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The architecture of the tropical city in Sub- Saharan Africa

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FAMagazine is a scientific e-journal in the areas of the architectural project (Anvur disciplinary areas: 08/C - Design and technological planning of architecture, 08/D – Architectural design, 08/E1 – Drawing, 08/E2 - Architectural restoration and history, 08/F - Urban and landscape planning and design) that publishes critical articles compliant with the indications in the [Guidelines for the authors of the articles](#).

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The call for papers provide authors with the possibility to choose between two types of essays:

- a) short essays between 12,000 and 14,000 characters (including spaces), which will be submitted directly to the double blind peer review procedure;
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The architecture of the tropical city in Sub-Saharan Africa

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5	983 997	mag-23	Long	Peer (B)		Yes
6	985 1000	mag-23	Long	Peer (B)		Yes
7	987 1002	mag-23	Long	Peer (B)		Yes
8	988 999	mag-23	Long	Peer (C)	Peer (A)	Yes
9	990	mag-23	Long	Peer (B)		Yes
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NEXT ISSUE

n. 69/70 July-December 2024

Architecture travels

edited by Crisitna Pallini and Lamberto Amistadi

The Grand Tour, a pivotal part of an architect's education, peaked in the early modern period. This unique experience, with Italy and Greece as its key destinations, played a decisive role in shaping common cultural horizons. It was more than just a journey, it was a rite of passage and transcultural training.

The co-identities of many townscapes are a direct result of the circulation and exchange of people and ideas that the Grand Tour fostered.

Although this was mainly a journey to learn from heritage and the arts, from the ancient past and humanist culture, it also implied confronting 'the other', namely discovering diversity and complexity in its contemporary reinterpretations and appropriations. Nevertheless, architectural travel as a learning mode or design-oriented endeavour has recently shifted in meaning. The effortless access to low-cost travel associated with open digital image access has amplified the diagrammatic understanding of cultural distinctiveness and distorted its inception. Therefore, it is crucial to revisit the significance of architectural travel in the twentieth century, in the architect's practice and in their broader cultural understanding.



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This issue of FAM evokes the Grand Tour, broadly conceived, as a frame to:

- Revisit architects who filtered their travel experience into their built work;
- Trace projects/buildings that demonstrate the generative role and cross-cultural circulation of precedents;
- Identify possible affinities (travel destination, timeframes, encounters) and/or analogies and kinship between buildings;
- Enhance comparative review of paths to architectural interpretation.
- Question architectural travel's current incarnation and future as an operative formative collective tool.

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Editorial 1

Enrico Prandi
Out of Africa: between Blixen and Pasolini

Abstract

After the episodic interest in African architecture after the Second World War, it resumed towards the end of the last century and accelerated from the first decade of the New Millennium. Due to the historical events linked to European Colonialism coinciding with the advent of Modernism, architecture often lost contact with the cultural tradition of the place to become a transplant of external models and stylistic features or a caricature of local idioms, making it necessary to recover a specific identity. Tropical architecture is a specific category of architecture that, starting from the climatological condition, should develop its characters in a balanced balance of symbolic, cultural, technological, etc. aspects fused in the architectural project.

Keywords

Tropical architecture — Tradition and innovation — Richness and poverty



Fig. 1
 Diébédo Francis Kéré at Festival dell'Architettura of Parma, 2005. Festival dell'Architettura Archive.

A few years ago, in the *Architecture/World* section of the Festival dell'Architettura of Parma, in its second edition in 2005 entitled *Architecture: richness and poverty*¹, we went in search of figures and projects, native or allochthonous, that seemed to us worthy of attention for how they dealt with the theme of architecture in the so-called developing countries. Under the apparently general title there was the precise desire to invert the two words in polemical and reflective terms with the aim of arguing that so-called poor architecture was actually rich and authentic, even in meanings, while on the contrary rich architecture was often only a trivial display of wealth. Renato Pallavicini (2005), architect and journalist, accompanied an article in *L'Unità*, had juxtaposed the image of an agglomeration of straw houses in the Hidalgo valley in Mexico with the image of the skyscrapers of City Life in Milan. The contrast was not simply between architecture without architects, to quote Rudofsky, and designer architecture, but above all between authenticity and falsification.

On that occasion, a young Diébédo Francis Kéré came to Parma who, almost twenty years later, would be rightly consecrated with the Pritzker Prize for Architecture (the Nobel Prize for architecture), the Indian architect Raj Rewal, unknown to most but a figure of great interest in architecture and former professor at the School of Planning and Architecture in Delhi; we published projects by Kéré, ADAUA/Fabrizio Carola Group, Patrick Dujarric, Abdalla Mohammed Sabbar, Demas Nwoko, Abderrahim Charai and Abdelaziz Lazrak, just to stay in Africa.

This was before a general interest in African architecture broke out, as evidenced by a considerable number of research and publications developed especially since the beginning of the new millennium – the exhibition at



Fig. 2

Pier Paolo Pasolini interviews African students at the University of Rome 'La Sapienza'. Screenshot from the film *Appunti per un'Orestiade africana* (1970). From Wikipedia.

the Triennale Africa is worth mentioning *Big change, big chance* by Benno Albrecht (2014) – culminated with the entrustment of the direction of the 2024 Venice Architecture Biennale to the Ghanaian-born architect Lesley Lokko.

More recently, within a network of intercultural academic exchanges between European universities including the University of Parma and the University of Rwanda (Capacity Building in the Field of Higher Education) I had the opportunity to confront myself with a young Dean who submitted to me the study structure of the courses of the *School of Architecture and Built Environment* of the Kigali RU. If in the print of more than three hundred sheets there had not been written at the foot of the page “University of Rwanda, Department of Architecture”, that order of studies with the relative contents of the individual courses, educational objectives, reference bibliography, etc., could have been mistaken for any university course of study in Europe or perhaps in the world, so general was it, international and little characterized with respect to the territory in which it stood. I learned that the School of Architecture was born in 2009 with a European approach, not because of yet another act of cultural colonialist imposition, but because the leaders of the University of Rwanda at the time saw in the international generalist approach the possibility of inserting itself into a global circuit of university education in architecture and architecture in general, which was well framed in the broader phenomenon of Globalization. On the contrary, a counter-colonial movement was emerging to export a thought on architecture that recovered local building and linguistic traditions, modernizing them without imposing “out of place” techniques (interpreting this term in both a literal and metaphorical sense) that laid the foundations of an awareness as a cultural conquest that began to generate interesting results such as those we witnessed in that edition of the Architecture Festival, unfortunately the only one not to have seen a printed catalog published.

Nothing more came of that project to reform the educational system – the shared idea was to characterize the training course according to the principles of architecture and cities of tropical places – but from the discussions with Manlio Michieletto, former professor at the *Institute Superiore d'Ar-*

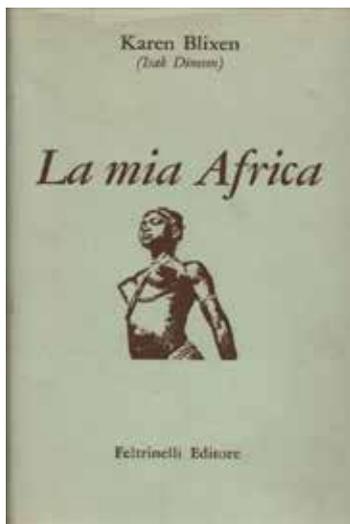


Fig. 3
Karen Blixen, *La mia Africa*, Feltrinelli, 1958. Cover of the Italian edition of the book *Out of Africa*.

chitecture et Urbanisme in Kinshasa in the Democratic Republic of Congo and then Dean of the *School of Architecture and Built Environment* of the University of Rwanda the idea of deepening the theme of sub-Saharan tropical architecture remained. It can be said, therefore, that the idea of the monographic issue of FAM was born on that occasion.

Within the magazine we had already delved into the themes related to the critical Regionalism of Framptonian memory – to which the theme of African tropical architecture is evidently linked – within which Anna Bruna Menghini (2022) speaking of Sub-Saharan Africa in an article, to which we refer for a concise but exhaustive historical-architectural historical-critical analysis of Africa, posed the problem of the cultural identity of a vast and complex continent with a difficult history.

This aspect of contrasting characters is emphasized by many: Africa is a variegated continent made up of “vast prehistoric landscapes, its miserable villages inhabited by a peasant and primitive humanity, two or three very modern cities that were already industrial and proletarian.” These are the words of Alberto Moravia who shares with Pasolini and Elsa Morante the journey first to India and then to Africa in search of cinematographic settings. This crude contrast, which recalls the Pallavicini approach reported above, was the basis of Pasolini’s idea of constructing a Poem on the Third World in the form of an episodic film. (Chiacchiararelli 2013)

The episode shot in Africa will have as its specific theme the relationship between “white” culture (Western: i.e. rationalistic and typical of a bourgeois and already completely industrialized world) and “colored” culture, i.e. archaic, popular, pre-industrial and pre-bourgeois (with the conflict that follows, and all its dramatic ambiguities, its insoluble knots). (Pasolini 1968)

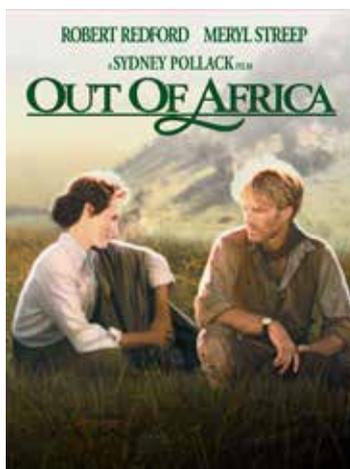


Fig. 4
Sydney Pollack, *Out of Africa*, 1985. Movie poster based on the novel of the same name by Karen Blixen.

The problematic knot was played, and in an architectural sense is still played today, between traditional native and archaic “colored” culture and rationalist modernism resulting from the “white (architectural) culture” imposed by the Western vision. Conflict and ambiguity have in fact accompanied the trials of the modern African, which has managed only in a few cases to achieve convincing results, albeit in a broad sense of modern that welcomes local declinations (what Luciano Semerani (2000) ultimately called “Altro Moderno”)².

The imagination always plays a fundamental role in all those who approach distant and different cultures. An imaginary often built on biased narratives because they were made outside the countries whose events are told, often for the use of colonizers according to clichés based on stories of slavery and imperialism. So that while waiting for a history made from the inside, such as that of Zeinab Badawi (2024) who recriminates *An African History of Africa*, the most important testimonies are those of explorers (anthropologists or ethnologists) who have entered the territories in order to document their physical environment but above all their culture, even symbolic. Above all Leo Frobenius of whom Lucio Valerio Barbera narrates well. Then there are those who have left their hearts on the African continent, such as Baroness von Blixen-Finecke. The English title of his famous novel, *Out of Africa*³ – from which the award-winning film of the 80s ruinously translated into Italian in *La mia Africa* (the Italian translation was already in the novel published in Italy in the Fifties) – is however the pretext to underline again the relationship between the before and the after, between pre-colonialism and post-colonialism.

Out of Africa is also the paleoanthropological hypothesis of the first human

**Fig. 5**

Patrick Schweitzer & Associés architects, Faculty of Architecture and Environmental Design, Kigali, 2012.

Photo @ Joules Toules

ArchDaily.com

<https://www.schweitzer-associés.com/single-project.php?albumID=8>.

migration by *Homo erectus* from which all of us (Europeans, Westerners) would have derived according to the most accredited scientific theories. In other words, humanity would have been born in the Rift Valley in the middle of tropical Africa also known as Black Africa. *Eve was African*, is the title of a book by Rita Levi Montalcini.

We architects, by general cultural training and by specific architectural cultural training, so attentive to the theme of history, tradition, memory of places, etc., cannot fail to consider Africa as our heritage to be defended from that “International of ideas” that flattens differences and homogenizes languages.

Claiming, therefore, the existence of a “kind of architecture” (understood as a classificatory category) that takes its name from the geographical strip crossed by the equator and delimited by the tropics in search of specific identity characteristics is no small thing. Of course, it is a type of architecture that owes a lot to specific climatic and natural as well as cultural conditions: from these, obviously including the set of construction techniques, which are fundamental for projects to be feasible by local workers, a specific interest of a generation of architects has restarted who, if on the one hand have grasped the need to address the theme, on the other hand, they have often adopted the modelling approach of the Manual as a tool of action that is too general to understand the differences in approach.

This is the difference between Otto Koenigsberger, former Head of the Department of Development and Tropical Studies at the Architectural Association, on the one hand, and Maxwell Fry & Jane Drew, who exemplify their theory with the numerous field tests represented by the buildings they have been building since the 1940s in Ghana, Togo and Nigeria. on the other.

After all, the experience (and value) of Fry & Drew earned him an invitation from Le Corbusier to join the design of Chandigarh.

That it is necessary to “design with the climate” seems all too obvious: it is, however, a matter of assuming that balanced attitude between tradition and innovation that has always characterized the good work of Architecture. In this regard, it should be remembered that Ernesto N. Rogers, in the first issue of *Casabella-Continuità*, juxtaposes the publication of Cameroon huts

as *Examples of equatorial architecture* (Tam Tam Group 1953), with the advanced technology applied to mass architecture by the self-taught Jean Prouvé (Zanuso 1953) to demonstrate that one must meet the other.

To conclude, returning to that cultural project of the School of Architecture and Built Environment of the UR of Kigali, which in the meantime had built a new headquarters that is an example of how European sensitivity can be combined with the characteristics of the place (I am referring to the new headquarters designed by the Swiss Patrick Schweitzer & Associés following the international competition of 2012) the core of the “capacity building” to which we were called, consisted in instilling awareness of the cultural richness of a tropical architecture on which the new school could base its teaching. To my knowledge, it could have been the first School of Tropical Architecture in which the themes of sustainability, technology but also history, tradition and memory could find a meeting point in the design laboratory.

Not an imposition, therefore, but a collaboration from the outside so that Africans could use *Out of Africa* as a warning to an economic-architectural neo-colonialism that now invades the great Africa from north to south.

Notes

¹ Red., Ricchezza e povertà al Festival dell'Architecture, in DomusWeb, 19 September 2005. Available at <<https://www.domusweb.it/it/architettura/2005/09/19/ricchezza-e-poverta-al-festival-dell-architettura.html>>. See also *Festival dell'Architettura 2. Ricchezza e povertà. Seconda edizione del Festival a Parma, dal 19 al 25 settembre 2005*. Available at <https://www.archweb.it/eventi_architettura/festival_architettura/festival_architettura.htm>.

² On the same line of research there is also the book by Kenneth Frampton (2015).

³ The original Danish title of the book is *Den afrikanske farm*, which literally translated into Italian would sound like *La fattoria africana*. Both the English titles *Out of Africa* and the Italian *La mia Africa* are an adaptation to different cultural contexts.

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Manlio Michieletto The architecture of the tropical city in the Sub-Saharan Africa

Abstract

The history of the tropical city is also the history of the architecture of the modern movement in Africa. The artefacts of this precise chapter of architecture are still recognisable today. However, these fragments of memory are jeopardised by an anti-modern movement, which classifies urban facts and the city as antiques whose value is “mysterious”. The contributions explore the remains of a vanished memory, helping to restore its continuity. The relationship between architecture and the city is analysed in time and space before and after Independence and in a geographical area where the project is inextricably linked to the context. From the experiences in Western Sub-Saharan Africa, Nigeria, Mali, and Burkina Faso, we move on to the events of modernism in South Africa and Mozambique and then go back east to Tanzania, Sudan, and Ethiopia. The journey ends at the equator in Congo and Rwanda.

Keywords

Sub-Saharan Africa — Tropical Architecture — Tropical City — Modern Movement



Fig. 1
Exam of architectural planning II, “La casa tropicale”, at ISAU (Institute Supérieure d’Architecture et Urbanisme, Kinshasa, DR-Congo). 2014 ©Victor Mukanya Bay.

