falaj.²⁰ Subsequently, in the late 1830s or early 1840s, he erected a second palace in the centre of Zanzibar town, the Beit-el-Sahel [figure 12].²¹

Seyyid Said was not only the worldly leader of his empire, but also the religious leader, the Iman of the Ibadhi muslim sect, known for their sober architecture, void of ornament and monumentality. Their mosques are often plain white cubes with flat roofs and without minarets [figure 13]. Notably, the southern Algerian Ibadhi villages composed of introvert white cubes with internal courtyards were of great influence on Le Corbusier and his contemporaries.²²

Mtoni and Sahel Palaces in Zanzibar followed the Ibadhi tradition, but the Omani soon found their architecture—with its flat-roofed heavy structures and small windows—ill-fitted for the wet and warm Zanzibari climate. Consequently, pitched *makuti* roofs, covered with palm leaves were erected as well as *benjile*, airy pavilions inspired by the local Swahili architecture, generous in shaded outdoor living space, *baraza*.

As an answer to the Zanzibari climate, Seyyid Said had to make modifications to his Omani-style palaces in Zanzibar. To secure the flat roofs against the frequent

downpours on the island was a nightmare and the fierce sun turned the flat roofs into radiators that gave off their heat during the clammy nights of Zanzibar. Therefore, pitched *makuti* roofs were erected on top of the palaces. Furthermore, air pavilions were also added to his palaces, to pass the day in the cooling sea breeze. These pavilions were called *benjile*, a name possibly derived from the Indian bungalow [figure 14].²³ It was a fitting answer to the climate and life style on the island, clearly inspired by the local Swahili architecture [figure 15].

Mtoni Palace was deserted upon the death of Seyyid Said, whereas Beit-el-Sahel was expanded into a large palace complex, consisting of ceremonial and residential buildings, a court, a mosque and a bath complex. The main building of the palace complex, erected under Seyyid Said's successor Sultan Seyyid Majid (rd. 1856–1870) was Beit-el-Hukm, the Government Palace, which though of typical Omani style was adapted to local conditions, with the traditional *makuti* roof replaced by a *ma-bati* roof, clad with corrugated metal sheets. To the front of Beit-el-Hukm, a porticoed veranda over the full height of the façade was added. This veranda can be seen as a mid-way development between Beit-el-Sahel with the semi-detached *benjile* to what would be the splendid new palace of Seyyid Majid's brother and successor Sultan Seyyid Bargash (rd. 1870–1888): Beit-el-Ajaib, the House of Wonders.

Beit-el-Ajaib

Following a family feud (whereby the British intervened to force a split up of the empire) the Said's empire was divided between the brothers Seyyid Thuwain and Seyyid Majid, who would henceforth rule Oman and Zanzibar respectively. Seyyid Bargash thus began his reign over a much reduced though fertile and prosperous empire, acting as the main trading entrepôt for the north-western part of the Indian Ocean.

Inspired by visits to Paris and London in 1875, he energetically took on the modernization of Zanzibar, installing, a piped drinking water system, amongst other infrastructure projects. Around 1880, he started the construction of a new palace that became a lengthy and problematic process according to the Zanzibar based architectural historian Erich Meffert. He even records the palace project being referred to as “an eternal building site” due to the repeated collapse of the high walls. Meffert dryly concludes that, due to this erratic process “[...] no world class building was created.”²⁴

The largest of its kind in Zanzibar, it was conceived by Seyyid Bargash himself, possibly assisted by a Scottish (maritime) engineer,²⁵ as a ceremonial palace, not as a residence:²⁶ “it dominates the waterfront, which is the

most important space in the city [...] The House of Wonders is an expression of domination, the city is the arena of display."²⁷ It formed the centre of a complex of residential (Beit-el-Sahel) and administrative (Beit-el-Hukm) palaces, a mosque, a lighthouse, extensive gardens, a bath complex, a graveyard and ancillary structures, amongst which an enormous boat-shaped water cistern, all connected by sky bridges.

The plan of Beit-el-Ajaib [figure 16] is that of a traditional Omani palace-square, introvert, with galleries facing an internal courtyard and giving access to long and shallow rooms. In addition to its impressive size are the deep verandas around the full perimeter of the palace [figure 17], assembled from prefabricated elements imported from the United Kingdom: cast iron columns, universal steel beams and corrugated metal sheets, also used to construct the courtyard galleries, main staircase and the skylight over the inner court. The ring beams tying the columns together may qualify as the earliest use of reinforced concrete in East Africa.

Bargash had thus developed the traditional Omani residence, a typology that had not changed since the Middle Ages, into a truly contemporary, Modern palace, equally austere in aspect but responding to climate and providing comfort using Modern materials and amenities such as piped water and electrical lighting [figures 18, 19, 20, 21, 22].

The Zanzibari praise for the palace was however not unanimous. Former British Resident to Zanzibar, Major F.B. Pearce commented in 1919 that it had "[...] architecturally [...] no merit, but it evidently startled the Arab population, who gave it the name it bears."²⁸ Meffert continued his comments on the palace in 2008 "[...] an architect could not be identified yet. This is no surprise, as the basic deficits of the building would not have occurred if a trained architect had been involved. Thus it remains an amateur's dream, with its faults, however, a rather impressive one."²⁹

The Centre of British Colonial Administration on Zanzibar

Seyyid Bargash died in 1888, shortly after the completion of the palace. Subsequently British influence over the island grew steadily, with Zanzibar becoming a British Protectorate in 1890. Although the Sultan was allowed to continue living in his palace, his role was reduced to a ceremonial one. Later, in response to the seizure in 1896 of the throne by one of Bargash's successors, Prince Seyyid Khaled, the palace was bombarded by a British navy squadron who regained control of the complex in 38 minutes (the shortest war ever in history).

The bombardment severely damaged Beit-el-Hukm,

Beit-el-Sahel and the lighthouse. Beit-el-Sahel was partly restored, but the lighthouse and Beit-el-Hukm were not rebuilt. Beit-el-Ajaib was cut loose from the other buildings and became a 'stand alone' palace henceforth. The repairs to the palace itself proceeded in an unexpected direction with the modification or removal of some of the verandas and the addition of a clock tower typical of the Eclectic Victorian style in fashion in Great Britain at the end of the 19th century,³⁰ both gothic and classicist in reference. The intervention, an anachronistic appliqué, nonetheless denies the innovative and highly Modern, almost proto-Modern, architectural achievement of the original African-Arab building.

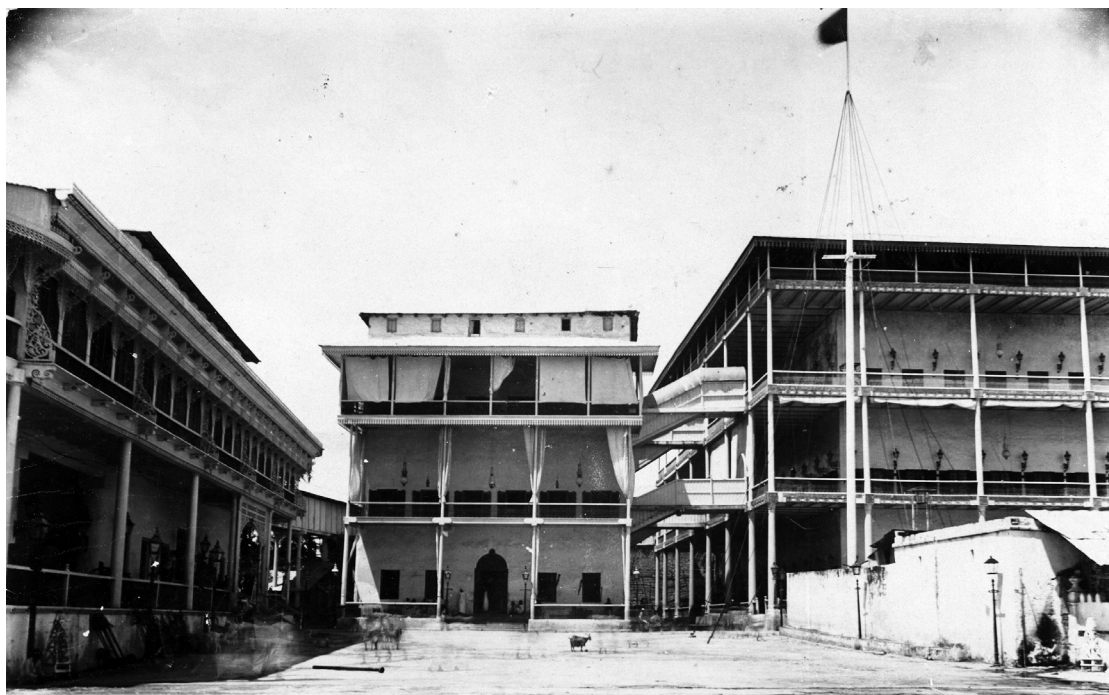
The palace would serve the British colonial administration of Zanzibar until independence in 1963. The central Zanzibar telephone and telegraph Exchange were installed and the internal arrangement of rooms was altered to accommodate its new function. The façades possibly underwent considerable rehabilitation works in the 1920s, most likely under the supervision of architect J.H. Sinclair, responsible for all major architectural work commissioned by the British colonial government in Zanzibar during the first decades of the 20th century. The roof terraces on the corners were removed, the main roof foreseen with a monumental parapet, and the clock tower was stripped of any ornamental features.

Beit-el-Ajaib today

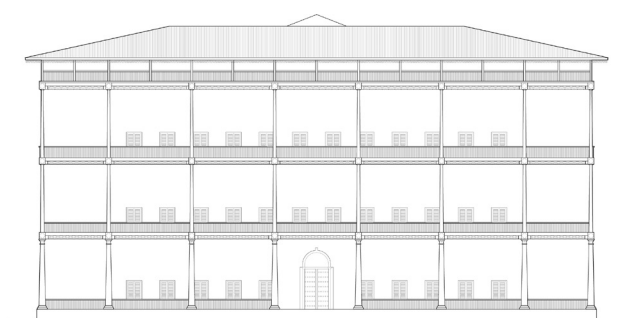
Upon independence, on 10th December 1963, Beit-el-Ajaib was restored to its function of ceremonial and administrative palace for the government of Sultan Seyyid Jamshid, a descendant of Sultan Seyyid Said. Shortly afterwards however, on 12th January 1964, the Revolution broke out and the sultan had to flee the island. The palace was looted and the new government was installed elsewhere. President Karume decided to turn the building into the Afro Shirazi Party Ideological College and Revolution Memorial Museum to the Revolution and the ruling Afro Shirazi Party. Even though the palace kept this exhibition until the 1990s, it was perceived as a closed bastion. In 1992, the building was returned to the Zanzibar Government, and much of it was dismantled in a fit of anger, and a large part of this collection was destroyed or dispersed.³¹

Today, very little remains in terms of contemporary documents or photographs, but for a photograph of an enormous banner displaying President Karume and the Revolutionary flag hovering over a cheering crowd [figure 23].

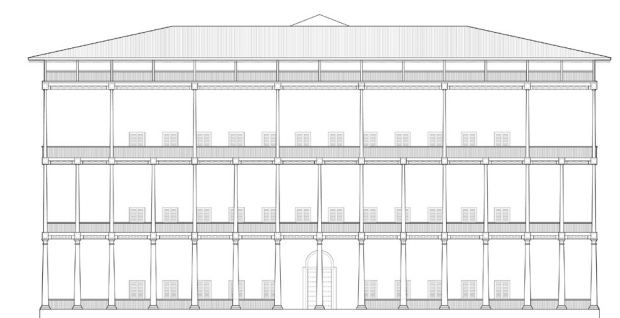
In 2000, the palace was converted into the Zanzibar House of Wonders Museum. The museum houses a broad collection on the history of Zanzibar [figures 24, 25].



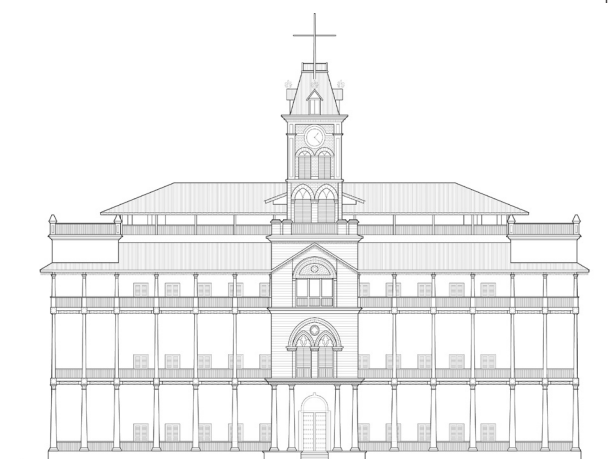
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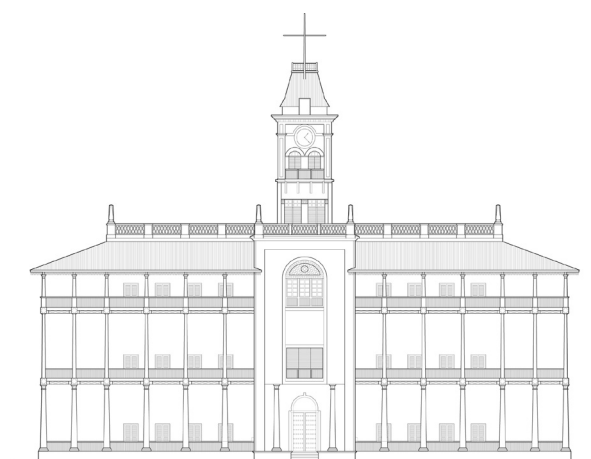
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Figure 17. Palace complex ca. 1890. Photo courtesy of the Zanzibar National Archives.

Figure 18. House of Wonders façade ca. 1888. Original building.

Figure 19. House of Wonders façade ca. 1892. Modifications: additional columns.

Figure 20. House of Wonders façade ca. 1900. Modifications after bombardment: verandas lowered, addition of roof terraces and clock tower.

Figure 21. House of Wonders façade ca. 1920. Final modifications possibly by **J. H. Sinclair**.

Drawings by Folkers and Cominetti.



Figure 22. House of Wonders around 1900. Photo courtesy of the Zanzibar National Archives.

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Figure 23. Banner of President Karume in the House of Wonders, 1960s. Photo courtesy of the Zanzibar National Archives.

Figure 24. Inner court of the Museum.

Figure 25. Floor plans of the House of Wonders Museum.

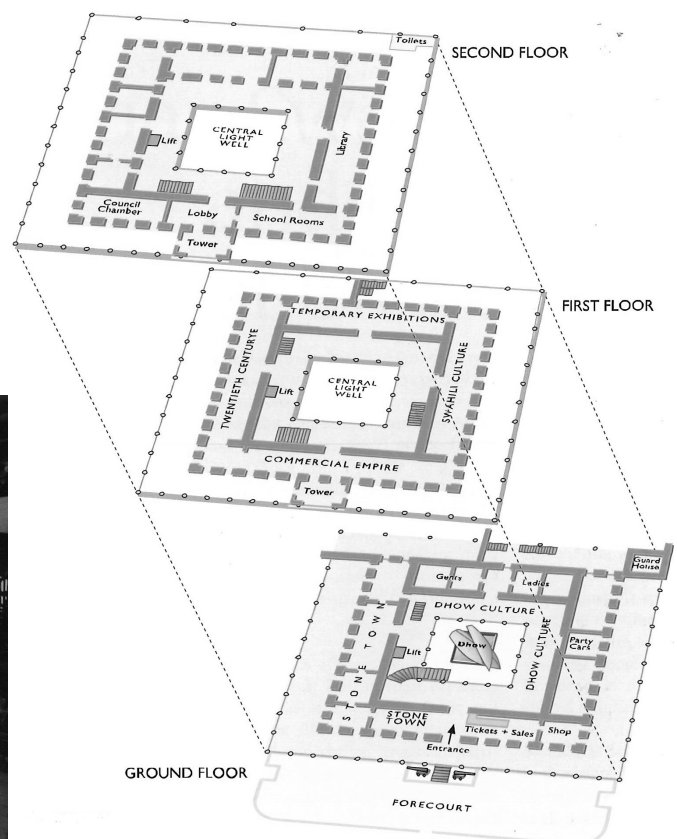
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Conclusions

As seen in the House of Wonders, early Modern palaces commissioned by African royalty during the second half of the 19th century bear witness to a strong desire to innovate amongst African rulers. Traditional typologies were quickly developed into contemporary translations, responding to local climate, culture and *Zeitgeist*. Though calling upon the technical expertise of European engineers and architects, these palaces were conceived within an African context, from African thought.

Knowledge of this 'strand' in the Modernization of African architecture may be of importance in the understanding of the subsequent 'strands' of the well known history of Modern architecture in Africa.

Notes

1. European Modernity in this essay defined as the 'classic' architecture of the Modern Movement of the 1920s and related off-springs of *Neue Sachlichkeit*, Functionalism, International Style, up to late Modernity such as Team X Structuralism of the 1950s and 1960s.
2. Kultermann, Udo, Delft, *Oase*, n° 82, 2010.
3. Omezi, Giles; Sola Ogunbanjo, "Synthesising the Appropriate: Architectural interpretation of Natural synthesis—Demas Nwoko to Bukka". Paper presented at Africa Perspectives in Delft, December 2007 (not published), 7. See also Omezi, Giles, *Towards a New Culture: Rethinking the African Modern—The Architecture of Demas Nwoko*, London, 2008, and on the oeuvre of Demas Nwoko: Godwin, John; Hopwood, Gillian, *The Architecture of Demas Nwoko*, Lagos, Farafina, 2007.
4. Nwoko, Demas, *The Impoverished Generation*, London, New Culture publications, 1992, 4.
5. This division is meant to be non-discriminatory and is not set in chronological order. This first attempt is open to adaptation and extension upon experts' viewpoints. It is not meant to be all-inclusive or determinist, but rather to point at the diversity in parallel and subsequent strands of modernization in African architecture.
6. Denison, Edward; Yu Ren, G.; Gebremedhin, N., *Asmara, Africa's secret modernist city*, Merrell Publishers, 2003.
7. Cohen, Jean Louis; M. Eleb, *Casablanca, mythes et figures d'une aventure urbaine*, Paris, Editions Hazan, 2004.
8. See for instance: McIntosh, Gordon; Hanson, Norman; Martiensen, Rex, *Zero Hour*, Johannesburg, Hayne and Gibson, 1933.
9. See for instance: Avermaete, T.; Karakayali, S.; Osten, M. von, *Colonial Modern, Aesthetics of the Past, Rebellions for the Future*, London, Black Dog Publishing Limited, 2010. Avermaete, Tom, *Another Modern, the post-war architecture and urbanism of Candilis-Josic-Woods*, Rotterdam, NAI Publishers, 2005.
10. Except South Africa with a strong architectural school tradition which started well before World War II.
11. Kultermann initially discards Guedes' work "[...] it must be regarded as a ridiculously exaggerated form of the European Jugendstil." Kultermann, Udo, *New Architecture in Africa*, New York, Universe, 1963, 20. He changes his mind in his later book *New Directions in African Architecture*, New York, Braziller, 1969. For Guedes' work: Guedes, Pedro (ed.), *Pancho Guedes. Vitruvius Mozambicanus*, Lisbon, Museu Coleção Berardo, 2009.
12. Folkers, Antoni, *Modern Architecture in Africa*, London, BPR Publishers, 2010, 243–245.
13. Uduku, Ola; Zack-Williams, Alfred B., *Africa Beyond the Post-Colonial: Political and Socio-Cultural Identities (Interdisciplinary Research Series in Ethnic, Gender and Class Relations)*, London,

Ashgate Publishers Ltd., 2004, 5.

14. Lloyd, P.C.; Mabogunje, A.L.; Awe, B. (ed.), *The City of Ibadan—A symposium on its Structure & Development*, Cambridge, Cambridge University Press, 1967.
15. Dmochowski, Z.R., *An introduction to Nigerian traditional architecture*, vol. 2. South-West and Central Nigeria. London, Ethnografica, 1990, 2.39 and Osasona, Cordelia O., *Ornamentation in Yoruba Folk Architecture*, Ibadan, BookBuilders, 2005.
16. Viallet, Michel, *Douala autrefois*, Paris, Atlantica, 2002, and Soullilou Douala, Jacques, *Un siècle en images, Paris*, l'Harmattan, 1982.
17. Diwouta-Kotto, Danièle, *Suites architecturales—Kinshasa*, Douala, Dakar, Epinal, Association VAA, 2010, 62–63 and Babina, Lucia; Douala Bell, Marilyn (ed.), *Douala in Translation*, Rotterdam, Episode Publishers, 2007.
18. Lauber, Wolfgang, *Deutsche Architektur in Kamerun—1884–1914*, Stuttgart, Karl Krämer, 1988, 89–93.
19. Nativel, Didier, *Maisons royales, demeures des grands à Madagascar*, Paris, Karthala, 2005.
20. Beit-el-Mtoni and Bayt-el-Falaj both mean 'the House at the Creek'.
21. Beit-el-Sahel means 'the House on the Coast'.
22. Folkers, Antoni, *Modern Architecture in Africa*, London, BPR Publishers, 2010.
23. Folkers, Antoni, *Modern Architecture in Africa*, London, BPR Publishers, 2010.
24. Meffert, Erich, *Where to, fair beauty? Zanzibar Guide. The attempt of an inventory*, Zanzibar, Von Heute auf Morgen Verlag, 2009, 65.
25. O'Brien, J.; Cumming-Bruce, A.P.H.-T., *A Guide to Zanzibar*, Zanzibar, Government Printer, 1952, 45: "It is said to have been designed by a maritime engineer" and Meffert, Erich, *Where to, fair beauty? Zanzibar Guide. The attempt of an inventory*, Zanzibar, Von Heute auf Morgen Verlag, 2009, 65.
26. Pearce, F. B., *Zanzibar: the island metropolis of eastern Africa*, London, T. Fisher Unwin, 1919, 199, amongst others.
27. Battle, Steve, "The Old Dispensary: an apogee of Zanzibari Architecture", Sheriff, Abdul (ed.), *The History & Conservation of Zanzibar Stone Town*, Zanzibar, The Department of Archives, Museums & Antiquities, 1995, 94.
28. Pearce, F. B., *Zanzibar: the island metropolis of eastern Africa*, London, T. Fisher Unwin, 1919, 199, amongst others.
29. Meffert, Erich, *Where to, fair beauty? Zanzibar Guide. The attempt of an inventory*, Zanzibar, Von Heute auf Morgen Verlag, 2009, 65.
30. Clock towers appeared all over the main African cities in the late 19th century. They belong to the earliest interventions by European colonial powers assessing their position on the continent. It is as if to say: 'now it's our time'. Folkers, Antoni, *Modern Architecture in Africa*, London, BPR Publishers, 2010, 17.
31. Sheriff, Abdul; Voogt, Paul; Luhila, Mubiana, *The Zanzibar House of Wonders Museum. Self-reliance and Partnership. A Case Study in Culture and Development*, Amsterdam, Koninklijk Instituut Voor De tropen, 2007.

Antoni Folkers

Architect and urban designer, specialized in African architecture. He studied Art and Art History at John Carroll University in Cleveland, and obtained his Masters in Architecture at Delft University for Technology in 1986. He started his career as researcher and designer in Ouagadougou before joining the Institute for Tropical Building (IFT) of Dr G Lippsmeier in Starnberg, Germany. In 1988, for Lippsmeier, he became Resident Architect for East Africa.

He has been a cofounder of various foundations: in 1992 FBW Architects with offices in the UK, the Netherlands, and Uganda; in 2001 ArchiAfrika; and recently, in 2010, he cofounded African Architecture Matters. The main aim of these foundations is the promotion of African architecture and the conservation of it.

Transcontinental Modernism: How to Find the Shortcut¹

By Ana Tostões

More than ever, it is urgent to expand the new emerging consciousness focused on the need to include other territories in our efforts to achieve a comprehensive understanding of the “modern Diaspora”.² Recently, the development of concepts such as hybrid or the otherness³ has been promoting a nuanced historical analysis on architecture and politics in the 20th century beyond a Eurocentric vision.⁴ The recognition that a widespread awareness of the Modern Movement architecture has always been serving colonization⁵ involves rethinking the basic principle of Modern welfare society and practiced architecture as a mission. How Modern principles have been exchanged, resulting from a Eurocentric culture, with the cultures of East and Africa. In addition, it must be said that the case of sub-Saharan Africa Lusophone is now beginning to be studied in depth, and putting together peripheral universes: Portugal, Brazil and South America. In fact, Brazil in particular and Latin America in general, form a world decidedly challenging in the context of architectural culture and modern city that has been recognized for a long time as periphery. Several researchers argue today on rather centrality of these innovations so that it is possible to sustain a sense of a kind of transcontinental modernity driving these places and cultures, the architecture and urbanism of these cities. The reception and nowadays the reinterpretation of the modern movement architecture imply the preservation of the physical, conceptual and cultural identity. The paradox lies on the fact that Modern Movement architecture deals and stresses a special moment of political affirmation, free expression and democratic values. The question is: how could this modern expression be the vehicle of colonization? As Anatole Kop (1915–1990) argued, Modern architecture is not an aesthetic but the proposal of a better life.⁶ We all are aware that we live in a postcolonial period. In other words, we are former colonies or colonising countries going through a post-colonial era. So, I believe that the most interesting way to approach this issue is through such

concepts as identity, memory and exchange.⁷

In the early 60s, Udo Kultermann (1927–2013) gave the alert when Africa began to develop under the scope of new laws, in a way that the world started to see the “black continent” differently. If Leo Frobenius’ (1873–1938) investigation made possible to understand ancient African culture, the current aim was to focus on the newborn culture. 1960, the great African year, brought not only political separation, but also gave origin to a decade that made possible an excellent outcome by gathering on one single work all *Neues Bauen in Afrika*⁸ by grouping them into an orderly set. Kultermann believed that architecture in Africa lived from a millenary tradition entering a whole new period. In 1963, his book aimed to prove the existence of an African architecture, an idea still denied till today. Moved by the 60s optimism, Kultermann’s approach questioning the link between tradition and innovation on African architectonic production has no precedent.

In fact, the local circumstance approaching an awareness of regionalism was till then exclusively articulated through climate factor as one of the design tools increasingly developed by Modern architects.⁹ According to Baweja, since the 50s the climate-responsive design is a reality in expansion in the African Sub-Saharan countries, as a pre-history of Green design that emerged in the 70s.¹⁰ In fact, the formal, technological and ideological principles of the Modern Movement emerge through the 50s in the Portuguese African colonies as a cultural stimulus articulated by geographic and climate specificities promoting Modern vocabulary in acquiring new expression and scale. Firstly influenced by the Brazilian Modern architecture,¹¹ followed by Fry and Drew,¹² or Koenigsberg researches,¹³ the climate adaptation was based on architectural programs and solutions developed to potentiate the use of the open spaces, using circulation galleries, and introducing devices in order to maintain a permanent air circulation and to control the direct sunlight incidence, namely trough *brise-soleil* used in the horizontal and in the vertical position, fixed or mobile, as prefabricated



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grids in concrete or ceramic.¹⁴ The Angolan architect Vasco Vieira da Costa (1911–1982) took this concept further, and, as Le Corbusier did in Chandigarh's High Court Building, he associated the grid concepts creating several variations of grids of different dimensions coordinated with fixed devices that guaranteed the solar protection and natural ventilation.

Kultermann underlined the local factor stating that "when analyzing tropical countries architecture one must not neglect some characteristics: wide information on temperature, air humidity, wind's order and orientation, solar movement and types of vegetation, should all be carefully studied if one wishes to create useful construction." Therefore, he dared to defend that "it was not easy to correctly satisfy all tropical construction requirements, being on a drawing board in Europe." But for Kultermann the question was not only by mechanically aligning all these elements, because the art to build is related to space, volume, light, movement and harmony. When critical re-

Figure 1. **Pancho Guedes**, Tonelli Building, Maputo, Mozambique, 1957.

Figure 2. **Vasco Vieira da Costa**, Mutamba Building, Luanda, Angola, 1968.

Figure 3. **Pancho Guedes**, Abreu, Santos & Rocha Building, Maputo, Mozambique, 1953.

Figure 4. **Pancho Guedes**, Dragon Building, Maputo, Mozambique, 1951-1953.

Figure 5. **Pancho Guedes**, Tonelli Building, Maputo, Mozambique, 1957. Plan of floors 4,7,9,12; Plan of floors 5,10; Cross Section; Southwest Elevation. Ana Braga, 2012.

Photos by Ana Tostões, 2010.

gionalism began to be discussed in the early 80s, retaking thoughts from the end of World War II, the search of identity was understood as something vital to the development of postcolonial societies. In 1955, on *Histoire et Vérité*, Ricoeur analyses the growing phenomenon on universality considering it progress and subtle destruction, not only to traditional cultures but also to great cultures creative core, questioning if the path towards moderniza-

tion implied abandoning the “ship” of passed culture that stood as a nation reason for being?¹⁵

Kultermann defends that the evolution from colonial African architecture to “the maturity of early African identity” took place in a short period of time¹⁶, therefore promoting the introduction of occidental contributions to the development of construction techniques and new technology. At the same time, these quick changes promoted to awake a return to tradition. From all the architects active in Africa of Portuguese expression, Pancho Guedes¹⁷ (1925) is repeatedly analyzed establishing a parallel between the regional and global scene.¹⁸

Fantasy Must be Brought Back into Architecture

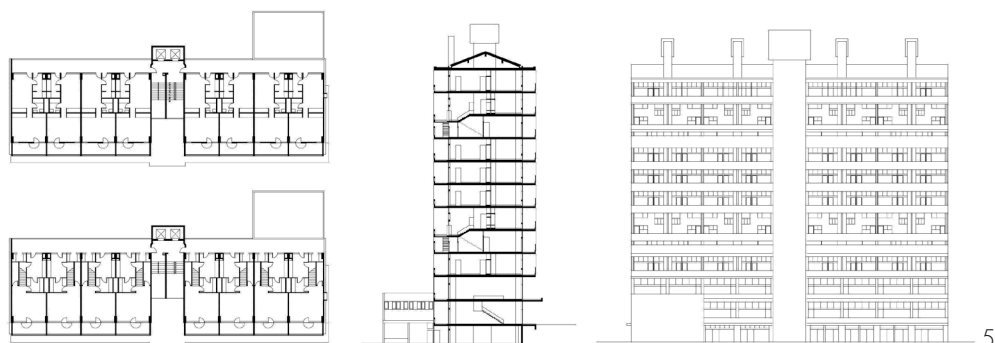
A radical and innovative approach far from the common canons of the Modern Movement is followed by Pancho Guedes, the luso-african architect (Witwatersrand University, 1953) active in Mozambique, made in his writings and architectural production a major contribution to the reassessment of architectural modernity, connecting different disciplines and cultures and carrying out affinities with various creators namely with the painter Malangatana Ngwenya (1936–2009). His fantastic and magic architecture comes from the stimulus of a large worldwide network of artists and thinkers that he himself put up from different sources such as: the Modern Movement architects, namely the South African contributors as Martienssen; Frank Lloyd Wright inspiring legacy or the CIAM’s critic contestation movement under the scope of Team X; or finally the new African artists which he promoted. Besides being one of Mozambique’s major architects, Pancho had the sagacity to detect talent, to promote creativity, having the ability to establish a network of creative,¹⁹ functioning himself as a sort of mediator between art and architecture.²⁰

At the time, Maputo (former Lourenço Marques) witnessed a significant impulse towards development in the period between the end of World War II and the revolution that shook Portugal on April 25th 1974, leading to the independence of Mozambique the following year. In an Africa of Apartheid between Mozambique,

Rhodesia and South Africa, Pancho knew that there was the need to found an authentic and raw art, the art for authentic artists.²¹ Therefore he sought for an Architecture full of significance, carrying a personal dimension based on a research focused on all formal dimensions and on the possibility for architectural elements to contain and express emotion: “I claim for architects to have the same rights and freedom painters and poets have for so long.”²² Pancho wanted to appropriate the primitive’s universal motifs, mixing them with his own sophisticated architectural culture, in order to achieve in his buildings the ambience of Chirico’s painting. Pancho knew that Architecture is not perceived as an intellectual experience but as a sensation, an emotion.²³ Therefore he was interested in the quest for such quality “long ago lost among architects but able to reach a spontaneous architecture capable of magic intensity.”

In the 50s, this search resulted from the desire to create an alternative modernity, different from the mechanical international style growing also in Africa, assuming the creator’s right to innocence stimulated by the sensuality and drama of the surrounding African culture. The objects he collected, helped him free himself “from the dominant Eurocentric point of view of the white man who lives in the land of others.”²⁴ The will to discover an alternative modernity was the answer to an inner appeal, but also to an Africa dawning to contemporaneity, to a new world which was in a state of ferment.²⁵

Pancho witness and acts in a time when Architecture is open to popular culture, when architecture without architects and architecture of fantasy are accepted.²⁶ But it is also the time for complexity and multiple solutions opened through the Modern Movement continuity or crises,²⁷ the ones Giedion identified as a result from reason and emotion related equation²⁸. He gathered the conditions to follow an alternative, original and idiosyncratic path of his own. Besides his huge talent, wide culture, experimentalist and genuine curiosity, he had the term of living in Africa at the time: conditions he managed with cleverness. On one hand being apart from the Eurocentric European culture spreader, living in Africa in an Eu-



ropean imperialistic peculiar colony; on the other hand, living the period of colonial emancipation spreading throughout Africa, where, despite the imperialistic presence “anything seemed possible.”²⁹

From technical issues to poetic approaches, pop art and African expression, Pancho promoted the possibility of modernity issued from a complex procedure nourished from diverse and eccentric cultural sources. Pancho divested himself of the colonial hegemony of his time and immersed the myriad of cultural influences and motifs that constituted the very particular African cosmopolitanism of the city of Lourenço Marques in the beginning of 1960s.³⁰ An intense cultural input drove the fundamentals of his work: open and unorthodox, eclectic and irreverent, freely revisiting and reinventing both modern and primitive art in his constructions, with his architectural projects borrowing from his painting and sculpture in the overall creative process. Establishing links with the local population, he found in Africa a favourable atmosphere for the realization of his projects. Malangatana recognized that “no architect had ever linked architecture to indigenous culture. In his designs we see a geometry that reflects patterns resembling the tattoos of African mythology”. Famous for his fertile imagination, for him, each project springs naturally from its surroundings, climate, geology and the culture of those who use it. With its prolific output, Guedes anticipated various trends and ways of thinking that are still to be found today in the international context inspiring the relations between art and architecture.

Notes

- 1 This work integrates the research project “EWV Exchanging World Visions: modern architecture in Lusophone Africa looking through Brazilian experience”, FCT-MEC(PTDC/AUR-AQI/103229/2008) developed by IST(ICIST)-UM.
- 2 Sharp, Dennis; Cooke, Catherine (ed.), *The Modern Movement in Architecture-Selections from the docomomo Registers*, Rotterdam, 010 Publishers, 2000.
- 3 “Other Modernisms” 9th International **docomomo** Conference, Ankara, Proceedings, 2006.
- 4 Henket, Hubert-Jan, Heynen, Hilde (ed.), *Back from Utopia : The challenge of the Modern Movement*, Rotterdam, 010 Publishers, 2002.
- 5 Kultermann, Udo, *World Architecture. A Critical Mosaic 1900-2000*, vol.6, Central and Southern Africa, Omslog, 2000.
- 6 Kopp, Anatole, *Quand le Moderne n'était pas un style mais une cause*, Paris, ENSBA, 1988.
- 7 Carlos, Isabel (ed.), *Exchanging Visions*, Lisboa, Instituto Camões, Autores e Artistas, 2007.
- 8 Kultermann, Neues Bauen in Afrika, Wasmuth, Berlin, 1963.
- 9 Olgay, Victor, *Design with climate, Bioclimatic approach to architectural regionalism*, Princeton, Princeton University Press, 1963.
- 10 Baweja, Vandana, *A Pre-history of Green Architecture: Otto Koenigsberger and Tropical Architecture, from Princely Mysore to Post-colonial London*, University of Michigan, 2008.
- 11 Goodwin, Philip, *Brazil Builds: Architecture New and Old 1652-1942*, New York, The Museum of Modern Art, 1946.
- 12 Fry, Maxwell; Drew, Jane, *Tropical Architecture in the Dry and Humid Zones*, London, BT Batsford Limited, 1964.