The journey in Africa between architecture and cities

Every generation has its pyramids to build¹.
(Ki-Zerbo, 2008)

My interest in the city and tropical architecture arises from the work carried out over the years as a professional and an academic in Burkina Faso, the Democratic Republic of Congo (Fig. 1) and Rwanda (Fig. 2), to which are added brief experiences in Ethiopia and Sudan. In particular, the years spent in Kinshasa and the Congolese provinces have allowed us to grasp aspects and implications that persist as a source of inspiration and research. The teaching methodologically based on precise disciplinary references has been enriched over time by rediscovering tropical modernism and its constructed epiphanies (Fig. 3-5). A journey through the African continent that continues today, in Egypt, to rediscover the origins of architecture in its most general meaning. Ernesto Nathan Rogers defined the journey as “building material”, material to progressively build an ideal “way” that corresponds to the architect’s experience, like a formwork that makes the construction of the arch possible and, once its mission is accomplished, disappears, continuing to support the stones of knowledge as described by Carlos Martí Arís:

Suppose I have learned something after so many years dedicated to these issues. In that case, any attempt at theoretical construction in our field must, from the beginning, assume an auxiliary role, a secondary condition, subordinate to the works, which are the authentic custodians of knowledge in architecture as in any other artistic activity. This auxiliary character that I attribute to theory in the field of art does not diminish

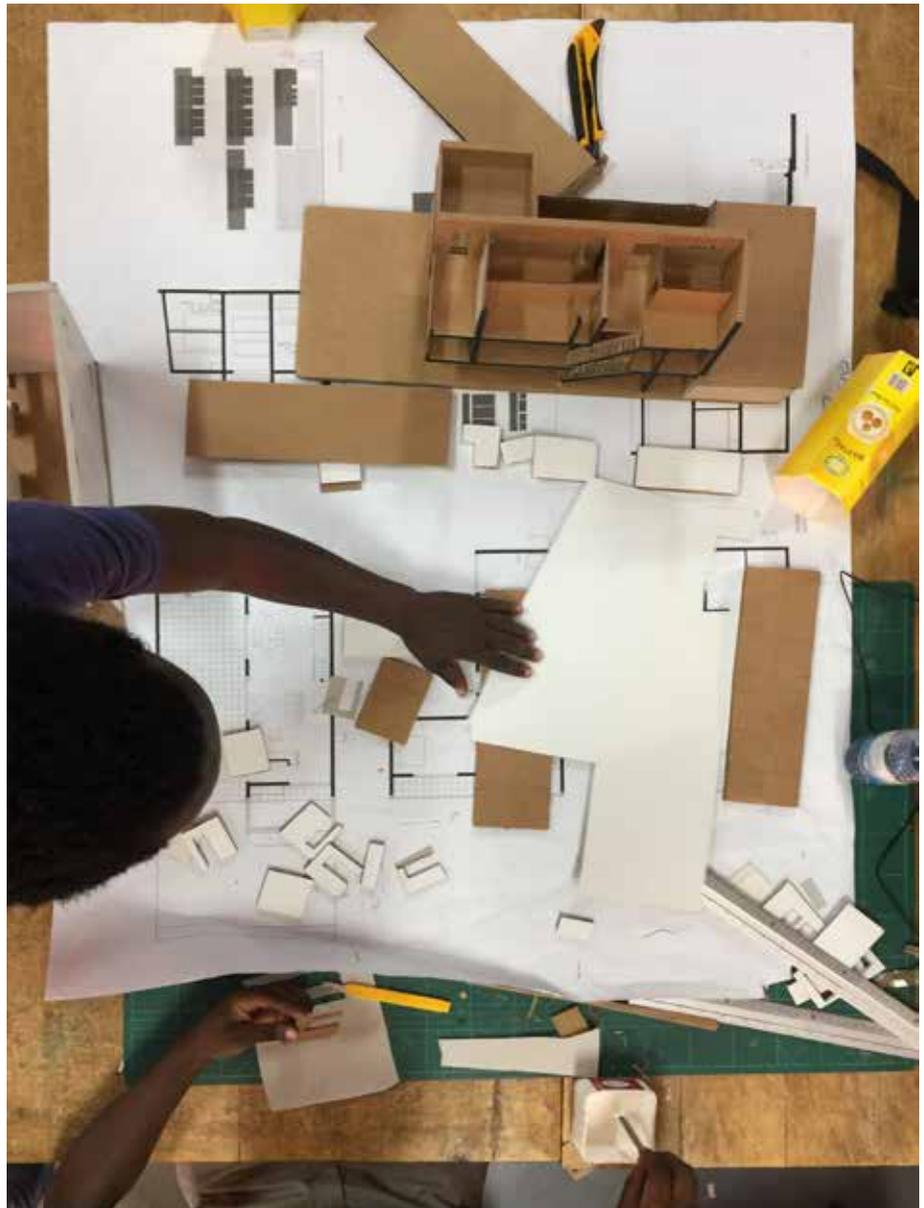


Fig. 2

WAVeAbroad 2019, “Kigali Città Sostenibile”, at SABE (School of Architecture and Built Environment, Kigali, Ruanda. 2014 ©Manlio Michieletto.

its importance in the least, nor does it deny its decisive value. It is like the formwork that makes the construction of the arch possible: once its mission is accomplished, it disappears and does not enter the perception we have of the finished work, but we know that it was an obligatory and essential step, a necessary element to erect what we now see and admire. (Martí Arís, 2007)

The journey is intrinsically linked to experience because through the known, the already known, we are destined to capture the unknown, a sort of archaeological investigation of the tropical heritage. The need to live and work in symbiosis with the context, outside and inside the university, has influenced the research and studies shared over the years with colleagues, particularly with students. Architectural design and composition workshops and the preparation of history and theory courses linked to the tangible and intangible context have allowed an in-depth investigation of specific local themes. The rediscovery, on the one hand, of the origins of the tropical city and, on the other, of the precursors of a contextualised architectural language must help revive interest in the way of doing that of the modern movement, too hastily catalogued as obsolete but which in reality represents a solid basis for present and future knowledge.



Fig. 3
Single-family courtyard house built in the 1950s in Kananga, Repubblica Democratic Republic of Congo. 2014 ©Manlio Michieletto.



Fig. 4
Mbanza Ngungu Cinema now home to the University of Congo, Democratic Republic of Congo. 2015 ©Manlio Michieletto.



Fig. 5
Faculty of Engineering at the University of Kinshasa, Democratic Republic of Congo. 2014 ©Manlio Michieletto.

The city is built over time (Rossi, 1966) and grows on itself, stratifying and articulating itself along its “permanences”. Therefore, the African tropical city does not exist as a total invention but rather as a rediscovery of the existing and its context, both built and unbuilt, in the belief that knowledge of the recent past can lead to future “pyramids”. Ancient Africa had various examples of cities, and recent archaeological discoveries have shown that indigenous urbanisation became possible thanks to the introduction of agriculture and the consequent model of sedentary life (Coquery-Vidrovitch, 1995). The urban phenomenon has not been imported *tout court* over the centuries but is an intertwining and converging of different Indigenous contributions with the new. The work of Ernst May, for example, as an urban planner in Uganda and Kenya reflects precisely this need to make the idea of the development of the city by satellite nuclei, *Trabantestadt*, coexist with the urban tradition and the forms of indigenous settlement (Michieletto, Olatunde and Bay, 2019). The plans for the expansion of Kampala (Fig. 6) or the drawings for the Port Tudor satellite in Mombasa (Fig. 7) are among the projects the German architect conceived during his African exile.

A tropical story

The history of the tropical city in Africa is the history of the architecture of the modern movement on the continent. In *Edilizia Moderna*² issue 89-90 of 1967 (Fig. 8), the echoes of this architectural language are recounted in the form of a register of projects that, at different latitudes, had ferried the colonies towards Independence. A theme that had aroused the interest of Kultermann (1963), who, with *Neues Bauen in Afrika*, had provided an initial account of it. The recent book *African Modernism: The Architecture of Independence. Ghana, Senegal, Côte d’Ivoire, Kenya, and Zambia* (Herz et alii, 2022) have lifted the veil of oblivion that covered the architecture of tropical modernism for several decades. The progressive aftermath of this precise act of architecture is still recognisable today, even if jeopardised by an anti-modern or anti-historical movement that recognises in urban facts and in the city itself pure objects of the past from which to break away. Furthermore, the architecture of the tropical town is essentially the city of tropical modernism since many of the historical buildings can be placed in that architectural chapter of the first half of the twentieth century (Folkers and Van Buiten, 2010). Today, we can define permanence amid the urban delirium that afflicts the city’s construction. These urban artefacts take shape and are structured through urban plans to re-establish an architecture-city relationship that is not oblivious, as mentioned, of the surrounding environment in its various forms. The aim was to stimulate a reflection on the architectural project through the declinations that this language could assume in the African continent’s tropical belt, both about individual buildings and the urban composition. As Hassan Fathy taught us, architects, architecture, and cities could not exist if not in those places. This tells us an urban story whose reading begins with its planning or from the knowledge and conception of the city as a project (Aureli, 2013).

Manuals on Tropical Architecture in Africa

In the introduction to the first volume of the *Oeuvre Complete 1910-1929*, Le Corbusier published a letter sent in 1936 to a newly formed group of modern architects in Johannesburg, the “Transvaal group”, expressing his amazement at the architectural commitment devoted to the search for a



Fig. 6
Kampala City Extension Plan in Uganda by Ernst May. ©Ernst-MayGesellschaft.

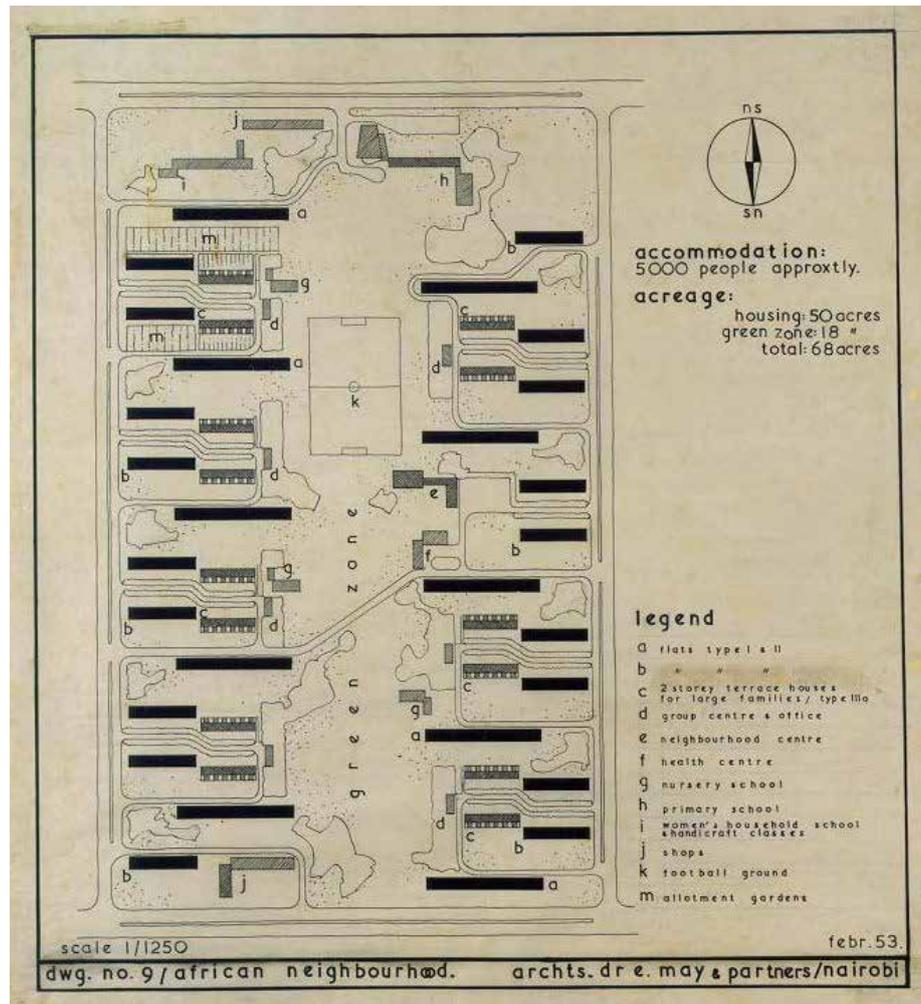


Fig. 7
Satellite plan of Port Tudor in Mombasa by Ernst May. ©Ernst-MayGesellschaft.

new sensibility far from Europe. A little less than two thousand years earlier, Pliny the Elder, in *Naturalis Historia*, cites the Greek proverb according to which something new always arrives from Africa -*ex Africa semper aliquid novi*. Pliny narrates the discovery of a metaphor for nature, that of Africa, which is always made of the same elementary things but composed differently because they are suited to another context. We have tried to collect contributions investigating the rhetoric of tropical modernism. This architectural language translates into the rediscovery of elements of the indigenous art of building as neologisms of common knowledge translated to different latitudes. The English architects Maxwell Fry and Jane Drew are famously considered the proponents of this language thanks to their work in the former British colonies of West Africa. Their text *Tropical Architecture in the Dry and Humid Zones* (Fry, Drew, 1964) is the forerunner of a series of manuals on construction in tropical zones: *Village Housing in the Tropics with Special Reference to West Africa* (Fry and Drew, 1974), *Manual for Tropical Housing and Building* (Koenigsberger et alii, 1974) and *Design with Climate Bioclimatic Approach to Architectural Regionalism* (Olgay, 1963). In 1992, the first work dedicated to tropical architecture in Central Africa was published in the Republic of Zaïre: *L'Architecture Tropicale. Théorie et mise en pratique en Afrique tropicale humide* (Fig. 9). In the first paragraph of the introduction, the fundamental question for a correct reading of the buildings is posed; that is, it is a question of defining an architectural grammar appropriate to the context:

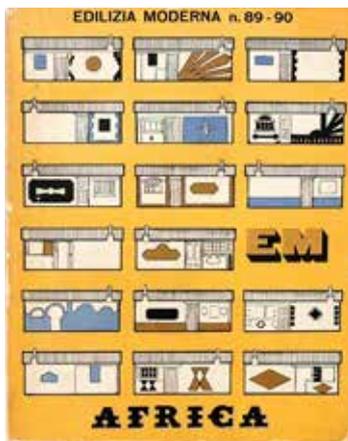
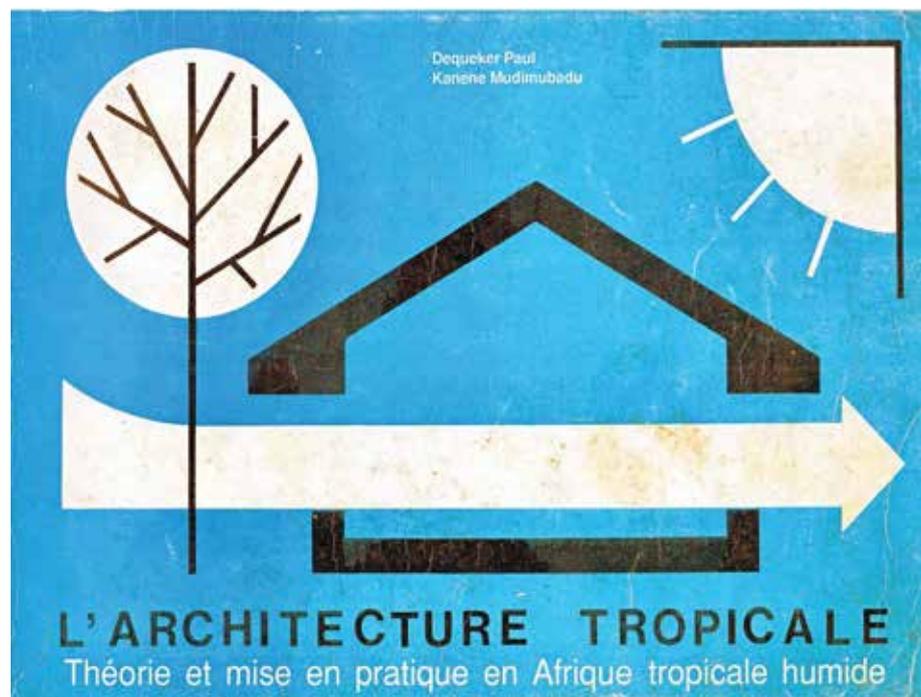


Fig. 8
Cover of issue 89-90 of Edilizia Moderna. ©Manlio Michieletto.