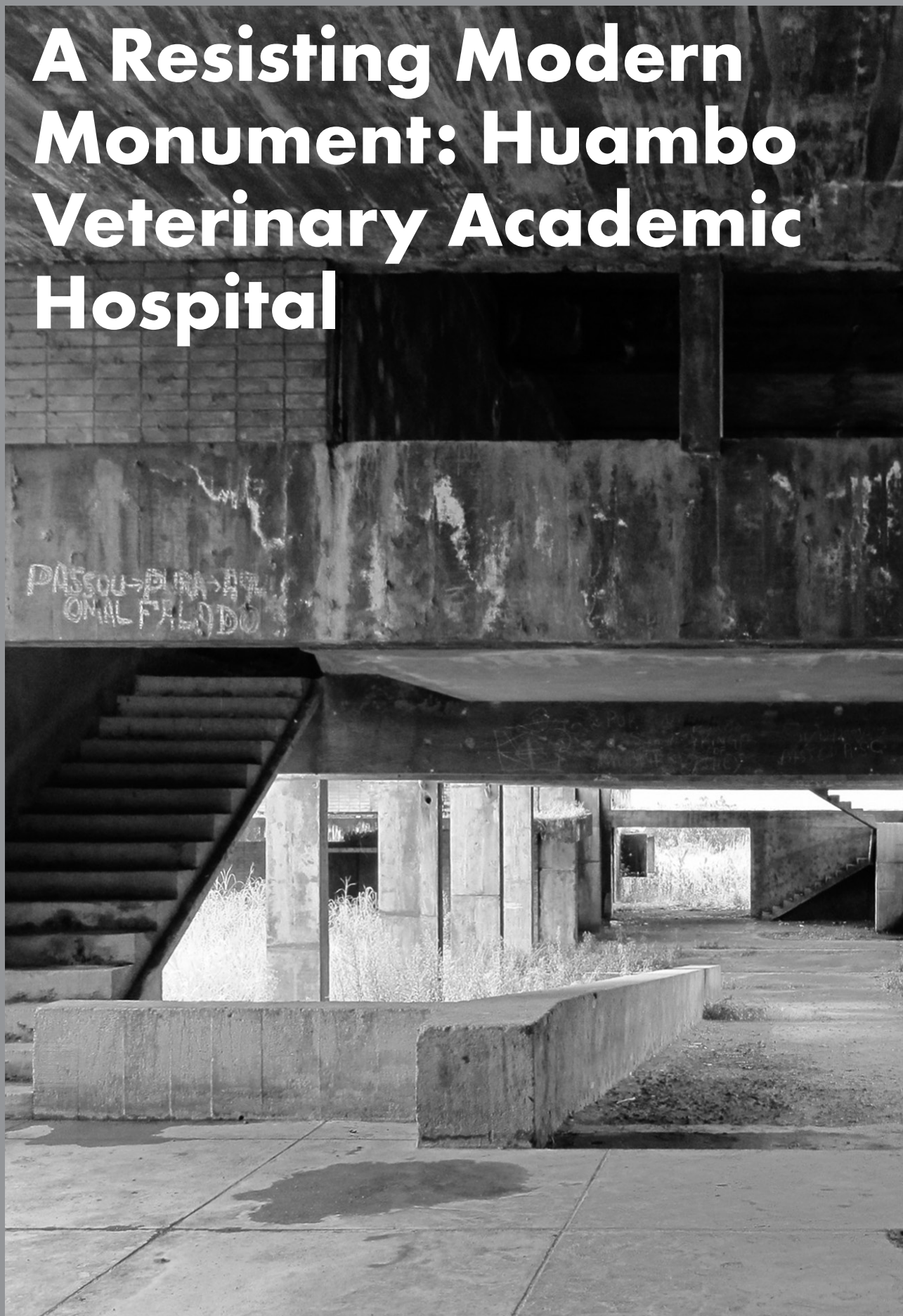
13. Koenigsberger, Otto; Ingersoll; Szokolay, *Manual of Tropical Housing and Building*, London, Longman, 1974.
14. The brise-soleil, mobile grids that moved around a central axis, was innovatively used in the north façade of the Education and Health Ministry of Rio de Janeiro (1936-1942). After that, it was exhaustively used in the great public buildings of Brasília, as well as the fixed version of the prefabricated brise-soleil in concrete or ceramic, popularly designated as *combogó*.
15. Paul Ricoeur, *Histoire et vérité*, Paris, Le Seuil, 1955. Cf. Kenteff Frampton, Kenneth Frampton, *Em direcção a um regionalismo crítico: 6 pontos para uma arquitectura da resistência*, Hal Foster (ed.), *La Posmodernidad*, Barcelona, Kairós, 1983.
16. Udo Kultermann, Kenneth Frampton, *World Architecture 1900-2000: A Critical Mosaic. Central and Southern Africa*, vol. 6, New York, Springer-Verlag Wien, 2000, 32.
17. Pancho Guedes full name: Amâncio d'Alpoim Miranda Guedes.
18. Pancho Guedes joined Team X as founder member at CIAM's Roy-aumont meeting together with the Smithson's, Aldo Van Eyck, Candilis and Giancarlo di Carlo.
19. Malangatana Ngwenya, “Pancho Guedes visto por Malangatana”, Savana, 5 de Março de 2010. Alexandre Pomar (ed.), *the africanos of pancho guedes, the dori and amâncio guedes collection*, (Lisbon: CML-Sextante, 2010), 56.
20. Tostões, Ana, “Correspondences by Pancho Guedes, Architectural Elective Affinities”, S. Paulo, EAHN-FAUSP, 2013.
21. Amâncio Guedes, “Mr. Tito Zungu. Master of the Decorated Envelope”, in Pancho Guedes, *Manifestos, Papers, Lectures, Publications*, op.cit., 111.
22. Amâncio Guedes, “A Wrightian Thesis from the Early Fifties”, in Pancho Guedes, *Manifestos, Papers, Lectures, Publications*, op.cit., 12.
23. Bernard Huet, introduction to: Amâncio Guedes, “Y aura-t-il une architecture?”, *l'Architecture d'Aujourd'hui* 102 (1962), 42.
24. Pancho Guedes, *Vitruvius Mozambicanus*, (Lisbon: Berardo Collection Museum, 2009), 165.
25. Tristan Tzara, “introduction to Guedes' lecture”, A. D'Alpoim Guedes, “things are not what they seemed to be”, *Proceedings of the First International Congresso n African Culture Held at the National gallery, salisbury, Rhodesia, 1-11 August (1962)*.
26. MoMA exhibition in 1960 “Visionary Architecture”, Bernard Rudofsky (1905-1988) “Architecture Without Architects: A Short Introduction to Non-Pedigreed Architecture” (1964), “Architectural History , as written and taught in the Western World , has never been concerned with more than a few select cultures.”
27. Ernesto Nathan Rogers, “Continuità o Crisi”, *Casabella-Continuità* 215 (1957).
28. Sigfried Giedion, *Space Time and Architecture. The Growth of a new Tradition*, (Massachusetts: Harvard, 1941).
29. Amâncio d'Alpoim Guedes, “Lembrança do pintor Malangatana Valente Ngwenya quando ainda jovem”, in Júlio Navarro, *Malangatana Valente Ngwenya* (Lisbon: Caminho, 1998), 9.
30. Pedro Gadanh, (ed.), *Pancho Guedes. Ein alternativer modernist*, Basel, Christoph Merian Verlag, 2007.

Ana Tostões

Is chair of **docomomo** International (www.docomomo.com). Architect, architecture historian and associate professor with habilitation at IST-UTL, Lisbon, where she is coordinating the architectural PhD Program. Her research field is the twentieth century architectural and urban history with an emphasis on rehabilitation practices, focusing especially on post-war architectural culture and relations between European, African and American. On these topics she has published widely, curated exhibitions, and taken part in juries and scientific committees. Tostões has been vice-president of the Portuguese Border of Architects and the Portuguese section of the International Association of Art Critics. She's actually coordinating the research project (PTDC/AUR-AQI/103229/2008) EWV: Exchanging World Visions. The project aims to study Sub-Saharan African architecture and planning mostly built in Angola and Mozambique during the Modern Movement period.

A Resisting Modern Monument: Huambo Veterinary Academic Hospital

34



The Huambo (former Nova Lisboa) Veterinary Academic Hospital, designed by Vasco Vieira da Costa in 1970, was never completed. With the independence of Angola in 1975, a civil war started and lasted 27 years, with its main battlefield in the country's central region, where the opposition party was settled. The building has served as a military headquarters since the 80's, becoming extremely damaged in the last three decades. Peace was restored in 2002 but 30 soldiers are still nowadays living in the ruins to defend the building from vandalism. The University is planning the renovation of the Veterinary Academic Hospital, although unawareness about the building's heritage significance may result in the irreversible loss of an Angolan Modern monument.

By Margarida Quintã

Between the end of World War II and Angola's independence in 1975, the former Portuguese colony witnessed great development lead by the ruling fascist political regime. Economic growth was even stronger by the end of 1960, when movements towards independence began and the colonial war started. The *Estado Novo*¹ determined it was imperative to go to Angola 'quickly and strongly'² not only to fight the war but also to develop the country. This way, the final years of the Portuguese domination in Angola were the most vigorous ones, with the astonishingly rapid construction of new buildings and cities (Fernandes, 2002).

'With a Sword in One Hand and a Quill in the Other'

Education was a field in which the regime widely invested at the time, sponsoring the construction of numerous school buildings all over the colony (Milheiro, 2012). "With a sword in one hand and a quill in the other,"³ the government was trying hard to maintain its power over the Angolan territory. Thanks to the new political path, college education was established in 1962,⁴ and the opening of six higher education courses took place in the academic year of 1963-1964.⁵ Veterinary Medicine was amongst those courses and had 15 students in its first year.

In 1965 the Faculty of Veterinary Medicine was transferred from Luanda to Huambo and so were the Faculties of Agronomy and Forestry the following year. Huambo, located in the Angolan central plateau, offered good natural conditions for the development of agriculture and livestock. Moreover, the Central Laboratory of Veterinary Pathology was established there since 1927, so the new Faculty could benefit from its expertise. Besides being the oldest Scientific Research Institute in the country, the

Laboratory had 1200 Ha of land and facilities that included 10 buildings to perform treatments and research.⁶ Initially, the existing buildings were adapted to accommodate the students, but afterwards the University bought more land on the area to create a new campus (Mendes, 2006, 156).

The Veterinary Academic Hospital was part of the campus facilities. The building project was commissioned to Vasco Vieira da Costa in 1970 and its program was established with detailed advice from Professor Ivo Soares, who was a veterinarian and the University director since 1968.⁷ They both went to South Africa, along with the director of the Angola's Veterinary Research Institute (IIVA), to visit The Onderstepoort Veterinary Academic Hospital (OVAH). Onderstepoort campus was the top reference in Africa's Veterinary Medicine, so it should serve as model to the development of the Huambo premises.⁸

Veterinary Academic Hospital: Designing with Climate

The project for the Veterinary Academic Hospital was rather ambitious, designing classrooms, laboratories and surgical rooms in a 7000 m² construction. Besides the main building, there was also a Small-Animal Center, functioning as triage for outpatients, located near the site's main entrance to the north. An Isolation Unit for infectious diseases was positioned south, halfway between the Academic Hospital building and the IIVA premises.

The Veterinary Academic Hospital has northeast-southwest settlement in an H-shaped plan. The 4 wings, with different functions and design, form a horizontal set that spreads along 170 meters of brick and exposed concrete [figure 1]. The main entrance is located in the center, where hospital life revolves around the patio. Several passageways meet and surround a small garden on which a concrete staircase raises from the ground [figure 2].

The wing on the left side of the patio has 2 floors with surgery and recovery rooms; the wing on the right has 1 floor with classrooms along a central corridor.⁹ Due to

< Vasco Vieira da Costa, Exterior passageway.



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the site's topography, the other 2 volumes are located 30 meters to the west, on a lower level. A bricked volume suspended on exposed concrete pillars covers the passageway from the patio to the animal shelters [figure 3].

The wings for animal shelter also have different characters. To the north, large animals (mainly cattle) were housed in 5 identical blocks [figure 4] linked by an open-air corridor. The volume to the south has 7 rooms to house small animals with large-scale skylights on the top. This dashing natural lightning and ventilation system is also an icon of the building's architectural expression [figure 5].

Huambo's climate influenced Vieira da Costa's design. Due to the long rainy season of the Angolan central pla-

teau, he conceived several sheltered outside spaces. From October to April, the daily rains are usually heavy, sudden and thundery, so cover is vital for using the outdoors. For this purpose, the architect designed 4-meter-span cantilevered inverted beams to cover the exterior passageways along the building. Rainwater drainage is camouflaged within the building and designed to work daily.

The architect considered that suitable natural ventilation and solar protection were normally enough to limit the use of air-conditioning systems. However, under demanding circumstances or typological constrains, he chose artificial methods of environmental control to create the necessary comfort conditions.¹⁰ In tropical Luanda, Vieira da Costa used the Modern lexicon to design cre-

ative and efficient systems of shading, natural ventilation and rainwater drainage. These Modern devices were designed to each building's particular circumstances, like typology, climate and site (Quintã, 2007).

Vieira da Costa used the same method in the Veterinary Academic Hospital, but with different results. He exposed the building's structure, highlighting the concrete elements through the large brick surfaces. At the same time, infrastructure and environmental control systems

were concealed within the building. Huambo's moderate climate endorsed simple environmental solutions and limited the use of air-cooling systems.¹¹ This way, the architect could easily develop a building in harmony with the landscape, establishing continuous relationship between inner and outer spaces. The large horizontal slabs, the transparency of concrete grids and the use of raw materials contribute to blending the building into the natural environment [figure 6].



5



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Figure 1. **Vasco Vieira da Costa**, Veterinary Academic Hospital, Huambo, Angola, 1970-74. View from the south.

Figure 2. View of the building entrance. Figure 3. View of the patio. Figure 4. View from the laboratories. Figure 5. Exterior passageway.

Figure 6. Animal shelters. Figure 7. The skylights.



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Vieira da Costa designed a significant set of buildings in Angola, but the Veterinary Academic Hospital is one of his most ambitious works. At the same time, it is also one of his last designs, as he closed his practice in 1975 due to the sudden lack of commissions resulting from civil war. He then dedicated himself exclusively to teaching at Angola's Engineering Laboratory and committed to the establishment of Angola's Faculty of Architecture.¹²

Vieira da Costa lived in Angola from a very young age and only left the country for ten years while studying architecture. He won a scholarship in 1940 to go to Porto and in 1945 decided to go to Paris. During this period he studied urbanism and worked briefly with Le Corbusier, arriving in Luanda in 1950.

He was part of a generation of young architects that settled in Angola and shaped Modern cities after World War II. Their designs were developed locally, so they could escape the repressive control of the Portuguese central government (Matos, 2010; Tostões, 2010).

Vieira da Costa developed an architectural production based on the Modern Movement premises, using exclusively reinforced concrete structures and developing a plain architecture with a tropical feature [Quintão, 1987]. Most of his buildings are situated in Luanda, but the Veterinary Academic Hospital, adapting to a different climate, opens new readings on his work.

The Veterinary Academic Hospital has never been used as such because the construction was never completed. In 1975 the country finally became independent but the civil war immediately started, opposing MPLA and UNITA on the struggle for power. This war stroke Huambo region more than any other in the country because it was UNITA's resistance stronghold. In the 80s, MPLA started using the abandoned building as military headquarters and until the present day it has served as accommodation for 30 soldiers. A great part of Huambo's buildings and infrastructure were completely ruined, but the Academic Hospital remarkably survived the long civil war.



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Figure 8. View from the terrace.

Figure 9. View of the terrace.

Figure 10. The exterior staircase.

Photos by Margarida Quintã, 2013.

Challenges on Heritage Conservation

Nowadays the building belongs to the José Eduardo dos Santos University, which was established in Huambo in 2009. This public University is the owner of several buildings in the city but at the same time is developing a 2500-Ha campus in the Cambiote suburb, in order to gather students from the provinces of Huambo, Bié and Moxico. The faculties will be placed in the new campus, so the future of the existing buildings is still uncertain. Nonetheless, the Veterinary Hospital should be restored, as has been announced in the country's 2013 Annual Financial Statement [figures 7, 8, 9, 10].

The restoration of Modern buildings is a challenging demand to the Angolan construction industry. Contractors from abroad, especially from China and Portugal, are rebuilding the country's infrastructures and reshaping Angolan cities. However, the urge for development has been promoting the demolition of Modern buildings in city centres, in spite of their historical relevance.¹³

This building activity is based on massive importation of materials and equipment, because the country's manufacturing industries are scarce. Likewise, design solutions are mostly imported and frequently overlooking local conditions. Contemporary demands on interior comfort had led to the progressive abandonment of passive methods of environmental control. Existing buildings are being refurbished to introduce air-conditioning systems but, due to maintenance issues, small domestic packages are frequently chosen over global systems. Either it is an apartment renovation or a large-scale refurbishment,¹⁴ Modern heritage devices designed with passive techniques for environmental control tend to disappear.

In order to reverse the growing damage of the Angolan Modern legacy, it is urgent to assert the buildings' patrimonial value. At the same time, it is also necessary to define an intervention method that guides the renovation of the 20th century architectural heritage in Angola. For this reason, it is mandatory to develop a broad understanding of the Modern construction techniques, materials and passive systems of environmental control.

The major challenge on the table remains how to confront heritage conservation with the Angolan contemporary expectations on comfort, energy and economy. Hopefully, the renovation project of the Veterinary Academic Hospital will prove that such challenge can be met.

Notes

1. *Estado Novo* was the authoritarian regime installed in Portugal by António de Oliveira Salazar in 1933. This dictatorship ruled the country until 1974.
2. Free translation: "Para Angola, rapidamente e em força" – quotation from António de Oliveira Salazar's speech, 13 April 1961.
3. Free translation: "Numa mão a espada e noutra a pena" – chapter

from *História do Ensino em Angola* about the establishment of the University in Angola and the developments from 1960 onwards.

4. On 21 August 1962 the law for the "General University Studies" in Angola and Mozambique was published. The University of Luanda was established later in 1968 (Santos, 1970, 301).
5. The higher education courses established in 1963–64 were: Medicine, Engineering, Pedagogical Sciences, Agronomy, Forestry and Veterinary Medicine (Santos, 1970, 289).
6. João Aguiar (GUC) developed the master plan for the Central Laboratory of Veterinary Pathology, planning 10 buildings: central building; laboratory; bromatology; equine immunization; swine immunization; experimental parasitology; bacteriology; rabies; bovines; autopsies. The construction of the main building was completed in 1953.
7. Prof. José Quintão interviewed on 18 June 2013. Prof. José Quintão worked with Vasco Vieira da Costa from 1970 to 1974 and took part of the Veterinary Academic Hospital design team, along with António Falcão and Paula Alves Pereira.
8. Prof. João Seródio de Almeida interviewed on 18 July 2013. Prof. João Seródio de Almeida graduated from the Nova Lisboa's Faculty of Veterinary Medicine in 1972.
9. These volumes were built in the construction's first phase, while the kennels and stables were only built after 1974, according to Prof. José Quintão.
10. See for instance, the use of air conditioning devices in Angola's Engineering Laboratory and Students Residence in Luanda.
11. According to Prof. José Quintão, there were no air conditioning devices except in surgery rooms.
12. The Faculty of Architecture was established in Angola in 1979, three years prior to his death.
13. The Kinaxixe Market's demolition in 2008 embodies the neglect of the country's Modern legacy. The Market was the first work by Vasco Vieira da Costa, from 1951–58, and Modern Luanda's landmark.
14. See, for instance, the new glass envelope of Hotel Presidente in Luanda. The Modern building designed by António Campino in 1960 became unrecognizable after the façade renovation.

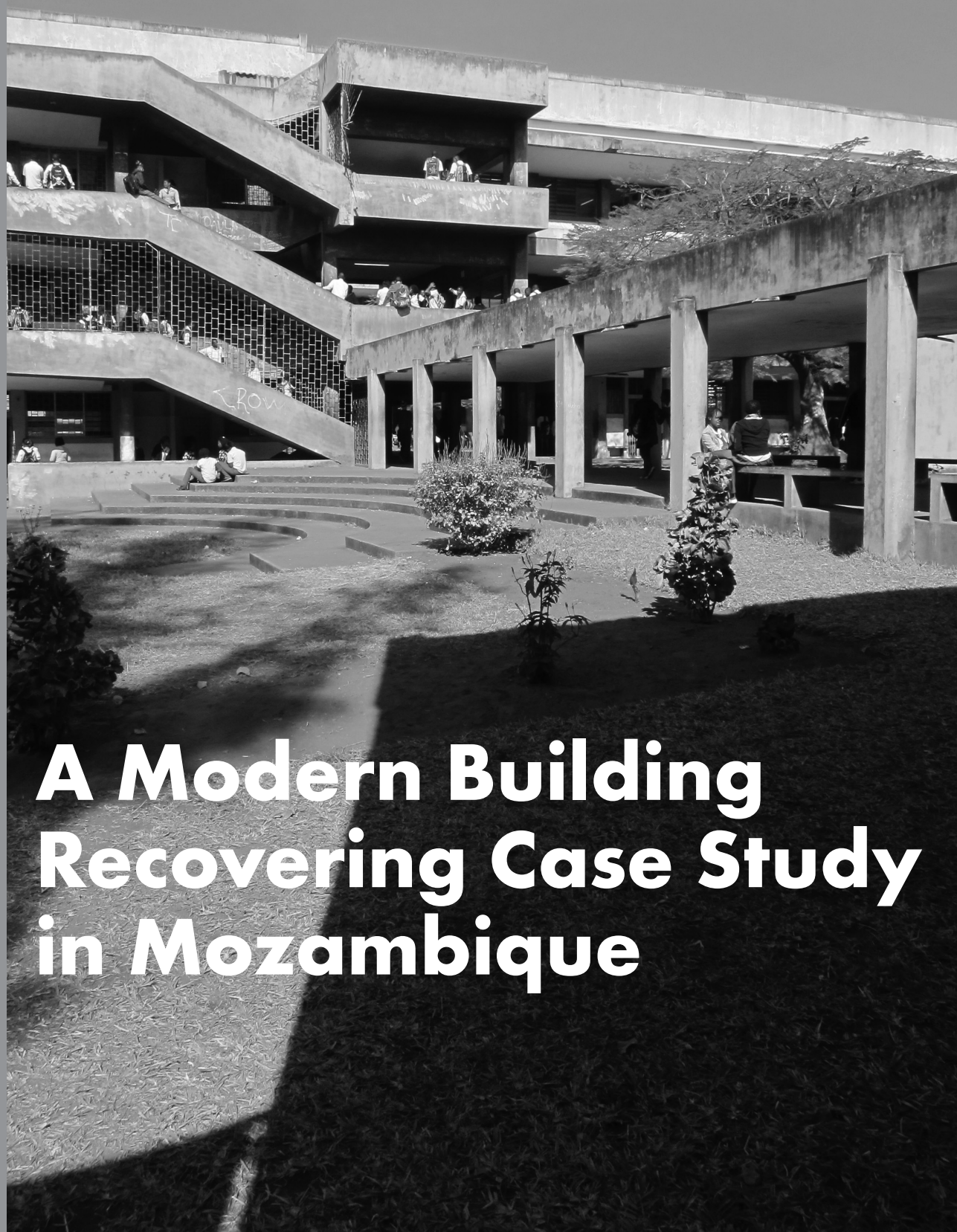
References

- Fernandes, José Manuel, *Geração Africana. Arquitectura e cidades em Angola e Moçambique*, Lisboa, Livros Horizonte, 2002.
- Matos, Madalena Cunha, "Colonial Architecture and Amnesia. Mapping the work of Portuguese architects in Angola and Mozambique", OASE 82, Rotterdam, 2010, 25–34.
- Mendes, António Martins, "A Universidade de Luanda – apontamento histórico", *Revista Portuguesa de Ciências Veterinárias* 559–560, Lisboa, 2006, 149–161.
- Milheiro, Ana Vaz, "Escolas em Angola durante o Estado Novo" in *Nos trópicos sem Le Corbusier: Arquitectura luso-africana no Estado Novo*, Lisboa, Relógio d'Água Editores, 2012, 364–415.
- Quintã, Margarida, *Arquitectura e Clima. Geografia de um lugar: Luanda e a obra de Vasco Vieira da Costa*, Porto, FAUP, 2007.
- Santos, Martins dos, *História do Ensino em Angola*, Luanda, Serviços de Educação, 1970.
- Tostões, Ana; Oliveira, Maria Manuel, "Transcontinental Modernism. M & G as an *Unité d'habitation* and a factory complex in Mozambique", *docomomo* Journal 43, Barcelona, 2010, 70–73.

Margarida Quintã

Architect (FAUP, 2007) and Ph.D. candidate (IST-EPFL Joint Doctoral Initiative). She holds a scholarship from the Foundation of Science and Technology in Portugal to develop her research on designing with climate and modern heritage re-using in Angola. She is the author of *Architecture and climate. Site geography: Luanda and the work of Vasco Vieira da Costa* (2009).

Polana High School.



40

A Modern Building Recovering Case Study in Mozambique

The Polana High School in Maputo, designed by José João Tinoco and José Forjaz around 1970, is a plain functional building both as regards to the spatial organization of its composing pavilions and as to its construction that is mostly made of exposed reinforced concrete structures and elements. After decades of heavy duty use and an almost absolute lack of maintenance, it recently went through some urgent repair operations. In this sense, it exemplifies what could be today effective conditions regarding economic possibilities and cultural problems to recover Modern heritage in Africa.

By Vincenzo Riso

Among African contemporary city capitals the Mozambican Maputo has a straightaway recognizable characteristic which corresponds to a remarkably high density of Modern buildings, originating from the colonial occupation of the country. In fact during the 1950s and 1960s the Portuguese authorities, so as in the necessity to justify their belated presence, made large efforts to Modernize Lourenço Marques (former name of Maputo) and, differently from what was happening in their mother country, a new generation of Portuguese architects found here a huge ground for applying and experiencing some of the Modern architecture issues. Needless to say, all the contradictions inherent to the application of Modern Movement ideas in a colonial context are (especially today) equally evident in the resulting works. Following the finally obtained independence of Mozambique, those buildings continued to be fully used in the given configuration of housing blocks and infrastructural buildings such as schools, hospitals, administration offices and transportation, cultural or sports facilities. That is to say this series of 1950–60s buildings was somehow capable to positively react to the appropriation processes that naturally underwent after 1974. This, in turn, gave way to a locally familiar living with Modern architecture heritage, that (*si parva licet componere magnis*) recalls the integration between everyday life and Modern architecture experienced in the Netherlands after World War II. But sorrowfully such significant practice of use of the buildings could not materially correspond to an adequate maintenance exercise. Moreover the city has recently been going through a real economic explosion and buildings are indifferently requested to perform according to international standards; and this finally places Maputo's Modern Movement legacy in front of the com-

pelling alternative between reparation/adaptation on one hand and substitution/cancellation on the other.

As regards the whole of those problems, the Polana High School in Maputo constitutes an exemplary case study. Within the general plan of the city, this building is located on the East side of the reference axial road called Avenida Kim Il Sung, but differently from the correspondent square urban grid, that lays parallel to the coastal line, the building assumes a north/south direction to organize the sequence of volumes, which constitutes the school. Anyway due to the extent of its pertinent plot, looking at the area map, what initially appears only as a manifest indifference to the surrounding urban fabric, it can then also be interpreted as a way to take hold of the ground as if the building had been freely placed upon it.

The school was designed by José João Tinoco and José Forjaz around 1970 and its construction started in 1973. At the arrival of independence, the building was short of completion, with the sports centre yet to be built.

The structure can be described as a series of classroom blocks that are placed and connected on both sides of a central corridor, which terminates on the north side with the auditorium, the library and the special canteen volume. On the top south side, where the entrance is placed, the administration wing is to be found. The central corridor is an open portico that acts as a shading protection for the path linking the various classroom pavilions, where the same portico motif is extended as a side extension to shape the north side elevations of the pavilions. In this way, a full and multilevel comb network of servicing spaces has been defined to maintain a constant relationship with the open spaces, taking advantage of the above mentioned free disposition of the building within its isolated plot of land.

It is also worth mentioning that at the middle of its extension, the central corridor roof spans largely from the pillar support lines so as to generate a covered square; again a privileged relationship between the construction and its pertinent ground is here affirmed, creating in this case, a special social space within the functional organization of the school.

< José João Tinoco and José Forjaz, Polana High School, Maputo, 1970–73. The intersection between the central corridor and one of the classroom pavilions. Photo by Vincenzo Riso, June 23 2010.



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The building is mostly made of exposed reinforced concrete structures and elements—the load bearing system but also some accessorial parts that protrude out of the structure, such as the benches along the corridor or other very significant elements for the classrooms blocks such as the vertical sun breaker elements placed all over the south side elevations to protect the fully operable glazing surfaces from direct light in the morning and afternoon. The veranda-like extension of the service stairs and ramp spaces on the north side elevations of the blocks assumes the same function.

The inclined roofs of the blocks were covered with undulated asbestos cement plates so that the only differing color parts within the whole are the infill wall parts that are whitewashed.

The simple and efficient organization as well as its material roughness served the school well for several decades, but in recent years the concrete structure has begun to show some serious decomposition problems, some of which are a result of the corrosion caused by the prevailing coastal winds, others being caused by internal percolations of effluent waters. Severe corrosion problems concerned also the metallic operable sashes of the glazing surfaces and more dangerously even the steel fitting supports of the heavy vertical sun-breaker concrete panels.

At the beginning of 2012, a Chinese building firm, within a cooperation program, proposed to the Mozambican Ministry of Education to execute some restoration work on the building.



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Figure 1. The north side elevation of one of the classroom pavilions.

Figure 2. The south side elevation of one of the classroom pavilions.

Figure 3. Detail of the south side elevation with vertical sunbreakers to protect the underneath fully operable glazing surface.

Figure 4. Detail of steel corrosion on the fitting supports of the vertical sunbreakers

Figure 5. Detail of the steel fitting supports of the vertical sunbreakers that have been replaced by similar but larger ones.



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To give the reader an idea of the nature of these interventions we can relate that they consist, for instance, in filling the concrete splits with proper epoxy resin; exchanging the steel fitting supports of the vertical sun-breakers for similar but bigger ones; and finally safely replacing the asbestos cement undulated plates covering the roof with *IBR* (metallic and polyethylene) sheets colored in red (though also available in grey).

Of a strictly pragmatic nature, such interventions were exclusively aimed at maintaining the building in use, within a short term perspective. Beyond the possible criticism that could be advanced regarding the single and specific repair solutions, it can be observed that the real problem of the rehabilitation operation as a whole has been the lack of a general plan. The work had been defined and organized as a list of isolated interventions (tender specifications). And it is possible that some of the causes of the degradation problems might not have been recognized, and that therefore their solution could be only temporary due to the remaining presence of the original problem.

In this sense, within the global context of our case studies, the Polana High School is of particular importance, not solely due to the quality of the building itself, but also to show the financial as well as cultural issues that might hinder the recovery of buildings of heritage value, which, notwithstanding the quality of their construction, have been constantly exposed to heavy duty use and that have suffered from a severe lack of maintenance.

In this sense, the story of the Polana High School also embodies the common condition of the large amount of Modern Movement architectural works that can be seen in Maputo. Beyond the shabby condition of the finishes

and in spite of the manifest alterations, nevertheless those buildings sustained up to now the weight of social and time changes. This could be the evidence that also Modern architecture can grow old and proudly be maintained in the state which its history shows. Moreover the urgency of material conditions to guarantee the continuous use of such buildings, if they simply undergo proper maintenance, could be the occasion to skip the 'old problem', which often emerges in the restoration operations in wealthier countries, of remaining true to the spirit of Modern when literal conservation of buildings can become a subtle way to betray its original design concept.

Figure 6. **José João Tinoco** and **José Forjaz**, Polana High School, Maputo, 1970–73. Detail of the decomposition of concrete due to internal percolation.

Figure 7. Detail of frequent concrete break up areas

Figure 8. The central open corridor, view from the south side top.

Figure 9. The covered square along the central corridor.

Photos: 1, 2, 3, 4, 7, 8, 9 © Vincenzo Riso, June 23 2010.

Photos: 5, 6 © Irene Miguel, March 20 2012.

Vincenzo Riso

Trained as an architect at the Department of Architectural Design of the University of Florence (I), where in 2006 he also obtained his Ph.D. in architecture. He received the Bruno Zevi Prize for a critical essay about Modern architecture in 2008 and has been the Dean of the School of Architecture of Minho University (P) since 2012.



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Introducing Modern Gallery Housing in Maputo: Design Experimentations, 1950–1968¹

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Modern architecture has recently been the subject of a more systematic analysis in the formerly Portuguese African territory. These studies aim at understanding the specific circumstances from which Modern Portuguese architecture first arose. Following the international debate on housing during the 20th century, Mozambique has been the arena of a new and experimental approach to collective housing in accordance with the guidelines set out by Le Corbusier. A singular social, economic and cultural territory, it adopted a tropical variant of the gallery typology, briefly introduced in this paper by means of select case studies built in Maputo between 1950 and 1968.

By Susana Gomes

One must not build collective houses towards streets, yet streets should be raised for houses.

Jorge Segurado, 1948

Context

It is important to introduce this paper by recalling the 1st National Congress on Architecture (1948), where the freedom of speech for Portuguese architects was won and Modern architecture gained an identity in Portugal. The lectures presented on this occasion reflected long-standing reservations and concerns within the discipline, as indicated by the two themes of the congress itself: "Architecture in the National Planning" and "The Portuguese Problem of Housing." Awakening to the industrialization of the constructive process, architects defended a rationalist approach to housing and urbanism. Collective housing was clearly favored, particularly the new vertical lodging typologies: the *aposementamentos*.² Furthermore, the idea of the *minimal* dwelling echoes the term "apartment" in the lecture given by J. Segurado (1898–1990), presented as a foreign-derived word of Brazilian use.

Based on his observation of modern experiences abroad, Segurado defended the construction of buildings up to 13 floors, which included a high-ceiling ground floor surrounded by open green areas, and accommodating a mixed-use program of housing, commerce and services. These buildings would meet insulation and hygiene needs as well guaranteeing an economy of construction. The apartment takes the form of a standardized unit cell and the circulation gallery is proposed as the system of horizontal access, supported by a vertical volume consisting of two complementary lifts and a double staircase.

Une grande époque vient de commencer. Il existe un esprit nouveau.

Le Corbusier, 1923

< Alberto Soeiro, Tap/Montepio building, view from main elevation.

The Gallery in Collective Housing

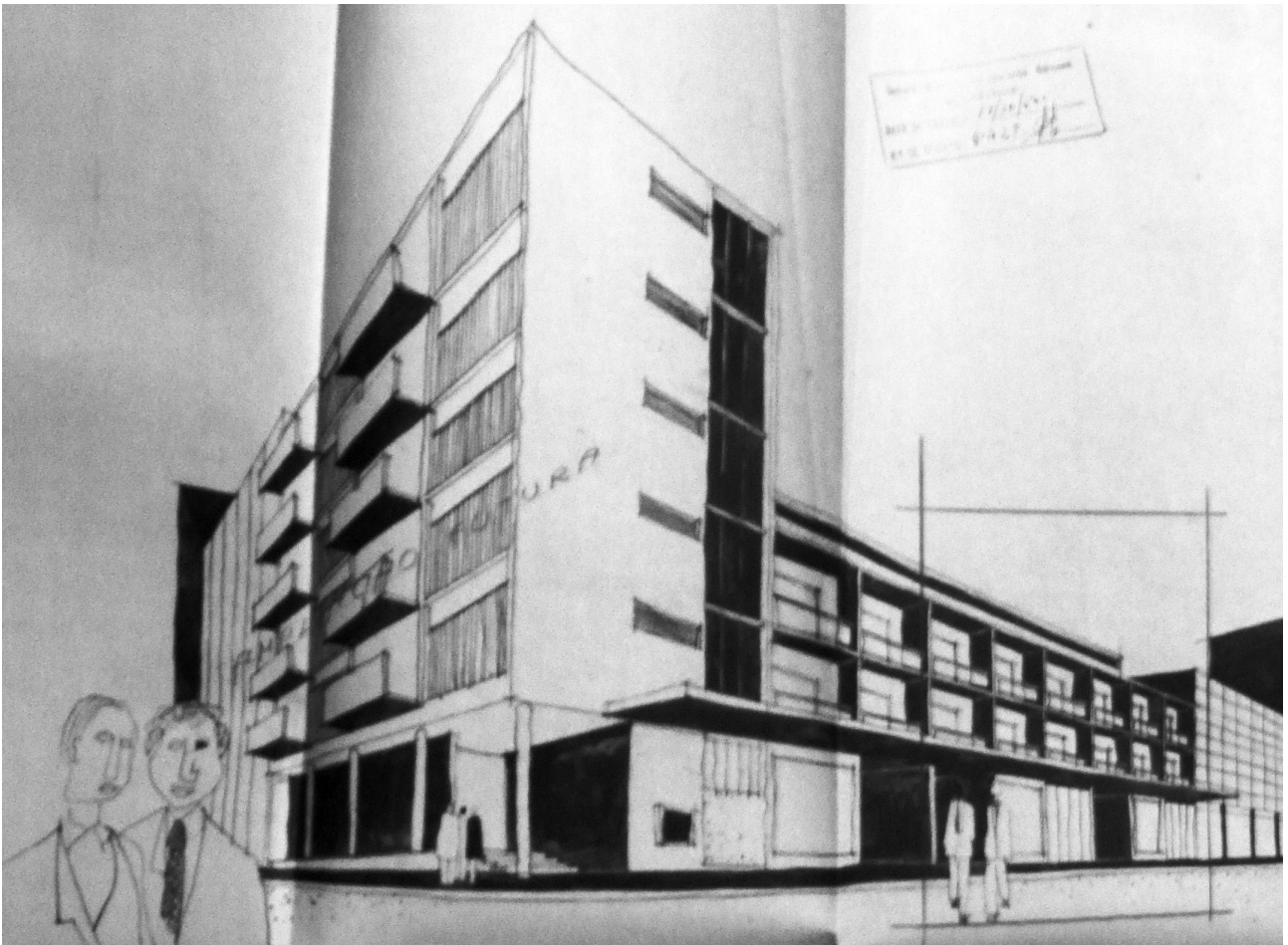
The prototype building of Segurado has obvious allusions to Le Corbusier's theories, and marks a break from former architectural ideologies in Portugal, seeking affinity with the *International Style*, seen as a unique, consistent and logical approach to architecture.

Gallery circulation in housing was tested in several countries in the inter-war period and subsequently throughout the 50s and 60s. The model was most probably based on Le Corbusier's project for the *Immeuble Villas* (1922), built as a prototype at the *Pavillon de L'Esprit Nouveau* and exhibited at Paris' International Exhibition (1925). In this project, a double gallery, in the form of two parallel corridors on each floor, separates the main circulation space from the services. Variations of this typology would arise, amongst others, in the designs of Moisei Ginzburg for *Narkomfim* (Moscow, 1928), Walter Gropius for *Siedlung Siemensstadt* (Berlin, 1929), Wells Coates at *Lawn Road Apartments* (London, 1932), or even at *Casa Rustici* (Milan, 1933), where Giuseppe Terragni designs a unique aggregation of galleried buildings with a central courtyard.

In tropical climates, the circulation gallery would be articulated with other strategies of sun protection such as balconies, sun baffles and louvers, combining Modern language with vernacular tradition.³ In Brazil for example, whose Modern experience influenced the new generation of Portuguese architects, the typology was defended by its suitability to climate conditions, justifying solutions such as Carlos Ferreira's *Casas para Operários* at Realengo (1942).⁴

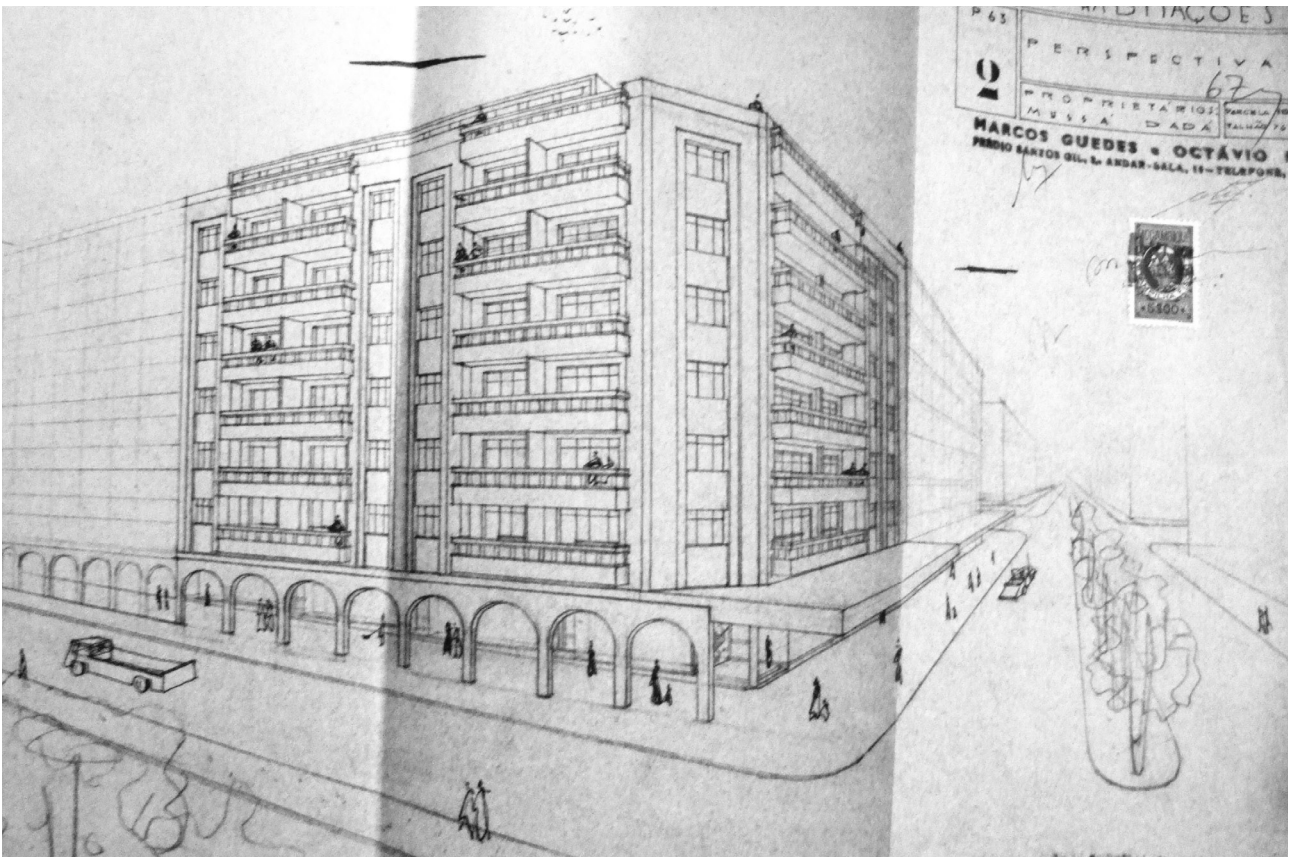
In Portugal, with the exception of a few buildings promoted by an enlightened bourgeoisie, most structures of collective housing were based on reproducing the single-family house on several kinds of assessments. This system recreated the ideology of rural revival promoted by the political regime at the time.

In this context, the construction of *Bloco Saldanha* (Porto, 1937), a set of budget houses developed around



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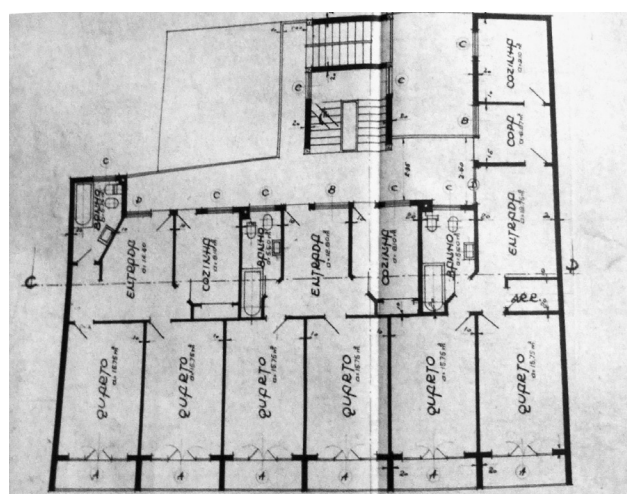


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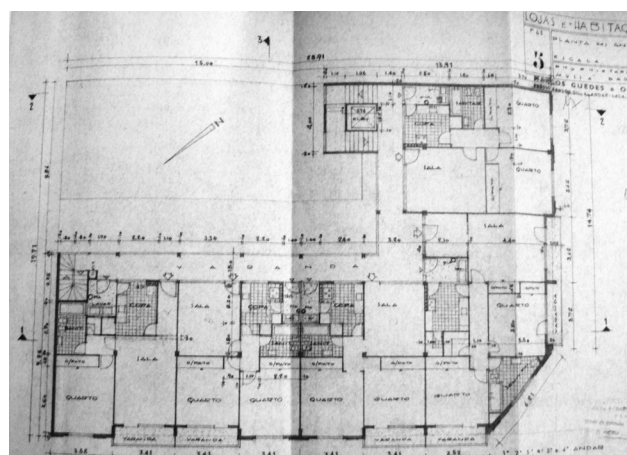
a central courtyard, accessed by a continuous outer circulation gallery, is particularly noteworthy. The project recalls one Dutch experience, prior to the already mentioned proposal by Le Corbusier, namely Michiel Brinkman's *Spangen Quarter* (Rotterdam, 1918), regarded as the first Modern example⁵ of this typology. The innovation of this markedly social example, expressed the maturation of the distinction between public and private space, through intermediate semi-public spaces—patios—designed in the block's interior and by the access system to the upper housing, composing a "high street" of sorts along the building's cluster. This model, which influenced Le Corbusier (William Curtis, 1986) and other protagonists of the Modern Movement, is emblematic of architectural reformation, a period of great socio-formal revisions, which would be taken up internationally in the second half of the 20th century.

All projects built in Colonies must be designed by Architects or have their higher orientation.

João Simões, 1948



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Experiences in Maputo

Focusing now on Maputo, formerly called Lourenço Marques, it is important to recall that the city did not differ from any Portuguese provincial capital where, upon new integrationist consolidation policies after World War II, there was significant investment in development planning and building construction.⁶ Housing accounted for most of these buildings, distributed in state or municipal operations, but mostly initiated by the private sector.

The conclusions made in the 1948 Congress and the consequent influx of architects to Mozambique from the 1950s, contributed to an increase in the quality and sophistication of construction (França, 2009). In fact, in the mid 20th century, most buildings subject to municipal licensing consisted of low-density housing, including single-family homes designed for wealthy families, 1 or 2 floors high. Houses organized in sets of 2 ("mirror") or more cells ("train houses", Lima, 1968), popularized in the late 19th century, represented a cheaper alternative for land optimization, and remained a common solution in many of the projects in the 50s and 60s.

The first privately funded collective housing projects came about for two reasons: firstly the lack of houses for the new wave of immigrants, and secondly the financial incentive for the rising bourgeoisie to invest in construction on land acquired in the emerging quarters of the city. Initially, these consisted of buildings of 2 to 4 floors, with vertical access through two stairs⁷ and 1 or 2 apartments per floor. The buildings' planning was central, creating four independent façades and maintaining the philosophy of the single family house, articulated by a surrounding green area. Buildings with 5 or more levels appeared along the new structuring avenues of the city, consisting of mixed or exclusively housing programs. Only from the 60s onwards did buildings featuring more than 10 floors appear.⁸

Generally, in such buildings, vertical access was granted by two systems—left/right or gallery—the latter typology being the subject of extensive experimentation.

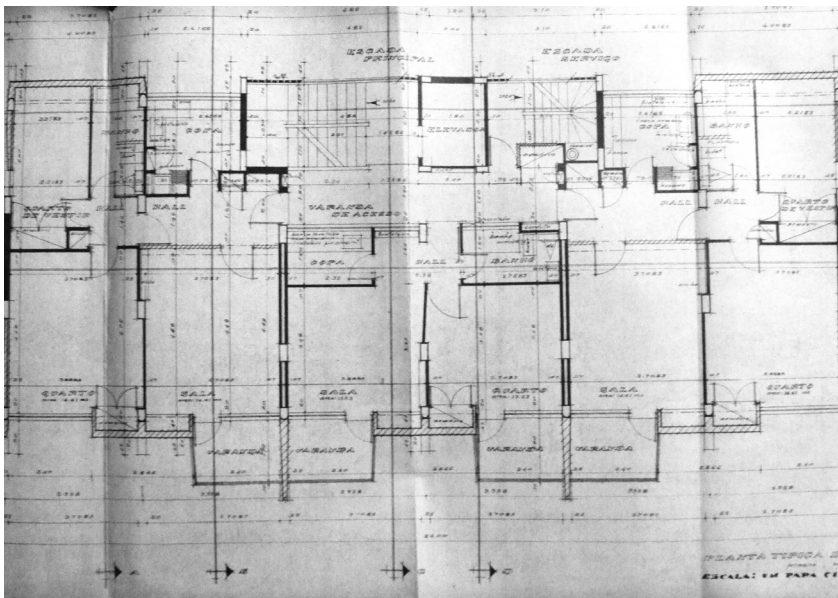
From our analysis of the projects achieved between 1950 and 1968, 74 buildings adopted a circulation based on a gallery or varanda (balcony).⁹ Of the 20

Figure 1. Perspective of a building's main façades, P.C. 166/50.

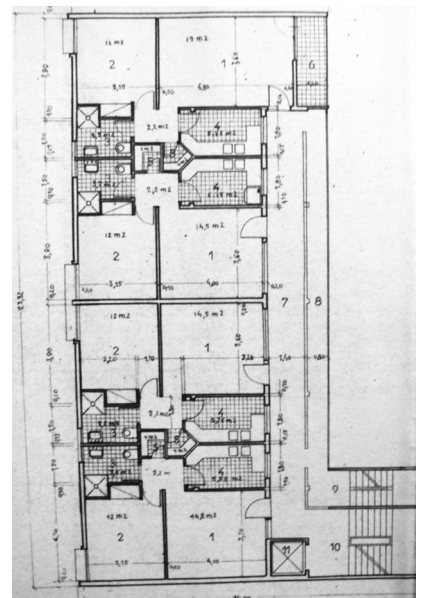
Figure 2. Marcos Guedes and Octávio Pó (P.C. 189/59), perspective of building's main façade.

Figure 3. Plan of housing floor, P.C. 166/50.

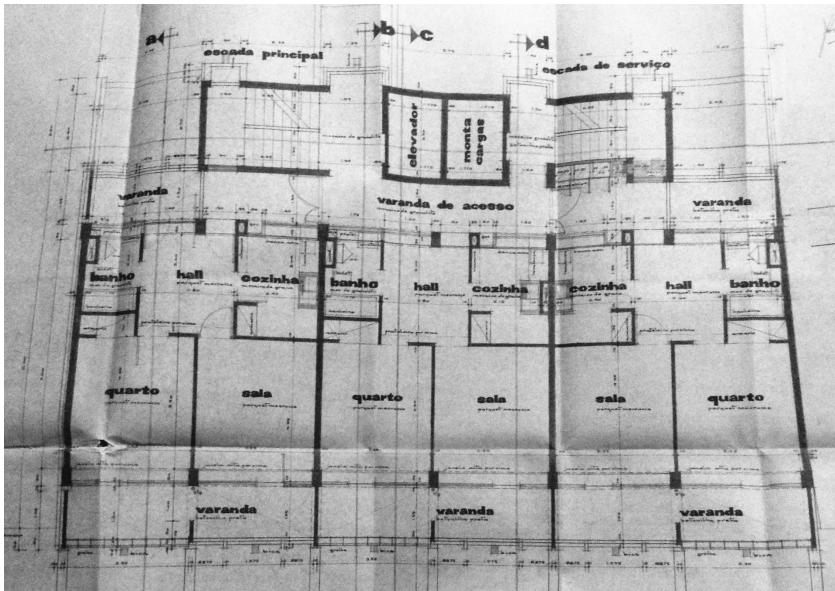
Figure 4. Marcos Guedes and Octávio Pó (P.C. 189/59), plan of housing floors.



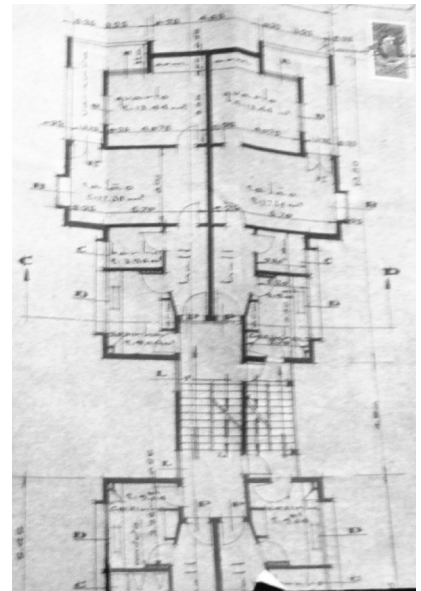
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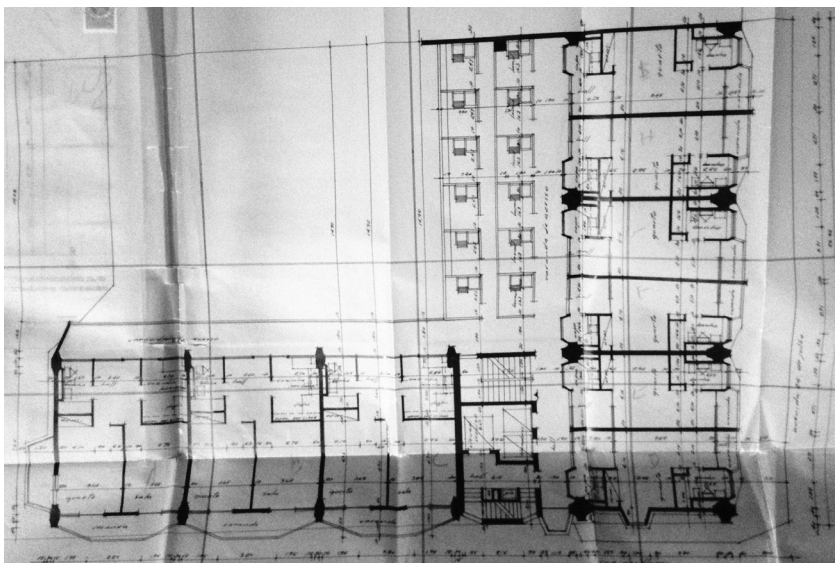
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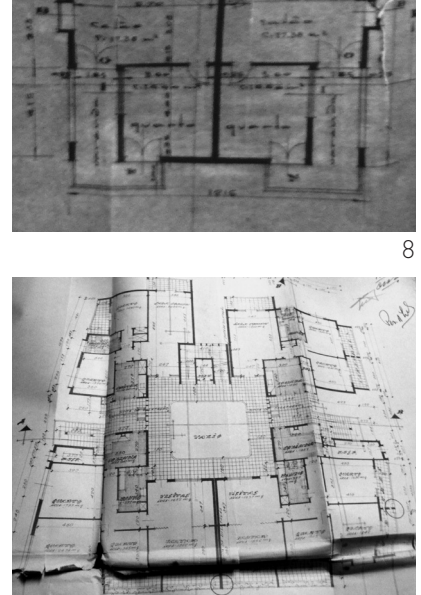
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buildings of more than 10 floors, proposed from 1960 onwards, half have adopted this type of access. The proportion increases when analyzing buildings of 5 to 9 floors, where out of a total of 42 cases identified, 29 of them had adopted galleries. We can therefore state that

to some extent a prototype was developed—a building type exploring circulation systems.

Amongst the many examples, we can distinguish the existence of two types of utilizing the gallery: projects where it serves as just one of the integrated access points and those in which the gallery provides the sole means of access to the housing units.

In the first subtype, we identified that the apartment's main access is made through the traditional left/right system. The gallery is designed specifically for the service circuit, where it joins the dwelling's kitchen, often by an intermediate space, called a *service balcony*. The façades with galleries define themselves as opposed to the main street layout, and infer, especially in the early years, some disability and formal framework for the set. In projects where the gallery is the only access system, variants can be observed as to how it relates to the apartment's distribution.

Gallery on every Floor. The design of the gallery on every floor represents the most common situation in single-storey apartments (simplex), allowing the development of

Figure 5. **Pancho Guedes** (P.C. 140/53), Prometheus, plan of housing floors

Figure 6. **Pancho Guedes** (P.C. 44/64), Dr. José da Costa, plan of housing floors

Figure 7. **Pancho Guedes** (P.C. 224/59), Isauro Lopes, plan of housing floors

Figure 8. Plan of third and fourth floors, P.C. nº 205/58.

Figure 9. **Pancho Guedes** (?) (P.C. 52/52), plan of first and second floors

Figure 10. **Pancho Guedes** (?) (P.C. 102/55), plan of housing floors

Figure 11. **Pancho Guedes**, Tonelli, view to rear façade with galleries

Photos by Susana Gomes, April 2011/13

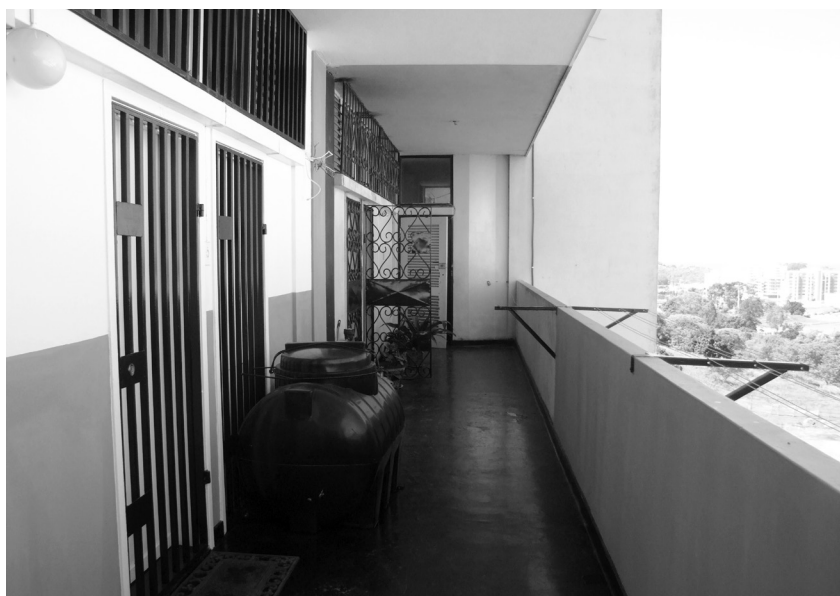
two or three façades, and thus ensuring cross ventilation. The gallery can be situated on the front façade but is generally placed on the rear, less visible elevation.

Of note, one of the first examples of this type is the building at Av. Fernão de Magalhães, 1950,¹⁰ whose design was reproduced in 1951.¹¹ These projects present generous galleries that are nonetheless disproportionate with the reduced internal spaces of the dwelling. The vertical access of the building stands as an isolated volume.

In 1959¹² architects Marcos Guedes and Octavio Pó designed a block with an identical system. In this case, vertical access is incorporated into the main building, and both main and service stairs are positioned on opposite sides of the gallery.

In a later project (1966), the service staircase disappears, replaced by an additional lift and a single staircase located on the central axis of the building. The gallery, now understood as a public access, becomes a balcony (private space) anticipating the entrances to the apartments on the sides of the building. This solution brings about nobler spaces for the dwelling, more private and well shaded by concrete grids on the gallery.

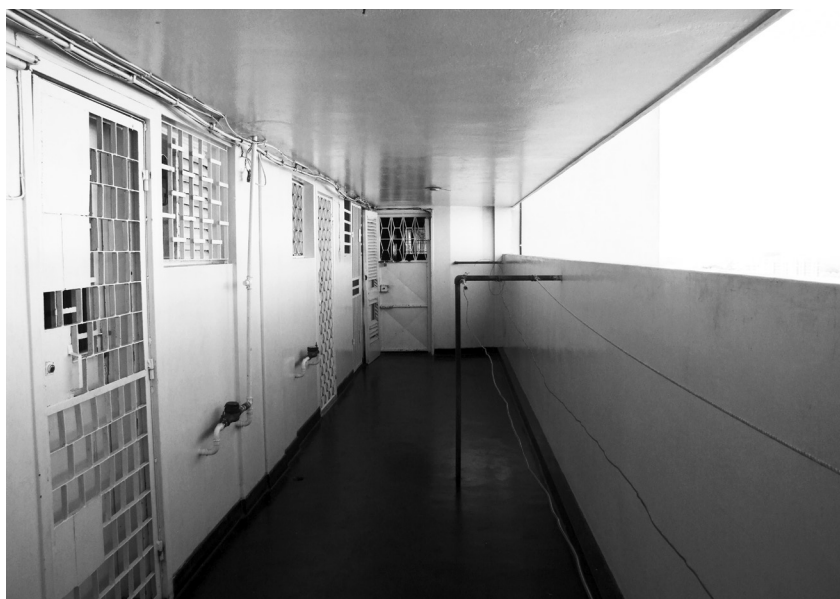
In 1953,¹³ in a well-known building named *Prometheus*, Pancho Guedes designed a circulation scheme as a “balcony” to the apartments on the rear façade, shielded by the vertical circulation volume. These balconies guaranteed continuous cross ventilation by adopting prefabricated grids in elevation. The same author, while



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designing Dr. José da Costa (1964),¹⁴ develops the layout, placing the gallery at the edges of the building.

In the similarly famous *Abreu Santos & Rocha* (1956),¹⁵ the architect's first project for housing, Pancho Guedes draws the gallery as a simple corridor with a grid wall of variable height, facing the interior of the lot. Finally, at *Isauro Lopes* (1959),¹⁶ he uses the gallery to enhance the status of the building's service façade, increasing its width, in order to include a second corridor for each apartment's laundry area.

Gallery at every Second or Third Floor. This subtype was used in buildings with apartments of more than one storey. The façade of the gallery acquires prominence in the set, and integrates the formal care given to the main elevation. One of the early designs dates from 1953¹⁷ and is probably by Pancho Guedes. In it, the minimum simplex apartments are combined with larger apartments in duplex. The former are repeated on all floors and are accessible directly by the lobby of the vertical circulation volume. The gallery acts as an extension of the lobby, as an open balcony on every second floor, giving access to other dwellings. While the main staircase integrates the central block, the service staircase and elevator constitute an autonomous volume, both by distance and their curvilinear form, breaking the rigidity of the main orthogonal set. In the absence of the odd floor galleries, the ensemble is aligned by advancing the façade of the upper floor duplex apartments.

Alberto Soeiro's remarkable *Tap/Montepio* (1956)¹⁸ presents the circulation system as a gallery on every third floor, giving access to the duplex and triplex apartments. While drawing on to Le Corbusier's *Unité d'Habitation*, as noted in the vertical grid façade and pillars, the project is made distinctive by displacing the *rue* corridor onto the main façade. The gallery, designed as an extensive cantilevered balcony, acquires a single access through a mid-floor system to the apartments, thus providing them with greater privacy.

Double Gallery. Given the socio-functional peculiarities of the time, we can also consider the aforementioned *Tap/Montepio* building as embodying a double gallery

system. Aiming to specialize the access and ensuring the privacy of the inhabitants, Soeiro designs a second gallery circulation, exclusively for service access on the rear façade of the building. With direct access to the apartment through the kitchen, the system of cantilevered balconies is repeated, narrower, but this time shielded by occasional shading produced by the intercalated terraces of the apartments.

The system of a double gallery on opposite façades was also tested in 1958,¹⁹ although in a building with simplex apartment typologies only. The main entrance to each dwelling is granted half a floor lower, while the service one maintains the gallery level. Once more, the gallery employs the design of a porch on the front façade, this time integrated into the ensemble.

At *Tonelli* (1957),²⁰ Pancho Guedes reiterates the philosophy of the aforementioned project (1953), combining simplex and duplex apartments. In this building, the simplex flats are distributed across four levels, while the duplex apartments spread over four others. In the first part, the main gallery is complemented with the service one. In the duplex system, the gallery duplicates on the same façade, on different levels with a separation corridor. The service entrance is situated on the lower floor of the apartment, while the main entrance is positioned midway between the social and private areas. This gives rise to different heights within the galleries, reinforcing their diverse functions and defining a distinct rhythm in the building's rear elevation.

Finally, in another building designed in 1958,²¹ the distinction between the various access points is reinforced by doubling the gallery on the same floor and façade. In line with the philosophy of Le Corbusier's *Immeuble Villes*, the corridor is extended, positioning the service area along the façade, and separating it from the main one by using a grid wall for shading.

Gallery Singular Variants. In addition to the three subtypes exposed, it's important to identify the existence of unique variants or adaptations. Here, we identify examples where access is not granted by a corridor alongside a façade, but by its adaptation to other forms of access and/or experience of outer space that this circulation model provides.

In analyzing the period 1950–68, we identified two unique projects, both most likely designed by Pancho Guedes. The first one, from 1952,²² consists of a building adapted to a rugged topography, divided into two volumes positioned at mid-height with respect to one another. Every floor's access is granted by two staircases—main and service—that emerge from the entry lobby. Although no hallways exist, we can read in the open space

Figure 12. **Pancho Guedes**, *Tonelli*, photo from main gallery

Figure 13. **Pancho Guedes**, *Tonelli*, photo from service gallery

Figure 14. **Alberto Soeiro**, *Tap/Montepio*, photo from main gallery

Figure 15. **Alberto Soeiro**, *Tap/Montepio*, photo from service gallery

Photos taken by Susana Gomes, April 2011/13

designed by the stairs, an outdoor gallery. In the other block, from 1955,²³ the flat's access is carried out in the building's core, which opens in the form of an exterior courtyard. Recalling Terragni's Casa Rustici, the gallery is shown as a balcony access but also as a living space, thus promoting community life.

Conclusion

The study of the above mentioned projects confirms the existence of design exploration on gallery access since very early on. Naturally fitting to the tropical climate, it assumes its practical and functional character—day lighting and ventilation, shading and the provision of more than one façade to the apartments. It also contributes to the social character of the ensemble by encouraging community living, expanding the houses to outer spaces through balconies. Thus, the gallery sometimes arises as a “disguised” corridor in elevation through a system of grid shading, or, more often, as a balcony delimited by a low-high wall.

The adoption of a double vertical access system is common in buildings regardless of the income threshold of the residents, ensuring the separation of the general circuit from the service one. This will tend to disappear after the beginning of the armed conflict, already in the mid 1960s. Where circulation occurs horizontally along a gallery, this duplication of access points has not always existed. Nevertheless, the examples found demonstrate formal and functional exploration, maturing over time, particularly in the work of Pancho Guedes.

In summary, we understand that the gallery on every floor, with distinct access points only in the vertical circulation, is adopted in buildings aimed for smaller apartments. Sometimes, apartments are situated on the edges of the ensemble with more rooms benefiting from three façades and a possible entry by private balcony that extends the gallery. As these dwellings are intended mainly for single residents, small or low income families, they do not justify the separation of circuits along the gallery.

The gallery on every second or third floor appears only in housing buildings with multi storey apartments, destined for larger families or higher yields. They embrace specialization of housing spaces, organizing social and service areas on the gallery floor and private areas on another level. In some cases, the distinction of general and service access is only maintained in vertical circulation. This situation is reversed in the examples of buildings with a double gallery, either on the same floor for simplex dwellings or on different floors or duplex or triplex apartments. They are intended for more economically privileged residents, requiring unequivocal separation of circuits. The treatment of the façades bears witness

to the evolution in adapting the gallery to the language of the ensemble, though in most cases, it applies to the rear façade. The contradictory and, therefore, singular example, is the building *Tap/Montepio*, where the general access gallery takes the form of a large cantilevered balcony on the main façade.

Finally, the exploitation of this metamorphic system circulation that is the gallery, is achieved in their adaptations, or simulations, “disguising” it with other spaces or circulation areas, either by ladder or the balcony around the courtyard.

Visiting the existing buildings in Maputo, we can observe that the gallery has earned its status as an outdoor living space. On the one hand, the apartments are appropriating a shared balcony, promoting interaction between neighbors; on the other hand, the street is transported into the building as the apartment becomes a house, a ‘villa’ almost, appropriated by the residents, either with customized paintings in the bays or by the façades that define the boundary of each house.

Notes

1. This paper is based on documentation acquired at Maputo's City Hall archives, aimed for an architecture PhD thesis developed by Susana Gomes at FAUP. The investigation lies on collective housing project's study, presented for municipal license. Documents (writings and drawings) were photographed from 164 projects aimed for “prédios de rendimento” (income buildings), between 1950 and 1968.
2. *Aposentamentos* is a former Portuguese word for Apartment, presented in Jorge Segurado's theme at the 1st Portuguese Architecture National Congress, titled “A solução vertical na habitação coletiva e os aposentamentos” (Vertical solution on collective housing and apartments).
3. “Remember the Moroccan window openings arranged like a pack of cards set up at right angles in the depth of the wall: the same sculptural and architectural results can be achieved with modern techniques.” Le Corbusier's writings about his travels to Morocco.
4. “The upper floors contain small flats turned to open galleries. Only the high level kitchen and bath windows open towards it. Rooms and living rooms communicate with the east side. This type of plans, widely developed in Europe several years ago, is admirably adaptable to Brazil's climate, for each apartment acquires the most complete and free ventilation.” Extract of author's description of architecture solution.
5. According to several widely published authors, such as Roger Sherwood (1978) or *Docomomo Italia Journal* (2010).
6. Since 1920 the city of Lourenço Marques has assisted the consolidation of its urban shape, increasing through developing plans its limits to suburbs. Existing public spaces have been rezoned, dignified in the 40s by the construction of remarkable public buildings. This results mostly from the creation in 1944 of the “*Gabinete de Urbanização Colonial*” (Colonial Urbanization Office), afterwards named of “*Ultramar*” (Overseas) that assures the architectural and urban designs to Portuguese colonies from the metropolis. In 1947 “the city launches itself definitely in the conquest of height with the construction of the *Palácio Municipal* and *Prédio Fonte Azul*.” (Alfredo Pereira de Lima, 1968).
7. Following the example of buildings in Portugal, these examples stand out the double circulation, by separating different accesses—main and service—developed at all typologies—single or multi-fam-



Figure 16. **Alberto Soeiro**, Tap/Montepio, detail from service elevation. Photo taken by Susana Gomes, April 2011/13

ily housing—, replacing the internal maid (at metropolis) by the native-born, pointing a colonial society. Only around the mid 60's, will the first projects appear that invert this condition, designing the circulation access with a single staircase.

8. Of all projects analyzed at the Municipal archive, Pancho Guedes' *Tonelli* (1957) is the first building over 10 floors (11). But other projects such as this appear more frequently only during the 60s.
9. "Varanda" (balcony) was the term commonly used in the drawing's legend to define gallery circulation.
10. P.C. nº 166/50, signed with authorship by Eng. Victor Barbosa da Silva Carvalho.
11. P.C. nº 108/51, same authorship, to be located at Av. da República, currently named Av. 25 de Setembro.
12. P.C. nº 189/59, designed for a mixed use building with 7 floors, located at Av. 24 de Julho with Av. Luciano Cordeiro.
13. P.C. nº 140/1953, to formerly named Av. Massamo de Amorim with Av. A. W. Bayley, currently Av. Mao Tse Tung and Av. Julius Nyerere.
14. P.C. nº 44/1964 located at old Av. Pinheiro Chagas, now Av. Eduardo Mondlane.
15. P.C. nº 50/1956 at Av. General Machado with Praça Mac Mahon (currently Av. Guerra Popular and Praça dos Trabalhadores), was initially designed for a mixed use program (housing and stores) with 4 floors. Currently the building is 8 floors and was changed to commercial and office use. This increase of height can be witnessed on the "blind" façade turned to Av. Guerra Popular, specifically on the different colors presented at the artistic panel's stones designed by Pancho Guedes.
16. P.C. nº 224/59 located at Av. 24 de Julho with Rua das Flores.
17. P.C. nº 43/1953, signed by engineers, does not reveal its architecture authorship. However, the graphic design of its drawings reveals the singular style of Pancho Guedes. The building is located at Av. Paiva Manso, currently named Av. Filipe Samuel Magaia.
18. P.C. nº 119/1956, at Av. Fernão de Magalhães with current Av. Samora Machel.