Fig. 9
Cover of the book L'Architecture Tropicale by Dequeker and Kanene. ©Manlio Michieletto.



We have tried to define an architectural grammar capable of uniting twentieth-century technology with the region's conditions, the local materials and construction techniques available, the human scale, and the climatic and geometric rigour. (Dequeker and Kanene, 1992)

The book by Dequeker and Kanene describes and illustrates exhaustively and integrally the construction process in the Congolese humid tropical Africa: climatic approach, wind and ventilation, concealment or solar protection, protection against heat transmission and natural lighting. This climatic problem, connected with the composition of the constituent parts of the buildings, has given birth to an identity. This identity must remember that simple life forms are the closest to perfection. Field research for architecture linked to climate and place leads, therefore, the language of the modern movement to align itself with the context. The language reinvents or rediscovers the contemporary in a tropical key by giving it local but not necessarily vernacular connotations. The identity of the place is found expressed in the artefacts using materials and with the epiphany of an architectural grammar composed and regulated by a few but precise principles capable of providing adequate protection. These principles are also pretexts for creating a set of construction details aimed at optimising the use of these two natural elements, the sun and the wind, to which the relationship with local tradition must be added. Vitruvius himself remarked how the place affected the shape of the building and how, conversely, the construction influenced the surrounding site. In Vitruvius's words, the most relevant aspects of the project and construction concern the choice of the place, the climate and the landscape. Since its very beginning, the architecture of Sub-Saharan Africa has been linked to the question of the place and the question of building the city in an environment not accustomed to being urban. The towns built between the 19th and 20th centuries are sometimes real foundation projects that, from small agglomerations and even, in some cases, single outposts, are transformed into metropolises that have now risen to the rank of uncontrollable megalopolises in the urban planning news.

An emblematic case like Kinshasa, known as Léopoldville until 1960, represents the evolution of a village along the banks of the Congo River that, in little more than a century, transforms into the capital of a new country until it transforms into a megalopolis, where the polis disappears and becomes only a *megalo*. From the projects of the pioneers through tropical modernism to the unbridled eclecticism of the last decades, this type of city has lost its identity and, consequently, its recognisable and transmissible form.

The Tropical Language of Architecture

In *The Classical Language of Architecture*, John Summerson (1963) defines the parameters that classify architecture as classical. As a codified language, Tropical architecture finds its identity declined according to the different geographical contexts north and south of the Equator. Its African decline developed from the western region and subsequently spread up to the post-independence period to the rest of Sub-Saharan Africa (Uduku, 2006). The approach to tropical architecture is characterised by observing a few simple principles. The first step is to carefully study the project site by providing the correct orientation³ to the building. In tropical Africa, orientation is a determining factor for thermal comfort. Usually, the arrangement of the internal spaces of the building along the east-west axis is favoured, with the north and south facades less exposed to direct solar radiation (Olgyay, 1963). Another critical factor in orientation is the distance from the equator, which allows us to know the inclination of the sun during the day so that we can equip the building with adequate and appropriate protection devices. However, even the walls exposed to the east and west, sunny in the morning and afternoon, respectively, must be protected and insulated so that the heat is not transmitted inside. The roof, more exposed to the sun during the day, must be able to reflect the heat, also providing an adequate distance from the ceiling to ventilate constantly. In humid tropical climates, it is also advisable to arrange the buildings in such a way that they exploit the prevailing winds as a natural resource capable of cooling the internal spaces. The tropical decorative apparatus consists of those architectural elements peculiar to the modern language adapted to the context: canopies to increase the protection of the façade, vertical or horizontal slats (*brise-soleil*), perforated walls, ventilated façades, overhangs to protect the openings, air intakes for cross ventilation and the use of entrances (*barza*). Shading is a simple method of blocking the sun before it enters the interior spaces of the building. The *brise-soleil* device, or sun breakers, refers to a permanent solar screening technique: simple patterned concrete walls or aluminium panels (Fig. 10-11), used for the first time in Africa in the Maison Locative Ponsik project (1933) by Le Corbusier (Fig. 12). Another fundamental issue concerns the movement of air inside buildings, the goodness and effectiveness of which also lies in the distance between the artefacts and their height (Fig. 13). These components are obsessively repeated in a sort of rational mannerism capable of harmoniously adapting the project to the existing environment. “The revolutionary force of the past”, as Pier Paolo Pasolini⁴ said, unfortunately, seems to have been lost in the contemporary tradition of other references, detached from the context, not the result of carefully reading the *genius loci*.

**Fig. 10**

Aluminum *brise soleil* in the loggia of an apartment in the “Van Gele” building by Claude Laurens, Kinshasa. ©Manlio Michieletto.

Fig. 11

Aluminum *brise soleil* in an open position in the loggia of an apartment in the “Van Gele” building by Claude Laurens, Kinshasa. ©Manlio Michieletto.

The contributions

The articles have brought to light the architectural and urban experiences through research that can provide a key to understanding the cities history and development. At the same time, they refer to the work of architects who have consolidated a specific *modus operandi* in the countries of Sub-Saharan Africa, which time and oblivion have not affected and to which only the famous work can give adequate recognition. The texts proposed a rich critical analysis that reflects historical practices and the contemporary challenges of a complex and dynamic environment. The first contribution, “The other modernity of Demas Nwoko. An alternative form of climate thought” by Flavia Vaccher, explores Nwoko’s innovative approach, a synthesis between tropical architecture and local Nigerian tradition, which distances itself from the classical canons of modernity to adopt a more contextualised and experimental form. “A Manual Continent: Taxonomies of Contradiction in Postwar Africa” by Filippo De Dominicis and Jacopo Galli analyses the use of postwar architectural manuals, highlighting how they contributed to a contradiction inherent in modernisation between localism and forms of collective control through the analysis of three famous works. The third contribution by Daniela Ruggeri, “André Ravéreau, projects in Sub-Saharan Africa. Transpositions and syntheses between the north and south of the Sahara”, delves into the transition of modernist influences from the North to the South of the Sahara.

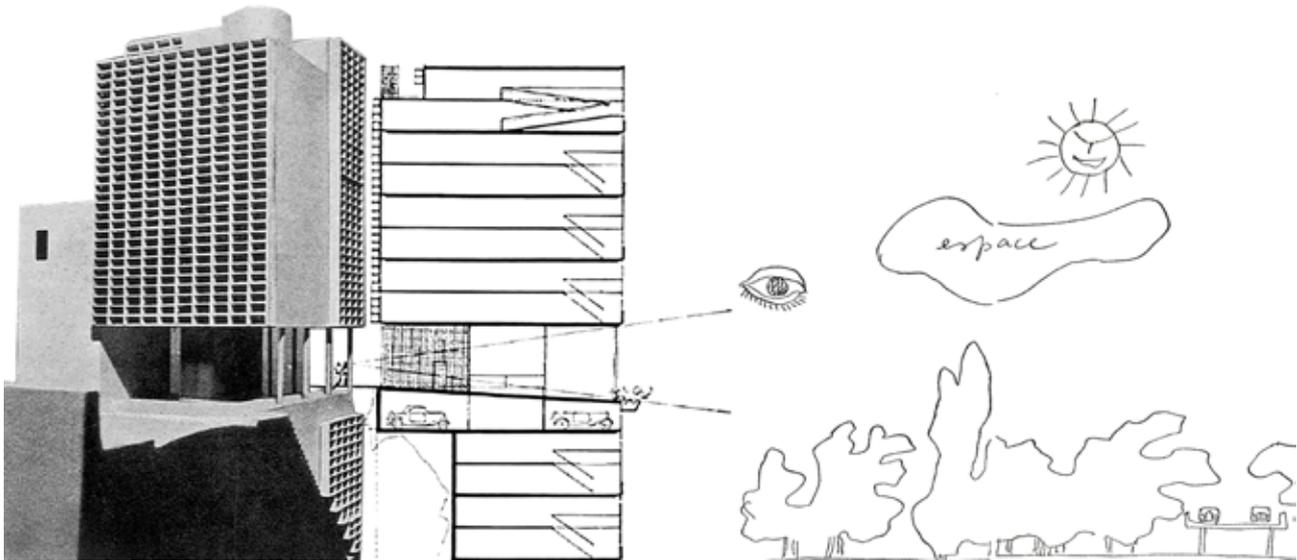
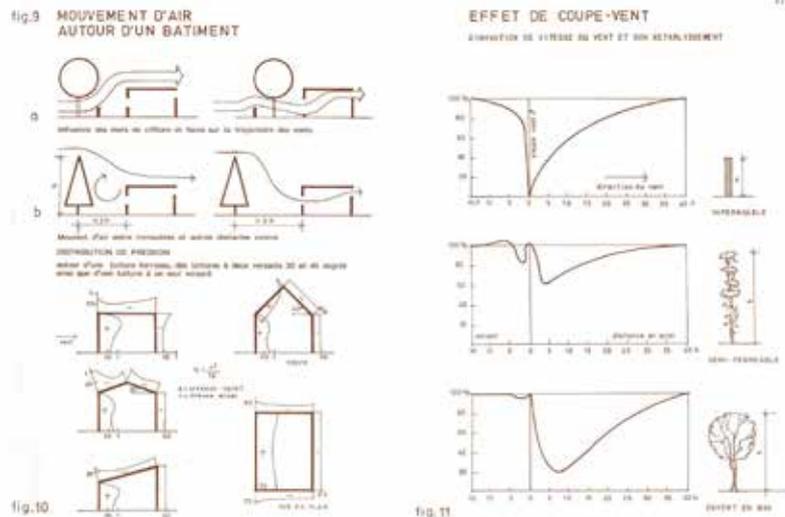


Fig. 12
Collage of the model and section of Le Corbusier's Ponsik building. ©Manlio Michieletto.

Ravéreau, a student of Auguste Perret, applies the experience learned in the M'Zab Valley to his projects in Mali, Mauritania and Burkina Faso, creating tropical architectural solutions firmly rooted in the context. The fourth contribution focuses on the Las Vegas building in Durban, an example of Brazilian modernism adapted to South Africa: "The Brazilian Modern of Crofton and Benjamin in South Africa, Las Vegas and the Creation of a Style" by Silvia Bodei. Here, Crofton and Benjamin develop a specific "style" that combines the forms of the modern with climate adaptation, proposing a unique local residential model. The fifth contribution, "Guedesburgo. Lourenço Marques and the Stiloguedes" by Ester Giani, examines the work of Pancho Guedes in Lourenço Marques in Maputo. The Mozambican colonial city offers a platform for the anarchic expression of architectural languages that merge with the complex urban environment in a work that has left a profound mark on African modernity. The sixth contribution by Anna Irene Del Monaco addresses the "Experiences of Realism and Architecture in Sub-Saharan Africa", focusing on research and infrastructure projects in Sudan, Ethiopia and Tanzania.

These projects, developed over the last twenty years, seek to combine tropical climate reality with local needs, contributing to constructing an architecture rooted in the context. The seventh contribution, "Modernist Transfers. From Europe to Sub-Saharan Countries" by Michele Caja, explores the impact of European architectural models in Sub-Saharan countries during decolonisation. These projects are often received controversially due to their relationship with local traditions and current social and climate issues. The text on regionalist architecture by Sara Coscarelli, "Critical Regionalism in Sub-Saharan Africa. A new *modus operandi* to understand the value of the city and its history through modernity highlights a new design approach that seeks to reinterpret popular African architecture through the lens of modernity, breaking with colonialism and valorising local tradition in urban and architectural development. The ninth contribution, "Tropical Modernism in Léopoldville and Delocalization. The Case Study of Marcel Boulengier's Levanium" by Alexis Tshianza Kabeya, André Ockerman and Jonathan Nkondi, explores the events related to the construction of the University of Levanium, as an example of decolonisation and indigenisation through architecture and urban planning. Finally, "Participation and Design in the Construction of the Contemporary City" by Lucio Valerio Barbera recounts the integrated design experience in Togo during the Seventies.

**Fig. 13**

Diagrams of the influence of obstacles on cross ventilation in buildings. ©Dequeker e Kane-ne, 1992.

The text underlines the importance of studying urban settlements in developing areas as an essential tool for understanding the challenges of modern cities. As a result, an interview with Prof. Mudimubadu Kane-ne, co-author of the manual mentioned above, *L'Architecture Tropicale. Théorie et mise en pratique en Afrique tropicalia humide* (1992) together with Paul Dequeker. In addition to representing the Democratic Republic of Congo at UN-Habitat, Kanene continues his professional and teaching activity at the Department of Urban Planning at ISAU⁵ in Kinshasa. These contributions offer a fascinating and detailed overview of how Sub-Saharan Africa's architecture and urban planning have evolved. They trace a path marked by the tension and dynamism of resistance and adaptation, tradition and modernity, local and global, presenting a compelling narrative of architectural evolution.

Notes

¹ The experience in Burkina Faso and more generally in Africa has been and continues to be accompanied by the testimonies of researchers and historians such as Joseph Ki-Zerbo (1922-2006).

² Among the authors Paul Dequeker presents case studies of tropical modernism in Zaïre. Publisher: Società del Linoleum, Milan, 1967. (Dequeler, 1960).

³ The word orient means "to point to the East," and east comes from the Latin *oriente*, and indicates the direction from which the sun rises during the equinoxes. Light was born in the east, in the orient, and therefore orientation has been closely connected to the position of the sun since the beginning.

⁴ With these words, in 1970, Pier Paolo Pasolini launched a heartfelt appeal to UNESCO: «Ci rivolgiamo all'Unesco, in nome della vera se pur ancora inespresa volontà del popolo yemenita, in nome degli uomini semplici che la povertà ha mantenuto puri, in nome della grazia dei secoli oscuri, in nome della scandalosa forza rivoluzionaria del passato».

⁵ ISAU, Istitut Superieur d'Architecture et Urbanisme (Istituto Superiore d'Architettura e Urbanistica) di Kinshasa.

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Kigali, Rwanda.
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Corneille Kanene Mudimubadu
Tropical Architecture: genesis of a research*

Abstract

The interview delves into the work of Professor Corneille Kanene Mudimubadu, a lecturer at ISAU in Kinshasa and co-author of *L'Architecture tropicale*, a seminal work on bioclimatic architecture in tropical environments. Kanene reflects on the importance of understanding the climate to design sustainable buildings, tailored to their context and in harmony with local resources. Particular emphasis is placed on natural ventilation, the use of appropriate materials, and sun protection to ensure thermal comfort. The teaching of bioclimatic architecture is seen as essential for training professionals capable of contextualizing their projects, moving beyond sterile formal references to focus on climate-conscious approaches. The interview concludes with a reflection on architecture as the art of organizing space, beyond the mere act of building.