19. P.C. nº 312/58, at Av. General Machado with Av. Fernão de Magalhães.
20. P.C. nº 117/57, at former Miguel Bombarda with Av. Elias Garcia, now Av. Patrice Lumumba and Av. Vladimir Lenine.
21. P.C. nº 205/58, at Av. Fernão de Magalhães.
22. P.C. nº 52/1952, at former Av. Dr. J. Serrão, now Av. Emília Daússe. Signed by Eng. Vitale Moffa, offers the same particular graphic representation used by Pancho Guedes.
23. P.C. nº 102/55, at former Av. Pinheiro Chagas, now Av. Eduardo Mondlane. Signed by Eng. Luís Reis Costa, also presents evidence of Pancho Guedes architecture authorship.

References

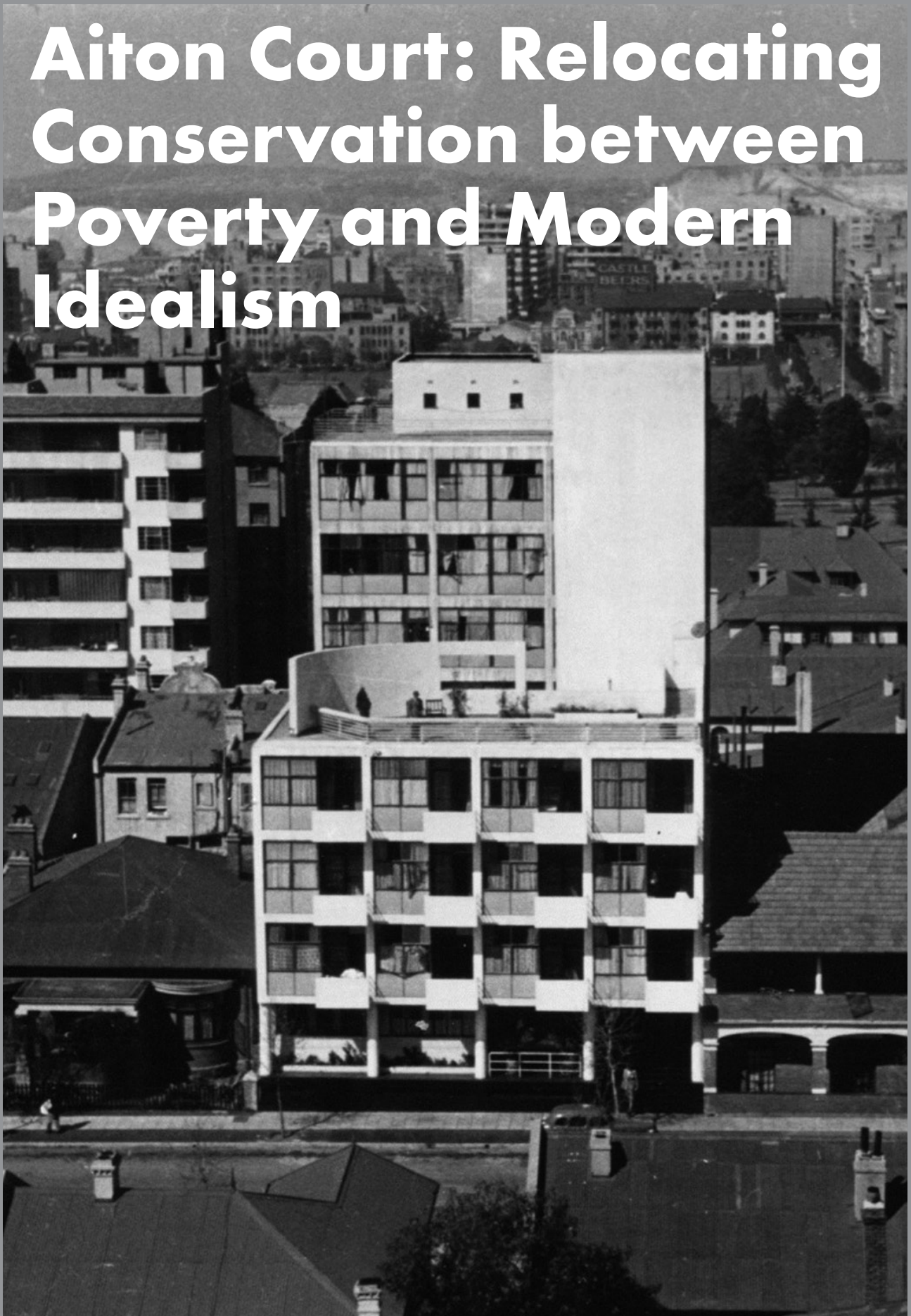
- 1.º Congresso Nacional de Arquitetura, Teses, Lisboa, OA, 2008 [1948].
- Curtis, William J.R., *Le Corbusier. Ideas and Forms*, Oxford, Phaidon Press Limited, 1986.
- Godwin, Philip L., Smith, G. E. Kidder, *Construção Brasileira. Arquitetura Moderna e Antiga 1652-1942*, New York, Museum of Modern Art, 1943.
- Sherwood, Roger, *Modern Housing Prototypes*, Harvard [1978], 2001.
- domomomo** Italia Journal, at <http://www.docomomoitalia.it/drupal/content/il-restauro-del-quartiere-di-justus-van-effen-rotterdam-michiel-brinkman-1922>, downloaded on 13/05/2013.
- Lima, Alfredo Pereira de, *Casas que fizeram Lourenço Marques*, Lisbon, Chiado Editora, 2013 [1968].
- França, José-Augusto, *A Arte em Portugal no século XX. 1911-1961*, Lisbon, Livros Horizonte, 2009.

Susana Gomes

Architect (FAUP, 2001), has co-worked in several private architecture offices since 2000 as a senior architect. Currently, she is developing the PhD Thesis at FAUP, under the theme "Paths to Modern housing in Mozambique".

Aiton Court: Relocating Conservation between Poverty and Modern Idealism

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Aiton Court, in Johannesburg, is a case study in how heritage and economics clash in economically constrained cities. This iconic and formally innovative Modern apartment block from 1937 is located in an area where the income levels of tenants are now very low. Although the building is protected by legislation, the viability of its restoration is being further tested by a rent boycott. The article covers the building's history, and questions how to approach its conservation differently, given the strong demand for housing at a cost level that would be excluded by purely market-led gentrification. We propose that locating conservation strategies in relation to the building's history and to other subsidies aimed at the public good may provide other routes to preserving Aiton Court.

By Hannah Le Roux, Brendan Hart and Yasmin Mayat¹

Aiton Court's History

Aiton Court is an iconic and early Modern apartment building in Johannesburg's dense suburb of Hillbrow [figure 1]. Designed by young South African architects Angus Stewart and Bernard Cooke in the mid-1930s, it reflects their exposure to the formal language of the CIAM architects through Cooke's lecturer Rex Martienssen, the leader of what Le Corbusier termed the *Groupe Transvaal* (Le Corbusier, 1935; Herbert, 1975). The design of minimal apartments also shows the influence of their fellow student and political mentor Kurt Jonas who had studied housing rights in Berlin. Images of this first major work, likewise, circulated within Modern circles, published first in the *South African Architectural Record* of 1938, and then the *Architectural Review*, *l'Architecture d'Aujourd'hui* and *The Modern Flat* (Yorke and Gibbert, 1948).

Aiton Court's compact design fits 40 units on a single, 50x100 foot (15,5 x 31m) property, in two parallel blocks separated by a courtyard, which is overlooked by the glazed stair tower and two access galleries [figures 2, 3, 4]. The roof of the front block is accessible as a solarium. The four and seven storied blocks are orientated north and staggered in height to allow sun into most living rooms. The building typology is transitional between early 20th century rooming houses with courtyards, and the gallery blocks that were to follow after 1945. The top floors contain rooms with shared ablutions and the lower floors have more modern studio apartments with a bathroom and a fitted kitchen area. The caretaker's flat was positioned at ground floor level to overlook the street and a generous entrance area. The building was well constructed with crisp plastered surfaces, modular steel

windows and projecting balconies with steel balustrades, painted largely in white but with an expressive palette in its details [figure 5].

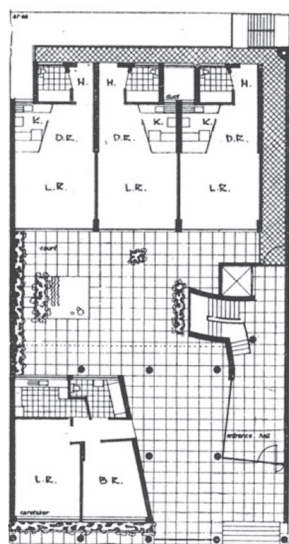
The building was built for commercial rental, so its Modern room norms, services and unelaborated finishes contributed to its relative economy. Nonetheless it was visually and spatially rich and welcoming. The building's entrance was raised up a half level to a platform edged by the western party wall which was painted a rich green color. The architect Herbert Prins, who lived there in the 1950s, said "It was a beautiful place. You came in through a red pivot door, that was usually open, and there was a fountain in the courtyard" [figure 6]. The rooms and apartments housed young, mainly single tenants, including artists [figure 7]. The only black residents were a few workers who were housed on the top floor of the rear block in small, set back rooms with tiny windows.

Between the time of construction and the present, the tenant demographics of Aiton Court changed as white middle class tenants left the inner city and poorer African immigrants and former township residents moved in. In the 1980s it was taken over by two tenants of South African Malay descent, who allowed the courtyard to serve as a meeting space for anti-apartheid activities, and for political exiles to stay clandestinely in the apartments. Until their death, the couple, as devout Muslims, managed it from their home in the caretaker's flat with often charitable intentions, using two apartments for a prayer room and feeding scheme. After passing into their daughter's possession the building was run remotely, and management problems emerged until, heavily in arrears, it was resold to a large property management company, Trafalgar.

Aiton Court in the Present

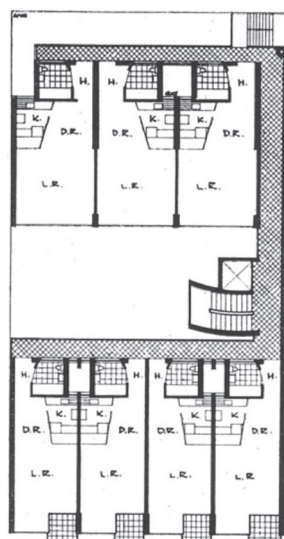
The purchase of Aiton Court was financed through the Trust for Urban Housing Finance (TUHF), an innovative finance company that provides loans for lower-cost housing projects in South Africa's inner city areas. Their

< Figure 1. Aiton Court in Hillbrow, Johannesburg, by Angus Stewart and Bernard Cooke, in 1937. Image courtesy of Julian Cooke.



GROUND FLOOR

2



TYPICAL FLOOR : FLATS

3



TYPICAL FLOOR : ROOMS

4



5



6



7

Figure 2. Ground floor plan.

Figure 3. First to third floor plan.

Figure 4. Fourth floor plan.

Figure 5. Street façade, 1937.
Image courtesy of Julian Cooke.

Figure 6. Courtyard, 1937.
Image courtesy of Julian Cooke.

Figure 7. Apartment interior, 1937.
Image from *South African Architectural Record*.

Figure 8. Street façade, 2012.

intention is to finance the renewal of the resource of tens of thousands of residential units in these areas, most of which were built between the 1930s and 1960s. These well located apartments provide a foothold in the city for people who were kept on the urban periphery during the years of urban segregation under apartheid.

The new owners set about painting the balconies red, their corporate color [figure 8]. They were unaware that the building, as a structure over 60 years of age, was protected from change under South Africa's National Heritage Resources Act (Republic of South Africa, 1999). When the alterations came to their attention, the Provincial Heritage Resources Authority stopped any work on the building until a heritage study and proposal had been approved. Working in partnership with the University of the Witwatersrand, the authors surveyed the building and began to prepare guidelines for restoration.

The challenges faced in the repair and conservation of Aiton Court can be broadly defined into the following categories of failure: maintenance, material, detailing and lifespan failure (MacDonald, 1997, 38). The major failures in the building relate to services and structural maintenance. The overcrowding of the building, particularly while hijacked and unregulated, has further stressed an already deteriorating infrastructure and services. This, along with failure of the waterproofing of the trafficable

surfaces of the courtyard and solarium and lack of general maintenance, has led to the corrosion of some of the steel in the reinforced concrete causing the spalling of the concrete work which could lead to long term structural deterioration if left unattended. The electrical installation of the building, having reached the end of its serviceable life, is unsafe and requires complete reinstallation.

Beyond these pragmatic needs, the opportunity offered by Aiton Court lies in the fact that, despite the severe neglect of the building, its external appearance has remained largely unchanged. With most surviving inner city contemporaries of Aiton Court similarly neglected or substantially altered, Aiton Court provides an opportunity to become a recognizable example of early Modern Movement in Johannesburg. Subsequently the restoration of the original external Modern color scheme was felt to be essential.

However, for the commercial property owner, explains Trafalgar's managing director Andrew Schaefer, the heritage value of the building is not of significance. Commercial viability is the motivation for all acquisitions. Schaefer elaborates that properties with perceived heritage value embody a great degree of uncertainty, with undetermined financial outlay and a potential "bottomless pit" of maintenance costs. As incentive for declaration and the conservation of heritage resources the city of Johannesburg currently offers a municipal rates and taxes rebate of up to 20% on declared sites, which is financially insignificant in comparison to the additional costs involved in restoration.

The funding of the restoration is further challenged by the socio-economic context of the tenants and their reactions to longstanding problems with the building. Schaefer explained that when a building is not financially viable, due to low or non-payment of rents, maintenance stops, creating a downward spiral which, in Aiton Court, resulted in the building being "hijacked" by frustrated tenants leaving a legacy of animosity between the new landlord and tenants. Evicting non-paying tenants is not simple, as housing rights and legislation make it necessary for good, alternative accommodation to be found (Tissington, 2011). As a result, Aiton Court's restoration is caught between two logics, that of social housing rights and that of market-driven gentrification.

Breaking the Deadlock

This research has pinpointed the tensions between tenant and landlord rights as the cause of Aiton Court's ongoing deterioration. Despite its obvious global significance as an iconic Modern design, and its important local history, the resources available to support heritage restorations are insufficient to stop its decay and restore



it. Raising rental income through gentrification, which would involve the eviction of existing tenants, is legally difficult and morally inappropriate. As a way of breaking this deadlock, it proposes that the conservation methodology expands to consider issues beyond its physical condition, to locate it in its history of use, its urban context, and a broader landscape of public subsidies. This research will in turn inform a strategy of critical conservation that proposes realistic and incremental renewals that do not exclude the possibility of a full restoration.

Three Contexts beyond Conservation

The first context is the historical record. Researching the building's use across history, especially through oral narratives, allows insights into those times at which the building worked well. At the outset, it was successful in drawing innovative tenants who appreciated the physical support of well serviced, affordable apartments, and their visual qualities. The cultural capital represented by the design may again be rewarded by a high quality restoration, but at the moment, the urban context and its rental levels deny this option.

However, the physical qualities of the public areas, the flow between public and private realms and the potentially attractive courtyard, as well as the social benefit offered by these spaces, can be restored at a lower cost. History also suggests that the tenant-centered location of the caretaker's flat supports better management. A trained, socially responsive caretaker could manage a social housing component in the upper floor rooms that could access further rental subsidies. Finally, the combination of such cheaper, communally serviced rooms and more independent apartments allows for tenants to move between these two housing options depending on their economic situation, so ensuring a longer stay within the same building and its community [figure 9].

The second context is the building's precinct, the Ekhaya Neighbourhood, which is an award-winning, socially driven neighborhood renewal project (The Housing Development Agency 2012). In its present state, Aiton Court brings down the appearance of the area and makes the adjacent buildings less attractive to tenants. The potential for its renovation to support this neighborhood improvement lies in the close physical relationship between the front apartments, roof terrace, entrance lobby and caretaker's flat and the street. If this set of relationships could be restored then the precinct as a whole would benefit.

The third context regards the funding sources and subsidies that may exist as an alternative to the small heritage rebates on offer. These include a tax rebate on building improvements in the inner city (The National Treasury, 2004), and a contribution by the Johannesburg

Development Agency of up to 70% of the capital costs of public space upgrade. The case needs to be made that the nominally private, but street-oriented spaces of Aiton Court would substantially improve the public realm.

Lastly, the carbon savings represented by the restoration of the building may qualify it for support by the Green Fund, a national initiative "that seeks to support green initiatives to assist South Africa's transition to a low carbon, resource efficient and climate resilient development path delivering high impact economic, environmental and social benefits" (Development Bank of South Africa, 2013). This funding could be applied in research and reinstating the many plants that the original design included, and so become a capacity-building showcase for inner city greening. It could also restore the front windows, replacing them with solar-responsive double glazing that would alleviate the daytime use of curtains and reinstate relationships between residents and the street.

Critical Conservation

Critical conservation is a strategy that imagines a staged renewal of a building that mediates between a realistic approach to what is possible and the ideal of total restoration, without stopping the possibility of such a return. The immediate needs in Aiton Court are for the restoration of basic services, and the protection of the envelope. But beyond this, the staging of restoration could be planned strategically, to take advantage of alternative subsidies to those available for heritage buildings.

The impact of the three strategies is illustrated in drawings that show the areas of the building that could be dealt with through three stages of restoration that might qualify for other areas of potential funding. The first image considers spaces in and beyond the building envelope that could be considered, and so renovated, as part of the public realm. The second image locates potential green surfaces that could be renovated via the Green Fund. The final image identifies the area of the building that could be managed as social housing for lower-income residents, so creating continuity in the tenant body and avoiding evictions [figure 10].

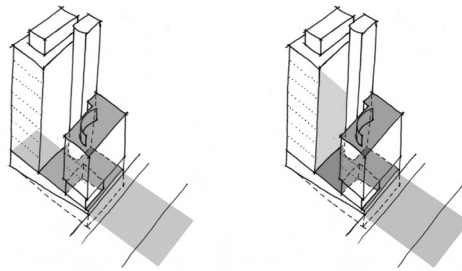
Conclusion

Although this is a single case study, many more inner city buildings, most less iconic but nonetheless valuable assets, are caught between economics and heritage [figure 11]. Getting Aiton Court's restoration right will have an impact on all of them. The interlinked issues around Aiton Court need not be antagonistic and ultimately destructive. Low-income tenants and this heritage building could, with sufficient research and alignment with existing funding initiatives, once again become compatible.



9

Figure 9. Stair tower, 2012.



10

Figure 10. Spatial strategies for renewal: the location of public spaces, green elements and social housing. Mayat Hart Architects, Johannesburg.



11

Figure 11. Hillbrow, Johannesburg, ca. 1960. Photo from Davids.

This achievement, by balancing social and physical environments would be in tune with the original ideologies behind Modern architecture. Towards this, conservation needs to be relocated into a broader but more nuanced public discussion, taking into account affordability, sustainability, history and incremental change.

Notes

1. School of Architecture and Planning, University of the Witwatersrand, Johannesburg (<http://www.wits.ac.za/>) and Mayat Hart Architects.

References

- Interviews with Rehana Rawat (2005); Yousof Rawat (2005); Herbert Prins (2005) and Andrew Schaefer (2012)
- Development Bank of South Africa, 2013. Green Fund: 2nd request for proposals. D. o. E. Affairs. South Africa, Department of Environmental Affairs.
- Herbert, Gilbert, *Martienssen and the International Style: The Modern Movement in South African architecture*, Cape Town–Rotterdam, AA Balkema, 1975.
- Le Corbusier, *Le Corbusier et Pierre Jeanneret-Oeuvre complète de 1929-1934*, Zurich, H. Girsberger, 1935.
- MacDonald, Susan, "Authenticity is More than Skin Deep: Conserving Britain's Postwar Concrete Architecture", *APT Bulletin* 28 (4), 1997, 8.
- Republic of South Africa, 1999. National Heritage Resources Act, no 25. G. Gazette.
- The Housing Development Agency, 2012. Regenerating a neighbourhood: useful lessons from eKhaya. Case Studies. T. H. D. Agency. Johannesburg, The Housing Development Agency.
- The National Treasury, 2004. Urban Renewal Tax Incentive. T. P. Directorate. South Africa, South African Revenue Services.

Tissington, Kate, *A Resource Guide to Housing in South Africa 1994–2010*, Johannesburg, Socio-economic Resource Institute of South Africa (SERI), 2011.

Yorke, F. R. S.; Gibberd, Frederick, *The Modern Flat*, London, The Architectural Press, 1948.

South African Architectural Record, 1938.

The Architectural Review, 1937.

L'Architecture d'Aujourd'hui.

Hannah Le Roux

Teaches, practices, curates and writes about architecture. She is an academic at the School of Architecture and Planning of the University of the Witwatersrand. As an architect in practice, she has worked on private and public projects including consulting on the redesign of public space in Alexandra and Johannesburg's inner city. Her current research, "Lived Modernism", is based on the observation of change in time of Modern spaces, and proposes and maps designerly practices that catalyze the social appropriation of space.

Brendan Hart

Obtained his architectural degrees at the University of the Witwatersrand and co-founded Mayat Hart Architects, an architectural and heritage consultancy. He teaches at the University of the Witwatersrand and studied a Masters of Philosophy in the Conservation of the Built Environment through the University of Cape Town.

Yasmin Mayat

Qualified as an architect at the University of the Witwatersrand after completing a BSc at the University of Cape Town. She co-founded Mayat Hart Architects where she combines her interest in heritage with an interest in the history and identity of the diverse communities of Johannesburg. She also studied a Masters of Philosophy in the Conservation of the Built Environment through the University of Cape Town..

Other Modernisms: Recording Diversity and Communicating History in Urban West Africa

62



Seminal publications on West African Architecture such as Kulterman's *New Architecture in Africa* and the Architectural Review's *New Commonwealth Architecture* came to define the African Modern Movement as it was understood internationally. This paper explores the specific context within which this new architecture developed and the actors that helped to shape it. Vaughan-Richards' Ola-Oluwakitan House and Cubitt's Elder Dempster Offices are analyzed in terms of their engagement with the socio-cultural context in which they were conceived, the site-specific Modernity of the former contrasting the corporate International Style response of the latter.

By Ola Uduku

Lagos is the site of the Elder Dempster Offices and the Ola-Oluwakitan Cottage, designed respectively by James Cubitt and Partners, and Alan Vaughan-Richards¹ in the 1960s. The Nigerian economy was booming at the time with the onset of crude-oil revenues. On gaining 'independence' from Britain in 1960, Nigeria initiated several grant-aided development projects, such as the secondary schools project funded by IDA/World Bank, the Kaduna Masterplan, or the UNESCO-funded public libraries project in Eastern Nigeria.²

As the economy flourished, developments in the built environment were called for to accommodate emerging activities. A number of new Modern offices were built including those for the Cooperative Bank of Western Nigeria, Barclays Bank, and Chase Manhattan Bank, Elder Dempster's Head Office, the Nigerian Post Authority, and Independence House. Furthermore, premier leisure facilities were built such as the Bristol and Ikoyi Hotels. Lagos thus became a showcase for a new post-colonial architecture.

Most architects involved in constructing Modern Lagos were expatriates, working in British architectural practices with satellite offices in Nigeria or in the Ministry of Works. In the 1960s there were few indigenous Nigerian architects, but these few, including Nigeria's first female architect, made a significant contribution to the architectural landscape of Lagos. Amongst the better known were Olumide Olumuyiwa, Alex Ekwueme, Frank Mbanefo, Kola Bankole, and subsequently the British-born Alan Vaughan-Richards, who settled in Nigeria in the 1950s and whose œuvre represents the breadth of the indigenous architectural style.³

Olumiyiwa, possibly the most prominent of this generation and most noted for his Crusader House offices in Lagos, was central to the establishment of the Nigeria

Institute of Architects (NIA). He sustained debates about the appropriateness of Western architectural education for the tropics with fellow architect Adedokun Adeyemi.⁴ Paradoxically however, it is Alan Vaughan-Richards' body of work that shows a clear and continued development from his pre-Nigerian independence architectural work at the Architects Co-Partnership (ACP), where he was first employed, to the evolution of a hybrid architectural style incorporating cultural and architectural influences of Western Nigeria in his later projects. The Ola-Oluwakitan House as well as his own residence are amongst the best examples of this development.⁵

Although the influence of British architects in the 'post-colony' context did allow for the interpretation of the brief period of Modernity as a transitional stage from colonialism and its appendages, to a quasi neo-colonial African approach to design, as evidenced in the more region-specific examples of Modern architecture of the time. In the less accomplished cases the term "Modern" described the slavish copying of the 'International Modern' style, with no reference to context, culture or local socio-economic conditions.

Elder Dempster Shipping Lines Head Office

Prior to the construction of the Lagos Office, the Elder Dempster shipping line had already commissioned Cubitt to build an office for their operations in Sierra Leone, completed in 1962.⁶ These offices were much smaller and seem to have been an early prototype for Lagos. The architect's attention and concern for the site is demonstrated in the diagrammatic analysis and building report for the Freetown planning office. The innovative use of pre-cast sections as mullions and shading devices for the glazing are particularly noteworthy. The sculptural approach to structure is revisited in the Lagos office building. Despite the prominence of the Lagos site, overlooking the historic port, it presented several limitations, namely the presence of an existing building on one side and Porto Novo Street, a main thoroughfare on the other. The design brief called for a distinctive office building that would serve both as

< Freetown Elder Dempster Shipping Lines Head Office completed in 1962 by **James Cubitt**.

a headquarters and as a booking office for Elder Dempster's shipping activities in Nigeria. It was also to provide its owners with speculative rental office space [figure 1].

The evolved design also had to overcome the ground conditions of the site for most of the natural ground surface of Lagos Marina was and remains below sea level. The building is recorded as one of the first in Lagos to have used pile foundations in order to assure the structural stability of the medium sized high-rise (ten-storey) block that was built [figure 2]. The building's structure comprises a customized ground floor with the entrance and shipping line offices and rental office space above. Designed around the structural columns, the floor spaces above the ground floor are open-plan, with services fitted within the floor structure above and centrally alimented from a roof top plant room. The semi-basement car park allows for the evacuation of water as the low-lying Marina area floods periodically. The upper floor offices are shaded by means of the Modern brise-soleil reinterpreted by the architect, whereby the form simultaneously serves as a billboard to inscribe Elder Dempster's initials. James Cubitt's influence as a sculptor comes to the fore with the design of the sculpted funnel form in an echo to Le Corbusier's Ronchamp at roof level.⁷ The raised ground floor booking hall was conceived as the *pièce de résistance*, with a circular drum showing a sinusoidal projection of the world and its time zones behind its booking desk. This served as the visual and symbolic representation of the extent of Elder Dempster's worldwide shipping empire.

The offices appeared to have been conceived to work in tandem with their tropical setting, using shading devices and being elevated above the ground thanks to a system of structural columns. On closer inspection however, the building's trademark modern sculpted funnel has been used to screen the air-conditioning machinery required to provide the offices with central air conditioning. Furthermore, the depth of the building in plan implied that much of the office space required artificial lighting. Operationally therefore, the building opposed many of the principles of tropical architecture.

By the time the offices were completed, the era of the passenger ship was coming to an end. Up until the mid 1960s, the company had an unchallenged international network of ships crossing the world. Prior to air travel, and with shipping being primarily associated with container trade, the glamour of travel was played out on luxury liners carrying expatriates and the *nouveau riche* to and from West Africa by passenger boat. *M.V. Aureol*, Elder Dempster's flagship mail-boat, took both missionaries and government functionaries to British West Africa in the last days of the 'Empire', as well as the newly re-

turning elites from their educational sojourns abroad.⁸ The location of the shipping offices on the shoreline of the Lagos Marina, ensured the building's incorporation into the Lagos skyline, offering the first glimpse of the city to passengers and ships coming into the Lagos lagoon. Furthermore, the sculpted funnel structure at its apex figuratively and metaphorically conveyed Elder Dempster's eminence in international shipping and travel.

With the introduction of cheap, regular airlines from the mid-1960s, the transportation of people and mail switched from ocean liner to airplane. The *Aureol* made its last voyage in 1974. Container shipping in Nigeria became commonplace from the 1970s onwards, with the development of purpose-built roll-on roll-off shipping facilities at Tin Can island. The Marina was also expanded in the mid-1970s, and is now crossed by the motorway network, with only visiting navy ships occasionally setting down at the former moorings.

The Elder Dempster building thus initially represented the epoch of Modern architecture in West Africa. However, whilst its outward appearance seemed to follow the conventional Modern charter styling, on closer inspection, this purism was compromised by the introduction of air conditioning and the attention paid to aesthetics at the expense of a more environmentally rational design for the office spaces, sufficient in day lighting and shading.

Today, the Elder Dempster building is imperceptible amongst taller office blocks on the skyline. Its ownership changed hands when the shipping line ceased to operate and the offices are presently owned by a private property company. The structure has a limited conservation status and has been infrequently cleaned and painted externally. Its distinctive funnel façade nevertheless remains visible within the indifferent landscape downtown Lagos, dominated by 1980s office buildings.

The Ola-Oluwakitan Cottage

Translated as "God has given us his blessings in abundance", the Ola-Oluwakitan Cottage is one of the most significant works of Alan Vaughan-Richards, attracting both publicity and critical comment.⁹ Built on a prominent site in Ikoyi, Lagos, the walls and exterior form of the house dominate the view as one approaches. The layout and design of the residence are restricted to the size of the plot, and there is relatively little room for maneuver in relation to optimal ventilation and lighting. Its form and finishing however, show considerable originality and creativity in their execution [figures 3, 4].

The non-rectilinear design of the façades bears witness to Vaughan-Richards' experimentation with form, going beyond the conventions of Modern tropical buildings in the 1950s and 60s, whose façades adhered to

the rationalist sobriety of the CIAM canon. The interiors however remain conventional in terms of design and layout, with a concession towards more open-plan, flexible living. The use of artists trained in the traditional crafts of West Nigeria in the design and realization of the façades as well as the interiors of the dwellings contributed to the indigenous character of the building. The sculptors Francis Idehen and Bruce Onabrakpeya were employed to develop the sculpted entrance area, while a Lagosian craftsman executed the name of the building on the façade using lettering that is commonplace in the Brazilian 'Aguda' part of Lagos [figure 5].

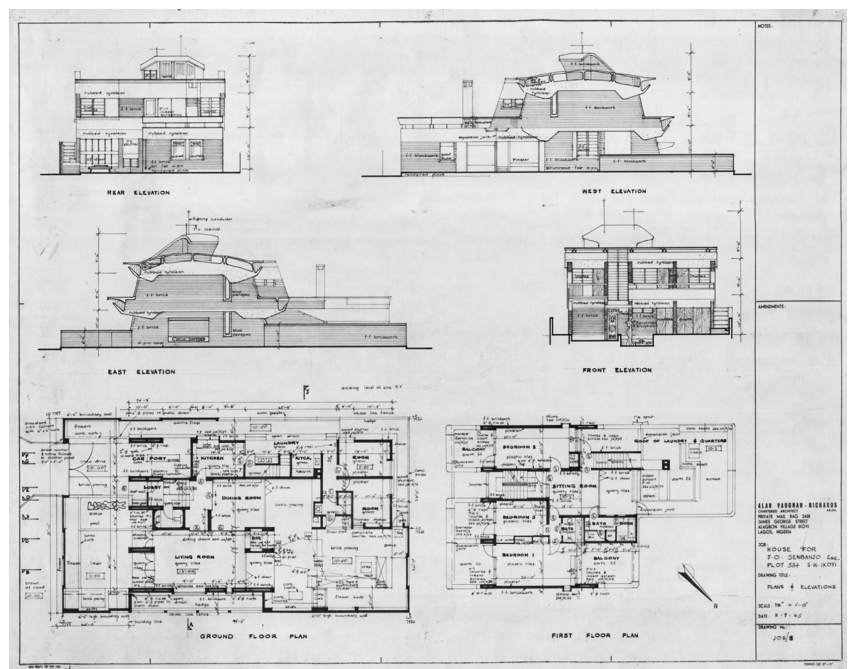
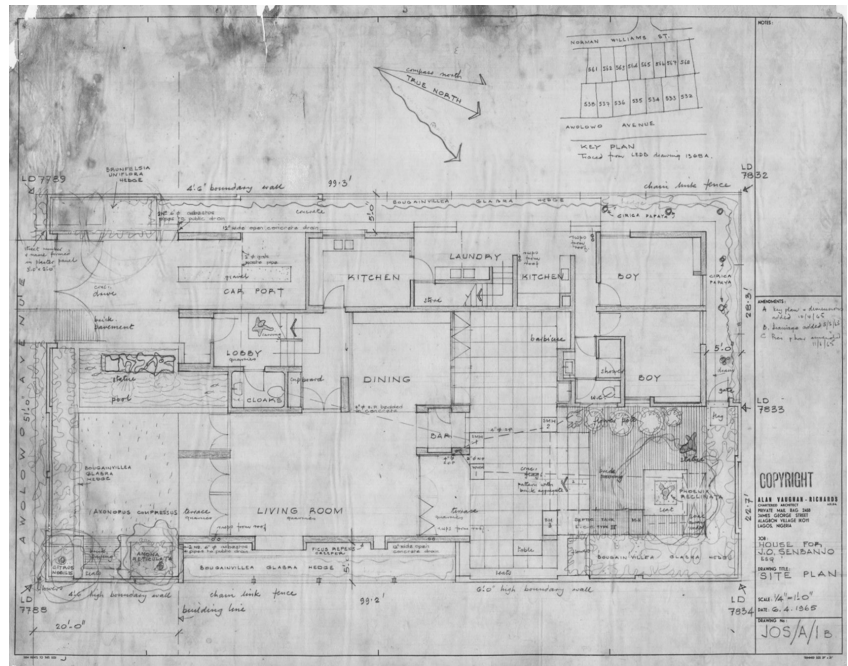
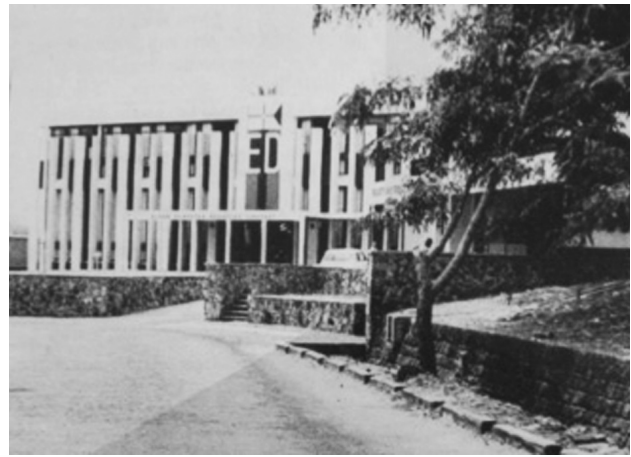
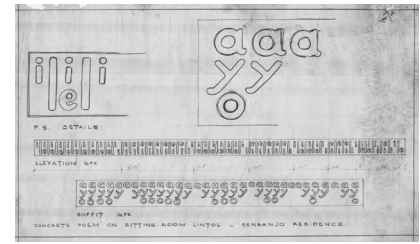
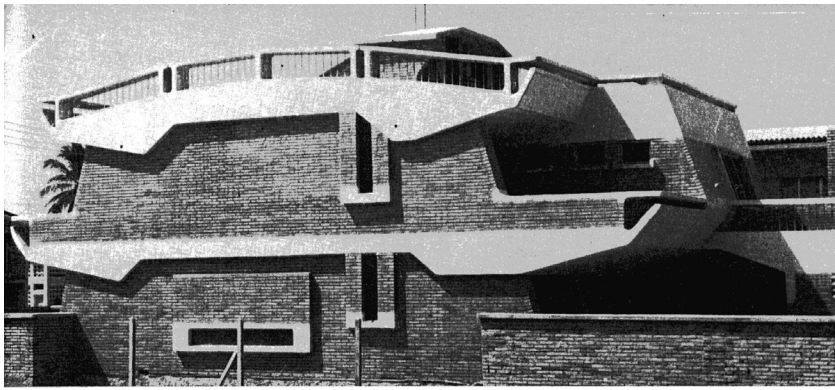


Figure 1. Lagos Elder Dempster Shipping Lines Head Office in the 1960s by **James Cubitt**. Photo from *West Africa Builder and Architect*.

Figure 2. Freetown Elder Dempster Shipping Lines Head Office completed in 1962 by **James Cubitt**. Photo from *West Africa Builder and Architect*.

Figure 3. Floor plan of the Ola-Oluwakitan Cottage by **Alan Vaughan-Richards**. Courtesy of Ms Remi Vaughan Richards, Alan Vaughan-Richards Archive.