Keywords

Tropical architecture — Bioclimatic architecture — Vernacular architecture — Sustainability

Alexis Tshiunza Kabeya: *Good morning, Professor Kanene. I would like to interview you for FAM magazine, which publishes an issue on tropical architecture. We will quickly go through an introduction. What is your background in tropical architecture?*

Corneille Kanene Mudimubadu: I have to go back to when I was still a student of architecture, and I had a course, a course that was not part of the training program but that I had the privilege of taking. It was a course in tropical architecture taught by my honoured colleague, who is now deceased, that everybody knows, Dequeker. He came, he gave this course, and then after that, it was a seminar. He never came back after that. After that, I was in Louvain-la-Neuve to participate in an earth architecture workshop. I was asked to talk about architecture in Africa. I had made a presentation on tropical architecture. I was at the University of Tizi Ouzou in Algeria. That's when they asked me to present earthen architecture in the tropics at a workshop. After that, in 1986, I was invited to the International Congress on Architecture and Climate. It was the first International Congress on Architecture and Climate, by Professor André De Herde, who was chairing this Congress and had asked me to propose a paper. After that, I also wrote a paper for a seminar in Algiers. And then I returned to the country. When I returned to the Congo, Paul Dequeker asked me, "What did I do while abroad?" And then afterwards, he said to me, "Oh, but you have made many communications on architecture and climate. Would that be..." He invited me if we could get together to write a reference work. Based on his work, how can we say forty years, fifty years, of realisation of architecture in his countries, the Congo, in the tropics, not only the Congo but also look at the fact that he has been in many countries? These countries,

Congo-Brazzaville, Chad, Kenya, and Angola, are what I'm looking for. Angola and Senegal have so many achievements across tropical countries. And we went for two years... Now, it's 1990.

ATK: *The book L'Architecture tropicale has become famous and is a reference work today. That is why FAM Magazine asked you for this issue on tropical architecture.*

CKM: Yes, but we talk a lot about the book L'Architecture tropicale and often only speak about that. Still, afterwards, Professor André De Herde, who had written the preface to the book L'Architecture tropicale, is going to associate me with writing a book, which is the book on architecture and climate, which is in itself a whole treatise that they wrote with Alain Liébard, on architecture and climate, entitled Guide de l'architecture bioclimatique, but then in the entire world, where there are several booklets, there is, among the booklets, there is volume 6, which deals with the hot climate. It is a complete work; there are several volumes on architecture; the first volume talks about the basic principle, there are two volumes, and the sixth volume talks about architecture and climate in a hot environment, but the hot climate is this volume, where I invested myself. I spent almost a year in Louvain-la-Neuve to write this epaîment; it was about nine months in Louvain-la-Neuve to write volume 6, which deals with the hot climate.

ATK: *Okay, do you think this book is much more significant than L'Architecture tropicale, which is better known?*

CKM: No, *L'Architecture tropicale* remains the masterwork because the work on architecture and climate, which speaks much more about sustainable development, also refers to tropical architecture; from the moment that tropical architecture is a reference, even this work, which also has an excellent reputation, is a reference.

ATK: *What approaches are developed in these works to address tropical architecture?*

Everything starts with design, from knowledge of the climate, especially the tropical climate, to understanding the climate to knowledge of architecture. I call this vernacular architecture. Knowledge of the climate is part of the evolution of new architecture. We started from the end of modern architecture.

ATK: *How is bioclimatic architecture regionalist?*

CKM: It is regionalist because it has even changed its name from one region to another. We developed Mediterranean architecture when we were in the Mediterranean basin and understood the data on the Mediterranean climate. In countries where the Eskimos have these very windy regions, the Eskimos who already live in these regions have produced the igloo, an architecture adapted to those living there. So, we can talk about polar architecture. And then, well, in the tropics, we analysed the Malay house. It is a house for those in a hot, humid tropical climate. So, we said, it's tropical architecture. Tropical architecture is bioclimatic architecture adapted to the country living in the tropics. This architecture is adapted to the tropical environment. Still, it also references the achievements of vernacular architecture when we look at tropical climates, particularly in hot and humid tropical climates, where we have found examples of applications of bioclimatic architecture adapted to the context.

ATK: *What example of traditional tropical architecture illustrates the bioclimatic approach?*

CKM: This architecture is adapted to the tropical climate, as seen in the Malay house, which has low thermal inertia. Still, from an urban planning

point of view, the homes in a Malay village are built so that each house can allow ventilation; I say ventilation can allow ventilation about the houses located downstream. The climate analysis brings us to an essential element. What is this crucial element? We are in search of comfort. But then, we quickly realised that comfort is very subjective. Why is the pursuit of comfort subjective? This is confirmed by analysing the fact that comfort depends on three elements of the climate: ventilation, temperature, and relative humidity. However, three factors depend on the individual. Do you see that? It depends on the individual because it depends on clothing. So, it depends on clothing and metabolism. And it depends, as I said, on each person's skin surface temperature. Comfort is subjective, which is the interest of this study of bioclimatic architecture, which analyses the spaces where comfort exists. In the tropical climate, ventilation winds come first. We talk about ventilation, but we talk much more about the difference between wind and ventilation. Wind is the air movement around the building, while ventilation is when the wind enters the space and emerges on the other side. So here, we have ventilation, and we want it to be cross-ventilation. This means that in its path, crossing the house, it does not encounter any barrier. This ventilation element will, of course, help us to deepen the bioclimatic study in tropical countries. But before that, there is still another element: the sun. This is the problem of shade. Shade is comfort, and tropical architecture seeks to achieve the conditions of comfort that prevail outside, under a tree. What is the case when I am in a hot and dry climate? In the hot and dry climate, shade is not comfortable. It is 40 degrees in the shade. In the tropical environment, where it is hot and humid, shade is comforting. We seek the conditions of comfort that prevail in the shade. We are also concerned with the cycle of seasons in hot and humid climates. We have two seasons: the dry season and the rainy season. But in both seasons, whether dry or rainy, we must be able to protect ourselves. So, we developed solar protection elements. We must be able to dissipate. We develop, and we maximise ventilation.

ATK: *How to ventilate?*

CKM: Ventilation is about allowing dissipation. So, with this basic concept of bioclimatic.

ATK: *Many African architects want to use local materials to promote their identity. What place does bioclimatic architecture reserve for materials?*

CKM: In bioclimatic architecture we can also arrive through a good knowledge of materials. If I have an excellent understanding of materials, I can also bring together the elements of comfort conditions. Good knowledge of materials will mean that I know the materials well and that these materials will retain energy but will not be a source of heat for the occupants.

ATK: *Bioclimatism in hot and humid tropical Africa seems to rely heavily on ventilation. But when there is no wind, can we not get some ventilation?*

CKM: So, we work on the chimney effect when there is no wind. We must study the ventilation flow. This ventilation flow will help us see how the house is built and how the windows are arranged to maximise ventilation. The other element of bioclimatism, tips, or other bioclimatic tools are tables, such as Karl Mahoney's tables.

ATK: *Since you are also a teacher, what place is given to teaching bioclimatic architecture?*

CKM: The teaching of bioclimatic architecture is what I teach. We need to contextualise the learning of architecture. Some people talk about situated architecture. However, what is general to international architecture is

emphasising the identity elements. And there, it is wrong. So, we are not going to emphasise the identity elements by necessarily resorting to traditional forms, we mean, of the architecture of our ancestors. Still, we base ourselves instead on bioclimatic data. A whole symbiosis, an effort of complementarity, must be sought. But the teacher himself must be at the school of bioclimatism. If the teacher ignores this, he misses out on whether the person who made the training program ignores bioclimatism. You cannot train an architect without taking the context into account.

ATK: *So, maybe one last question. After so many years of work, how do you define architecture?*

CKM: But that's what we were already saying, that architecture, Vitruvius had already told us that architecture was the art of building, it was the act of building. Afterwards, we realised that if architecture were only the act of building, we would have remained in cave. And that architecture is... I prefer to talk about the organisation of space. So, if this is the correct definition for me, it is the organisation of space. and to do this; it is no longer functionalism that must guide us; what must guide us is the quest, as we were saying earlier, for bioclimatic architecture, it is comfort.

Notes

* Interview by Alexis Tshiunza Kabeya.

Filippo De Dominicis, Jacopo Galli
A manual for a continent: taxonomies of contradiction in post-war Africa

Abstract

The goal of the contribution is to offer an interpretation of architecture and the city in Sub-Saharan Africa through the lens of manuals drawn up in postwar years, when the formation of the global transnational system, and the entry of the African continent in it, opened up new forms of hegemony and dependence. Three case studies will be examined: *Village Housing in the Tropics with Special Reference to West Africa*, by Edwin Maxwell Fry and Jane Drew (1947); *Tropical Architecture in the Dry and Humid Zones*, also by Fry and Drew (1964); and *Manual of Tropical Housing and Building: Climatic design*, by Otto Koenigsberger (1964). Through the comparative analysis of the three case studies we will attempt to describe the equivocal logic of the manual: post-political and contextually organic to the dictates of modernization; attentive to localism yet federative; capable of responding to the ambitions of individuals and at the same time functional to the implementation of collective control policies.

Keywords

Tropical Architecture — Africa — Post-colonial studies — Modernism

In 1947 Edwin Maxwell Fry (1889-1987) and Jane Drew (1911-1996) published a small manual titled *Village Housing in the Tropics*. The ambitious objective was to provide support to officials and managers called to operate in non-urban areas and in the absence of personnel specifically designated for planning. The subtitle – with special reference to West Africa – was even more eloquent and tells of the approach to a theme still lacking real disciplinary codifications: in its first architectural formulation, in fact, the tropical question is first and foremost a problem of political order and almost automatically linked to the territories of West Africa; in this case, to those areas of the continent which were progressively liberating themselves from the sovereignty of the British Empire. The very particular attention paid to West Africa represents a specific feature that this article attempts to unfold, with the aim to understand how and for what reasons this portion of the continent represented a key place for the construction of a future design orthodoxy that would soon spread out of the original geographical imprint.

In 1956, on the basis of the professional experience gained in the Gold Coast and Nigeria for a decade, Edwin Maxwell Fry and Jane Drew updated their work in the form of a manual, beyond their body of works, with images and drawings of architectures from all over the world - from Florida to North Borneo, from Venezuela to Kuwait – and for all climatic conditions (LeRoux 2008). Revised and corrected, tropical architecture would lose any sort of political connotation, coinciding with the corpus of residences, schools and public buildings built within a specific geographical and climatic area – the intertropical one – and according to rules immediately attributable to a strict modernist orthodoxy, although appropriately reinter-

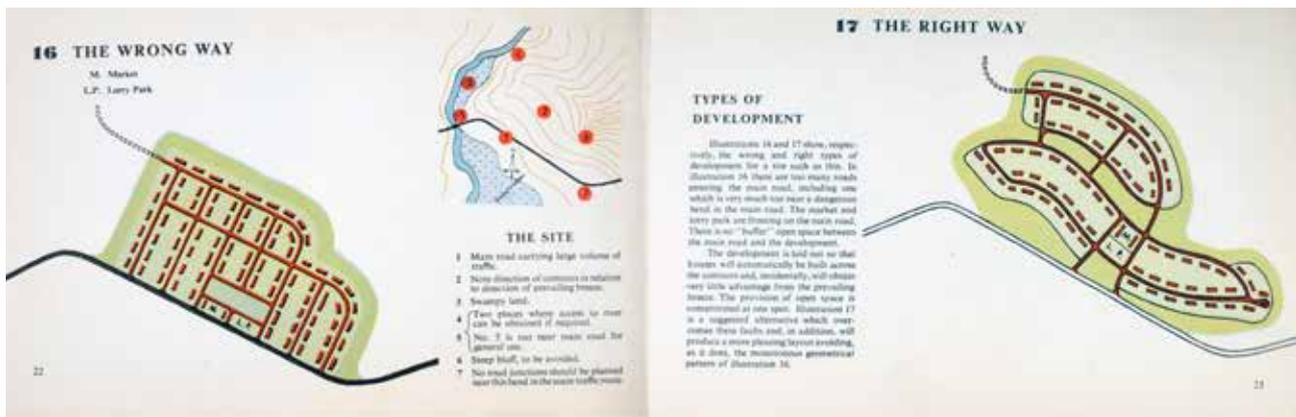


Fig. 1
Edwin Maxwell Fry, Jane Drew, *Village Housing in the Tropics, with special reference to West Africa*, Lund Humphries, London, 1947, p. 22-23.

preted and adapted. At the same time, the rigorous reference to the rural dimension of the first book would be lost, a fact testifying the complete transition toward the urban landscape. With the volume by Otto Koenigsberger (1908-1999), published for the first time in 1964 and entitled *Manual of Tropical Housing and Building*, the urban and international vocation of Fry and Drew's study will give way to a further generalization. In the interpretation offered by Koenigsberger, tropical architecture would materialize in the undifferentiated application of extremely specific technical – today one would say geolocated – prescriptions: almost a heterotopia, in its global aspiration as well as in the almost complete lack of references to physical places and built works.

Village Housing in the Tropics, the first book by Fry and Drew, turns up as a heterogeneous collection of recommendations, examples and models and represents one of the first attempts to systematize and summarize in the form of a manual a series of experiences and research conducted within the *Building Research Stations* of the British colonial Empire. The built work of Fry and Drew (1947) had in fact benefited from a large body of knowledge acquired and matured over the previous decades – both in environmental and climatic issues, and in the settlement field – of which the authors themselves had been among the creators in their capacity of planning advisors for the Colonial Office, and of which institutions later involved in the first self-help operations on a global scale would make extensive use. In this sense, *Village Housing in the Tropics*¹ is a colonial product, despite many of the ambitions and contents addressed in the text represent an effective anticipation of what the United Nations and International Bank for Reconstruction and Development (IBRD) will try to implement over the years. The problems that Fry and Drew aim to address, in fact, are those encountered by colonial officers during the exploitation of an alleged virgin territory; a territory overflowing with contaminated waters and unhealthy environments to which the colonizers had tried to adapt through devices of all kinds, and which Fry and Drew tried to transform by providing suggestions and indications regarding the improvement of the quality of air, water and light exposure. The two authors were not worried of deviating from architecture with several behavioral prescriptions, as in the case of advice on clothing, diet and correct nutrition. Framed in this way, Fry and Drew's work is a practical response, perhaps the last, to the infinite series of European hypochondrias that had directed the planning policies of the British Empire, especially in Africa, and that manuals such as that of the two architects tried to alleviate (Galli 2022).

Compared to past colonial examples, however, Fry and Drew's manual was not aimed at the survival of the European man. On the contrary, by

extending to the locals, perhaps for the first time, the anxieties, obsessions and paranoias of the colonizers, it operated in the direction of their readaptation through subtle actions of resettlement and displacement in “sanitized” areas made practicable by the wise “modern” practice. But not only that: the work of the two British architects is also the first to question ways and tools for the mitigation of phenomena such as erosion or floods which European penetration into the continent had made increasingly pervasive and frequent, especially in areas where land reclamation and operations of intensive agriculture had been implemented with greater force. For this reason, the premise of the manual deals with agriculture, and with the village as its “built” counterpart, in the belief that growth and well-being could stem only from that type of anthropized environment. The recommendations provided by the manual, in this sense, are all rather clear, directed towards an embryonic yet evident process of modernization that would affect the scale of the settlement as well as that of the furnishings, up to the design of the clothing. The drawings of small *siedlungen* placed along the roadside and gathered around the place of worship alternates with details of showers, kitchens and wells, towards the formalization of a new compliant lifestyle made up of covered markets, schools, shops, cinemas, museums, and tennis courts. But also concrete blocks, plastic – “no discussion of building materials could be complete without a reference to plastic”, write Fry and Drew (1947) – asbestos, iron, and corrugated iron. The presumed improvement of the continent’s housing conditions would start from here; readjusting the costume of the African man to criteria and conventions that the English motherland had already metabolized over the last century. At stake was not so much the adaptation of architecture to the environmental conditions of the tropics, but rather the adaptation of human beings to standard models of life and behavior far removed from local customs. The attention to the decency of customs and the healthiness of environments, however, would be gradually integrated with the recognition of equal dignity and equality between people. The creator and spokesperson of this instance will be the United Nations Organization (UN), which ratified the Universal Declaration of Human Rights during the third session of the General Assembly in 1948. The United Nations, in the years immediately following, will begin to make efforts to transfer and apply the principles set out in the Declaration in those environments and areas where disparities manifested themselves most clearly: among them, the habitat in the territories that had recently obtained or were preparing to obtain independence, not only in Africa (Kwak 2016).