Figure 4. Drawings of the Ola-Oluwakitan Cottage by **Alan Vaughan-Richards**. Courtesy of Ms Remi Vaughan Richards, Alan Vaughan-Richards Archive.

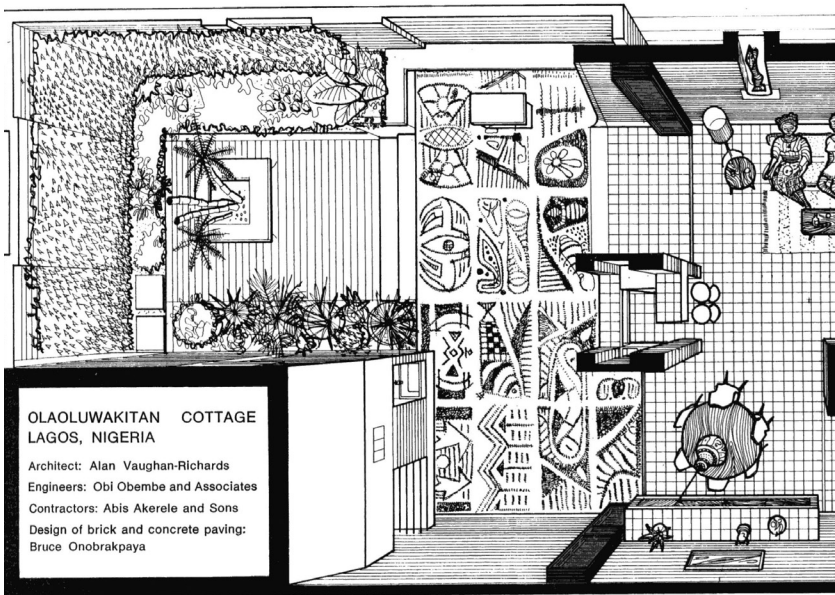


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Figure 5. A Lagosian craftsman executed the name of the building on the façade using lettering that is commonplace in the Brazilian 'Aguda' part of Lagos.

Courtesy of Ms Remi Vaughan Richards, Alan Vaughan-Richards Archive.

Figure 6. Drawings and image of the Cottage in *West Africa Builder and Architect*, 1966.



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The metallic mesh screens that represent stories from Yoruba mythology and the carved wooden floors contribute to an "African aesthetic". The materials employed within the house such as hardwoods and textiles were almost exclusively of local provenance too. Notably, an article on the building in the major West African architecture journal of the day *West Africa Builder and Architect* emphasizes the architect's choice of local craftsmen and suppliers [figure 6]. However, despite these abundant allusions to local culture, the incorporation of the word 'Cottage' in the building's appellation and the clearly Western lifestyle that the interior has been designed to embrace, point to the hybrid nature of Vaughan-Richards' oeuvre, whereby the indigenous is juxtaposed with the universal vocabulary of the Modern Movement. The Olaoluwakitan Cottage, is thus native in appearance and

Modern in its spatial layout and urban disposition, typical of 1960s Ikoyi.¹⁰

It is argued that the resultant design articulates the architect's will to differentiate himself from the new International Style. Significantly, less than a decade before its construction, Lagos was still a colonial outpost, where colonial style was seen as progressive.

These case studies illustrate the multi-faceted nature of Modern architecture in Nigeria. Whilst most architecture of the era was and could still be identified and labeled as Modern, the most successful buildings the movement produced in West Africa evidenced a reinterpretation of indigenous architecture rather than a *tabula rasa* on local history and tradition. James Cubitt and Partners was both prolific and groundbreaking in its work. Although the firm has been justly criticized for placing commercial

profit and commissions before architectural creativity, Cubitt's built oeuvre clearly demonstrates his commitment to a tropical Modern vision with particular emphasis on building orientation, shading and cross-ventilation, as well as the functional distribution of spaces.

Furthermore, despite the more corporate character of the office, Cubitt and his associates did on many occasions engage the services of local artists to give their buildings, particularly commercial ones, an exotic aspect be it African in reference or other, using murals, engravings or sculpture.¹¹ The resultant African-Nigerian aesthetic nevertheless tended to remain a purely visual gesture without functional implications.

Vaughan-Richards, besides collaborating for a period with the Nigerian architect Alex Ibru, worked nearly exclusively as a sole practitioner. He did however develop a number of collaborative alliances with artists and writers, including Kunle Akinsemoyin, with whom he wrote and illustrated *Building Lagos* for the 2nd Festival of African Arts and Culture (FESTAC) in 1977.¹² The originality of Vaughan-Richards' work is arguably best perceived in his residential projects, where the architect was not burdened with the task of pleasing a corporate client. Vaughan-Richards was unusual in setting up and running his practice in Nigeria rather than carrying out most of the design work in the UK with only skeleton staff offices on site, as was the norm at the time. Arguably his marriage into an established Nigerian family must have precipitated his immersion into African culture and the desire to reinterpret the Modern discourse within the Nigerian context.

Indigenous Nigerian architects contributed little to the evolution of the indigenous Modern style. The first local Nigerian architects, including Ekwueme, Bankole and Olumuyiwa, were mainly trained in the UK and did not begin to practice until the late 1950s.¹³ It would nevertheless be wrong to suggest that Nigerian architects did not contribute to architectural debates or that the few that were in practice did not have their work acknowledged. Olumuyiwa's Crusader House, mentioned previously, received significant attention in Kulterman's *African Architecture* series, and has more recently been critically reassessed.

Ekwueme set up the largest indigenous practice in the 1960s, gaining a number of significant government commissions including the design of the nationwide Federal Government Colleges, designed and planned with UNESCO-IDA funding. He also designed the infrastructure for the now-defunct national airline, Nigeria Airways, comprising offices and airports throughout the country. His oeuvre clearly challenges the view that the early body of buildings by local architects was less architecturally

impressive than the production of the expatriate teams of the day. Ekwueme's hospital for the Nigerian Railway Corporation in Lagos as well as Olumuyiwa's aforementioned Crusader House indeed received critical mention.¹⁴

The recognition given to the few Nigerian practices involved in building Modern Nigeria was important for socio-political reasons. Nigerian architects were amongst the first African architects to compete and produce architecture on the international stage. Their work, though possibly less critically challenging than the expatriate-designed commissions, made clear that a new African style was emerging. The visibility of their work was also crucial to the growth of the local architectural profession in Nigeria and ultimately in sub-Saharan Africa. The lucrative nature of architectural practice in West Africa in the 1950s and 60s, and its time commitments, however meant that this new generation of African architects made limited contributions to the development of architectural education in West Africa, which remained in expatriate hands until the 1970s. This might explain the lack of development of an indigenous post-Modern architectural style on the subcontinent.

This paper's premise is that West Africa, specifically Nigeria, was a prime site for International Style Modern Movement buildings with a specific tropical flavor from the late 1950s onwards. However, there was a distinct other, more hybrid Modern style that began to emerge in the early post-'independence' era, championed, in Nigeria's case, by the architect Alan Vaughan-Richards, who promoted an exploratory and localized approach to the production of Nigerian architecture.¹⁵ Noteworthy is also the contribution of unsung local Nigerian architects, whose work, though less architecturally interesting than the "AA-associated group" comprising of Cubitt, Fry and Drew, ACP and others who dominated much of West Africa's Modernity, was fundamental in the establishment of the profession and its identity in an emergent, culturally independent Nigeria.

Whilst this move to produce a distinctly 'other architecture' was short-lived in Nigeria, and much of West Africa, the Ola-Oluwakitan House designed by Vaughan-Richards in 1964 serves as a vivid embodiment of this will for stylistic differentiation. Gillies Reyburn's Drama Centre in Accra (1966) and the collaboratively produced Anglican Cathedral in Onitsha (1966), supervised by the British Architect Richard Nixon, are further examples of this ephemeral movement.

So why was this differentiated Modernity, of such originality and authentic cultural appeal, so short-lived? A number of factors arguably contributed to this. Firstly, the hybrid nature of the construction materials used required

the support of an indigenous building industry. Despite there being a local building research institute in Lagos, it remained a branch of the British based Garston research establishment, which, in the 1950s and 1960s, was not concerned with research on materials from a cultural perspective. The elements used by Vaughan-Richards in the Oluwakitan Cottage were custom made and never reproduced on a mass scale.

The nature of society in the early 1960s also favored its albeit brief development. The newly attained 'independence' of most of West-Africa, in the early 1960s and the short-lived economic strength of countries like Ghana and Nigeria meant that the continent's local elites, could and did show their identity through the profusion of expressed and lived culture. The local music and textile industries flourished and were accessible to all citizens. The elite could furthermore inhabit this new independence-driven culture by commissioning uniquely designed residences in Lagos and beyond. There was also the initiative to produce a cultural centre, though never completed, as well as new housing projects recalling the 1952 CIAM-inspired vision.¹⁶ Architect Olumuyiwa's proposal for the cultural centre was unfortunately never built and aside from Max Lock's Kaduna Plan, most of the housing schemes were Western imports taking only passing note of cultural requirements and perception.¹⁷

Finally, as Vaughan-Richards had eloquently discussed in his paper on the "new architecture generation", there were few schools of architecture in Nigeria.¹⁸ Those that existed received very little support in developing a body of indigenous reference material, despite the efforts of architects like Charles Cockburn to set up a library at the Ahmadu Bello University School of Architecture in Nigeria, or the AA-school approach introduced to the Kumasi School by John Lloyd, Max Bond, Lutz Christians et al.¹⁹

The practicing local architects, who arguably ought to have played a major role in the development of architectural education, seemed constrained by the demands of architectural practice. Olumuyiwa however, founding member and president of the NIA sought to ensure that the organization acted both as a legal and socio-political body giving Nigerian architects access to the lucrative architectural commissions of the period. Ekwueme served as the president of the NIA between 1965 and 1968.

The demise of the traditional Modern project could be explained along the same lines as the decline of Nigeria's 'differentiated Modern'. Having received the same training as the expatriate practitioners, local architects were less committed to indigenization, and more influenced by global trends. Cubitt went on to design major University

campuses in Malaysia and in Libya, whilst Vaughan-Richards' former practice ACP, designed schools in Algeria and other parts of North Africa, until the untimely death of its founder, Leo De Syllas in the late 1960s.

It is argued that Cubitt's Elder Dempster offices illustrate the transition from tropical Modernity to the corporate style, as air conditioning needs took on a prominent role in the design and the global image of shipping was of greater importance than the environmental conditions of the building's location. Furthermore, the standardization of construction materials and methods, as foreseen by the use of piling technology in Cubitt's office building, might be considered as a key factor in the development of a globalized corporate architecture that prevailed from the 70s onwards.

It would appear that by the end of the 1960s, the CIAM-inspired tropical Modern Movement had had its day. By the mid to late 1970s, architectural design was dominated by a more globalized architectural style. Western lifestyles had become widely mediated through publicly accessible television, print and other media.²⁰ FESTAC, hosted in Nigeria in 1977, had as its centerpiece a Bulgarian-designed auditorium with an appliqué of African sculpture on its exterior, while the associated housing planned as a Lagos suburb, 'Festac Village', was designed by European planners with limited local consultation.²¹ Nigeria's new capital city, Abuja, commissioned at the same time and designed almost exclusively by foreign consultants, has been labeled a tropical Milton Keynes, working but bearing little relation to its cultural and environmental landscape.²²

Drawing on the above-mentioned cases, one can conclude that Nigeria's Modern period was unique and short-lived. It has been particularly difficult to record this significant part of its architectural past for unlike vernacular architectural forms that can be archaeologically preserved, tropical Modern buildings have a recent history, and remain in full use. Although Nigeria does have a National Commission for Museums and Monuments, the concept and idea of listing is less commonplace and rigorous than in the West.²³ Furthermore, the environmental conditions in West Africa have rendered much print-based documentation, such as ink line plans and reports, useless due to the effects of heat moisture and insects. Many buildings that still exist have been adapted to accommodate changes of use, or were in some cases thoroughly redesigned.

With digital technology, the architectural history of Nigeria and Sub-Saharan Africa in general can be recorded and archived. Such is the objective of the Alan Vaughan-Richards Archive Project, which seeks to develop a non-perishable record of his key buildings, ac-

cessible to both researchers and students of this period in Africa's architectural history. The project is thus based on the premise that preservation does not have to be physical, the digitized nature of the archive ultimately being more accessible and manageable than the remaining buildings whose state and functions are inherently subject to change.

Notes

1. Throughout this paper, unless otherwise indicated, the main reference sources for both Elder Dempster's offices and Ola-Oluwakitan Cottage are from the journal *West Africa Builder and Architect*, specifically vol.4 n° 6, 1964, 110-113 and vol. 7 n° 2. Also see Okoye I. S. *Architecture, History and the Debate on Identity in Ethiopia, Ghana, Nigeria and South Africa*, Journal of the Society of Architectural Historians, vol. 61 n° 3 September 2002, 381-396, who notes that Ola-Oluwakitan House is now a restaurant and under new ownership.
2. For more on the IDA project see editorial in *West Africa Builder and Architect*, also I am indebted to John Godwin for allowing me to access his files on the project in Lagos in 1992. For the Kaduna masterplan see Lock M. and partners, *Kaduna 1917 1967 2017: a survey and plan of the capital territory for the government of Northern Nigeria*, London, 1967, and for the history of public libraries in Nigeria see Encyclopedia of Library and Information Science, vol. 33, Libraries in West Africa, 9, 10 and Emjorho D. *Public Library and Nation Building*, *Library Management*, April 2005 vol. 26 issue 3, 36-43 respectively.
3. Three of these are featured in Udo Kulterman's second volume on African Architecture, *New Directions in African Architecture* (tr. Maas), London, 1969. Olumuyiwa is first quoted as contributing to the conference on Tropical Architecture hosted at the AA in 1953, co-organized by Otto Koenigsberger (*Conference on Tropical Architecture*, London, 1954).
4. See Le Roux's paper "The Networks of Tropical Architecture", *Journal of Architecture*, September 2003, 337-354 for a more detailed discussion of Adeyemi.
5. Plans and a description of Vaughan Richards' house can be found in "House for an Architect", *West African Builder and Architect*, vol. 6, n° 1, 1966, 2-6.
6. Located in Freetown and completed in 1962, this was a one-floor office building with rental accommodation and parking onsite. See "Elder Dempster Offices", *West Africa Builder and Architect*, vol.3, n° 6, 109-110.
7. James Cubitt (1914-1983) was an influential member of the pre-war AA set, he saw service in Burma during WW2, and set up JCP with partners Fello Atkinson (1919-82), Stefan Buzas (b.1913) and John Maitland (1918-1969). From a family of builders he studied at Oxford and then at the Architectural Association. He was both an architect and a practicing sculptor.
8. For more textual narrative on journey by sea see both Achebe's "No Longer at Ease" and Okoro's "Dr Amadi's Postings". The history of the M.V. Aureol, launched in 1951, final voyage in 1974, and finally melted in India for scrap metal in 2001, is fascinating in itself.
9. His other notable buildings include Braithwaite House (*West African Builder and Architect* vol. 4, n° 5, 1964, 100-102) and his own house (*West African Builder and Architect* vol. 6 n° 1, 1966, 2-8, and Hannah Le Roux, "Post-colonial Architecture of Ghana and Nigeria", *Architectural History*, vol. 47, 2004).
10. It should be noted however that in a 1966 *West African Builder and Architect* editorial, the unrestrained design of houses in South West Ikoyi is berated as spoiling its planning so this originality of design was by no means always welcome.
11. This carried on up until the 1980s with their banking hall and offices

building at n° 54 Marina, also on the same street in central Lagos, which has cowrie shells and murals in its main banking hall.

12. Akinsemoyin, Kunle; Vaughan-Richards, Alan, *Building Lagos*, Lagos, F&A Services, 1977.
13. Foyle, A. M. (ed), *Conference on Tropical Architecture*, 1953, a report on the Proceedings of the Conference held at University College, London, March 1953, Unwin London, 1954.
14. Kultermann, Udo, *New Directions in African Architecture*, Braziller Incorporated, 1969
15. Vaughan-Richards, Alan, "Architecture, the New Generation", *West Africa Builder and Architect*, vol. 7, n° 1 and 2, 1967.
16. See Grove online, 2006 *Art and Modernism*.
17. See Lock, 1966 and compare this with the Kano Plan (Trevallion, 1960) and the later Festac Village (1977) Satellite Town (1979) and Abuja Masterplan (1983-to date)
18. See footnote 16
19. Cockburn, C. "Educating the Missing Man" *West African Builder and Architect*, vol. 6, n° 2, 1966 and the AA Journal for more on the Kumasi school.
20. This was the case in most of Africa, except South Africa where the Nationalist Government censored all media, and television particularly was only broadcast in the late 1970s.
21. Apter, A, *The Pan African Nation: Oil and the Spectacle of Culture in Nigeria*. Chicago University Press Chicago, 2005.
22. See Federal Capital Development Authority (FCDA) Masterplan, Lagos, 1979.
23. A small independent group named 'Legacy' has however been set up in Lagos, which works to preserve the architectural heritage of Lagos and includes amongst its founding members the architects John Godwin and Gillian Hopwood.

References

- West Africa Builder and Architect*, specifically Vol.4, n° 6, 1964, 110-113 and vol. 7 n° 2.
- Okoye, I. S., "Architecture, History and the Debate on Identity in Ethiopia, Ghana, Nigeria and South Africa", *Journal of the Society of Architectural Historians*, vol. 61, n° 3, September 2002, 381-396.
- Emjorho D., "Public Library and Nation Building", *Library Management*, April 2005, vol. 26, issue 3, 36-43.
- Lock M. and partners, "Kaduna 1917 1967 2017: a survey and plan of the capital territory for the government of Northern Nigeria", London, 1967.
- Kulterman, Udo, *New Directions in African Architecture* (tr. Maas), London, 1969.
- Le Roux, Hannah, "The Networks of Tropical Architecture", *Journal of Architecture*, September 2003, 337-354.
- Akinsemoyin, K.; Vaughan-Richards, A., *Building Lagos*, Lagos, 1977.
- Foyle, A. M., (ed), *Conference on Tropical Architecture*, 1953, a report on the Proceedings of the Conference, held at University College, London March 1953, Unwin London, 1954.
- Vaughan-Richards, A, "Architecture, The New Generation", *West Africa Builder and Architect*, Vol. 7, n° 1 and 2, 1967.
- Apter, A., *The Pan African Nation: Oil and the Spectacle of Culture in Nigeria*, Chicago, Chicago University Press, 2005.

Ola Uduku

Reader in Architecture at the Edinburgh School of Architecture and Landscape Architecture (ESALA). She holds a British Academy Small Grant for the Alan Vaughan-Richards Archive Project to set up a digital and physical archive on Modern West African Architecture. A member of **docomomo**, she is also a member of ArchiAfrika, a non-profit organization dedicated to linking architectural research and teaching networks in Africa with Europe and further afield. She will be the Academic Host for the 2013 'African Perspectives in Architecture' conference in Lagos in December.

Otto Koenigsberger and the Course on Tropical Architecture at the Architectural Association, London. Some Notes on the Portuguese Context

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Otto Koenigsberger is considered a pioneer in researching specific models and technical solutions for architecture and planning in the tropics. Educated within the core of the European Modern Movement, under the mentorship of Hans Poelzig, Bruno Taut and Ernst May, Koenigsberger moves away from the ideal and expressionist realm to the real and specific context whilst working in India. This non-western experience triggers an interest in developing countries, mainly tropical ones. In 1954, Koenigsberger conceives a new course on Tropical Architecture at the Architectural Association in London, followed by a great number of architects, such as the Portuguese Luís Possolo, António Seabra and Schiappa de Campos, who would apply their learning in the countries of “Portuguese Africa”, as it was formerly known.

By Jorge Figueira and Bruno Gil

The path of Otto Koenigsberger (1908–1999) is an eloquent example of the challenge that the methodologies and the agenda of the Modern Movement faced at the onset of the 20th century and within non-western contexts. Koenigsberger challenges the boundaries of Modern universalism with the introduction of anthropological, social and technical concerns.

Koenigsberger graduated from the *Technische Hochschule* in Berlin, where he studied under Hans Poelzig, Bruno Taut, and eventually Ernst May.¹ The polarity, as described by Rhodri Windsor Liscombe,² between an approach determined by a desired connection between architecture and industry and an expressionist path, where history is a given, is evident in the work he carries out in India between 1939 and 1951, having fled Berlin in 1933.

The positions he held in India, first as Chief Architect and Planner for the State of Mysore between 1939 and 1948, and then as Director of Housing of the first independent Government of India, where he worked until 1951, allowed Koenigsberger to test the accomplishments of the Modern Movement outside its traditional context. The India years would serve as a basis for his work as a mentor, then as the Head of the Department of Tropical Architecture³ at the Architectural Association School of Architecture between 1957 and 1971, and finally as professor in the Development Planning Unit at the Bartlett Faculty of University College London, where he remained until his retirement in 1976.

Koenigsberger, according to Liscombe, “began a process of modification in both his understanding of Modern design and the formulation of planning policy.”⁴ In this sense, he was a pioneer when adapting the aesthetic

models of the Modern Movement to urban planning and interior design, policies and local cultures.

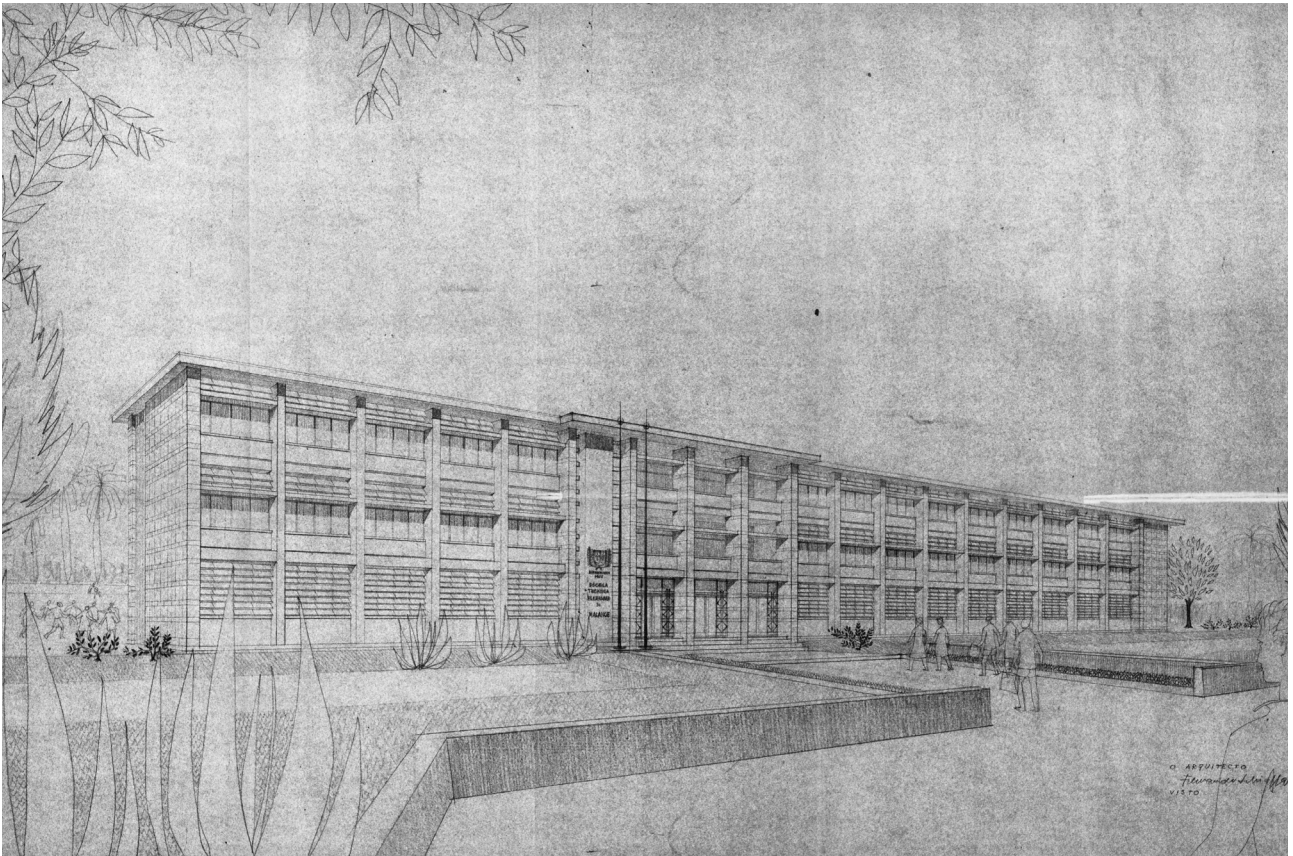
The post-colonial status was equally at stake as India’s independence in 1947 was accompanied by a growing mistrust of universal models, that is, colonizing models, preferring models of activism, with local emphasis. Liscombe wrote: “Koenigsberger’s intellectual and geographical journeys had convinced him that the post-colonial city required not imposed expert order but indigenous public activism.”⁵ In this sense, he initiated the themes that would be fundamental in the 1960s: “participation”, “le droit à la ville” and “architecture without architects.”

Koenigsberger moved to London in 1951, where he worked at the London School of Hygiene and Tropical Medicine.⁶ In March 1953, he participated in the Conference on Tropical Architecture, which triggered the appearance of the course on Tropical Architecture at the Architectural Association in 1954. The course was motivated by the dissatisfaction of the students that came from tropical countries, who felt that the contents of the architectural courses were distant from the context where they would later practice.⁷

The conference organized by Koenigsberger entitled “Tropical Planning Problems”⁸ addressed the need for specific planning for countries with different climates “where winter never comes,”⁹ or with nomadic, settled and hybrid communities.¹⁰ The accompanying paper is complemented with images which can be consulted in the AA archives as part of the assets donated by Renate Koenigsberger, and which depict several typical West African scenes of outdoor living and bird’s-eye views of local settlements.

With George Atkinson and Leo de Syllas, Koenigsberger elaborated a detailed programme for the course where the ‘hygienist’ approach, imported from the London School of Hygiene and Tropical Medicine, plays a significant role. During the first years, the head of the course was Maxwell Fry, following his return from Chan-

< Figure 1. Luís Possolo in Guinea-Bissau around 1960–1961. Luís Possolo Archive.



digarh, where he had elaborated the curriculum with Jane Drew, Le Corbusier and Pierre Jeanneret—a collaboration promoted by Koenigsberger.¹¹

The course initially envisioned a mediation between architecture and urban form with the express aim of preventing disease. However, it would progressively be enlarged to include themes of appropriation and comfort. The main purpose was to overcome the empiric understanding of what it meant to build in the tropics. Instead, it called for the specialization of knowledge when designing for a determined physical and social context. This approach reflected an anthropological concern in parallel with a technical and scientific vision, which focused on the analysis of the different climates and the properties of construction materials.

The premises and personalities of this pioneering course would confront the reality of the Portuguese Empire in Africa, then undergoing significant, though late, development. The planning and architecture of state-owned initiative on the five countries of the then called “Portuguese Africa”—Angola, Mozambique, Cape Verde, Guinea Bissau and São Tomé and Príncipe—fell under the responsibility of the Colonial Planning Office,¹² which worked under the tutelage of the Ministry of Overseas, and was associated with the political and administrative policies of the *Estado Novo*, the dictatorship that ruled Portugal between 1933 and 1974.

By referral from the Portuguese state, three architects attended the course on Tropical Architecture at the Architectural Association: Luís Possolo,¹³ António Seabra and Fernando Schiappa de Campos. As listed in the AA records, Luís Possolo attended the first edition of the course,¹⁴ along with “Miss Lakofsky, D.,” otherwise known as Denise Scott Brown,¹⁵ and Kenneth Frampton. This fact is significant in view of the path both would take, whereby the “learning” in Las Vegas and the Critical Regionalism proposals, though in opposing ways, refer to locality, identity and materiality.

The 1957–1958 session, with Koenigsberger already leading the course and followed by Portuguese students António Seabra and Schiappa de Campos, had a broad programme, covering subjects of artistic and technical nature. Climatology was a central theme as well as engineering and economy, but anthropology, painting and sculpture also featured on the pedagogical agenda: *Types of Tropical Climates*, John Page; *Building Materials in Tropics*, O. Koenigsberger; *Earth as Building Material*, G. A. Atkinson; *Urban Planning*, P. Stevens; *Cultural Patterns and Tropical Architecture*, P. Smithson; *The Tema Village Plan*, Denys Lasdun; *Hospitals in the Tropics*, R. Llewelyn Davies; *Schools in the Tropics*, Jane Drew; *Painting and Sculpture*, Eduardo Paolozzi.¹⁶

The three Portuguese architects would build in “Portuguese Africa” but also in Dili, Timor (Schiappa de Campos), drawing on the knowledge they acquired on the Tropical Architecture course and by means of their interactions with Koenigsberger himself. The influence of Koenigsberger’s teaching is being further investigated in a work that we are currently developing, and of which we hereby present a glimpse.

Koenigsberger’s projects in India bear witness to his rationalist and expressionist matrixes, dialoguing between the values of prefabrication of the demiurge building and expressionism. His conclusions lead him to believe that “master plans and reports are not enough. It is necessary to create a live organization, preferably anchored in the structure of local government,”¹⁷ ensuring expertise, coherence and continuity—a notion that has not ceased to be pertinent.

In the field of architectonic and stylistic expression relating to time and history, Koenigsberger was also a pioneer. Liscombe, referring to the Institute of Sciences, Bangalore Auditorium and Dining Hall (1945–46) stated that “the novel reinterpretation, blending Modern pilotis with Classical *antis colonnade*, registered Koenigsberger’s profound respect for ancient design [...] and its reverberation in the abstract and functionalist aesthetic of the Modern Movement.”¹⁸

Figure 2. Esplanada, Guinea-Bissau, **Luís Possolo**, DSUH DGOPC, 1959. Arquivo Histórico Ultramarino, Lisbon.

Figure 3. Technical School in Quelimane, Mozambique, **Fernando Schiappa de Campos**/Gabinete de Urbanização do Ultramar, 1956. Arquivo Histórico Ultramarino, Lisbon

Figure 4. **Fernando Schiappa de Campos** at the AA, London, around 1958–1959. Fernando Schiappa de Campos Archive.





Figure 5. Banco Nacional Ultramarino, Dili, Timor, by **Fernando Schiappa de Campos**, 1968. Arquivo Banco Nacional Ultramarino/Caixa Geral de Depósitos, Lisbon.

The articulation of different epochs, the adaptation of antique, classical and traditional models to the logic of the Modern Movement, will be a constant in the Portuguese context from the 1950s onwards, be it in the "Portuguese Africa" or the "Metropolis". The course on Tropical Architecture at the Architectural Association, under the tutelage of Koenigsberger, is a fascinating facet of this process.

Notes

1. Cf. Otto Koenigsbergerr, "Koenigsberger: Early Days Abroad", interview by David Toppin, *The Architect's Journal*, July 7, 1982, 36.
2. Rhodri Liscombe, "In-dependence: Otto Koenigsberger and modernist urban resettlement in India", *Planning Perspectives*, 21, 2006, 157-178.
3. In 1967, it changed the name to Department of Development and Tropical Studies, which in part coincided with a revival of the planning school at the AA with Leslie Ginsberg (cf. Koenigsberger, *Op. Cit.*, 37).



4. Rhodri Liscombe, *Op. Cit.*, 158
5. Cf. Rhodri Liscombe, *Op. Cit.*, 173.
6. In this school Koenigsberger produces a draft of a research text-book which would be the theoretical basis for his *Manual of Tropical Housing and Building*, published later in 1974, jointly with T. G. Ingersoll, A. Mayhew and S. V. Szokolay.
7. Cf. Otto Koenigsberger, *Op. Cit.*, 36.
8. Other communications included George Atkinson's "Tropical Architecture and Building Studies", from the Building Research Station.
9. In his paper, Koenigsberger quotes this title of a 1952's study, by the

- American zoologist Marston Bates, on man and nature in the tropics.
10. Cf. Otto Koenigsberger, "Tropical Planning Problems", Paper presented at the Conference on Tropical Architecture, Otto Koenigsberger Archive, AA Archives, 1953.
11. Cf. Liscombe, *Op. Cit.*, 159.
12. The Colonial Planning Office was created in 1944. In 1951, it changed its name to Overseas Planning Office until 1957, and subsequently to Department of Urbanism and Housing Services at the Ministry of Overseas, until 1974.
13. In Luís Possolo's diploma, there are four works referred to as: "Onitsha Market" and a "Health Centre", with the annotation "Store" (reference meaning "for archive", but it was not possible to locate these works) and a "House at Accra, Gold Coast" and a "House at Chandigarh", both with the annotation "Pass".
14. The name "Brown, R. B.", probably Robert Scott Brown, is also listed in the same records.
15. As detailed in a lecture programme, Autumn and Spring Terms 1957-58, Department of Tropical Architecture, AA archives.
16. Cited by Rhodri Liscombe, *Op. Cit.*, 173.
17. Rhodri Liscombe, *Op. Cit.*, 164.

References

- Architectural Association School of Architecture, "Department of Tropical Studies: A Cross-Section of Recent Work and Teaching Methods", *Architectural Association Journal*, 78, 1963, 302-309.
- Baweja, Vandana, *A Pre-history of Green Architecture: Otto Koenigsberger and Tropical Architecture, from Princely Mysore to Post-colonial London*, A dissertation submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy (Architecture), The University of Michigan, 2008.
- Koenigsberger, Otto, "Tropical Planning Problems", Paper presented at the Conference on Tropical Architecture, Otto Koenigsberger Archive, AA Archives, 1953.
- Koenigsberger, Otto; Ingersoll, T. G.; Mayhew, A.; Szokolay, S. V., *Manual of Tropical Housing and Building*, London, Longman, 1974.
- Koenigsberger, Otto. "Koenigsberger: Early Days Abroad", Interview by David Toppin. *The Architect's Journal*, July 7, 1982, 36-37.
- Koenigsberger, Otto. *Otto Koenigsberger Archive*, London, Architectural Association Archives.
- Le Roux, Hannah, "The Networks of Tropical Architecture", *The Journal of Architecture*, 8, 3, 2003, 337-354.
- Liscombe, Rhodri Windsor, "In-dependence: Otto Koenigsberger and modernist urban resettlement in India", *Planning Perspectives*, 21, 2, 2006, 157-178.
- Milheiro, Ana Vaz, *Nos trópicos sem Le Corbusier*, Lisboa, Relógio d'Água, 2012.
- Saldanha, José Luis, *Luís Possolo, Um arquitecto do Gabinete de Urbanização do Ultramar*, Lisboa, CIAAM, 2012.
- Spence, J. Mckay, "The New Role of the Architect in the Tropics", *Architectural Association Journal*, 71, 1955, 56-60.

Jorge Figueira

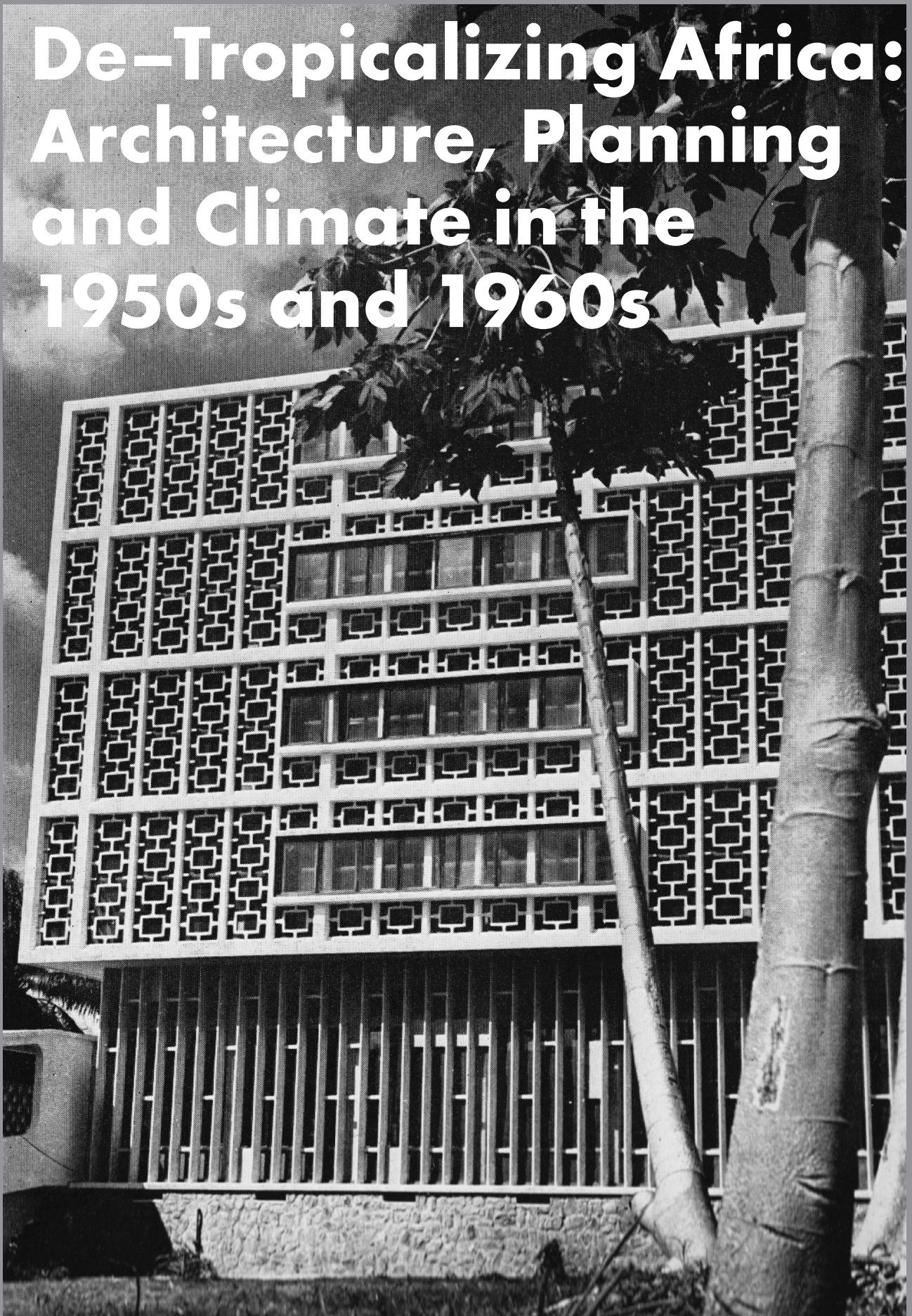
Graduated in Architecture at the University of Porto in 1992. PhD Degree at the University of Coimbra in 2009. He is Director and Assistant Professor at the University of Coimbra's Department of Architecture and Researcher at the Social Studies Centre (University of Coimbra). He is also the author of several books on contemporary architecture, including *O Arquitecto Azul*, Coimbra University Press, 2010 and *Reescrever o Pós-Moderno*, Dafne, 2011.

Bruno Gil

Graduated in Architecture at the University of Coimbra, Portugal, in 2005. He is currently developing a PhD on the practice of architectural research at the Centre for Social Studies and at the Department of Architecture, University of Coimbra, with a grant from the Foundation for Science and Technology, Portugal. He was also the cofounder of *NU* magazine and its Director between 2003 and 2004.

De-Tropicalizing Africa: Architecture, Planning and Climate in the 1950s and 1960s

76



In the mid-1950s, British architects Maxwell Fry and Jane Drew were among the leading figures behind the institutionalization of the Tropical Architecture field, contributing to the proliferation of publications, international conferences and establishment of academic centers. During the same time, the global shortage of housing and United Nations' development agendas for the "third world" brought a shift in planning priorities. Focusing in that particular moment, the paper traces the efforts for the de-tropicalization of Africa and planning practice alike, through the research activities of the Athens-based firm Doxiadis Associates and the writings and visions of Greek architect Constantinos Doxiadis.

By Petros Phokaides

West Africa and the Tropicalization of Modern Architecture

On May 4, 1953, *Life* magazine published a special issue on Africa with the subtitle 'a continent in ferment' that tried to document the state of African countries at a time when "[the] rising tide of nationalism—and perhaps Communism—seemed to take the whites by surprise."¹ Anticipating the end of European colonial rule and filled with racial and cultural stereotypes, this special issue marked the growing global-US in particular—anxieties over Africa's future and its positioning in the cold-war division.² Its articles campaigned towards African nations' 'self-government' through the combined effort of 'white and black' as the only way for Africa to pass from 'darkness to light.'³ The magazine paid particular emphasis to British colonies like Gold Coast (Ghana) and Nigeria that had already shown strong signs of modernization: for example, it exemplified Gold Coast as a "testing laboratory for native self-rule"; celebrating ethnic mixing in marriages and elite parties.⁴ In another case, it underlined the importance of educational facilities in Nigeria, such as the University College of Ibadan, which taught "modern medicine and agriculture in a land largely ruled by superstitions and cultivated by the primitive hoe" aiming "to graduate an educated elite, which will make the country more ready for self-rule."⁵ The magazine used a photograph from the students' residence building, one of Maxwell Fry (1899–1987) and Jane Drew's (1911–1996)⁶ emblematic (tropical) Modern architectural designs, constructed between 1947–1951, to underline that the road to 'self-rule' required social reforms based on westernized education and Modern institutions, in a way hinting to the complex relations between Modern

architecture, planning and the developmental policies of late colonialism in Africa [figure 1].⁷

The British husband-and-wife team of architects, Fry and Drew, had an extensive experience from their practice in the West-African (tropical) climate between 1946–1959 that was disseminated through publications, conferences and academic teaching, positioning them among the leading figures behind the institutionalization of the field of "tropical architecture" in the mid-1950s.⁸ Casting a historical perspective on the theme of "tropical architecture," current bibliography has shown the field's deep intertwinement to the transnational colonial history well before its post-war appropriation by Modern architectural culture.⁹ In this perspective, "tropicality" is understood as a particular European cultural construction of other geo-cultural regions, with an emphasis on climate, environment and nature;¹⁰ while architecture and the built environment found connections to disciplines that have flourished in colonial contexts such as botany, tropical medicine and tropical geography.¹¹ Indeed, the first book written by Fry and Drew in 1947 in collaboration with Harry L. Ford, titled *Village Housing in the Tropics*, was an early formulation of planning with response to local conditions and climate which exposes the relations between architecture, climate and hygiene [figure 2]. The book drew from the architects' experience of the rebuilding of a fishing village in Tema, Ghana, and the close study of the particularities of village life they did, only to arrive at a series of planning guidelines along the following (Modern) principles: "good diet, good air, good water, good light, and dry vermin-proof housing."¹² The capacity of architecture and planning to rationalize the use of space and regulate social life was put to the service of late-colonial agendas for raising living standards and welfare; ecological conservation; as well as increased exploitation of colonies' natural resources.¹³ After all, the village Fry and Drew helped to rebuild was part of the Volta River Project, a large infrastructural scheme initiated by the colonial Government for the construction of a hydro-

< Figure 1. **Maxwell Fry and Jane Drew**, Library building, University of Ibadan, Nigeria, 1947–1951. Photo from Fry, Maxwell; Drew, Jane, *Tropical Architecture in the Humid Zone*, New York, Reinhold Pub. Corp, 1956, 219.

electric power plant and a plant for the production of aluminum, which included also the building of a new town and port for Tema.¹⁴

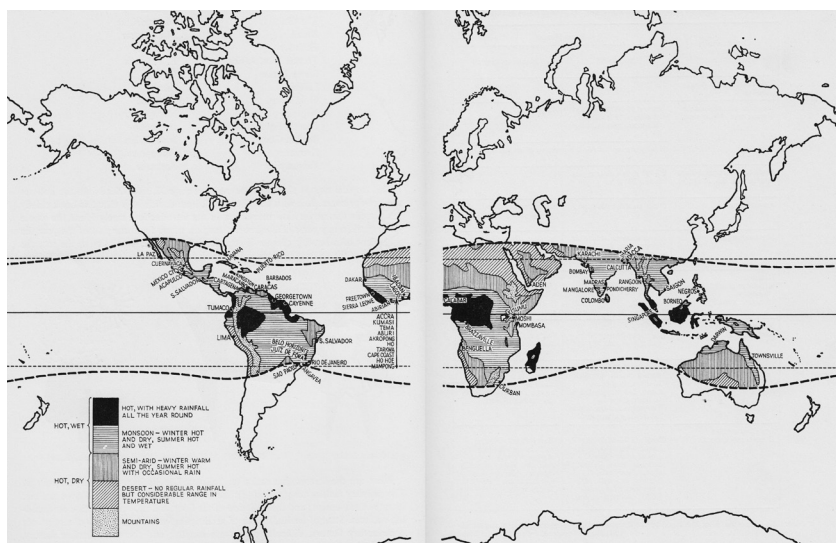
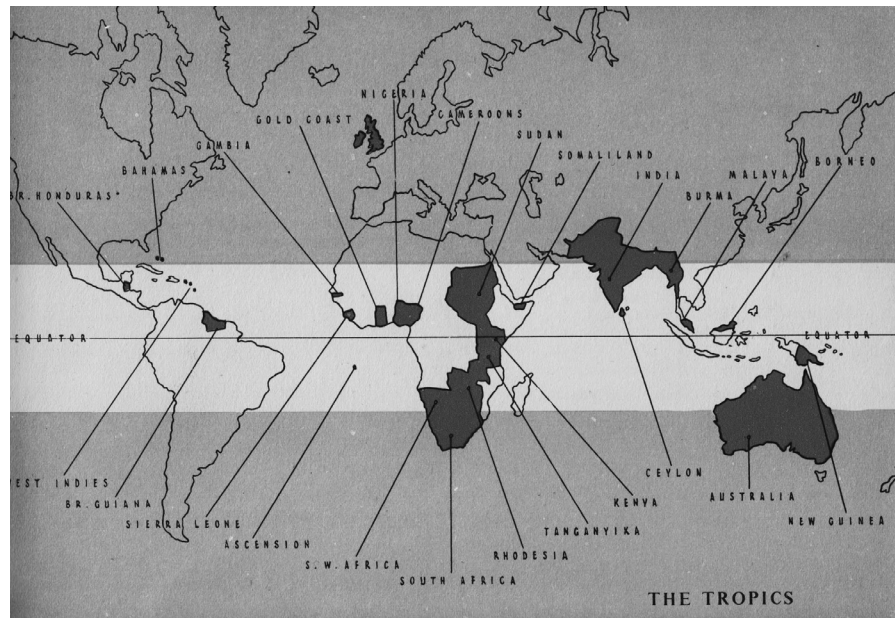
Fry and Drew's work in West Africa presupposed a European-Western supremacy over local knowledge and local architectural tradition, which resulted in a reciprocal *tropicalization* of Western Africa and Modern architecture alike.¹⁵ This process was manifested through a significant number of educational and commercial commissions they completed between 1946 and 1959.¹⁶ In these, the theme of designing "in the tropics" developed to an architectural practice and language predominantly Modern, that used building layouts, Modern material and construction details, architectural devices and furniture in order to regulate the impact of climatic elements (sun

movement, air flow, humidity, temperature, solar reflection etc.) in the urban space, the buildings and the users. Through this work, their understanding of architectural design suitable for the tropics was considerably elaborated, internationalized and canonized¹⁷ as the title of their second book, *Tropical Architecture in the Humid zones* that was published in 1956, suggests [figure 3].¹⁸ During this period, between 1951 and 1954, Fry and Drew were also involved in the planning of the new capital of Punjab at Chandigarh in collaboration with Le Corbusier and Pierre Jeanneret.¹⁹ In 1953 they participated in the International Conference of Tropical Architecture at the University College in London, while in 1954 they began teaching at the Department of Tropical Architecture that was established in 1954 at the Architectural Association

Figure 2. The Tropical region and the British Colonies. Image from Drew, Jane; Fry, Maxwell; Ford, Harry L., *Village Housing in the Tropics: With Special Reference to West Africa*, London, Lund Humphries, 1947.

Figure 3. The Tropical Zones. Photo from Fry, Maxwell; Drew, Jane, *Tropical Architecture in the Humid Zone*, New York, Reinhold Pub. Corp, 1956, 32-33.

Fig. 4 The cover of the *Ekistics Journal* with **Backminster Fuller's** Dymaxion Map. *Ekistics*, December 1957. Constantininos A. Doxiadis Archives © Constantininos and Emma Doxiadis Foundation.



in London. Assuming a role of experts in transnational “networks of tropical architecture”²⁰ they rearticulated the social agenda of tropical architecture as one that aims:

*[to solve] the problem of people in a state of change and movement [...] in such a way as to create social organisms that will satisfy and outlast the developing circumstances.*²¹

Instead of reading the above quote as an affirmation of a planning agenda that supported the colonized societies’ road to independence, Fry and Drew’s work might be better understood in the prolonged suspension and the ambivalence of late-colonial thinking as the colonial era drew to a close. This ambivalence is perhaps most exposed in their search for “an aesthetic in the tropics”. In their book’s epilogue, Fry and Drew explained that “[the] key to aesthetics in the tropics appears to be a dramatic ascent on the definite and the artificial: the creation of order” where tropical climate, nature and tradition can have an influence as long as “[it] remains an influence rather than something to copy.”²² In the tropical aesthetics, tropical Africa was still represented as natural, timeless and exotic.

Ekistics, Development and the de-Tropicalization of Planning

The proliferation of publications and the organization of international conferences in various cities made “tropical architecture” an internationally established research field in the mid-1950s, while a gradual shift in planning priorities was also becoming evident.²³ In 1954, an international conference of United Nations (UN) Housing and Community Improvement, was organized in New Delhi, India, by the South-African architect Jacqueline Tyrwhitt (1905–1983).²⁴ It brought together some of the leading figures of the “networks of tropical architecture” with other protagonists of the international planning arena, among many others.²⁵ This meeting’s aim was to align architectural and planning priorities of the time to the new global urgency of housing shortage, as it was expressed in the United Nations development agendas for the so called ‘third world.’²⁶

The priorities discussed and set in that conference were revisited by Tyrwhitt and Greek architect and town planner Constantinos Doxiadis (1914–1975) through a close collaboration initiated after their meeting in India.²⁷ Tyrwhitt accepted Doxiadis’s invitation and became the main editor of the *Tropical Housing and Planning Monthly Bulletin*. The bulletin was a compilation of extracts and digests from various sources prepared for internal circula-

tion, especially for “those in the field, distant from libraries and periodicals” in order to keep Doxiadis Associates (DA) (the planning firm founded by Doxiadis in Athens in 1951) informed and prepared for the firm’s international assignments which proliferated in the end of 1950s.²⁸ After two years of continuous production it was agreed for the bulletin’s “circulation [to] be increased on an exchange basis to include such university departments, research institutes or other similar bodies.”²⁹ The first issue published in October 1957 was considered a journal with the title: *Ekistics: Housing and Planning abstracts* [figure 4].³⁰ The new title associated the journal to Doxiadis himself and the theory of ‘Ekistics’ which he coined in the mid-1940s as “the science of human settlements”³¹ and was accompanied with the exclusion of the term “Tropical.”³² *Ekistics* journal’s renouncement of a tropical focus, was aligned to Doxiadis’s campaign towards a scientific planning theory and international practice that had also an ideological end: by avoiding any associations to ‘tropical networks’ and their imperial/colonial background, the journal was in line with shaping a global and ‘apolitical’ profile for Doxiadis and Doxiadis Associates that was most welcomed in the postcolonial world.³³ This also meant keeping a distance from other political-ideological affiliations and cold-war polarizations.³⁴

Ekistics’s distancing from ‘Tropical’ tradition was not only expressed in ideological terms. Doxiadis himself was, after all, skeptical with the homogenizing effect of the use of the term in planning:

*“I would not like to speak in general about tropical climates because there are many types of tropical climates and our behavior should not be always the same. Our attitude should be the same, but not our solutions”.*³⁵

On the one hand, this skepticism towards “tropicalism” was reaffirming the importance of studying thoroughly local climatic differences, something that was rehearsed throughout the firm’s projects in the Middle East.³⁶ On the other hand it was expressing a suspicion against generalizing models of visualizing climatic conditions that also appeared in a research study for Africa in 1960.³⁷ The study for a “Transport Plan for Africa,” which was funded internally by DA, criticized the “regularity of appearance of the main climatic zones” which in the end failed to account for “microclimatic differences [that] may result in a description of local conditions totally different from that suggested by the mere reading of a general climatic map of the whole continent” [figure 5].³⁸ All in all, these observations aimed to show that “except for deserts and permanent snows” all other climatic zones can be habitable,

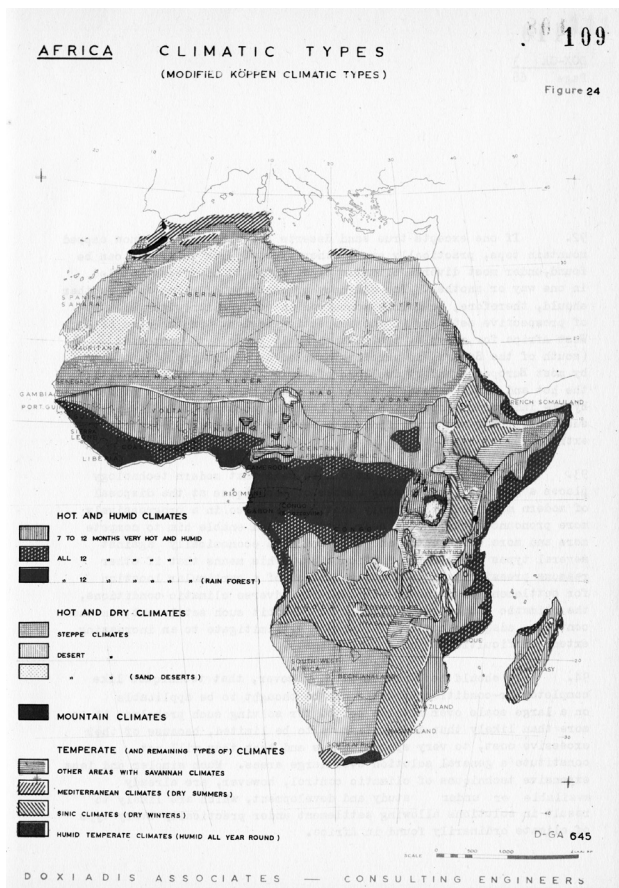


Figure 5. Doxiadis Associates, Climatic types of Africa, DOX-GA 3, March 1962 (Archive Files 23285), Constantinos A. Doxiadis Archives © Constantinos and Emma Doxiadis Foundation.

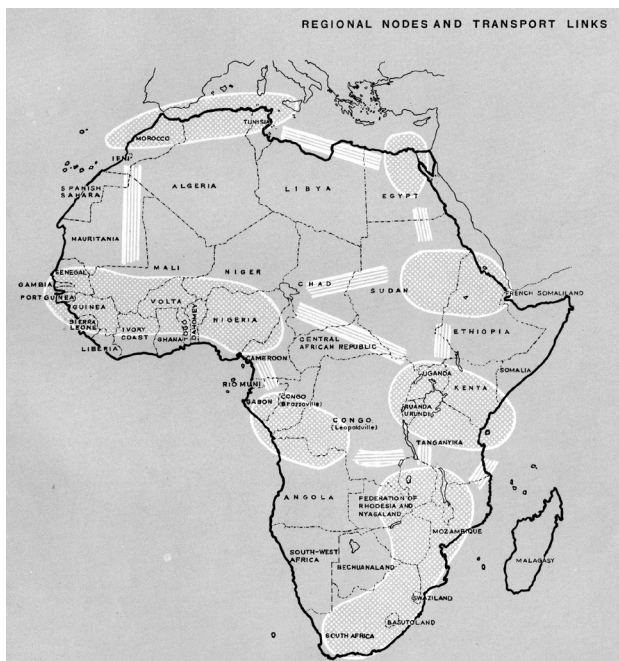


Figure 6. Doxiadis Associates, African Transport Plan, DA Monthly Bulletin n° 63, February 1964, Constantinos A. Doxiadis Archives © Constantinos and Emma Doxiadis Foundation.

as “adequate control techniques” exist from the most technologically developed to the most “simpler and less expensive” ones to counter “several types of climatic difficulties”.³⁹ The study further suggested that the impact of climate would be even less noteworthy for infrastructure constructions (highways, airports). By considering the impact of climate in human settlements in Africa, the study was consciously pulling apart one of the many (partly fabricated—partly physical) layers of developmental restraints on continental level: e.g. the production patterns developed to serve the former colonial metropolises; the untapped natural and human resources; the geographical and physical characteristics; all the way to national borders and administrative structures that were just being built. Sidestepping these restraints and ignoring the importance of others: such as the various countries’ geopolitical and cold-war affiliations; internal religious and other cultural tensions; DA proposed a continental transport plan (based primarily on highways and complemented by secondary transport infrastructure such as railways and air-connections) as the backbone of new urbanization and productive patterns “in such a way as to bring an equilibrium between the continent’s population, space, and resources” [figure 6].⁴⁰ By creating for Africa “a single balanced pattern within itself and with the rest of the world”,⁴¹ the plan was not only simply aligning to international development agendas which aimed to turn the newly emergent nations of the “third world” into productive economies;⁴² it was combining global ambitions with a vision for ‘expediting’ development:

“[...] Africa must decide which stages of development must be avoided so that a degree of development may be reached as soon as possible that will allow Africa to become truly independent and to compete with the family of the United Nations for a better future”.⁴³

Echoing Walter Rostow’s theory,⁴⁴ Doxiadis developmental vision for “Building a new [and independent] Africa,” further exposed the geopolitical assumptions behind the plan. Despite Doxiadis’s efforts to “de-tropicalize” Africa, by challenging it’s imperial past and the impact of climatic or other restraints impeding the utilization of its own resources, the vision placed a high-level of confidence in large-scale planning and its power to achieve a balance between modernization and nature,⁴⁵ and its power (as well as the planner-expert’s) to anticipate the creation of even more stressed relations between international and local forces, between modernization and existing social and cultural particularities, between city and nature and between body and climate.

Notes

1. Alexander Campbell, "Africa: A Continent in Ferment", *LIFE* (Special Issue), vol. 34, n° 18, 1953, 9-13.
2. Estimates for rapid population increase in Africa emerged as early as the 1940s raising global fears for the endangerment of "wildlife and habitat" and scenarios for urban conflicts "along racial and class lines". See Hodge, Joseph M., *Triumph of the Expert: Agrarian Doctrines of Development and the Legacies of British Colonialism*, Athens, Ohio University Press, 2007, 255.
3. Alexander Campbell, "Africa: A Continent in Ferment", *LIFE* (Special Issue), vol. 34, n° 18, 1953, 10.
4. Ghana (Gold Coast) was from 1953 the first African country that had a British Government with a native Prime Minister, U.S.-educated Kwame Nkrumah.
5. "An Educated Elite for Nigeria", *LIFE* (Special Issue), vol. 34, n° 18, 1953, 71.
6. Maxwell Fry was an active member in Modern Architecture Research (MARS) Group, a British section of the *Congrès International d'Architecture Moderne* (CIAM). He and Jane Drew, also a graduate of the Architectural Association, met during their work for the planning of MARS London Plan.
7. For British land development policies see Hodge, Joseph M., *Triumph of the Expert: Agrarian Doctrines of Development and the Legacies of British Colonialism*, Athens, Ohio University Press, 2007, 207-253. See also Crinson, Mark, *Modern Architecture and the End of Empire*, Aldershot, Hants, England, Ashgate, 2003. (especially Chapter 6: "Dialects of Internationalism: architecture in Ghana, 1945-66", 127-156).
8. Hannah Le Roux, "The networks of tropical architecture," *The Journal of Architecture* 8, n° 3, 2003, 337-354. And Hannah Le Roux, "Building on the boundary—Modern architecture in the tropics", *Social Identities* 10, n° 4, 2004, 439-453. And for developments of the "tropical architecture" discourse in other parts of the world see Olgyay, Victor; Olgyay, Aladar, *Design with Climate: Bioclimatic Approach to Architectural Regionalism*, Princeton, NJ., Princeton University Press, 1963. And Givoni, B., *Basic Study of Ventilation Problems in Housing in Hot Countries: Final Report*, Haifa, Building Research Station, 1962.
9. Jiat-Hwee Chang, Anthony D. King, "Towards a genealogy of tropical architecture: Historical fragments of power-knowledge, built environment and climate in the British colonial territories", *Singapore Journal of Tropical Geography* 32, n° 3, 2011, 283-300. And Iain Jackson, "Tropical Architecture and the West Indies: from military advances and tropical medicine, to Robert Gardner-Medwin and the networks of tropical modernism", *The Journal of Architecture* 18, n° 2, 2013, 167-195.
10. Daniel Clayton, Bowd Gavin, "Geography, tropicality and postcolonialism: Anglophone and Francophone readings of the work of Pierre Gourou", *L'Espace géographique*, 2006/3, vol. 35, 208-221.
11. Chang Jiat-Hwee, "Building a (Post) Colonial Technoscientific Network: Tropical Architecture, Building Science and the Power-Knowledge of Decolonization", Duanfang, Lu (ed.), *Third World Modernism: Architecture, Development and Identity*, New York, NY, Routledge, 2011, 211-235.
12. Drew, Jane; Fry, Maxwell; Ford, Harry L., *Village Housing in the Tropics: With Special Reference to West Africa*, London, Lund Humphries, 1947.
13. Beinart, William; Hughes, Lotte, *Environment and Empire*, Oxford, Oxford University Press, 2007, 285.
14. For an extensive analysis of this project see Viviana d'Auria, Victor Kootin Sanwu, "Between Development and Experiment: The Volta River Project's (Un) settling Communities", *Urban Knowledge: Its production, use and dissemination in Cities of the South*, 2010, 93-110.
15. Fry wrote in his memoirs: "We looked around to architectural precedent but there was none. [...] We were fated to make a new architecture out of our own love of the place and our obedience to nature, and to make it with cement and steel; asbestos sheets, wood above the termite line, glass, paint, some stone later, and not much else". RIBA Archives, Fry & Drew Papers, Box 22 Folder 2 (MF Memoirs), 186/15. Cited (footnote 35) in Viviana d'Auria, Victor Kootin Sanwu, "Between Development and Experiment: The Volta River Project's (Un) settling Communities", *Urban Knowledge: Its production, use and dissemination in Cities of the South*, 2010, 101.
16. Rhodri Windsor Liscombe, "Modernism in Late Imperial British West Africa: The Work of Maxwell Fry and Jane Drew, 1946-56", *The Journal of the Society of Architectural Historians*, 2006, 188-215. And Ola Uduku, "Modernist architecture and 'the tropical' in West Africa: The tropical architecture movement in West Africa, 1948-1970", *Habitat international* 30, n°3, 2006, 396-411.
17. In this book, they drew their examples from all over the world, showcasing architectural projects and buildings from various (tropical) contexts. Using temperature measurements and solar trajectories and the images of Modern buildings designed "in the tropics", the book was ultimately, promoting a Modern "tropical" architectural aesthetic. See Fry, Maxwell; Drew, Jane, *Tropical Architecture in the Humid Zone*, New York, Reinhold Pub. Corp, 1956.
18. Much of the content of the 1956 book was recycled in the next book, Fry, Maxwell; Drew, Jane, *Tropical Architecture in the Dry and Humid Zones*, New York, Reinhold Pub. Corp, 1964.
19. The design of a new capital in Chandigarh was an emblematic nation-building project promoted by the India's Prime Minister Nehru after the country's independence in 1947. For an account on Fry and Drew's projects in India see Iain, Jackson, "Maxwell Fry and Jane Drew's Early Housing and Neighbourhood Planning in Sector-22, Chandigarh", *Planning Perspectives*, 28.1, 2013, 1-26. And Scheidegger, Ernst; Casciato, Maristella; Nievergelt, Cerena; Von Moos, Stanislaus, *Chandigarh 1956: Le Corbusier, Pierre Jeanneret, Jane B. Drew, E. Maxwell Fry*, Zurich, Scheidegger & Spiess, 2010.
20. Hannah Le Roux, "The networks of tropical architecture", *The Journal of Architecture* 8, n° 3, 2003, 337-354.
21. Fry, Maxwell; Drew, Jane, *Tropical Architecture in the Humid Zone*, 24.
22. Fry, Maxwell; Drew, Jane, *Tropical Architecture in the Humid Zone*, 253.
23. International conferences on "tropical architecture" also took place in Paris (1931) Mexico (1938), Lisbon (1952), Washington (1952) and London (1953). See Vandana, Baweja, "A Pre-history of Green Architecture: Otto Koenigsberger and Tropical Architecture, from Princely Mysore to Post-colonial London." PhD diss., The University of Michigan, 2008.
24. Jaqueline Tyrwhitt was a key member of the International Congresses of Modern Architecture (CIAM), a United Nations (UN) advisor and professor at Harvard Graduate School of Design (GSD). Shoshkes, Ellen, *Jaqueline Tyrwhitt: A Transnational Life in Urban Planning and Design*, Farnham, Surrey, Ashgate Pub. Limited, 2013, 155-156. And "Mary Jaqueline Tyrwhitt: In Memoriam," *Ekistics*, vol. 52, n° 314/315, Sep-Oct / Nov-Dec, 1985.
25. In the conference participated the German-born architect and planner Otto Koenigsberger (1909-99); the British architect George Anthony Atkinson (1915-); Maxwell Fry and Jane Drew; the American urban housing planner Charles Abrams (1902-1970); the Greek architect and town planner Constantinos Doxiadis (1914-1975) and many more.
26. The housing shortage was clearly underlined in Doxiadis's conference presentation: "It is estimated that there is a world shortage of between 100 to 150 million houses needed in the world...Thirty million houses are estimated to have been destroyed during the war... Furthermore, the number of houses being built yearly throughout the world is far below that required...Thus humanity is already fighting a losing battle of a growing population versus housing construction."

tion..." "Types and Densities of Housing Accommodations," *Trip in India in 1954*, 24965, Constantinos A. Doxiadis Archives. (Doxiadis Archive)

27. After meeting again in the next couple of years in Athens and London. Shoshkes, Ellen, *Jaqueline Tyrwhitt: A Transnational Life in Urban Planning and Design*, Farnham, Surrey, Ashgate Pub. Limited, 2013, 183–185.
28. Tyrwhitt explained later: "It is now two years since Dr. C.A Doxiadis started to finance the compilation of a monthly collection of abstracts from current publications on planning and housing for the use of the members of his organization—particularly those in the field, distant from libraries and periodicals". Editorial, *Ekistics*, Oct., 1957, iii.
29. Ibid.
30. Another change in the journal's title took place in 1962 when the subtitle was changed to *Ekistics: Reviews on the Problems of Human Settlements*.
31. Doxiadis published an 'undeground magazine' during World War II, titled *Regional Planning and Ekistics* which presented surveys of Greece's war damages and plans for its reconstruction. Jeannie Kim, "The oracle of Athens: Constantinos Doxiadis and the study of human settlements", Staub, Urs; Geiser, Reto (ed.), *Explorations in Architecture: teaching, design, research*, Swiss Federal Office of Culture, Boston, Birkhauser, 2008, 90–91. The term 'Ekistics' derives from the greek noun "οἶκος[oikos]" which means "home" and the verb "οἰκ- [oik-]" meaning, "settling down." See "Glossary of Terms" in Doxiadis, C. A., *Ekistics: An Introduction to the Science of Human Settlements*, London, Hutchinson, 1969, 516.
32. Tyrwhitt (indirectly) addressed this change in title in her editorial from the first *Ekistics* issue: "To some extent we shall continue to be most concerned with the problems of housing and planning in the warmer climates partly because we think the biggest jobs are yet to be done in such areas. But we shall be increasingly alert to developments throughout the world." The use of the phrase "warmer climates" makes the exclusion of the term "Tropical" suggestive of something more than a broadening of the journal's geographical focus. Editorial, *Ekistics*, Oct., 1957, iii.
33. Doxiadis's claimed neutral profile, was welcomed both by Iraq's Development board which wanted to underline its western and (non-communist) aspirations, see Panayiota Pyla, "Rebuilding Iraq, 1955–58: Modernist Housing, National Aspirations, and Global Ambitions," *docomomo Journal* 35, September 2006, 73; and by the Government of Ghana in its non-aligned positioning, see Viviana d'Auria, "From Tropical Transitions to Ekistic Experimentation: Doxiadis Associates in Tema, Ghana", *Positions: On Modern Architecture and Urbanism/Histories and Theories* 1, 2010, 40–63.
34. In the Journal this was expressed by including abstracts ranging from "Cooking and Fuel Economy in Low-Cost Tropical Housing" from the British Department of Scientific and Industrial Research, and "The Expansion of all Types of House Construction" from the Soviet Union. *Ekistics*, October 1957.
35. Extract from a manuscript titled "Building urban environments in tropical climates" prepared by Doxiadis in 1966 for Architectural Review. "Building urban environments in tropical climates," 1966, 16793, Doxiadis Archive.
36. See also Panayiota Pyla's critique on the limitations in the use of climatic elements in the housing program in Irak. Panayiota Pyla, "Back to the Future: Doxiadis's Plans for Baghdad", *Journal of Planning History*, 7, n° 1, 2008, 3–19.
37. "Transport Plan for Africa," DA Projects: Africa V.1–Reports (1961–1963), 23285, Doxiadis Archive.
38. "Transport Plan for Africa," 23285, Doxiadis Archive, 66.
39. "Transport Plan for Africa," 23285, Doxiadis Archive, 68.
40. DA–Monthly Bulletin n° 63, February 1964: Towards an African Transport Plan, Doxiadis Archives.
41. Ibid.
42. Escobar, Arturo, *Encountering Development: The Making and Un-*

making of the Third World. Princeton, N.J, Princeton University Press, 1995.

43. Extract from Doxiadis's article translated to English that was first published in German in *Der Architekt* n° 6, June 1966, and then in the Swedish magazine *Arkitektur* in 1970. "Building a New Africa", 2779, Doxiadis Archives.
44. Doxiadis here refers to the development stages of the theory of Walter Rostow, See Rostow, Walter W., *The Stages of Economic Growth: A Non-Communist Manifesto*, Cambridge, Cambridge University Press, 1960.
45. Panayiota Pyla, "Planetary Home and Garden: Doxiadis's Environment-Development Politics", *Grey Room* 36, summer 2009, 6–35.

References

- Jiat-Hwee Chang, Anthony D. King, "Towards a genealogy of tropical architecture: Historical fragments of power-knowledge, built environment and climate in the British colonial territories", *Singapore Journal of Tropical Geography* 32, n° 3, 2011, 283–300.
- Viviana d'Auria, "From Tropical Transitions to Ekistic Experimentation: Doxiadis Associates in Tema, Ghana", *Positions: on Modern Architecture and Urbanism/Histories and Theories* 1, 2010, 40–63.
- Drew, Jane; Fry, Maxwell; Ford, Harry L., *Village Housing in the Tropics: With Special Reference to West Africa*, London, Lund Humphries, 1947.
- Escobar, Arturo, *Encountering Development: The Making and Unmaking of the Third World*, Princeton, N. J., Princeton University Press, 1995.
- Fry, Maxwell; Drew, Jane, *Tropical Architecture in the Dry and Humid Zones*. New York, Reinhold Pub. Corp, 1964.
- Le Roux, Hannah, "The networks of tropical architecture", *The Journal of Architecture* 8, n° 3, 2003, 337–354.
- Liscombe, Rhodri Windsor, "Modernism in Late Imperial British West Africa: The Work of Maxwell Fry and Jane Drew, 1946–56", *The Journal of the Society of Architectural Historians*, 2006, 188–215.
- Pyla, Panayiota, "Planetary Home and Garden: Ekistics and Environmental-Developmental Politics", *Grey Room*, 2009, 6–35.

Petros Phokaides

Is a doctoral candidate at the School of Architecture, National Technical University of Athens, Greece and a Researcher at the Department of Architecture, University of Cyprus. He received his Masters in Science and Diploma in Architecture from NTUA, where he received the First Prize as top ranked graduate of the year 2005. He is also the Chair of **docomomo** Cyprus.

Local and Global Modern Thinking. Designing with Climate in Mozambique: School Buildings Production

By Zara Ferreira¹

The novelty of modern architecture in the former Portuguese African colonies derives from the fact that the ideology of the Modern Movement was interpreted locally. This built heritage is represented in terms of its responsiveness to the physical environment in which it operates, by means of *Design with Climate—A Bioclimatic Approach to Architectural Regionalism* (Olgyay, 1963). Combining tradition and innovation, this approach sought to address the specific socio-cultural context within which modern architecture was conceived (Kultermann, 1969).