However, the changing political and cultural scenario will not correspond to an effective rethinking of the tools. For most of the initiatives conducted by the UN and linked to the improvement of housing conditions, in fact, reference to the works of Fry and Drew will continue to be an obligatory passage, especially because of the incredible amount of information and knowledge it contained². It is no coincidence that it was Fry that Jaqueline Tyrwhitt (1905-1983) turned to during the preparations for the first UN Regional Seminar on Housing and Community Development, promoted by the United Nations Technical Assistance Administration (UNTAAs) and organized by Tyrwhitt herself in her capacity as head of the Indian division of UNTAAs (Shoshkes 2016)³.

Despite the obvious conceptual and geographical gap – the seminar was held in India, and was organized to respond to overpopulation problems in the areas of South-East Asia – the thematic focus remained the one al-

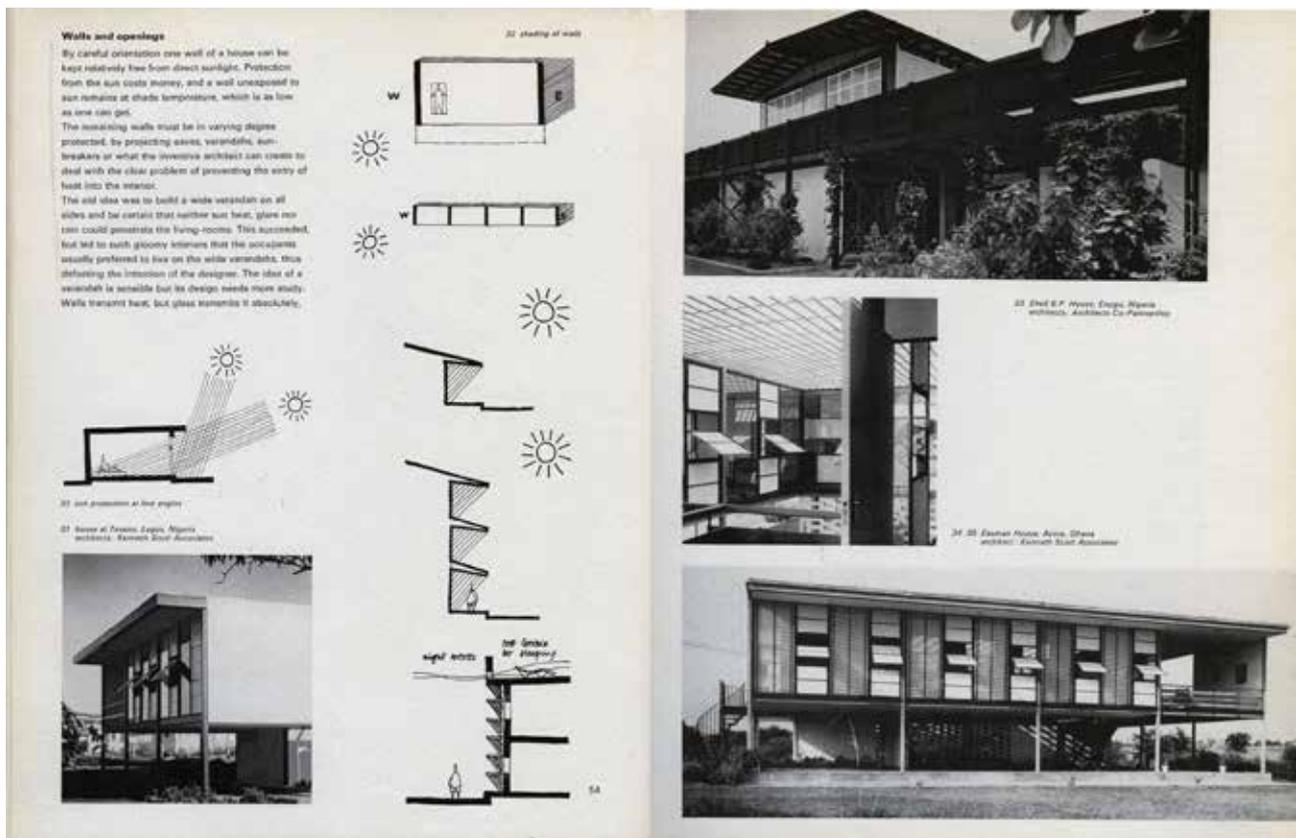


Fig. 2
Edwin Maxwell Fry, Jane Drew, *Tropical Architecture in the Dry and Humid Zones*, Batsford, London, 1964, p. 54-55.

ready identified by Fry and Drew seven years earlier – the village – and Africa itself the main reference in terms of knowledge and availability of information. Tyrwhitt seemed to be fully aware of the risks underlying the village’s paternalistic narrative; an awareness that she would manifest with a certain lucidity by focusing on the need to safeguard the village as a closed entity, out of the manufacturing or production “infiltrations” that would have transformed the inhabitants from productive subjects to objects of exploitation (Tyrwhitt 1985). At risk, according to Tyrwhitt, was the very permanence of the village as a model of development. Indeed, the risk would not have taken long to reveal itself, and the United Nations’ self-help policies were soon directed towards urban-scale environments, where financial capital naturally tended to concentrate. On the contrary, the tropical background would resist as a general framework, despite losing much of the political connotation that had characterized its earlier formalisation: while Tyrwhitt titled the bulletin edited on behalf of Doxiadis *Tropical Housing and Planning Monthly* – a collection of reports and documents from projects in developing areas⁴ –, Fry and Drew would update their work by publishing *Tropical Architecture in the Dry and Humid Zones* starting from the design and construction experiences undertaken in the same years across Ghana and Nigeria. Once again, Africa was the center and premise of the tropical world.

The tropics, however, were no longer considered a “political” entity: in 1956, three years after the start of the Tropical Architecture course at the Architectural Association in London (Chang 2016), the area between the two tropics had in fact turned into a geographical area that found its conceptual roots in the climate as well as in the polar coordinates that defined its extension – including areas and territories that had never been considered until then –, but also and above all in a new architectural practice with shared and at the same time specific traits. Of this extension, the first

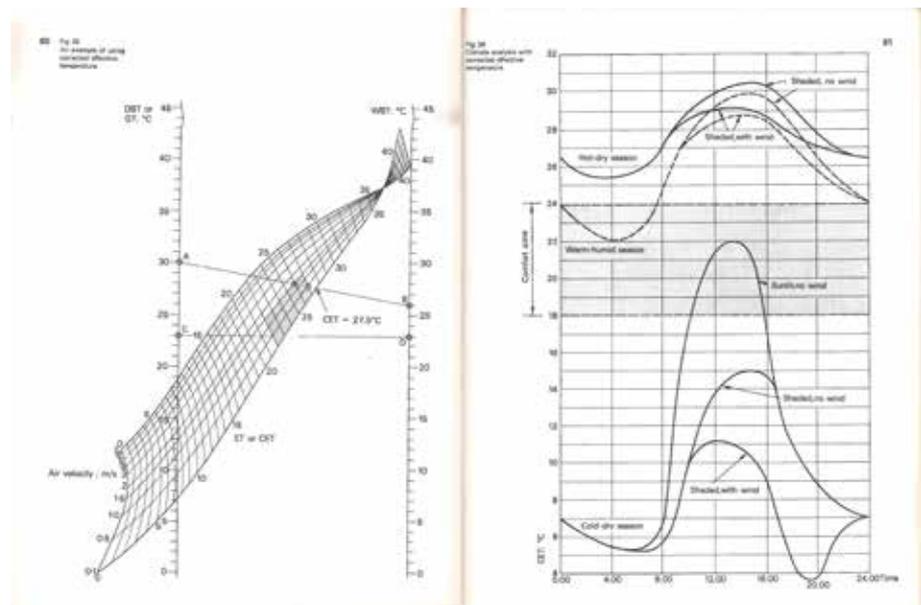


Fig. 3
Otto Koenigsberger, *Manual of Tropical Housing and Buildings. Part 1: Climatic Design*, Longman, London, 1964, p. 60-61.

critic would be George Anthony Atkinson, Colonial Liaison Officer since 1948 and professor in the Department of Tropical Architecture in London. Atkinson reviewed Fry and Drew's volume just a year after its publication, in 1957, highlighting the numerous shortcomings that characterize its technical apparatus (Atkinson 1957). It would have been more useful, Atkinson wrote, to narrow the field of investigation and further specify the singularities and characteristics typical of each area, beyond what had already been detected by the Commonwealth Building Research Stations and reported in the volume. But Fry and Drew's ambitions were no longer the same as it was ten years earlier. Tropical medicine had made giant strides and the hypochondria that was at the basis of the colonial discourse gave way to an increasingly bold and generalized aspiration for comfort, well-being and development; while the city became the environment where transformation and growth had to take place.

Of this transition, of course, the couple was profoundly aware: between 1947 and 1956, in fact, they had designed and built a large number of buildings in urban areas of Nigeria and the Gold Coast: mostly public facilities, homes and neighborhoods serving a society now ready for westernization (Uduku 2006). And it is precisely starting from these examples that the manual develops, divided into chapters based on the functions and roles of buildings, plus an appendix of data and technical devices regarding shading, solar radiation, water collection, thermal expansion of materials, defense from hurricanes, protection from termites and fungi, minimum residential standards, and construction costs (Fry and Drew 1956)⁵. The examples collected and depicted in the first section of the text display an incredible variety of strategies and solutions; a vocabulary that greatly exceeds the detail of recommendations and prescriptions provided in the appendix, opening up to the substantial ambiguity already partially noted by Atkinson. The redundancy of the architectures and devices described in the volume, in fact, almost seems to deny or contradict the claimed scientific nature of the approach reported at the end, testifying for a practically unlimited portfolio of design possibilities; not considering the authorship of the individual works, since the authors of the volume exclude the name of the designer from the captions of the images⁶. The result, almost paradoxical, is that of a large "tropical international"; a network of architects

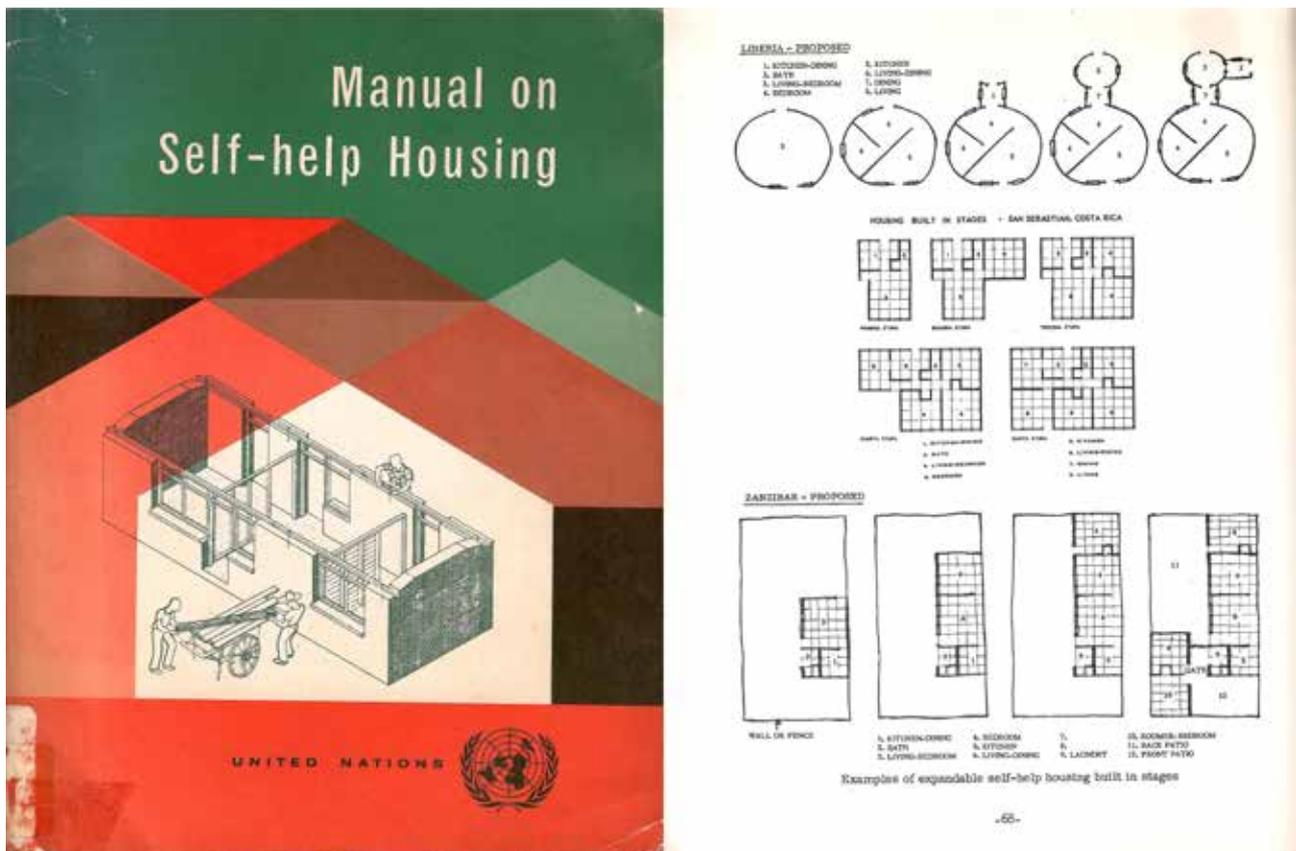


Fig. 4
United Nations, Dept. of Economic and Social Affairs, *Manual of Self-help housing*, UN, New York, 1964, book cover and p. 68.

faithful to modern orthodoxy and capable of operating with the utmost ease in a world where Africa stands at the center - and the Caribbean, Latin America and South-East Asia at its margins. Indeed, most of the built work included in the volume is concentrated precisely in Africa: in 1956, the African population was now ready for modernization and urbanization, and the architecture designed and built for this purpose acted as samples of a practice to be developed throughout the world.

In 1974 Otto Koenigsberger (1974) published the *Manual of Tropical Housing and Building*, the first of a series of volumes dedicated to design and construction in a tropical environment. The book – the only one in the series actually published – focuses extensively on climate issues and represents a significant change of direction. Fry and Drew’s open approach, in fact, is supported by a meticulous analysis of climate data, in the hypothesis that these can be transferred and transformed into spatial devices capable of responding directly to individual inputs. The continually renegotiable spirit established by models and examples of built architecture is therefore replaced by a ready-to-wear system, less rich in nuances but easier to understand and immediate to apply; at least for those who would use it, and provided they were “in tune” with the rigid system of rules that governed its functioning. In this sense, the *Manual of Tropical Housing and Building* is not necessarily to be understood as an evolution of Tropical Architecture but, rather, as a complementary work that transposes, accepts and integrates its operational limits, attempting to resolve its contradictions: the same, moreover, already recorded by Atkinson in his 1957 review.

Before the publication of the manual, in fact, the careers of Fry, Drew, Atkinson, Tyrwhitt and Koenigsberger had been intertwined in various ways, first within the operations conducted by the various colonial offices in Africa and India, then in London with the opening of the Department of Tropical Architecture and finally in New Delhi, during the UNTAA con-

ference of 1954. On behalf of the United Nations Koenigsberger would travel through the newly independent territories of Africa and Asia undertaking a large number of missions (Baweja 2008). And it is during these experiments – which will also lead to the creation of pilot projects, as in the case of the Gold Coast – that Koenigsberger understood the need to lay the foundations of a technical knowledge compliant with the modernization process underway. The missions on behalf of the United Nations began in the Gold Coast in 1954, with the experiments on the Roof Loan Scheme, continued to Pakistan and the Philippines to head back to Africa, in 1962, with the proposal of aided rehabilitation for the metropolis of Lagos; and finally concluded, in 1963, with the landing in the Far East and the implementation of the Singapore Ring City plan (D’Auria, De Meulder and Shannon 2011, Pappalardo 2021). Starting from these experiences, Koenigsberger will be increasingly convinced of the impossibility of proceeding case by case; and, at the same time, of the need to build a core of hard, scientifically appropriate knowledge that would guide and instruct architectural design in all its phases.