With the purpose of contributing to the documentation and conservation of modern heritage in Africa, interpreted in the light of these assumptions (Quintã, 2007), this paper addresses a particular architectural program—school buildings—widely developed and built in Mozambique, between 1955 and 1975, the year of independence for the former Portuguese colonies. Initially led by architect Fernando Mesquita, as part of the Public Works Services of the Province of Mozambique, it was reconfigured and evolved through various levels of education, ranging from primary to high schools. Extensively built in urban and rural territory, and even gathering later contributions from other authors,² the built output of this program remains a prominent feature in the Mozambican territory.



It's no accident that the most significant architectural achievements in Africa are to be found among educational buildings. The basic schooling of the African—as well as the education of his teachers—ranks before all economic, political, military, and other considerations. Elementary and technical schools, teacher's colleges, and universities are thus the primary tasks of building in the new nations.

Udo Kultermann, 1969

Modern Movement architecture in former African Portuguese colonies, namely in Mozambique, was developed within the scope of African investment overseas conducted by the *Estado Novo* dictatorship (1926–1974). According to updated UNESCO policies (1951), the educational program was a main focus of investment initiatives, following the strategies of other African countries (Raedt, 2012).

Although high school buildings were initially designed in the metropolis (Lisbon) by professionals connected to the Board of Construction for Technical and Secondary Education (1934–1969)³ or later by the Ultramarine Urbanization Office⁴ (Tostões; Bonito, 2012), the role would soon shift to local offices. At the same time, two phenomena were of particular consequence: the wave of Portuguese architects' emigration to African colonies after World War II and the increasing autonomy of these territories (Tostões; Oliveira, 2010). In Mozambique, it gave rise to the development of the Public Works Department (Ferreira, 2008), where a school trail-blazer concept was developed by Fernando Mesquita.⁵ Seeking for comfort in a tropical climate, a *modus operandi* was conceived and applied (Ferreira, 2012), varying according to the climate of each site. Establishing a methodological brand, an efficient and technical approach was achieved connecting design tools with sanitarian requirements.

1. Thinking Global

The Fernando Mesquita concept arose from the need to construct educational buildings on a large scale and in a short period of time, throughout the whole of Mozambique and for several education levels. Emphasis was placed on fast execution at minimum cost. However, the education program in Mozambique was still in the process of being defined. Given the uncertainty of the program and of the school population, one of the key design requirements was "to ensure the school has the greatest possible flexibility in future use, alteration, extension or adaptation, in order to reduce the risk of obsolescence" (Mesquita, 1961).

Therefore, depending on age level and type of education, the concept was developed electing the class-

room as the basic unit of spatial organization. More or less square in plan, the classroom is designed in a single compartment, always with at least 2 sides in contact with the outside, and flanked by a covered circulation gallery on 1 side. Initially designed for primary schools, based on the continued aggregation of rooms side by side, this model was later evolved in professional and secondary schools (technical, preparatory, commercial, industrial and high schools). Here, the basic unit of spatial organization is the grouping of classrooms, referred to as pavilions. These are distributed perpendicularly along a main covered circulation gallery. In some cases, the schools acquired 2 main circulation galleries, structured on a grid of orthogonal circulation, such as the Lourenço Marques Technical Elementary School (nowadays *Estrela Vermelha* High School) built in Maputo in 1961.

Acting as a backbone, the main gallery is assumed as the principal circulation channel, perpendicularly linked to the secondary access galleries, which give access to all the pavilions. With strict rationality and functionality, this system allows an economy of paths while ensuring shelter from the elements.⁶

In terms of functional organization, schools are divided between the school sector—aimed for teaching activities—the administrative sector and communal spaces. In the 60s, the sports sector also assumes a major role in high schools, with an independent pavilion for physical education. The school sector always assumes the major role. In primary schools, it is composed of a single floor of classrooms. In the professional and secondary schools, it is divided between classrooms—usually in 2 or 3 two-storey pavilions—and experimental teaching classrooms (workshops, crafts, design, etc.)—in 2 or 3 one-storey pavilions of more generous dimensions. The Portuguese Youth had as well a pavilion of its own, with the gym, such as the canteen and the choral, usually located in small spaces at the end of the main circulation gallery. In these schools, the administrative sector also acquires an independent pavilion, always adjacent to the school entrance. A backbone along which the programmatic blocks are judiciously articulated, Fernando Mesquita's system constitutes an archetype adaptable to different contexts. Almost based on a logic of mass production, his model projects were able to respond

quickly and efficiently to the shortage of school buildings in the whole country.⁷ However, no two similar designs can be found in Mesquita's legacy of school buildings: he was beyond the simplistic logic that a model project could hide.

2. Thinking Local: Design with Climate

The climate of most of the case study sites—Maputo, Inhambane, Beira, Chimoio (former Vila Pery), Quelimane, Nampula, Pemba (former Porto Amélia) and Nacala—is characterized by average high temperatures of 22°C in the hot season, combined with torrential rains bringing about high levels of moisture in the air. The main challenges for architectural design in tropical and subtropical regions lie in the optimization of solar gains and rain protection, while ensuring maximum ventilation to counter the effects of humidity.

To assure a positive environmental performance in these schools, the classroom was conceived as a single compartment between two opposing façades with a strong relationship with the exterior. What immediately caught the attention of



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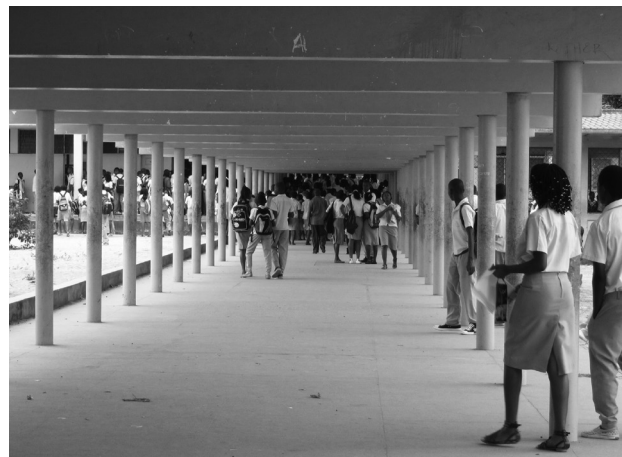
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Figures 1, 2. Primary School of Quelimane.
Photo by Catarina Delgado, 2012.

Figure 3. **João José Tinoco** and **José Forjaz**,
Polana High School, Maputo, 1969-1973.
Photo by Ana Tostões, 2012.

Figure 4. Quelimane Technical School, 1960.
Photo by Ana Tostões, 2012

Figure 5. Nampula High School, 1969.
Photo by Ana Tostões, 2010.

Figure 6. Nampula Technical School, 1953-1973.
Photo by Ana Tostões, 2012.

Figure 7. Nampula High School, 1953-1973.
Photo by Ana Tostões, 2012.

Figures 8, 9. Quelimane High School, 1969.
Photo by Ana Tostões, 2012.



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Prof. Ana Tostões and Maria Manuel Oliveira during their missions to Mozambique (2010 and 2012), was the detached and non aligned implantation of these structures in the urban context, suggestive of the importance of climatic considerations in the design. The buildings' implantation with respect to solar paths and wind directions would become the most representative principle of Mesquita's design with climate.

Sun Exposure: Protection Conditions and Lighting

Regarding sun exposure, the main challenge is reconciling the need for adequate shading, while ensuring an appropriate quantity and quality of light in spaces, depending on their function. Building orientation is the main strategy: by means of longitudinal deployment, the façades that could develop further would be positioned along an east-west axis, protecting the 2 larger walls from the sun. This orientation is adopted in most of Mesquita's schools; exceptionally they are geared towards the east, since the morning sun is less harmful.

Subsequently, it becomes imperative to protect the north façades from sun exposure that remains vertical the main part of the day and year. The aforementioned galleries and roofs of the pavilions, when located on the north façade, fulfill this role efficiently, articulating the circulatory function with horizontal shading devices.

On the south façades, where sunbeams are more horizontal and only perceptible at the beginning and end of some days, the openings tend to acquire large dimensions and are protected by vertical shading devices to prevent the sun from reaching the interior spaces on the hottest days. For this purpose, Fernando Mesquita employs the vertical *brise soleil* conceived as a continuous element of the structure. Both shading devices are external, intercepting solar radiation before it reaches the façade and preventing the overheating of construction materials. Furthermore, as they derive directly from the construction elements, they present fewer maintenance problems.

The combination of these shading devices with the orientation strategy was crucial in obtaining correct

classroom lighting. With larger windows on the south façades and the circulation galleries to the north, a uniform and diffuse lighting is achieved inside the classrooms, further enhanced by *beta* windows. These consist of horizontal glass strips about 10 cm wide, mounted on a thin and almost invisible iron structure (Caldas, 2011) that functions as an adjustable shutter "allowing control of the quantity and direction of both direct and diffuse light" (Mesquita, 1961), without hindering the thermal comfort nor visibility towards the exterior.

Outside, the presence of vegetation is constant, playing a major role in the process of air and floor cooling as well as providing further shade. It also helps filter pollution, dust, noise and visibility from the outside.

Air Moving: Conditions of Aeration, Ventilation and Protection from Rain

Known as "the climate for mushrooms"⁸ (Castro Rodrigues, 2012) it is commonly accepted that the main disturbance to human comfort in these climates is humidity. The renewal of air by natural

ventilation thus plays a vital role in countering the negative effects of humidity.

For ventilation to be effective, the air streams have to pass through the entire interior in an efficient way, cooling the surfaces and the users. To assure the best performance, it is necessary to promote the “easy incidence of winds, frequent during the hot season” (Mesquita, 1961). In these matters, the building implantation proved to be, once more, of upmost importance: most schools are orientated in such a way as to allow the prevailing winds in the warm season to reach the façades perpendicularly, where the larger windows are located. This brings about cross-ventilation in the classrooms as well as rainwater protection, since the larger openings are located on the opposite façade where the circulation gallery stands.

However, before the air reaches the interior spaces, its behavior is defined by interactions between elements in the surrounding built environment. While schools, built on unimpeded plots, benefit from fluid air circulation, one of the classroom pavilions does not have optimal conditions as it is shaded by the preceding pavilion. This situation is nonetheless well settled in other single floor pavilions, where the slope of the roof allows the routing of air consecutively to all pavilions. The larger windows facing the direction of prevailing winds, found in

almost all schools, ensure air circulation. To favor the circulation, inlet openings are almost always larger than the outlet. This improves the conditions of the disadvantaged classroom pavilion mentioned above, assuring air renewal even in periods of absolute calm. The *beta* windows can assure a “permanent ventilation of the classroom even in rainy conditions and simultaneously control the direction and the speed of the wind” (Rute Bota, 1971).

The Implantation: “a Compromise Solution”?

If in all the cases the two basic factors influencing architectural creation in tropical regions—the sun and the winds—could be harmonized by means of a perfect implantation, all the aforementioned passive systems would work. This is however not always the case. The compromise situation between over-heating and permanent air circulation, gives rise to the two distinct approaches in the implementation of Fernando Mesquita’s schools. The Nampula and Quelimane schools can be considered the prototypes of the respective approaches.

In the Quelimane schools, air circulation and sun protection are perfectly articulated, while in the Nampula schools only the air flow performs its role rigorously. The perilous situation in terms of sun protection in the Nampula schools suggests that

the Fernando Mesquita concept has been developed for situations where the winds come from the South. Otherwise, the option has been to turn the model 180°, without making any adjustments to the new situation in terms of sun protection, since horizontal shading devices are of no use on façades facing south and vertical ones are of no use in the north façades; exchanging devices, we observe excessive brightness in the interior spaces causing visual discomfort and over-heating.

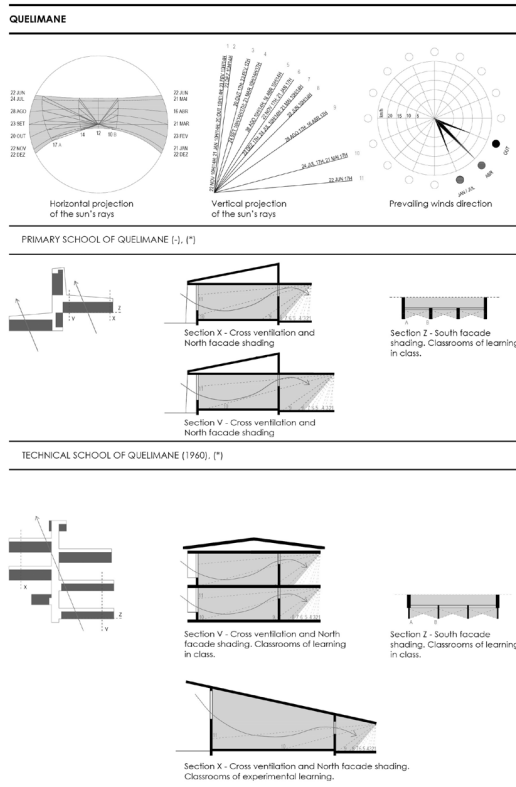
Several studies have indicated that in hot and humid climates, ventilation should be a design priority to the detriment of the ideal sun protection. Considering that it is the only means of combating the discomfort caused by excessive humidity, the need for adequate ventilation is of particular importance in classrooms given their high occupancy rate.

Furthermore, air circulation helps to prevent potentially fatal (Fry, Drew, 1964) insect bites, responsible for diseases such as malaria.

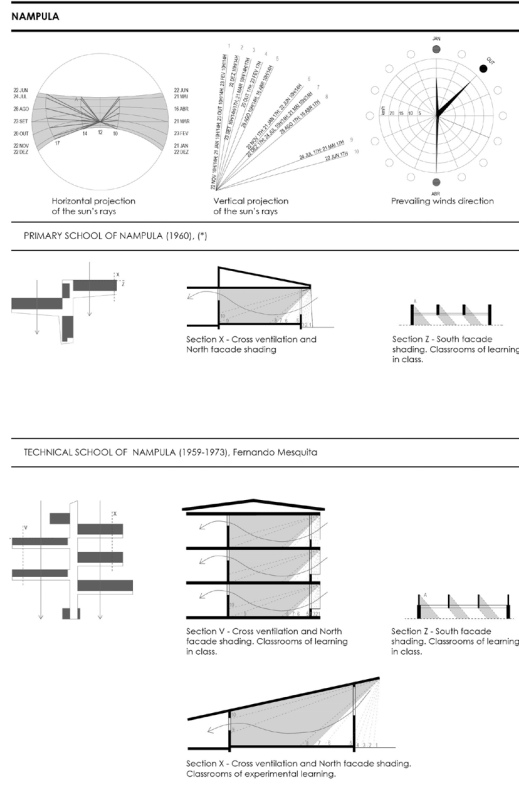
3. New Directions¹⁰ Towards the Future

Reflecting confidence in the virtues of modern architecture, Fernando Mesquita developed an architectural blueprint or rather a *modus operandi* for designing in the tropics, with the purpose of ad-

SYNOPSIS TABLE: IMPLANTATION, SHADING AND VENTILATION



SYNOPSIS TABLE: IMPLANTATION, SHADING AND VENTILATION



addressing the shortage of school buildings in Mozambique between 1955 and 1975.

In terms of construction, the fusion between a functional and a modern material solution is evident, based on the use of exposed reinforced concrete—“giving the building a character of truth that all correct solutions require” (Mesquita, 1961)—and the use of prefabricated systems, local materials and techniques (with consideration for reuse). Both choices are well suited to the conditions that the structure and material are subjected to: high degrees and variations of temperature, moisture and precipitation, combined with acoustic and mechanical concerns implicit in a school programme. “In all the matters, I always looked for the most efficient solution, recommending only materials and construction processes of great durability; in each case, I looked for solutions as lasting as the circumstances could allow, avoiding the mistake of exaggeratedly economizing on resources that would lead to excessive conservation charges, that would reduce efficiency and eventually the life span of the building” (Mesquita, 1961).

After more than 50 years of intensive use, exposed to severe climatic conditions and intensively used, these buildings have proven to be of immense strength, mainly reflected in the efficacy of their device systems and exemplary structural resistance. Based on its capacity to provide better and more comfortable living conditions (Tostões; Oliveira, 2012), Fernando Mesquita’s school building programme articulates a just reconciliation between the modern and the local. Intrinsically democratic and designed to respond to the comfort index of tropical climates and cultures, his architecture has been appropriated by local population in a way that proves its propensity to respond to the socio cultural and environmental requirements of these territories. Notably, his solutions continue to be adapted today. At a time when this heritage is reaching the end of its lifecycle and the economic and demographic development is threatening its destruction, the definition of intervention strategies becomes a priority. Through the development of know-how in rehabilitation, we could contribute to the maintenance and improvement of the intrinsic qualities of these buildings, in turn enhancing the experience of their users. The school, as a support structure of one of the most important social resources— education —should be a priority intervention target.

From the technical detail to the functional typology update, the creation of an intervention plan could make the survival of this modern heritage possible. Fernando Mesquita’s school buildings proved to be cost-effective and flexible, able to adapt to contemporary needs, both in physical, environmental and

social means. In addition to the social mission that was intrinsic in the genesis of modern architecture, the Modern Movement has always aspired to economy and the efficient use of resources; its main mission always having been to build a better world (Tostões, 2011). Whence it would be pertinent to develop a research project that looks to the reuse of these structures in a sustainable manner, based on a dignified management of resources.

Notes

1. Zara Ferreira is an intern architect and research fellow at the Department of Civil Engineering and Architecture at Instituto Superior Técnico. This research has been developed under her architecture master’s thesis, “O Moderno e o Clima na África Lusófona. Arquitectura Escolar em Moçambique: o Programa de Fernando Mesquita” (1955–1975), Lisbon, IST-UTL, 2012. Supervised by Prof. Ana Tostões (IST-UTL) and Maria Manuel Oliveira (EA-UM), under the research project (PTDC/AUR-AQI/103229/2008) EWW—Exchanging Worlds Visions, developed by IST-UM.
2. Polana High School (1969–1973), Maputo, by João José Tinoco (1924–1983) and José Forjaz (1936–).
3. Salazar High School (1945–1952), current Josina Machel Secondary School, Maputo, by José Costa e Silva (1911).
4. Based in Lisbon, supported by a framework of architects and engineers, the goal was to concentrate on a single public entity the design of all architecture projects and urban plans supported by the State for African colonies. It took an active part in the initial school production developed in Mozambique. Although it had an intensive production (1956), it didn’t last long and had no continuity with the school designs developed in the following years. Assuming a *modus operandi*, this production consisted on a few model projects based on the “Normas para as Instalações dos Liceus e Escolas do Ensino Profissional nas Províncias Ultramarinas”, 1956. Led by a team of 3 architects: Fernando Schiappa (1926), Lucínio Cruz (1914–1999) and Eurico Lopes Pinto (1914–?), the set of constructions varies between 2 fundamentally distinct types, whether it was intended to be constructed in Angola and Mozambique: one for high schools: Pêro de Anáia High School, Beira; António Enes High School, Maputo; D. Guiomar de Lencastre High School, Luanda (1956); and another one for Technical Schools: Inhambane Elementary Technical School, Nampula Elementary Technical School, Silva Porto Elementary Technical School (1956).
5. Fernando Ferreira Botelho Queiroz de Mesquita, (1916, Vila Real) obtained his architecture diploma in 1944 in Oporto and attended urbanism classes at London University. He went to Maputo, at the end of the 40s, where he worked as an architect and urbanist and was in charge of several Public Works offices and directed the Urbanization Office of Lourenço Marques City Council, created in 1964. Advocate of the Modern Movement principles. Fernando Mesquita was responsible for many of the public and private orders received by young architects who were working in Maputo at the time: Fernando Eurico, João José Tinoco (1924–1983), Maria Carlota Quintanilha (1923–), Marcos Miranda Guedes (1924–2001), Alberto Soeiro (1926–1968), Craveiro Lopes (1921–1972)

and Pancho Guedes (1925–). He stayed in Mozambique after its independence, dying in Maputo in the 90s.

6. “The gallery as a typological element, is related with two fundamental factors: the spatial organization, regarding the access distribution and circulation, and the qualification of a space that is both inside (because it is framed into the limits of the building and, being covered, it is protected by the sun and the rain) and exterior (because, exposed to the air circulation, it is in contact with the outside temperature and noise)” (Magalhães, 2009).
7. It was possible to study 35 case studies, built along only 2 decades; by mapping the territory with Google Earth software it was possible to identify 20 more cases.
8. Francisco Castro Rodrigues (1920, Lisbon) in a personal interview (03.04.2012), uses the word “mushroom” as an analogy to the lichen, a common type of eczema in the inhabitants of these climates, caused by the combination of high temperatures with high air humidity.
9. Expression used by Vasco Vieira da Costa (1911, Aveiro–1982, Porto) to define what would be the “preferred orientation” of buildings “where the consideration of each of those 2 determining factors of orientation (insolation and dominant winds) yield solutions that do not conjugate.” In Vasco Vieira da Costa, *Cidade Satélite* nº 3, CODA Porto, ESBAP, 1984 (1948).
10. Kultermann, Udo, *Neues Bauen in Afrika*, Wasmuth, 1963.

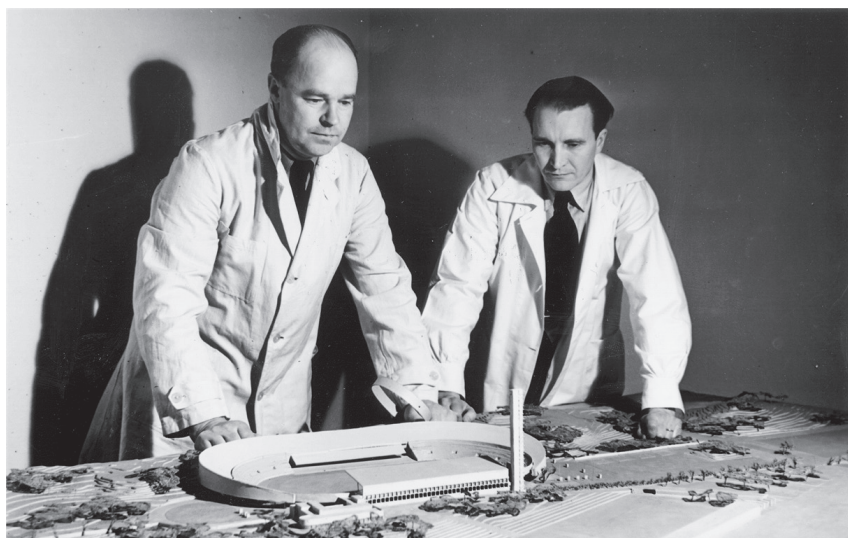
References

- Albuquerque, A., *Arquitectura Moderna em Moçambique: Inquérito à Produção Arquitectónica em Moçambique nos Últimos Vinte e Vinco Anos do Império Colonial Português (1949–1974)*, Coimbra, FCTUC, 1998.
- Bota, R., *Relatório: Situação das Escolas Primárias em Moçambique no Último Decénio*, DGOPMU, 1971 (PT/IPAD/MU/DGOPC/DSUH/1926/13048).
- Caldas, J. V., “Design with Climate in Africa. The World of Galleries, Brise-Soleil and Beta Windows”, *docomomo Journal* 44, 2011.
- Ferreira, A., *Obras Públicas em Moçambique, Inventário da Produção Arquitectónica Executada entre 1933 e 1961*, Lisboa, Edições Universitárias Lusófonas, 2008.
- Ferreira, Z., *O Moderno e o Clima na África Lusófona. Arquitectura Escolar em Moçambique: o Programa de Fernando Mesquita (1955–1975)*, Lisboa, IST-UTL, 2012.
- Fry, M.; Drew, J., *Tropical Architecture in the Dry and Humid Zones*, London, BT Batsford, 1964.
- Kultermann, U., *New Directions in Africa Architecture*, New York, George Braziller, 1969.
- Magalhães, A., *Moderno Tropical. Arquitectura em Angola e Moçambique 1948–1975*, Lisboa, Edições Tinta da China, 2009.
- Mesquita, F.o, *Escola Técnica Elementar de Lourenço Marques. Projecto–Memória Descritiva*, Lourenço Marques, DSOPT, 1961 (AHU-MU-0P00584-2646-1/2).
- Quintã, M., *Arquitectura e Clima. Geografia de um Lugar: Luanda e a Obra de Vasco Vieira da Costa*, Porto, Iperforma/Soapro, 2007.
- Tostões, A., “Modern and Sustainable”, *docomomo Journal* 44, 2011.
- Tostões, A.; Bonito, J., “Between Cancer and Capricorn: Urban Planning and Know-How Exchanged”, “11th International Conference on Urban History, Cities & Societies in Comparative Perspective,” EAUH, Prague, 2012.
- Tostões, A.; Oliveira, Maria Manuel, “Transcontinental Modernism. M&G as an Unité d’Habitation and a Factory Complex in Mozambique”, *docomomo Journal* 43, 2010.

The Helsinki Olympic Stadium in Transition

By Wessel de Jonge¹

Many 20th century sports facilities are in need of upgrading according to present standards and the 1938 (1952) Olympic Stadium of Helsinki is no exception to the rule. The international sports federations increase their requirements and security issues become more prominent by the year. Finland's largest stadium is mainly used in summer for soccer matches, athletics, rock concerts and other events, and additional usage throughout the year would be welcome in order to strengthen the venue's financial position and to pay for the extensive maintenance and renovations. At the same time the stadium is a popular historic site that plays an important role in the collective memory of the Finns and needs to retain its character as cultural heritage. Many delegates have visited this outstanding example of Modern Movement Heritage during the last docomomo International Conference that took place in Helsinki last August. Now, the building needs to be improved.



of the other structures were extended or altered.

After the Games, new offices and a youth hostel were built under the stands. The annexe houses a popular sports museum including trophies of the national hockey team and trivia that once belonged to Finland's sports legend, the distance runner Paavo Nurmi whose outstanding performances in earlier Olympics inspired the Finns to make the bid in the first place. Together with the stadium's landmark tower that offers a breath taking view of down town Helsinki, its harbours and the bay, the museum is a must-see for every tourist visiting the capital.

The arena involves a 400 metre athletic track and an athletics field that is used as well for soccer matches, accommodating 70.000 spectators on the surrounding stands at the time of the 1952 Olympics. Today the venue seats 40.600 spectators for sports events while its capacity for concerts can be extended to 50.000 with additional stands on the centre field. A second canopy opposite the original one has been added in 2003–05 after design of K2S architects, who also developed a master plan for future developments of the site.

The job for the architectural design of the stadium's conversion was put to tender in the summer of 2012 and was won by an international team consisting of K2S and NRT, both noted architectural firms from Helsinki, stadium expert White architects from Stockholm and Wessel de Jonge architects from Rotterdam, that specialises in the adaptive re-use of 20th century architectural heritage.

The stadium needs to be adapted to come up—as far as possible—to the guidelines of FIFA, UEFA and the IAAF which may be regarded a real challenge given its status as a national heritage site. One of the key issues is the consideration to cover the rest of the seats with additional canopies. Another is the request for a single-curved track whereas the present track could only be squeezed in between the stands by designing a double-curved track. Other challenges to be met include the wooden benches which are similar to the original ones but do not comply with UEFA requirements regarding individual seating, the lack of vomitories for emergency evacuations, the general lack of logistic facilities such as parking, loading docks and elevators, and the cramped catering and sanitary areas. New facilities will be added for contemporary sports and cultural events as well as fairs and conferences that will allow multiple usages. The site plan needs to be revised in order to accommodate large crowds in a more inviting way and to improve service access of the venue while avoiding large scale surface parking facilities and connecting the site much more to the surrounding city. The renewal is scheduled to be ready by 2018.

The Finns—as a small and young nation—took immense pride in offering their help after Tokyo withdrew to organise the 1940 Olympics in the dawn of the Second World War. The first large scale stadium of the country was designed by the Finnish architects Yrjö Lindegren and Toivo Jäntti and was first completed in 1938. Among the other structures that were built for the Games were the 1934–35 Exhibition Hall (architects Aarne Hytönen and Risto-Veikko Luukkonen), the 1938 outdoor Swimming Stadium (architect Jorma Järvi), the 1938–40 Velodrome and Rowing Stadium (architect Hilding Ekelund) and the Olympic Village designed

in two stages from 1938–40 and 1940–48 by Hilding Ekelund and Martti Välikangas.

One may imagine the great disappointment when the 1940 Games were cancelled altogether due to the outbreak of the war. It was not until 1952 that the next Olympics could be held in the Finnish capital and the new stadium could finally serve its intended purpose. By then, the requirements for the event had increased and the building had to be considerably adapted and complemented with a second ring in reinforced concrete and temporarily extended with a third ring of stands constructed in timber. Also most



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Figure 1. Architects **Yrjö Lindegren** and **Toivo Jäntti** with the original model for the stadium. Photo from Stadion-säätiö (The Stadium Foundation).

Figure 2, 3. The Helsinki Olympic Stadium in its present condition, showing the 1952 extension rings with their fan-shaped timber façade. The tower offers an outstanding view of the city and is a tourist attraction. Photo by the author.

Figure 4. Due to the harsh climate in the Finnish capital, the stands and sports field inside are left unused for much of the year. Photo by the author.

Notes

1. Wessel de Jonge graduated in architecture at Delft University of Technology and co-founded **docomomo** International. Beside his 1999–2004 rehabilitation project for the Van Nelle Design Factory in Rotterdam, his other Master Planning projects include the extensions of Amsterdam's 19th century Artis Zoo and the 1958 *Cité Modèle* in Brussels. He founded Wessel de Jonge architecten bna which has specialised in the field of rehabilitation of existing buildings that in many cases involve additional or new interpretations in particular environments. Among other projects he has been in charge of the restoration and adaptation of Gerrit Rietveld's 1953 Biannual Pavilion in Venice, Italy (1995); the supervision of the restoration of the Wiebenga and Van der Vlugt's 1922–23 former Technical Schools in Groningen

(1999); and the rehabilitation of the 1947 former Control Tower at Schiphol International Airport (2001). Recent commissions include the Forum Rotterdam, in cooperation with OMA; the extension to the 1920s Royal Tropical Institute (KIT) in Amsterdam, involving the rehabilitation of the museum's entrance and the addition of a hotel and a new theatre.

References

Makkonen, Leena, *Modern Architecture in Helsinki*, Helsinki, Helsinki City Planning Department, 2012, 86–101.
Högström, Hikka, *Architecture of Helsinki: 'Great is to Triumph, Greater Far Noble Combat*, Tournikotis, Panayotis, ed., *The Body, Sport and Modern Architecture*, Athens, **docomomo** Specialist Committee on Registers, 2006, 287–306.

From Sentiment to Science — docomomo comes of Age

The following keynote lecture was presented at the 12th International **docomomo** Conference that took place in Espoo, Finland, in August 2012. The author, an active member of **docomomo** since its creation, used this opportunity to do what is traditional when someone ‘comes of age’, that is, use it as a milestone to look back at where **docomomo** came from, and forward to what it might become [figure 1].

By John Allan

It would be presumptuous of me to attempt this task on behalf of an organization embracing so many different countries and cultures, so I must approach it just as an architectural practitioner in the UK and my presentation will inevitably be somewhat autobiographical. However, by using some of my own case studies to identify certain themes, I want to suggest a wider interpretation of the **docomomo** mission as it has developed from infancy to adulthood, and how it might continue from here.

I still have the most agreeable memories of our first conference in Eindhoven in 1990, when the delegates from a mere handful of countries came together to share their concern over the fate of Modern architectural heritage. It seemed like a historic beginning, as indeed it has proven to be. Such initiatives however do not come from nowhere; it was our response to a context of ignorance and neglect. Many of the authorities who ought to have known better were ignorant of their MOMO legacy, and many of the owners of key buildings and sites had allowed them to fall into varying states of neglect. To those of us for whom this legacy was our inspiration, the situation was unbearable. So you could say that our response to this ignorance and neglect was driven by *sentiment*. ‘Sentiment’, is defined in our English dictionary as ‘susceptibility to tender, delicate or romantic emotion’, which I think aptly describes the impulse that brought us together 22 years ago—a shared love of the most precious built achievements of the heroic period of Modernity that had fallen into oblivion and were at risk of being lost altogether, almost accidentally.

What that moment ignited was a shared resolve to ensure that the best surviving achievements of that heroic period of the Modern Movement were firstly identified and recognized as such, then protected and conserved. Some of the success stories have been heroic in themselves and perhaps none more so than that of the building that started it all: the Zonnestraal Sanatorium saved by **docomomo**’s founders Hubert-Jan Henket and Wessel de Jonge.

This building, and the monumental task of rescuing it, has become a sort of metaphor for the whole movement. Many of the national groups here may likewise have originated in a particular rescue campaign, and I dare say that every country in the **docomomo** family could identify one building, among all others, that represented that optimism and innocence by which we identify

the early Modern Movement. In England we had the Penguin Pool at London Zoo, which I was privileged to restore in the mid-1980s and that for a time became an emblem both of English Modernism in its prime, as well as of the conservation initiative represented by **docomomo**.

I will come back to Eindhoven at the end, because it provides such a clear milestone from which to measure the distance we have travelled since. But that was then, and this is now. We may not need to re-write the Eindhoven Statement, which still makes persuasive reading, but do we have to re-define the mission to which it is applied? I believe we do. So what has changed?

Well, I think two things have changed. One has to do with **docomomo** itself, the other its external context. Firstly, our own position in relation to the Modern Movement legacy.



Figure 1. John Allan addressing the Helsinki Conference, Espoo, August 2012. Photo by Stella Maris Casal.

Figure 2. **docomomo**’s changing focus.

Figure 3. Balancing differing project priorities.

This might be imagined in the form of a pyramid where the very few, most iconic, examples sit at the top, and as heritage significance diminishes, so the numbers increase. In the centre, lies the largest collection of works that may not be sufficiently distinguished to be listed, but that are certainly too numerous and valuable as property to demolish. At the base is the residue of buildings that could surely be lost without a tear being shed.

Since many of the most significant monuments have now been identified and in most cases (if not all) have been saved or at least removed from the 'critical list', so our attention has turned to the other less rarified but more numerous elements of the legacy. Thus, the first change after 22 years, it seems to me, is the *change of focus* [figure 2].

The second change—relating to our context—is surely the cause of environmental sustainability, which in 1990 was little more than a gleam on the horizon, but that has now become the single most pressing issue to confront not only in building design and construction generally, but in virtually every field of endeavor in the 'developed' world. It is now unthinkable to embark on any kind of design undertaking without the question of its environmental impact and sustainability being at the heart of the project. It conditions everything we do.

Increasingly alarming statistics tell us that we can no longer behave as if the earth's resources were limitless, and that we must learn how to renew the world with things that exist already. Indeed it often seems as if the Green Agenda were the *only* agenda.

Now I've identified these shifts for **docomomo** as two separate things, but their implications come very close to being a single proposition, namely that environmental and economic reasons may be more relevant than heritage sensibilities for keeping and improving the majority of Modern buildings that are not 'iconic'. Or, to use my earlier terminology, we are finding that initial 'sentiment' by itself either inapplicable or insufficient. We must find *other* arguments for conserving our legacy and these, I suggest, are likely to focus on economic and sustainability factors.

To expand on this, I want to say a word about heritage recognition. Whereas historic buildings usually attract instinctive public support, in the case of Modern buildings—because their recognition as *heritage* is still so underdeveloped—the arguments for listing must be made by specialists such as academics, architectural historians, etc. It's due to the prevailing unpopularity of Modern architecture in the UK that listing has become the conservationists' main

weapon against demolition. If their case is successful, then at least the building has the law on its side—even if not public opinion. However, this is a game of high stakes inasmuch as, if the listing case fails, then demolition is assumed to be inevitable.

This is exactly what happened with Robin Hood Gardens, Pimlico School, Broadgate, and conceivably, London's Southbank complex, which has now been turned down for listing 4 times. By relying so much on listing as the primary defence, and therefore on trying to convince sceptics of *heritage* significance, conservationists of Modern architecture have been seeking to win the most difficult type of argument for saving buildings in distress. This is how motivation by *sentiment* can have precisely the opposite outcome to that intended—since losing the heritage argument for listing becomes synonymous with losing the buildings altogether.

I am not suggesting that **docomomo** abandon the evangelical first article of its Eindhoven Statement—to 'bring the significance of the Modern Movement to the attention of the public'. What I am suggesting is that in the increasing number of cases, where we are *not* dealing with 'icons' and where a heritage argument therefore becomes that much more difficult to win, we should be exploring and promoting the many *other* possible motives for keeping a Modern building.