A body of knowledge, the one imagined by Koenigsberger, which necessarily started from scratch and which, perhaps for this reason, had to be first and foremost based on questions external to the field of architecture. Operating mostly in areas of the non-Western world, in fact, Koenigsberger had realized that the universalism of the architectural manuals developed in the First and Second World War postwar years was only presumed; and that the most of prescriptions were neither extendable – nor even applicable – to climatic and social conditions differing from those in which they were conceived. Hence, the idea of an appropriate product, made of everything that precedes or revolves around – like the sun – architecture. As if what had already been created or conceived up until then was in some way “deviant” with respect to criteria not yet fully explored or stated. According to this new perspective, the actual role of architecture resided therefore only and solely in its effectiveness, or rather in its responsiveness to external and pre-established topics, including climate and material performances. In other words, the quality of the built environment had to be achieved exclusively through the resolution of technical problems and the slavish application of the rules set out in the manual. A process that eliminated not only every form of complexity and conflict inherent in the colonial paradigm shift. In fact, it was also and above all architecture that was dissolving as it had been understood up to that moment, and not only by Fry and Drew: subjected to the outcome of application processes that were always identical to themselves and paradoxically almost georeferenced in the last attempt to adapt its forms to extremely specific conditions, Koenigsberger’s work definitively challenges the rules of authorship to project itself into the galaxy of hegemonic expertise and knowledge, as the system of power that generated them is hegemonic and on a global scale (De Dominicis and Tolic 2022). In this sense, Africa once again becomes the place where everything begins: the main space of experimentation in which the technological and apparently “scientific” knowledge of the manual not only overlaps with the mythopoetic processes necessary for the establishment of new national realities, but ends up directing customs and material development according to new forms of dependence.

Notes

¹ This work is to be considered the result of common discussion that the two authors developed within the framework of their respective interests, the part concerning the Fry&Drew manuals is mainly attributable to Jacopo Galli and the one on Tyrwhitt and Koenigsberger to Filippo De Dominicis. Given the breadth of the topic, it was not possible to provide a sufficiently exhaustive bibliography, for which reference should be made to the monographic texts of the authors.

² In this sense, a statement released by Leonard W. Rist, one of the main managers of the World Bank's activities in Africa, is interesting. Interviewed as part of an oral history program at Columbia University, he admitted that for New York officials Africa remained a substantially unknown territory, and that much of the information necessary for the investigation of the projects was obtained from the dispatches of colonial officials, especially British.

³ At the UN Regional Seminar in New Delhi in 1954, experiences and research conducted in India, Southeast Asia, Indonesia, the Caribbean and Africa were presented by Otto Koenigsberger, Ernest Weissmann, Robert Gardner-Medwin, Jacob Thijsse, Charles Abrams, Constantinos A. Doxiadis, and Arie Sharon, just to mention some of the best known profiles; and here the foundations will be laid for some of the most important design experiments of the years to come.

⁴ The *Tropical Housing and Planning Monthly Bulletin*, compiled monthly by Jacqueline Tyrwhitt between 1954 and 1957, is in fact the precursor of *Ekistics*, a magazine created and published by the Greek planner Constantinos A. Doxiadis (1913-1975).

⁵ The technical appendix included at the end of *Tropical Architecture in the Dry and Humid Zones* is taken from research by the Building Research Stations of the British Colonial Office, the list of which is reported at the beginning of the section.

⁶ In addition to Edwin Maxwell Fry and Jane Drew, Architect Co-Partnership and James Cubitt, the names of Richard Neutra, Paul Rudolph and Oscar Niemeyer also appear among the architects whose works are included in the volume.

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Jacopo Galli (Crema, 1985) architect and PhD is a researcher in architectural and urban design at the Università Iuav di Venezia. He obtained his PhD in architectural design at Iuav with a thesis entitled “Tropical Toolbox. Fry&Drew and the search for an African modernity”. His research work is devoted to the issues of architectural and urban transformation in extreme conditions. His latest work is *Cities Under Pressure* with Benno Albrecht (ArchiTangle, Berlin 2023).

Michele Caja
Modernist transfers. From Europe to Sub-Saharan countries

Abstract

African modernism has been the subject of recent investigations by European scholars that have opened new perspectives on architectural production, especially confined to a time frame limited to the period of de-colonization (1957-1966), not only in the countries of the North, but also in the lesser-known countries of the Sub-Saharan area. From a historical-critical perspective, this production reveals its interest in the way it addresses the relationship between urban and architectural development models imported from Western countries and site-specific conditions. From a cultural point of view, many of the projects created in that period are received controversially today, both with respect to the current search for new forms of identity, linked to building traditions handed down for centuries in individual countries, and with respect to the increasingly pressing urgency of social, climatic and environmental issues. Moreover, the current poor condition of many of these projects seriously calls into question the possibility of their survival.

Keywords

Sub-Saharan Modernism — Decolonisation — Cultural Identity

Introduction

The African declination of Modernism has been the topic of recent research, which has mainly focused on the works realised in Sub-Saharan countries by architects coming mostly from Europe, after the end of colonial mandates. Being directly commissioned by local administrations, these architects were able to design works that were able to give a modern face to these developing countries. On one hand, the current reinterpretation of these works aims at highlighting their significance from a critical and historiographic point of view, in relation to better-known experiences in other continents. On the other side, however, in the perspective of urgent environmental and climate issues, many of these works pose serious problems of conservation, but also of their integration inside local contexts. Very often they appear today as decontextualised objects, reflections of distant cultures, which have nothing to share with the urgent search for an autochthonous identity by many of these countries, which in younger generations are trying to find it in the building traditions that have been handed down for centuries. These ancient techniques are, moreover, also the only ones that can respond to the increasingly pressing urgency of climate and environmental issues.

Early Examples of North African Modernism

The research group led by Tom Avermaete, Serhat Karakayali, Marion von Osten – curators of the travelling exhibition *In the Desert of Modernity. Colonial Planning and After* (Berlin/Casablanca, 2008 - 2009) (Avermaete, Karakayali and von Osten 2010) – were among the first to focus on the complex relationship of the Modern with colonialist culture, tracing the



Fig. 1
Edmond Brion, Worker's Neighborhood SOCECA, Casablanca, 1942. (By M. Caja, 2024).



Fig. 2
Victor Bodiansky, George Candilis, Henri Piot and Shadrach Woods, Cité vertical 1952. Casablanca, 1952. (T. Avermaete e S. Karakayali, M. Von Oste, 2010).

reciprocal cultural exchanges, which occurred because of the migration processes after World War II, between the European context and the North African countries. In these different contexts, the urban principles inherited from the European Modern had to be confronted with climatic and environmental conditions, as well as with secular local building traditions. The declination of imported models in individual African countries has led to heterogeneous architectural works in which old and new, tradition and innovation coexist in a state of dynamic tension.

Already before the Second World War, some French architects – as Edmond Brion – were working in the Moroccan colony, to build new urban neighbourhoods in the suburbs of Casablanca (Cohen and Eleb 2002), and company towns related to phosphate mining in the area around the city of Khourigbah, using urban models referred to the morphological and typological principles of the local medinas (Avermaete 2012). According to these first examples, other European architects, working in the North African colonial territories from the early 1950s onwards, also moved away from rigidly modernist schemes, seeking new solutions closer to local settlement characteristics (Caja, Landsberger and Fumagalli 2020).

The models tried out in these new urban parts reflect the discussion on the legacy of Modernist principles introduced by the young generation of architects – later brought together in Team 10 – at the 9. CIAM in Aix-en-Provence in the summer of 1953. An articulated debate, united however by the desire to overcome the rigid principles of functionalist zoning enshrined in the Athens Charter in favour of a closer interconnection between house, street, neighbourhood and city. It would take more than a decade for new typo-morphological approaches to the historic city – initially introduced in the Italian context – to study and analyse in greater depth the form and the primary factors that compose the individuality of the Islamic city compared to the European one. As early as 1952, Victor Bodiansky, George Candilis, Henri Piot and Shadrach Woods reinterpreted the traditional typology of the patio house in the *Cité Verticale* – a pilot project for a new urban part of Casablanca, built as a low-cost residential neighbourhood for rural immigrants. This was however developed in height to create a regular mesh of multi-storey blocks, whose irregular boundaries fit one of the city's largest suburban bidonvilles.

**Fig. 3**

Fabrizio Caròla, Hospital in Kaédi, Mauritania. (A. Doucet - Opera propria, CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=9819721>).

Similarly, Michel Écochard's districts, also built on the fringes of Casablanca and other Moroccan cities, abandoned the open building schemes of functionalist matrix to accord with the layout of the local medinas, whose density and scale are here adopted as a scale of aggregation for new forms of community. In contrast to these horizontally developed schemes, the *Climat de France* in Algiers, realised by Fernand Pouillon in Algeria in the same years, introduced a new monumental scale for collective residence, drawing on the large courtyards of local historical complexes. This project became a pilot experience in the search for new settlement forms, which was only later rediscovered as an alternative model to the LeCorbusieran Unitè, thanks to its ability to integrate itself into the existing urban context, making use of local architectural and construction solutions.

Cultural transfers between Europe and Sub-Saharan Africa

Compared to the rest of the African continent, the specificity of the urban and architectural interventions carried out by European architects in the territories of the South-Sahara clearly emerges. Particular attention has recently been devoted to them by international, mainly European, scholars. In particular, the series of architectural guides by the Berlin-based Dom Publishers has explored with Prussian systematicity in as many as seven volumes all the possible national declinations of Sub-Saharan Africa (Meuser and Dalbai 2021).

The introduction by Philipp Meuser – editor of the series – underlines the multiplicity of cultural transfers that took place in the last century between European countries and the examined territories. These exchanges involved architects from different European nations, who in various ways tried to give a local version of the International Style then prevailing.

If we consider the case of Italian architects, these countries have often been the occasion to realise large-scale works with individual characters which however today show the difficulty of relating to changing climatic and environmental conditions. Precisely for this reason, many of these works remain iconic pieces today, mostly characterised by unusual shapes and a dimension that is mostly alien to the fabric of local urban contexts. Such as the office building La Pyramide in Abidjan in Ivory Coast by Rinaldo Olivieri (1972), which is characterised by the unusual composition of a pyramid-shaped glass office volume, leaning against the stereometric

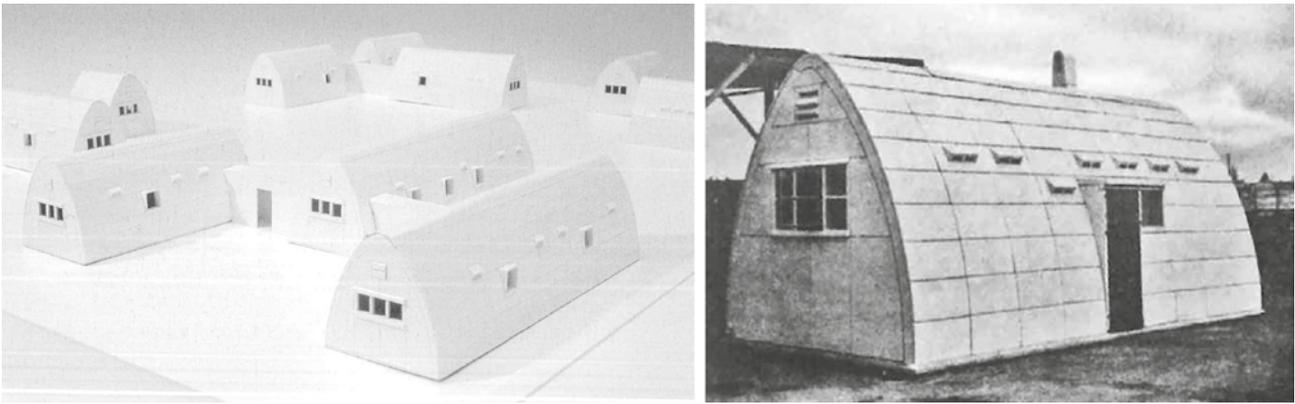


Fig. 4

Ernst May, Hook-on-Slab prototype, typological variations and combination possibilities. (Meuser and Dalbai 2021, Herrel 2001).

reinforced concrete distribution tower behind it, without, however, finding a dialogue with its surroundings.

Among the authors who have instead sought to relate in a concrete manner to local climatic and environmental conditions, emerges the figure of Fabrizio Caròla, an architect of Neapolitan origin who moved to Africa in the early 1970s. In his works, he has been among the first to take up traditional techniques, such as the use of unbaked earth to create self-supporting domes, as in the hospital in Kaédi, Mauritania (1989), a central work in his work, which won the prestigious Aga Khan Award (Alini and Caròla 2016).

The works of architects from other European nations, mostly linked to previous colonial mandates – particularly those of the British and French, but also Portuguese, Belgian and Spanish – show clear references to European models, influenced by late LeCorbusierian work and British Brutalism. Despite their foreignness to indigenous architectural culture and traditional urban contexts, these interventions were often welcomed by the local community, viewing them as instances of adhesion to an international language, capable of extending the cultural boundaries of individual countries to other continents – as Udo Kultermann, one of the first to deal with African modernism, pointed out at the time (Kultermann 1963).

The activity of German architects in these countries remains poorly documented, following the cession of their colonies to French and British power after the First World War. Following the independence of the nations from the colonial powers, some German architects were mainly commissioned for public buildings and diplomatic headquarters. Among these, the German Embassies designed by Heinz Seidlitz in Lagos, Nigeria, and Monrovia, Liberia, employed a technocratic language typical of the administrative buildings constructed in Germany in the same years.

Compared to these, Ernst May's work in East Africa – well documented in the 2001 exhibition at DAM in Frankfurt (Herrel 2001) – is an exception. Having emigrated to Kenya in 1934 – following his experience as chief architect of *Das Neue Frankfurt* and his subsequent brief period in the Soviet Union – May imported the experiences of low-cost housing reform made there. Here he used prefabricated prototypes, which he used to build housing estates in several countries, including Kenya and Uganda.

Tropical Architecture

In Great Britain, tropical architecture became a privileged field of research from the early 1950s onwards (Lu 2010). In the *Conference of Tropical Architecture*, held at University College London in '53, the debate was on the advantages and disadvantages of exporting western models and on

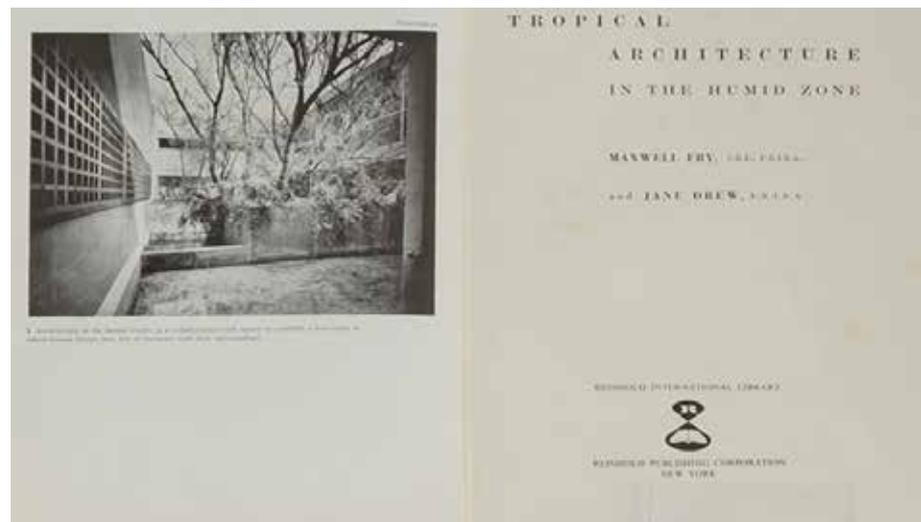


Fig. 5
Maxwell Fry and Jane Drew, *Tropical Architecture in the Dry and Humid Zones*, 1964. (By Maxwell Fry and Drew 1964).

the relationship between new building technologies with reference to the return to traditional knowledge, vernacular styles and local materials.