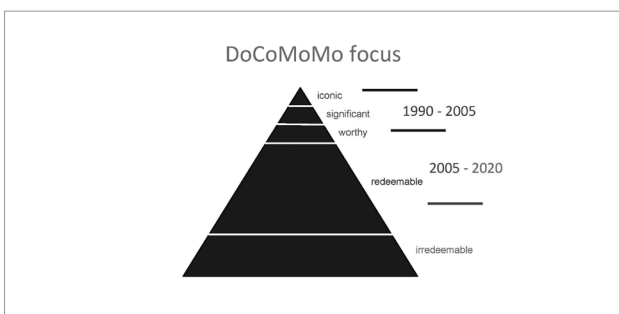
I want to examine this issue of motives because what has struck me from my own experience is how projects that the architect might deem to be of heritage significance are usually seen quite differently by the other participants, with heritage very low on their agenda—if at all. In almost every case, there are three types of need that require a response—of which only the first could be said to be purely heritage driven. This is *repair*—the requirement to shore up or reinstate original fabric to retrieve or prolong its authenticity. Beyond this however, there is *upgrade*—the need to improve the technical performance of a building or replace its engineering systems that have become deficient or unserviceable. And then, crucially, *re-formation*—the pressure to intervene and change buildings and their sites in order to add value or accommodate new requirements.

For the purposes of this talk, I hope to use these terms generically without getting tied up in the semantics of terminology. This pattern repeats so consistently that I have come to see the architect's role as one of trying to bring these 3 factors to a valid and sustainable point of balance. However, this will differ with each project, according to their particular priorities [figure 3].

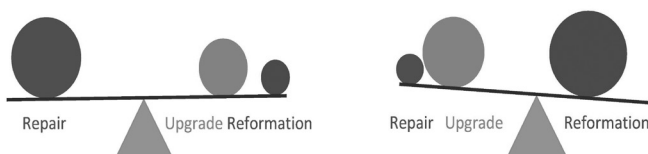
The conservation lobby is interested in authenticity and 'significance', and is therefore biased towards preservation and repair of original fabric. Users are concerned with whether a building is good to work in or live in, and so are inclined to focus on upgrading its performance and functionality. Property owners are interested in their building as an investment and so are concerned with intervening to maximize its exchange value and return. So the three needs tend to be identified with the three key types of stakeholder, *repair*—conservationists; *upgrade*—users; *re-formation*—owners/ investors.

Architects must serve all of these interest groups. However, depending on the project, the weight given to each need can vary considerably. In the few high profile projects I've called 'iconic', conservation is supreme, with upgrade and intervention being admitted only so far as is necessary to secure the key heritage objectives. On the other hand, with the great majority of Modern buildings in the middle of my pyramid, it is only realistic to assume that intervention and upgrade will play the dominant role.

This is really the thesis I want to put to you, that because the conservation of the Modern Movement cannot, in the majority of cases, expect to operate in a supportive heritage culture, but *has* to grapple with the sciences of upgrade and adaptation, we should be developing those skills and not just relying on heritage advocacy.



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Figure 4. 2 Willow Road, London, **Ernö Goldfinger**, 1938.

Figure 5. The Homewood, Surrey, **Patrick Gwynne**, 1938.

Figure 6. 66 Frognal, London, **Colin Lucas**, 1938.

Figure 7. Harbour Meadow, West Sussex, **Peter Moro** and **Richard Llewelyn Davies**, 1938-40.

Figure 8. Miramonte, Kingston-Upon-Thames, **Maxwell Fry**, 1937.

Figure 9. Hill House, London, **Oliver Hill**, 1930s.

Figure 10. The Isokon, London, **Wells Coates**, 1933-34.

Figure 11. New North Court, Jesus College, Cambridge, **David Roberts**, 1963.

Now, I don't want to be misunderstood here. I certainly do not underestimate the need for a scientific approach to conservation work *as such*, and projects like Villa Tugendhat surely provide supreme examples of this discipline. But the point *there* is surely that the science occurs *within* a conservation agenda, whereas in the cases I'm talking about it must find a place in a sceptical arena where even keeping Modern buildings, and working with them, *cannot* be taken for granted.

To illustrate my thesis I will therefore present my case studies by descending order of heritage motivation, that is, starting with heritage-led projects and progressing to those where heritage was increasingly peripheral—though still an important 'by-product'; in effect a step-by-step journey from sentiment to science. This I believe is the way *most* modern buildings will have to be saved if they are to survive—*not* by pleading special heritage privileges but by demonstrating how they can be made useful for the future.

If we start at the tip of the pyramid, the two house museums we've restored for the National Trust—Erno Goldfinger's House in Hampstead and Patrick Gwynne's House near Esher—could be regarded as the most straightforward in terms of motivation—that is where *all* key parties—client, conservation authorities, users and indeed ourselves—shared the same agenda—*heritage*. [figures 4, 5].

However, it must be noted that by privileging the heritage interest, the houses themselves ceased to be houses, (albeit the Gwynne house is tenanted). There are very few such cases where Modern Movement buildings can be expected to survive by just becoming exhibits in themselves.

We are in the rarified realms of Villas Savoye and Tugendhat, Sonneveld and Seidler.

We have undertaken many other rescue missions on Modern houses, but these have all been for private owners, where invariably there have been *other* aims on the agenda—most notably the desire to add value. So while I might want to present these as conservation projects in the **docomomo** canon, it would be disingenuous to suggest that this was the sole or even the main objective. The economic realities dictated otherwise, and it was *heritage* that was an 'extra benefit'. The challenge of these projects was to achieve the client's required interventions without detriment to their heritage value [figures 6, 7, 8, 9].

Staying with residential property, the Isokon, which you might assume was saved because of its iconic status, was really regenerated for its value to a social landlord whose agenda corresponded exactly with the local council's policy to prioritize key-worker housing.

The fact that this building was listed Grade I of course meant that conservation protocols were an essential element of the project. These were however not the project drivers as such [figures 10, 11].

Another residential example would be the hall of residence we restored for Jesus College, Cambridge University, where the underlying requirement was to make the building suitable for conference visitor use. Though a familiar challenge for British universities, this case involved the complete re-engineering of the service cores of this 1960s Grade II listed building. Nevertheless, I should still like to think that this was achieved without detriment to its special architectural interest.

What we are seeing is the changing argument in moving down the pyramid toward the less iconic, more generic elements of the Modern Movement legacy [figure 12].

A good example of the latter type is Priory Green, a large and troubled early post-war housing project by Lubetkin, which we regenerated for another social housing association. Here there was *no* question of heritage driving the agenda. On the contrary, the local authority who owned the estate was ready to demolish in favor of redevelopment. By-passing heritage arguments, we maintained that a more *sustainable* approach would be to retain and rehabilitate the estate. This could have been done in various ways as the buildings were not listed. Overcladding and plastic windows might have been accepted as the client was more pre-occupied with viability than how it was achieved. The heritage ambitions were simply our own. Eventually however, on seeing the completed result the local council declared the whole estate a Conservation Area [figure 13].

Plymouth Civic Centre was another case of a local authority disowning its inheritance, wishing to sell the site for redevelopment and move into new offices elsewhere in the city. This fine ensemble dating from the early post-war years was opened by the Queen in 1962 and became a potent symbol of Plymouth's recovery from the blitz. Memories fade however. When the council sought to dispose of the buildings, English Heritage had them listed. We were commis-



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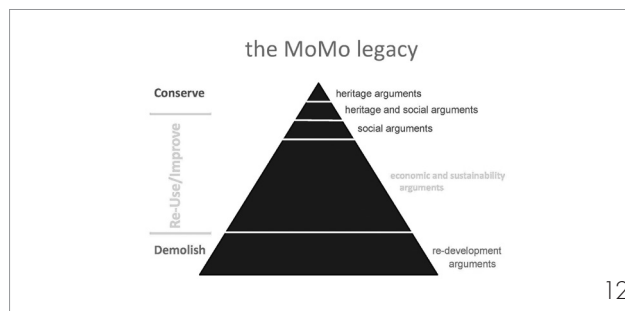
sioned to propose rehabilitation measures and potential future uses. We found that the buildings were quite capable of upgrade and adaptive re-use, and new developers are now being invited to express an interest in taking over the site whilst retaining and upgrading the buildings. Here again, the project drivers depended entirely on economic and sustainability factors [figure 14].

Much the same could be said of my final two examples from the education sector (and also listed)—Sheffield University Library and Haggerston School in East London, both now saved for an extended future through architectural and environmental intervention [figures 15, 16].

Almost all of these projects were saved by motives other than a concern for Modern heritage. In every case however, there has also been a heritage benefit in terms of enhanced authenticity. In other words, the dominance of *other* motives in projects involving important Modern buildings does *not* mean that heritage considerations can't play an important part. I believe there is a lesson in this for us at **docomomo**, and this is what I shall consider in conclusion.

I started by describing **docomomo** as a family, and I suspect that what binds us together is our predisposition to embrace the Modern Movement legacy as heritage first and foremost. *Outside* the family however, most people we deal with have no such predisposition. By all means we can continue to revere our legacy, but I believe that we must *also* get better at understanding and exploiting *other* arguments for keeping and working with Modern buildings than solely heritage ones. There are plenty of such arguments to pursue—and I suggest that they are likely to focus on the environmental and economic factors now dominating societal concerns.

It seems to me that the survival of most modern buildings will depend increasingly on demonstrating the feasibility of upgrading performance, adding value and exploiting opportunities for change to serve new needs. I would like to promote this broader interpretation of conservation over the more rarified conventional model usually derived from the well-known conservation charters with their focus on minimal intervention and their almost exclusive preoccupation with original fabric and its assumed survival.



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In stressing the role of intervention, I do *not* want to give an impression of devaluing specialist skills and knowledge in the conscientious restoration of buildings of *any* period. Far from it. Conservative repair can still be regarded as the gold standard of conservation practice *in appropriate circumstances*. But we shouldn't forget that the Modern Movement, and Modern architecture, was supposed to be for *everybody*, and it's my opinion that beyond the celebrated high-profile cases, the greater challenge is to find ways of adapting the re-usable mass of the Modern legacy to serve the real needs of the majority.

I once described conservationists as falling into one of two categories—curators or alchemists—the former regarding heritage assets as *heirlooms*, the latter approaching them as a *resource*. It seems to me, in our current climate of uncertainty, when *everything* we now do is subject to the criteria of environmental

Figure 12. The Modern Movement legacy.

Figure 13. Priory Green Estate, London, Berthold Lubetkin and Tecton, 1943–52.

Figure 14. Plymouth Civic Centre, Plymouth, Hector Stirling, Jellicoe, Ballantyne & Coleridge, 1959.

Figure 15. Sheffield University Library, Sheffield, Gollins, Melvin & Ward, 1959.

Figure 16. Haggerston School, London, Ernő Goldfinger, 1964–65.

survival of modern





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and economic sustainability, that the curatorial challenge of preserving buildings and places from the past will increasingly be overtaken by the *creative* challenge of adapting the larger Modern Movement legacy for a sustainable future.

One of the early criticisms of **docomomo** was that its conservationist stance towards architecture of the Modern Movement was intellectually—perhaps even ethically— inconsistent with a movement originally dedicated to renewal. Yet to follow that ‘logic’ would mean that we should be bound by the circumstances confronting our grandfathers when half the world lay in ruins, and argue that what justified *their* need to rebuild should remain *our* justification to keep on demolishing.

Yet, as I said earlier, the conditions of *our* time have surely taught us that progress must now consist in learning how to renew the world with things that exist already. People may continue to debate the *heritage* values of the Modern Movement, but what *cannot* be disputed is that its legacy represents an incalculably vast investment of human labor and embodied energy. Doubtless some of it must be cleared and replaced. To suggest otherwise would be naive. But more, much more, must survive by being *sustained*.

As this conference title ‘The *Survival* of Modern’ surely implies, we should be leading the way in demonstrating how, for example, the embodied energy in an existing Modern building may make it economically more advantageous and environmentally more responsible to retain and upgrade it, regardless of whether it is listed or not. Although I’m well aware that there has been progressive work in the science and calculation of embodied energy, this kind of reasoning is still woefully underdeveloped in the discourse and politics of conservation. And yet many of the materials we are dealing with in Modern Movement buildings—cement, steel, aluminum, copper, oil based products—have some of the highest embodied energy values amongst building materials. We must begin to appreciate this investment in energy and material as *another* kind of heritage.

If, as the slogan has it, ‘the greenest building is the one already built’ then the question I put to **docomomo** is whether it is willing to venture into this territory and master the science and politics of sustainability and embodied energy in the cause of keeping modern buildings? Or would we rather stay in our comfort zone, immersed in history and culture and carrying on lovingly restoring our favorite icons?

Of course we can still be Modern Movement evangelists, pursuing article 1 of the Eindhoven Statement, and hoping to win converts from a sceptical or indifferent audience. My own view however is that we must now engage with this larger field and draw **docomomo** into the wider debate on *environmental* conservation.

The alternative, it seems to me, is that **docomomo** will increasingly become a victim of its own specialization.

Those of you at Eindhoven in 1990 will remember Peter Palumbo and his philanthropic role in rescuing the Penguin Pool. He was one of **docomomo**–UK’s original supporters. So allow me to close by quoting from his Eindhoven paper all those years ago. He said:

*We hope that **docomomo** does not become backward-looking. We hope it is not just a pressure-group for conservationists. We hope that docomomo will not emerge as just a club for scholars. None of these things, we believe, would be in the best interests of the Modern Movement.*

docomomo is about the future, if it is about anything. It has to forge a connection between the past and the conditions which confront us today.

Surely ‘the conditions that confront us today’—that is in 2012—are even more pressing than 22 years ago when these words were spoken. I put it to you that forging this connection two decades later must surely entail going beyond sentiment and grappling scientifically with the larger challenges of sustainability that I have indicated. In the terms of our conference title, it seems to me that the ‘survival of modern’, ultimately cannot be separated from SURVIVAL itself.

docomomo has achieved many glorious things in its coming of age. Now, I believe it is this difficult but compelling task that presents our movement with its next great challenge.

John Allan

Director of Avanti Architects for nearly 30 years. First Chairman of **docomomo**–UK 1989–91. Biographer of Berthold Lubetkin, John Allan has led all Avanti’s Modern Movement conservation projects, including the restoration of Lubetkin’s Penguin Pool, Highpoint Flats and Finsbury Health Centre.

Oscar Niemeyer

1907-2012

By Danilo Matoso Macedo

Modern master Oscar Niemeyer (1907-2012) was the most important Brazilian architect. Graduated in the *Escola Nacional de Belas-Artes* in 1934, he soon became world-known for his role, together with Lúcio Costa (1902-1998), with the design of the Brazilian Ministry of Education (1937) in Rio de Janeiro; or for their Brazilian Pavillion in New York World Fair in 1939. His solo work in the Pampulha buildings was immediately published in the catalogue of the "Brazil Builds" exhibition at the Museum of Modern Art in 1943.

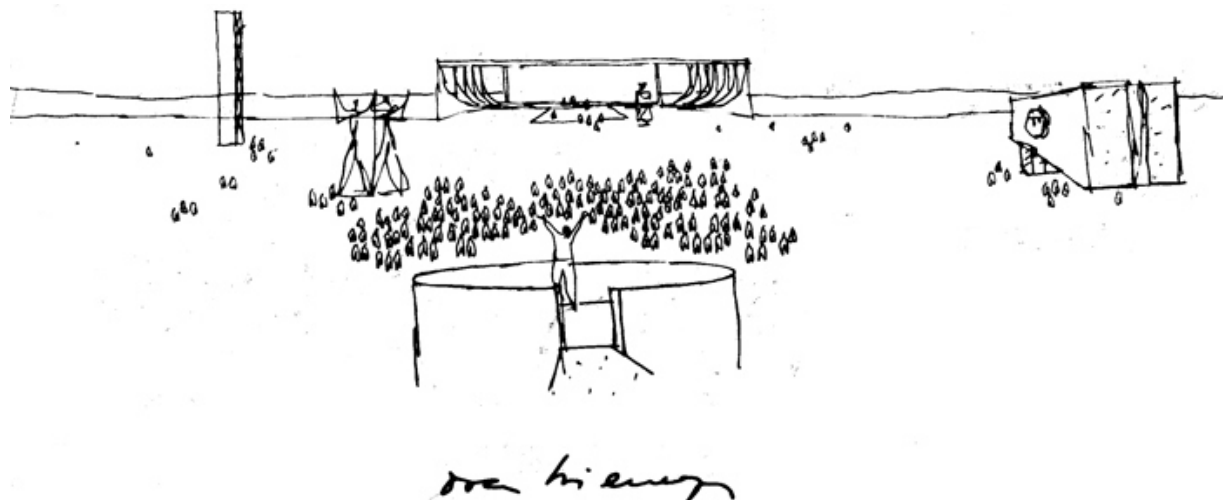


Definitive international recognition came in 1946, when he was part of the team in charge of the design the United Nations Headquarters also in New York, when Niemeyer's design was the one chosen to be followed in further developments. Pampulha was also the beginning of his partnership with the politician Juscelino Kubitschek, then a young mayor and the President of Brazil from 1955 to 1960, when he decided to accomplish the long-cherished national dream of building a new federal capital: Brasília. Lúcio Costa won a competition for the urban "Pilot-Plan" and Niemeyer designed the main administrative buildings. He never ceased to produce new and sometimes controversial designs for the Capital. However, as Brazil immersed into a twenty-five-years dictatorship from 1964 on, he intensified his work abroad, in places as different as Haifa, Tripoli, Algiers, Milan, Paris or Havre.

Niemeyer performed a rare combination of true avant-garde innovation with professional success. His longevity, along with the large number of important commissions, makes him one of the most influential architects of the 20th century in western culture. Works derived from his initial colorful and sensual phase, from his new monumentality in Brasília, and from his late minimalist work, can be found in the architecture from every corner of the Modern world.

Danilo Matoso Macedo, August, 2013

Architect and Urban Designer, specialist in Public Policies and Government Management. He is the author of *Da Matéria à Invenção. As Obras De Oscar Niemeyer Em Minas Gerais 1938-1955* published in 2008 and he founded the docomomo Brasília within **docomomo** Brazil.



1907-2012
Obrigado, Oscar

Pedro Ramírez Vázquez 1919–2013

Requiem for Pedro

By Armando V. Flores Salazar

The news of his death was instantly dispersed, displacing all other issues of national or international interest. When I read the message that Louise Noelle sent to all **docomomo** Mexico members, I accepted it as a plain and sad confirmation of what had happened: “Dear colleagues, this tragic note is to inform about the death of architect Pedro Ramírez Vázquez today, April 16. He was one of the most prominent architects of the Modern Movement and his work has been part of our writings”.

The mental mechanism of what we had in common came about and in a disorderly manner I reviewed the analysis and reflection of the meetings, retreats and affinities that built the personal and professional friendship that uniquely brought us together.

His close ties with the city of Monterrey began in 1953 when President Ruiz Cortines assigned him to become the liaison with the Monterrey delegation—led by Governor José S. Vivanco and Don Alfonso Reyes—to pursue the procedures to create the *Ciudad Universitaria* of Nuevo Leon. This request was made in correspondence to his duties as Head of Building Conservation of the Ministry of Education of Mexico. In 1954, he was part of the delegation accompanying President Ruiz Cortines in his visit to Nuevo Leon and in the Government Palace he informed on the progress of the studies to achieve this ambitious project. An unfinished cultural and professional service to the city and the region began including his role as President of the jury that selected the winning project for the new *Palacio Municipal* of Monterrey (1975) and the project management of the new Guadalupe Shrine in Colonia Independencia (1981), where he wisely respected the existing sanctuary and the privilege of equipping the new temple with a stone block from Cerro del Tepeyac for the altar.

My impersonal relationship was primarily born from the admiration of his outstanding professional production: National School of Medicine at UNAM; National Anthropology Museum; Basilica of Guadalupe and Azteca Stadium among others.

My personal relationship was born by the common friendship bonds with Ramon V. Salguero, Ernesto G. Gallardo, Eduardo Padilla and Louise Noelle; by being chairs of the National Academies of Architecture in Mexico and Monterrey; for sharing parity as emeritus academics of the National Academy of Architecture and, above all, by the close personal relationship amalgamated in many shared tables; in the book exchange; in working sessions; in verbal and written communication; in his disquisitions on various cultural issues; and among many other things his hypnotic gift of being a masterful conversationalist.

We talked a lot and even more we became silent. We never talked, for instance, of his ‘Magna Solidaridad’ library project for the *Ciudad Universitaria* of Nuevo Leon which in 1997 became the *Biblioteca Magna Universitaria* ‘Raúl Rangel Frías’. Once the design and detailing were in an advanced stage, the project was transferred to Ricardo Legorreta’s office due to a personal dislike between Rector Manuel Silos’ person in charge of the project and the architect’s project chief. The rector solved the problem by suggesting another office to continue the project. Thus the opportunity to have one of his works in the *Ciudad Universitaria*—the academic institution with which he was linked from the outset—vanished.

The chivalry of Don Pedro never allowed speaking of this issue in his subsequent visits to the city. It was in this ongoing dialogue and mutual interests that I gave him to read the manuscript of *Calicanto*, a book that explores the cultural frameworks that underpin regional architecture, including the African context. I knew of his particular interest in this continent due to the museums that he had built there. When we met to speak about it his first emotional and excite words were: "I wish I had been the author of your book". My grateful and enthusiastic response was: "That

forces you to write the foreword and thereby make it yours as much as it is mine".

Since then friendship turned into brotherhood. His physical absence has created a void that leaves me flat, full of sadness. Living together in *Calicanto* mitigates the feeling a little bit... as well as the possibility of keeping on with the dialogue in the timeless dimension.

Armando V. Flores Salazar

Architect and professor at the Faculty of Architecture of the Universidad Nacional Autónoma de Nuevo León.

Clorindo Testa 1923–2013

By **docomomo** Argentina

It is with regret and sadness that **docomomo** Argentina informs the international **docomomo** community that architect Clorindo Testa passed away on April 11 2013.



Testa was an architect and urban planner but also a painter whose artistic sensitivity has been always present in the way he conceived architecture.

Born in Naples (Italy), he moved to Argentina with his parents when he was only a few months old and there he attended school. He received his architectural degree at the University of Buenos Aires

and soon after that he worked for the town planning office steered by Jorge Ferrari Hardoy, Antoni Bonet Castellana and Jorge Vivanco, all of them in close contact with Le Corbusier's Modern ideas and the CIAM international conferences.

His built legacy includes the former London and South America Bank (1959, associated with SEPRA), the National Library (1962, with Francisco Bullrich and Alicia Cazzaniga), the Central Navy Hospital (1970, with Héctor Lacarra and Juan Genoud) and the Terrazas building (1975) in Buenos Aires; the Santa Rosa Civic Centre in La Pampa (1956, with Boris Dabinovic, Augusto Gaido and Francisco Rossi); and the beach complex La Perla in Mar del Plata (1985–1990, with Juan Genoud and Osvaldo Álvarez Rojas).

The remarkable conceptual, expressive and material values of his work have received national and international recognition. Clorindo Testa's architecture represents and inspires the evolution of Modern Movement ideas and his most referential buildings have been included in the **docomomo** international register.

Furthermore, most of us will recall him as a kind, enthusiastic and inspiring man, always receptive and patient to explain his vision of architecture to students and colleagues.

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Roberto Segre 1934–2013

A Life of Adventure that Ends with a Banal Tragedy

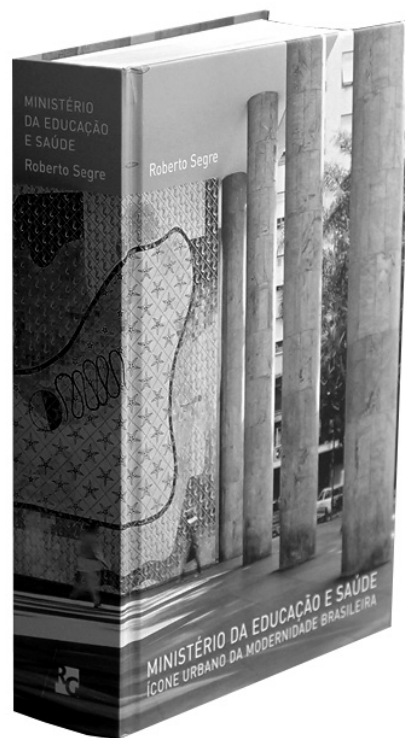
By Abilio Guerra

Born in 1934 in Milan, Roberto Segre migrated to Argentina with his family in 1939, fleeing the anti-Semitism of Benito Mussolini's fascist government. He graduated as an architect at the University of Buenos Aires in 1960 and soon after, in 1963, settled in La Havana, Cuba, where he taught history of architecture for three decades. In 1994, he began his career as a Brazilian researcher and professor on graduate courses in urban planning at the Faculty of Architecture and Urbanism of the Federal University of Rio de Janeiro (UFRJ), where he served until March 2013. During these decades of professional activity, he came to be respected as a critic and historian, publishing many books and articles of the utmost importance on Latin American architecture.

In the last fifteen years, Roberto Segre devoted himself to in-depth research on the history of the *Palácio Capanema*, the current seat of the Ministry of Education and Health, opened in Rio de Janeiro in 1945. In 2009, Luiz Fernando de Almeida, then Iphan's national chairman, learnt of his work and subsequently invited Roberto Segre to coordinate the preparation of the document claiming the building's inclusion on the UNESCO World Heritage List.

This research project also became a publishing project, developed over the past five years by Romano Guerra Editora. During the proof-reading process, the author was impatient to share glimpses of the publication with his friends and colleagues on his iPad. "This is the great book of my life", he would say to friends he crossed in the corridors of the Faculty of Architecture and Urbanism of the UFRJ.

On the morning of March 10, 2013, two days before the layout process began, Roberto Segre sent the last corrections to the editor: "Finally I found a mistake. In the references, the book *América Latina fim do milênio!* appears twice. Check it". He then left for his Sunday walk on the beach. Soon after, the magnificent adventure of his life was interrupted by a motorcycle traveling at high speed.



Original publication: Guerra, Abilio, Roberto Segre. *Uma vida de aventura que se encerra com uma tragédia banal*. Drops, São Paulo, n.13.067.01, Vitruvius, abr. 2013. <http://vitruvius.com.br/revistas/read/drops/13.067/4704>.

Abilio Guerra

Architect, historian and professor at the Faculty of Architecture and Urbanism of Mackenzie University, São Paulo.

Calouste Gulbenkian Foundation. The Buildings

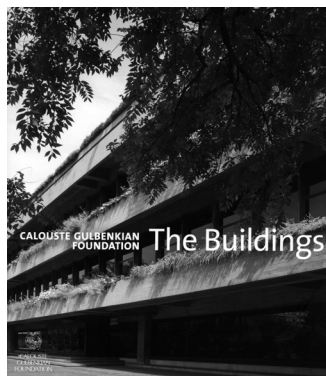
By Ana Tostões

Publisher: Calouste Gulbenkian Found.

ISBN 978-9-8997-2892-9

Language: English

Year: 2012



Modernidad Urbana Urban Modernity

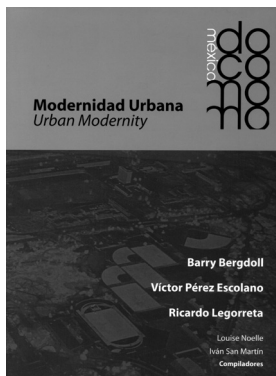
By Louise Noelle and Iván San Martín

Publisher: **docomomo** Mexico

ISBN 978-6-0780-5906-5

Language: English and Spanish

Year: 2012



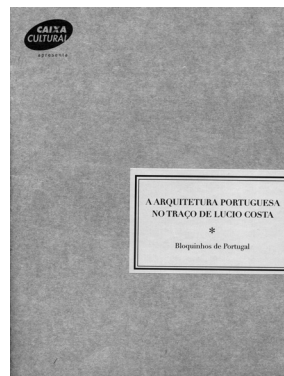
Bloquinhos de Portugal. A Arquitectura Portuguesa no Traço de Lúcio Costa

By Lúcio Costa

Publisher: Caixa Cultural

Language: Portuguese

Year: 2012



The Headquarters and Museum of the Calouste Gulbenkian Foundation are a major work of architecture. The impact it has had and the way it has revealed the effectiveness of qualities such as formal sobriety and contention have confirmed the magnificent articulation achieved between design and construction. Together with the garden, the complex has constructed the image of prestige and innovation of the Foundation itself.

This book is the final product of research that began some years ago, focused on the buildings and the relevance in affirming Modern architecture. By delving into the Projects and Works Department archives, the author unearthed thousands of documents that made it possible to reconstitute the strategy adopted, the choice of the protagonists, the doubts, discussions and major decisions, and the opinions and recommendations gathered. The aim of this work is to reveal the whole process from the moment of creation in 1956 to the present day. Particular emphasis is placed on the design process, in an endeavour to show the daily work that preceded and resulted in the final product.

The book also looks at the potential of the architectural complex, highlighting both its value as Modern heritage and its contemporaneity. It looks at the way it has withstood the transformation in use over the years, including recent interventions and the building's capacity for renewal. It also states the recent recognition as a national monument, starting a new period in patrimonial concepts embodying Modern Movement architecture as heritage.

Calouste Gulbenkian Foundation

Ten years ago, in 2003, **docomomo** Mexico was created and in 2010 it organized the 11th International Conference under the title "Living in the Urban Modernity", celebrated at the UNAM in Mexico City. This publication compiles the speeches by Ana Tostões (**docomomo** International Chair), Louise Noelle (**docomomo** Mexico Chair), and Louise Cox (UIA President between 2008 and 2011); and the keynote presentations by Barry Bergdoll ("Good Neighbors: the Museum of Modern Art and Latin America, 1933-1955, a Journey through the MoMA Archives"), Víctor Pérez Escolano ("1929: La Primera Arquitectura Moderna en las Periferias Ibérica y Latinoamericana") and Ricardo Legorreta ("José Villagrán García y Luis Barragán").

The book is presented by Iván San Martín and has a prologue by Sara Topelson de Grinberg.

Texts in English and Spanish depending on how they were originally presented, and it has been possible thanks to the scientific and economical support of **docomomo** Mexico members, showing their strong commitment with their academic work and with **docomomo**.

These documents are not only a compilation of texts but they suppose a critical approach towards the role of Modern Movement in the urban context, seen from the point of view of some of the most important critics and architects of our time.

The book can be found at: <http://servidor.esteticas.unam.mx/docomomo/publicaciones/page1.html>

Ivan Blasi
Secretary General **docomomo** International

The exhibition of the same title shows the recordings made in small note books by the famous architect and urban planner during his visits to Portugal in 1952. These small note books were lost for 50 years and were revealed to the public in an exhibition at Espaço do Brasil, curated by Maria Elisa Costa (daughter) and José Pessoa. In total, these documents by Lúcio Costa resulted in 305 sheets, filling five small blocks. On the occasion of the publication of his autobiography in 1995, he unsuccessfully tried to find the drawings he had made in Portugal in order to include them in the book. Only after his death, this material was found by her daughter Helena. This publication compiles these materials and makes it possible to see these unknown documents.

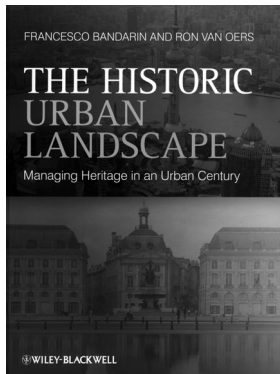
Lúcio Costa's relationship with Portugal has always been one of extreme tenderness and respect. The creator of Brasília, the foreword looking visionary, had a profound connection with the Portuguese mold of Brazilian culture, not as a counterpoint to its architectural boldness but as the foundation and pillar of a Modern reality.

His wise take on Portugal, which he visited so many times and got to know profoundly, is quite patently clear in this admirable collection of sketches, mnemonic moments of an aesthetic devotion that was experienced by this unique architect and urbanist in his 1952 trip to Portugal.

Miguel Horta e Costa
Commissioner General of the Year of
Portugal in Brazil

**The Historic Urban Landscape.
Managing Heritage in
an Urban Century**

By Francesco Bandarin & Ron van Oers
Publisher: Wiley-Blackwell
ISBN 978-0-4706-5574-0
Language: English
Year: 2012



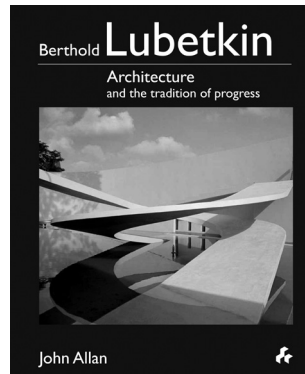
**Nos trópicos sem Le Corbusier:
arquitetura luso-africana no
Estado Novo**

By Ana Vaz Milheiro
Publisher: Relógio d'Água
ISBN: 978-9-8964-1301-9
Language: Portuguese
Year: 2012



**Berthold Lubetkin—Architecture
and the Tradition of Progress**

By John Allan
Publisher: Artifice Books Architecture
ISBN 978-1-9073-1714-7
Language: English
Year: 2013



Much of the current debate on how we should preserve our cultural heritage revolves around urban sites—historic monuments in urban settings, historic districts, or complete historic towns. The growing complexity of urban heritage conservation makes reaching a consensus on how to manage urban heritage difficult. Additionally, the sharp increase in the world's population now living in urban areas, combined with a lack of policies to facilitate a sustainable use of heritage assets means the pressure on historic sites is set to rise. Unless new and innovative ways of managing these sites can be agreed on, there is a real danger that historic cities as we know them today will not survive the first decades of the 21st century.

The Historic Urban Landscape: managing heritage in an urban century offers a comprehensive overview of the intellectual developments in urban conservation. The book examines its modern interpretations and critiques, and the way in which the classical approach has been challenged by the evolution of the conceptual and operational context of urban management. Analyses are provided of how World Heritage sites are managed—with associated debates and decisions—to inform the development of local urban conservation policies and practices. The authors offer unique insights from UNESCO's World Heritage Centre. Examples are drawn from urban heritage sites worldwide—from Timbuktu to Liverpool—to demonstrate key issues and best practice in urban conservation today.

Wiley-Blackwell

Há outras teses neste conjunto de textos. (...) Gosto da forma como se insinuam através de contextualizações mais aprofundadas do que tem sido comum na historiografia especializada nesta temática e cronologia. Note-se, por exemplo, como emergem as diferenças, que por certo agora a autora estará a desenvolver, entre os contextos e resultados da produção arquitetónica na Guiné, Angola e Moçambique.»

A preface is a lens mounted on a book according to a particular perspective. [...] When the book is a collection of texts issues become sharper [...]. Unless they constitute a coherent body and have been organized with clear principle. This is the case of "In the Tropics without Le Corbusier", a collection of texts with a suggestive title which clearly expresses its content [...]. If the title (which is also used for the last text) defines time, the subtitle (Portuguese-African architecture in the Estado Novo) tells us, here equivocally, which is the space. It even reveals much more: the social, political and historical context.

There are other arguments in this group of texts. (...) I like the way these are insinuated through contextualizations which are deeper than what has been usual in specialized historiography on this theme and this chronology. Note, for example, how differences arise – something the author will now develop – between the contexts and results of architectural production in Guinea, Angola and Mozambique.

Walter Rossa

Architect and Professor at the Universities of
Coimbra and Algarve

Now in a new, updated and re-designed second edition this awardwinning book, first published in 1992, is the only comprehensive account of the life and work of Berthold Lubetkin (1901-1990), pioneer architect of the Modern Movement in Britain, survivor of the Russian Revolution, European traveller and intellectual, social commentator and, at the age of 81, RIBA Royal Gold Medallist. John Allan's study (now with 1000 illustrations) is the outcome of his 20-year friendship with Lubetkin and contains many previously unpublished drawings, photographs and extracts from Lubetkin's writings, which were as compelling as his architecture.

The author studies Tecton's large-scale post-war housing schemes in Finsbury and Paddington and the circumstances of the firm's dissolution in 1948. There follows a fully-documented account of Lubetkin's greatest challenge as Architect-Planner of Peterlee New Town—a dream commission that ended in ruins after only two years, leading to his long period of embittered seclusion. The conventional myths of Lubetkin's unbuildable city of towers and ensuing premature retirement are disproved, and the considerable but little known design work of his later years is critically evaluated.

The book is complemented by the original text of Lubetkin's celebrated Royal Gold Medal address; a full directory of works and references; an essay on Lubetkin the writer; an extensive bibliography; a note on sources of material, a chronology and an additional section containing over 100 new colour illustrations.

Artifice Books on Architecture