Among the speakers was the German architect Otto Königsberger, long active in the Indian colonies, who propagated the use of local building traditions, against the export of western technologies. From 1954 onwards, he will direct a post-graduate programme in tropical architecture at the Architectural Association in London. This study programme was very successful and attracted many architects from different countries of the European Community.

Emblematic figures such as Maxwell Fry and Jane Drew will teach there. These two architects – well-known for their later participation in the making of Chandigarh beside Le Corbusier – will be the authors in the 1950s of many key works in Nigeria and Ghana. Of particular interest is their National Museum in Accra, Ghana, which consists of a horizontal volume with staggered baffles on which a lowered dome is grafted, containing a large central space for the display of the main emblematic artefacts symbolising the country's national identity.

Fry and Drew would later systematise their theoretical and design principles put into practice during the realisation of these works in the book *Tropical Architecture in the Dry and Humid Zones* (Maxwell Fry and Drew 1964), published in its final version in 1964. In this manual, the authors attempt to set the foundations for a new design methodology customised for tropical areas, attempting to apply western methodology to the conditions of cultural and social underdevelopment in Sub-Saharan countries. This gives rise to the idea of a deeply rooted approach to local climatic and geographic conditions, which seems to anticipate the regionalist trend, even if far away from any vernacular accent (Galli 2016).

Also related to this research line is the German architect Georg Lippsmeier, whose theoretical and architectural output remains little studied until today, even though part of his legacy was transferred to the archives of the CCA in Montreal in 2016. Founder of the *Institut für Tropenbau* (IFT) in Germany in the 1960s, with his studies and projects he linked up with Ernst May's experience of low-cost housing designed for the poorer layers of the African population. From his studio in Düsseldorf - the headquarters of the Institute of Tropical Construction - he opened several satellite offices in the countries – Kenya, Senegal and Tanzania – where he worked as an architect.



Fig. 6

Karl H. Nostvik, KICC - International Conference Center in Nairobi, Kenya 1966-1973. (By Herz 2022).

The Architectural Legacy of Modernism

The legacy of these modernist works by European architects has been the subject of another recent study, coordinated by Swiss architect Manuel Herz, which focuses on five Sub-Saharan nations – Ghana, Senegal, Ivory Coast, Kenya and Zambia – chosen based on their specific climatic and cultural conditions and their reflection on the development of local architecture (Herz 2022). This research opens new perspectives for Western critical and historiographical culture – which until now has been reluctant to include this geographical area – focusing on architectural production after the emancipation from colonial domains, mostly during the period from 1957 to 1966. Within this little or not at all known heritage, one discovers works that can become, in the opinion of the authors, cornerstones of the late Modernism of the 1960s and 1970s, on the same level as much more famous projects realised in the same years in other continents. The goal of the research is not only historiographical, but also aims to stimulate interest in the local institutions, to allow for future conservation interventions, that would be desirable for many of the selected buildings, often in a state of neglect today, before their imminent demolition.

This research aims to show the different facets in these works, overcoming the often-recurring prejudice, mostly referring to ethnographic and vernacular aspects, of the existence of common features in many of the cities of these countries. As Achille Mbembe, a Cameroonian theorist and expert on post-colonial issues, well explains, an image of Sub-Saharan countries emerges today that differs from the one predominantly referring to the elementary and primitive living conditions to which most of the population is subjected (Mbembe 2001). Contradicting this image, the works realised by predominantly European architects during the 1960s and 1970s trigger a critical dialogue with long-consolidated cities, referring to urban and architectural principles that are for the most part foreign to local settlement patterns.

The International Style of the post-World War II period, as well as Brutalism of British origin, are here declined according to forms and stylistic features that are individualised in different ways from time to time, which



Fig. 7
Thomas Leitersdorf and Heinz Fechel, Hotel Ivoire in Abidjan, 1963-70. (By Herz 2022).

only in certain fortunate cases manage to integrate with the surrounding context.

In this modernisation process, autonomy from traditional urban and architectural development models opens the experience of Sub-Saharan countries to international debate. With respect to which there is a slight temporal gap at times, also due to the different cultural matrices of the architects involved. Architects who had mostly been trained in English, German, Belgian or French schools and universities, as the level of university education in these countries was almost non-existent at the time – the first school of architecture will be active from 1960 in Ghana. While most of these architects came from France and England, there are also representatives from other countries, besides the already mentioned Italy and Germany, such as Scandinavia, Eastern Europe and Israel. Scarcely involved in colonialism, the Nordic architects had easier access than the others thanks to their democratic tradition, showing particular interest in the territories of Sub-Saharan Africa both on a political and diplomatic level. These countries, on the other hand, represented for them an opportunity to obtain important architectural commissions that were difficult to obtain at home. Public works stand out, which often become new landmarks on an urban scale. Among them, the Kenya International Conference Centre, designed by Norwegian architect Karl H. Nostvik, is soon recognised by the local community as a symbol for the country's independence. The complex, consisting of a tower on a circular plan and an amphitheatre with a closed flower-shaped roof, is based on an articulated and decorated concrete plinth. Among others, the Danish architect Max Gerlach realised the Great Hall at Knust in Kumasi, which dialogues between the lightness of the pilotis, on which the volume is suspended, and the granite inserts which accentuate the character of solidity. His compatriot Erhard Lorenz, active in Lusaka, the capital of Zambia, will also design several works, including the chapel of the University Campus, a large portico with giant pillars under which is inserted the the circular volume of the church.

As for the projects realised in the same years by architects from Eastern Europe, the relationship is mainly explained by the common political orientation of these countries, often administered by socialist regimes. Prominent among these projects is the Accra International Fair, designed by the Polish architects Jacek Chyrosz and Stanislaw Rymaszewski, which



Fig. 8

Kunlé Adeyemi - NLE', Makoko Floating School, Lagos, 2013. (By Meuser e Dalbai 2021, Herrel 2001).

is characterised by the large circular volume of the entrance, covered by a large oculus opened towards the sky.

More surprising, however, is the relationship of the Sub-Saharan countries with Israel: both united by the struggle against British dominion, they had recently found their independence by becoming active members of a common ongoing process of decolonisation. It will be Golda Meir – the first woman to lead the country – who will resolutely support this process, influencing the political choices made by African governments. Among the projects realised by Israeli developers and architects two hotel complexes stand out, which differently interpret the relationship between basement and autonomous buildings. The Hotel Ivoire in Abidjan, by the architects Thomas Leitersdorf and Heinz Fechel, is built around a large open conference space that keeps together two isolated buildings, a tower with staggered walls and a rectangular prism with horizontally curved façades. The Hilton Hotel in Nairobi by Zevet Architects, develops in height in a tower building with a circular layout, with a façade punctuated by full-height vertical pillars, supported on a compact base connecting it to the surrounding urban context.

New Postcolonial Activisms

The role and involvement of European architects active in the countries that were once part of the colonial empire has now become a subject of critical investigation, different from the previous research mentioned above aimed at re-evaluating their role within a historiography of the Modern Architecture limited mostly to European and Western contexts. This change of perspective is mainly based on the current desire – parallel to the ongoing battles in various disciplinary fields – to assert independence from imported models from an architectural and urban point of view.

On the other hand, many doubts remain today as to the actual cultural autonomy of these countries. Despite the countless efforts made to mend ties with traditions and forms linked to their past, very often these countries are the terrain of foreign investment, for real estate operations that are based on globalised models.



Fig. 9

Francis Kerè - Proposal for a playground, Kamwokya community in Kampala, Uganda. (By Meuser e Dalbai 2021, Herrel 2001).

About the works of imported Modernism of the 1960s and 1970s mentioned above, two divergent positions emerge. On the one hand, there is an attempt to preserve them as testimonials of a time in which these countries, following the conquest of their political independence, placed themselves critically in relation to the international debate, re-elaborating it according to original forms; on the other hand, however, these same forms are now read as extraneous references to the local culture, disconnected from real ties to the environment, climatic conditions, constructive and craft traditions of the individual countries.

This question was placed at the centre of the last Venice Architecture Biennale, which focused on two keywords that seem to centre on the two emerging issues discussed here so far: decolonisation on the one hand, and decarbonisation as an answer to environmental issues on the other. In the militant intentions of the Anglo-African curator Lesley Lokko, the two themes were tackled by actively involving young local collectives who, in different ways – often also at the limits of other disciplines and far from architecture – have tried to show how it is possible to rediscover one’s own identity today through the search for continuity with one’s own historical and cultural roots, rereading them in close relation to today’s pressing environmental and energy issues (Lokko 2023).

In this new phase of decolonisation – which differs from the first in its greater awareness of the cultural and ideological objectives it sets itself – African countries seem today to be seeking alternative models to both those of Western modernism and those proposed by the globalised economy, drawing on the identity of local cultures and traditions. This act of *resistance* – the first principle of any form of critical regionalism, as asserted long time ago by Kenneth Frampton in his manifesto-text, which is still today the object of worship and critical revision (Frampton 2019) – seems

today to be particularly felt by the new generations of architects, ready to question an abstract notion of modernity in favour of a deeper rootedness to reality.

A new Sub-Saharan architecture scene is emerging from below, made up of young and mostly unknown authors. Using ways that are at times unrealistic, naive and often far removed from real architectural proposals, at the risk of becoming a bad copy of much more convincing forms of activism in the artistic sphere, these new forms of resistance give voice to new identity and gender demands (Magnago Lampugnani 2023). Compared to the fragility of these bottom-down actions, which often remain far removed from the disciplinary sphere of the architectural project, new figures of architects of African origin, but for various reasons active in Europe, are strongly emerging. In the most interesting of these, the ability to combine their Western education with their culture of origin in the search for appropriate solutions to local issues is intertwined (Biraghi 2023).

Once again, as after the liberation from the colonies, we see a phenomenon of cultural transfer, but in this case according to an inverse relationship. Now, in fact, it regards Afro-European architects returning to their countries of origin to deal with issues related to their roots, seeking unusual solutions capable of finding a more general meaning that goes beyond specific localisms. Such as Francis Kerè's recent proposal for a playground within the Kamwokya community in Kampala, Uganda, which successfully acts as a regenerating element for an entire community and fits organically into the minute fabric, creating a small but significant island of order intended as a meeting place for the district's youth. As has also been shown on another recent occasion – the exhibition *Africa: Big Change Big Chance*, curated by Benno Albrecht (2014) – these countries can now become spaces of a new modernity, where a different universal, cosmopolitan, global culture can be erected, despite the problems caused by the rapid urbanisation underway, the incongruous use of natural resources and territories. Is this the right way to approach the country's difficult renaissance with the tools of architectural design?

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Sara Coscarelli
**Critical regionalism in Sub-Saharan Africa.
A new modus operandi to understand the value of the
city and its history through modernity**

Abstract

Modern architecture was born in the colonial era and must be understood as a means of representing power. However, after World War II, some young architects began to promote the study of a reinterpreted African popular architecture by seeking new ideas beyond the traditional boundaries of the architectural discipline.

Critical regionalism is an approach to architecture, which strives to counter the placelessness and lack of identity of the International Style.

Through European cultural uprooting, these architects enhance their ability to modernize local tradition, compared to other professional colleagues who build with many more resources. This also serves to break with the inertia of colonialism on the continent and to encourage future generations to stop copying modern European architecture.

Keywords

Critic Regionalism – New modernity – Sub-Saharan Africa

Introduction

Geographical categories, defined as ‘Western’ and ‘non-Western’, have often been used as indicators of exclusion in architectural writing. Indeed, African architecture has centuries of tradition, although it did not gain prominence until recent decades. Slowly but surely, the Sub-Saharan architectural style proved its uniqueness in the face of Eurocentrism and architectural discrimination of some European schools of thought, especially before the Second World War.

There are many historical and cultural problems, such as the crisis of the ideology of progress after the Great Depression, the questioning of European culture during the Second World War, the doubts about the meaning of the Athens Charter of 1933, the creation of Team X and the new interest of the Modern Movement in nature and landscape, among many others. All of them represented a turning point in the usual procedure of South African modern architecture, typical of the International Style, leading its protagonists to revise that modernity and put it into crisis.

The New Modernity: Crisis of the Modern Movement in Sub-Saharan Africa

Modern architecture in Sub-Saharan Africa was born in colonial times and must be understood as a means to represent power, the continuation of colonial imperialism after independence or as the cultural supremacy of the other, represented by the permanence of the Western world in Africa. In many cases, the African city has been built without regard for historical pre-colonial urban identities and focused on modernity as a continuation of the colonial legacy. Despite the fact that the anti-imperialist narrative has extensively criticized this survival, the truth is that today the urban land-

scape of the African continent could not be understood without the contribution and imposition of Western architecture (Coquery and Vidrovitch 2005). In parallel, there is also a socio-economic reality in Sub-Saharan Africa that consists of the permanent existence of a constant migratory flow, especially from the rural to the urban context, due to the lack of necessities such as food and sanitation and the need to obtain decent housing (Kultermann 1969), a situation that is exponentially aggravated by the demographic increase. Ultimately, the growth of urban centers due to agglomeration generates global food, health and housing emergency.

The Modern Movement was clearly necessary to break away from the academic and archaic architecture of the 19th century. Its existence enabled the technological evolution and paradigm shift that the world needed to carry on the Industrial Revolution. Subsequently, the lack of regional architecture of each territory began to be perceived, considering that the International Style promulgated normative and abstract architecture that had to reach everywhere. This abstraction, initially necessary to break with any autarchic past, found its weak point a few years later due to the lack of respect for the own, indigenous, traditional and vernacular cultures of the various existing interstices.

In the face of this reality, concern for the revaluation of the indigenous languages of one's own territories might seem secondary. Indeed, it is essential to be able to recognize an identity, as it is a heritage that pushes governments to value their resources by promoting low-cost types of construction that respect the pre-colonial past and the identity and memory of the people. Anyway, against the megalomaniac architectures built by western powers, whose only goal was the domination in Sub-Saharan territory and the need to prove western supremacy to the natives, there is an alternative path.

Pagano was already investigating indigenous folk architecture in the 1930s, during the International Style boom, or Le Corbusier himself when he realized, on board the *Patris II* during the IV CIAM in 1933, the wonderful value of vernacular architecture, or when he admired traditional African architecture (Le Roux 2004). Even Aalto put into practice this new positioning, which is nothing other than the reinterpretation in a modern key of the traditional languages of the different regions of the territories, while respecting, nonetheless, the emancipatory postulates that the Modern Movement allowed. Several European architects perceived the Modern Movement's lack of humanity and considered indispensable its overcoming for the smooth progress of architecture's future. Team X architects interpreted traditional African architecture and used its principles in their critique of contemporary architectural and urban design, identifying several alternative models that architects could choose for the building environment (Dainese 2015). Rudofsky's magnum opus *Architecture without Architects* (1964) is also decisive, where the architect explicitly defends the values of African architecture when questioning the universal consideration of world civilization.

Critical Regionalism in Sub-Saharan Africa

Critical Regionalism is an approach to architecture that strives to counter the placelessness and lack of identity of the International Style, but also rejects the extravagant individualism and ornamentation of postmodernism. Consequently, African vernacular architecture is redefined to become modern, using a wide variety of materials in today's use and with the aim

of preserving historical identity. It must be understood as an attitude whose focus is on creating a bridge between tradition and modernity. However, this modernity cannot stop the permanence of local tradition as it would mean the disappearance of identities (Frampton 1983).

Sub-Saharan critical regionalist architecture is defined by its multicultural history, a term that runs through any historical and cultural narrative in this region. Here, architecture is a mix of vernacular building traditions and techniques, revised modernity and new technologies.

According to Manuel Herz, curator of the exhibition *African Modernism - Architecture of Independence* (2015), held at the Vitra Design Museum in Weil am Rhein, Germany, these constructions followed colonial models and, for the most part, failed to capture the desires or identities of the majority of Africans¹. Constructive uprooting is one of the elements that ended with International Style. One of the pillars of Sub-Saharan Critical Regionalism is its ability to modernize local tradition using local materials that greatly reduce production costs, while at the same time freeing architecture from the inertia of colonialism on the continent.

Indeed, African architecture is a conglomerate of styles and forms, residing in the houses themselves and in the culture of their inhabitants. Construction techniques vary from area to area because what works in one place may not work in another. In Africa, for example, there are adobe houses covered with straw, a highly impermeable material that also allows air to pass through. There are also square or rectangular houses with sloping roofs in wet areas and with flat terraces in dry areas. Others overlook an internal patio. Some are built on rock. Sometimes they are circular, beehive or cone-shaped (W. Hull 1976). Vernacular architecture is very practical and adapts to each region, its climate and the needs of its people. In terms of materials, the most commonly used are, as already mentioned, clay-cheap, ecological and easy to obtain- and adobe -a mass of mud mixed with straw which, moulded into bricks and air-dried, is used in walls-, but there is also wood, rammed earth and even cocoa which, in areas where it is cultivated, is used to waterproof houses and repel insects (Fathy 1986). In this type of architecture, nine broad categories of room structures can be identified: beehive-shaped, cone in a cylinder, cone at the poles, covered gable, pyramidal cone, rectangle with rounded roof and sloping at the ends, square, domed or flat brick roof, quadrangular around an open patio, cone on the ground (W. Hull 1976). This tradition is based on the sustainable relationship communities that have with their environment, where natural materials are compatible with the environment, facilitate indoor air circulation, are self-insulated and create a great symbiosis with nature. These materials have an impact on the aesthetics of space, as its natural colour scheme creates a decorative effect, ranging from lighter beige to red or even black.

The architects of Sub-Saharan Critical Regionalism

In the African context, after the Second World War, this vernacular architecture became the basis for the work of a new generation of professionals who, in the wake of the crisis of the Modern Movement, sought to define the identity of African architecture. It also demonstrates that through design, it is possible to change people's lives for the better by incorporating forms into their local building projects, the result of which is economically and environmentally sustainable.

Through European cultural uprooting, these architects enhance their ability to modernize local tradition, compared to other professional colleagues who build with far more resources. It also served to break with the inertia of colonialism on the continent and encourage future generations to stop copying modern European architecture.

Young architects began to promote the study of traditional African architecture as an antidote to the 'heroic' attitude of modern architecture, seeking new ideas outside the traditional boundaries of the architectural discipline. In addition to the architecture of Henri Chomette (Touré 2002), probably the best-known architect of the New Modernity in Africa, there are lesser-known architects who, unlike their Western-influenced counterparts, do not adopt a Eurocentric perspective when building in Africa, but integrate local elements into their designs. The designs that are considered most representative of this critical positioning of architectural modernity in the Sub-Saharan context are exemplified below.

Demas Nwoko (1935), Nigeria

Nigerian-born artist, designer and architect Demas Nwoko received the Golden Lion for Lifetime Achievement at the 2023 Venice Architecture Biennale, entitled *The Laboratory of the Future*. Demas Nwoko is a Nigerian-born artist, designer and master builder at the forefront of the Nigerian modern art movement. Through his works, he strives to incorporate and articulate African themes and modern techniques in architecture and scenography. His versatile works span media and disciplines, including architecture, sculpture, design, literature, criticism, scenography and history. Son of Obi (King) Nwoko II, Prince Demas Nwoko was born in 1935 in Idumuje Ugboko, Nigeria. There, Nwoko took inspiration from the city's newly built residences and the palace building of Obi, her grandfather, who designed the palace. He studied at the Nigerian College of Arts, Sciences and Technology in Zaria between 1957 and 1961, where he became a founding member of the Zaria Art Society. The group, also known as "Zaria Rebels", promoted the idea of natural synthesis, a concept developed by artist Uche Okeke. The concept was intended to bridge the gap between the Western training of artists by colonial educators and their African origin, centred on traditional themes and narratives. The Zaria rebels contributed to the postcolonial modernist avant-garde movement in Nigeria in the early 1960s (Prucnal and Ogunsote 2016).

Nwoko later established New Culture Studios in Ibadan, a training centre for the performing arts and design programme. The impact of his work lies in his desire to synthesize Western influences with authentic, traditional African practices. His architecture demonstrates these interests. Its buildings, while relatively few, demonstrate a resource-conscious and sustainable approach, incorporating culturally authentic forms of expression. This deep desire to mix and synthesize, rather than sweep, has characterized Nwoko's work for more than five decades. He was one of the first Nigerian creators of spaces and forms to criticize Nigeria's dependence on the West for the importation of materials and goods, as well as ideas, and remained compromised in the use of local resources.

His works are a precursor of sustainable, resource-conscious and culturally authentic forms of expression that are crossing the African continent - and the world - and point to the future. The Dominican Institute was his first major architectural project. In the Dominican Chapel, a semicircle emphasizes the transition and movement in the complex and there is also a central



Fig. 1
Dominican Institute, Demas
Nwoko, Ibadan, Nigeria, 1973.

axis with entrance doors and in the main sector two natural pools showing the central entrance of the building. The morphology of the building aims to be a modern interpretation of the basic constructions of African vernacular architecture. In this work the artist combines sculptural elements and modernity with a Nigerian vernacular architectural style. The structure incorporates features such as wooden columns carved with traditional designs and elaborate metal work on the balustrades and doors. The main facade alternates clay drawings that reinterpret the traditional aesthetics of the place (Dele 2007).

Anthony Almeida (1921-2019), Tanzania

Son of Indian immigrants from Goa, Anthony Almeida was born and raised in the city of Dar es Salaam (Tanzania). He subsequently went to India to study Architecture at the prestigious Sir J.J School of Architecture in Mumbai, where he met the work of important figures of the Modern Movement such as Le Corbusier, Wright and Aalto, all of whom would have a decisive influence on his architectural career. After completing his studies in 1948, Almeida returned to his hometown, where a few years later he opened his own architecture studio.

His first major commission did not come until 1955, when the Indian community of Dar es Salaam invited him to design a primary school for 500 students. At that time, Tanzania was still a very conservative colony. His design was considered by British officials to be too modern, although it was eventually approved and built. The project has transformed into a reference, where climate and rationality define the forms, with elevated clas-

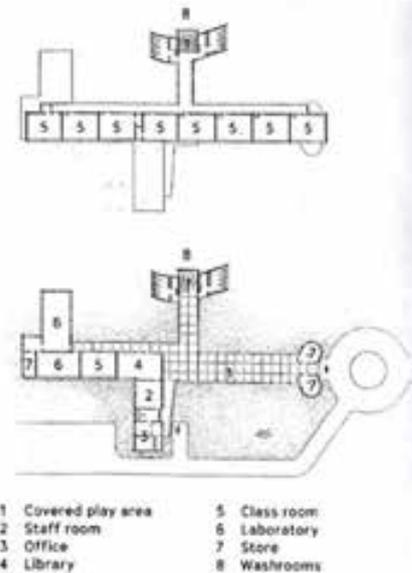


Fig. 2
San Xavier School, Anthony Almeida, Dar es Salaam, 1955.

rooms supported by structural columns and a palette of discreet materials. Its layout solution – with a service volume separate from the main building – led the British authorities compare the school to an airplane. It is a simple building, where it uses modern materials to offer a free plant, leaving the protagonism to the delicate finishes of the African tradition. It can be seen in the curved structure of the entrance, made of stones with lattice windows, and in the lattices of the ground floor facade, which allow fluid natural ventilation.

Lastly, the cladding of the side facades stands out, recalling the colours of the mud buildings typical of African popular architecture.

Beda Amuli, Tanzania

In the 1970s, Beda Amuli, became notable for being the first black African to open an architectural practice in an East African country. Amuli studied architecture at the Israel Institute of Technology, returning to Tanzania to open his own studio in 1970. Probably the most iconic of his projects is the Kariakoo Market, designed and built in 1973. Brutalist in style, the market was designed as a large clearing protected by “exposed concrete trees”. Taking inspiration from the nature and landscape of Tanzania, Amuli’s biggest challenge in this project was to translate the structure of a tree into concrete. With a total area of approximately 540 square meters, the Kariakoo Market is defined by a grid of 4 by 6 monumental concrete pillars, which expand in the shape of an inverted umbrella 15 by 15 meters wide, the “trees” from the African market.

Under the constructed topography of the roof, the market space develops on different levels: loading and unloading of goods, as well as product storage spaces take place in the basement, the coolest place; the commercial spaces, however, occupy the two upper floors which connect directly with the adjacent public space. Connecting all levels of the market, the central staircase also collaborates with the building’s natural ventilation system. This works primarily through a chimney effect, enhanced by the distance between the tops of the concrete “trees” designed by the architect. Furthermore, these magnificent and sculptural structures also serve to capture rainwater, which is filtered, stored and then reused in the market. The iconic building is an established urban landmark, a point of reference for residents and the vibrant city life of Dar es Salaam.



Fig. 3
Kariakoo Market, Beda Amuli,
1973.

Pancho Guedes (1925-2015), Mozambique

Born in Lisbon in 1925, he moved with his family to the Portuguese territory of Mozambique at the age of 7. He studied in Sao Tome and Principe, Guinea, Lisbon, Lourenço Marques (now Maputo), Johannesburg and Porto. Guedes was part of Team 10. In addition to his major architectural projects, he was a sculptor and painter. After the *Revolução dos Cravos* in Lisbon, he left the colony practically independent. Mozambique's independence was established in 1975 and was officially called the People's Republic of Mozambique.

A Leão que Ri (1954-1958), his most famous building, located in Maputo, combines his desire to create with surrealism and expressionism an African modernity. It is a sculptural ambition with its ability to transform dreams and visions into space. It is a residential building, with a gallery at the back and with three apartments for plants, suspended above the ground and creating a sculptural modelling (VV.AA. 2011).

Located in a residential area on the corner of Kwame Nkrumah and Salvador Allende Avenue, the building consists of 6 apartments open to the city and with 6 parking slots. The seven pillars rest on seven sculpted bases approximately 1.20 m high and covered with mosaics of limestone pebbles. The 6 apartments are located on the first and second floors, the main facade of which is oriented to the North-West, and the vertical accesses and the horizontal gallery are located on the South-East facade. Both vertical accesses are at the ends of each gallery. At the north-east end there is the service staircase, which goes up to the third floor protected by walls, where curved surfaces are sculpted. At the south-west end the main open staircase goes up to the second floor and connects the two wide access balconies. The third floor is delimited by two long bas-relief murals, which hide the terraces and the uncovered accesses to the domestic staff lodgings. Here we find toilets and showers, washing machines and clotheslines.

The roof is defined by 6 vaults that rest on the bas-relief murals. The mural is like that of the Palazzo Tonelli (1957-1968), and the sculptural design of the upper summit of the side facades reminds us the African combs and of the Palazzo Prometeo (1951-1953). The main facade consists of three sets of double balconies delimited by structural planes that organize the interior of the apartment. These sculptural walls touch the sculpted bases through an expressionist design of the pillars. The building owes its name to the lion that stands at the entrance on top of a cube which, as the author recalls, was sculpted by himself and Gonçalves, an African bricklayer from Inhambane. Nowadays, the ground floor is partially occupied with commercial premises and garages, and the balconies of the main façade are closed with railings.



Fig. 4
Leão que Ri, Pancho Guedes,
Maputo (1954-1958).

Michael Tedros (1921-2012), Ethiopia

Filwoha Hotel and Spa are in the central part of Addis Abeba and serves the local public and tourists. The building was built on a natural hot spring, that Empress Taitu liked so much. That was the reason for Emperor Menelik II to move the capital, Addis Abeba, from the Entoto Mountains to the valley below (Levin 2016).

The project includes a hundred and thirty thermal baths, ten showers, two swimming pools and a hydrotherapy department. Each building is composed of hexagons grouped around a central public hall. All spaces are lit from above and ventilated via shutters. The main design considerations were traditional thermal baths shape, cell layout, climate, traditional shapes, prefabrication and provision of seating solutions. The aim of Tedros and Enav was to work as much as possible with natural resources. Natural light and a low-tech ventilation system that requires no electricity were an important part of the design. The construction system is based on load-bearing brick walls that support prefabricated concrete pyramid roofs. The prefabrication system saves construction time and reduces costs. The idea was to design a self-sufficient low-rise building with local materials that fit the economy of that time and that defines modernity in other way.

Conclusions

Critical Regionalism, theorized by Kenneth Frampton years after its appearance, forcefully entered Sub-Saharan Africa in the 1950s and became the most balanced attitude for designing new architectural spaces, both public and private, generating a harmonious balance between the progressive ideas of the Modern Movement and the characteristics of the vernacular tradition.

This new *modus operandi* will continue nowadays with new protagonists, always in search of sustainability. The help of ancestral techniques and materials, demonstrated for more than 50 years, are currently and continue to



Fig. 5
Filwoha Hotel and Baths, Michael Tedros, Addis Abeba, 1965.

solve the problems of centuries ago. This design strategy is nothing other than the use of logic in building, beyond new construction techniques. The idea of mixing the ancient with the modern, in other words, those elements that worked long ago and continue to do so with those that have allowed technological progress, contributes to the optimization of resources in an environmental context of health, economic and society that requires the help of all other societies.

Notes

¹ The aim of the book, born from the homonymous exhibition hosted by the Vitra Design Museum in Weil am Rhein, Germany, wanted to express the idea of its curator Manuel Herz, architect and historian, to explore in paper format, the photographic catalogue of African banks or stadiums built starting from the 1950s in the main urban centres of Africa.

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Flavia Vaccher
The “Other Modernity” of Demas Nwoko. An alternative form of climatic thinking

Abstract

An innovative approach, a sort of synthesis between the principles of *Tropical Architecture* and the elements of local tradition, is that undertaken by the architect-artist Demas Nwoko, who formalized it in the *Natural Synthesis* manifesto before, and then in the magazine *New Culture: A Review of African Arts*. It is the result of a personal poetic expression characterized by a high degree of experimentation, on which the period spent at the *École des Beaux-Arts*, the trips to Europe and the United States certainly had a decisive influence.

A little-known but consolidated design experience, inextricably linked to the climate, place and materials; an "other" but not necessarily vernacular modernity, which reflects the cosmopolitanism of Nigeria in the post-colonial years.

Parole Chiave

Climat thinking — Other modernity — Contamination — Tradition — Invention

Technology is universal but the aesthetics of art is unique to different cultures. So I set out to translate the African idioms and aesthetics to our contemporary scene. (Demas Nwoko)

In the trilogy *Things Fall Apart*, Chinua Achebe (1958) describes, through the tragic events of the main character Okonkwo, the chronicle of the tormented history of Nigeria from the beginning of the British conquest to the post-colonial period, marked by the painful civil war in Biafra between 1967 and 1970 following a relatively late independence, occurred in 1960. It was an era of profound and sometimes lacerating political, social and economic changes that matured under the pressure of «the euphoria of political independence» (Okeke-Agulu 2015), as well as the transition of two cultures, the African one linked to tradition and the Western one imposed with colonization.

The numerous research and extraordinary experiments, in particular those of the first ten years of the postcolonial period, conducted with the «desire for a return to “origins”, to those cultural conditions shared by indigenous people» (Low 2014), are the testament of a particularly lively and fruitful period for the country from a cultural and architectural point of view.

Cities such as Lagos (capital of Nigeria until 1991, before it became Abuja), but also Ibadan, capital of Oyo, an ancient Yoruba state, Zaria in the north of the country and Enugu in eastern Nigeria, were all laboratories of critical thinking¹, true *Ateliers de la Pensée* (Mbembe and Sarr 2017). Here intellectuals, artists and architects were engaged in the construction of a specifically African identity – the concepts of *Africanism*² and *Négritude*³ were an important part of the cultural discourse – in which to

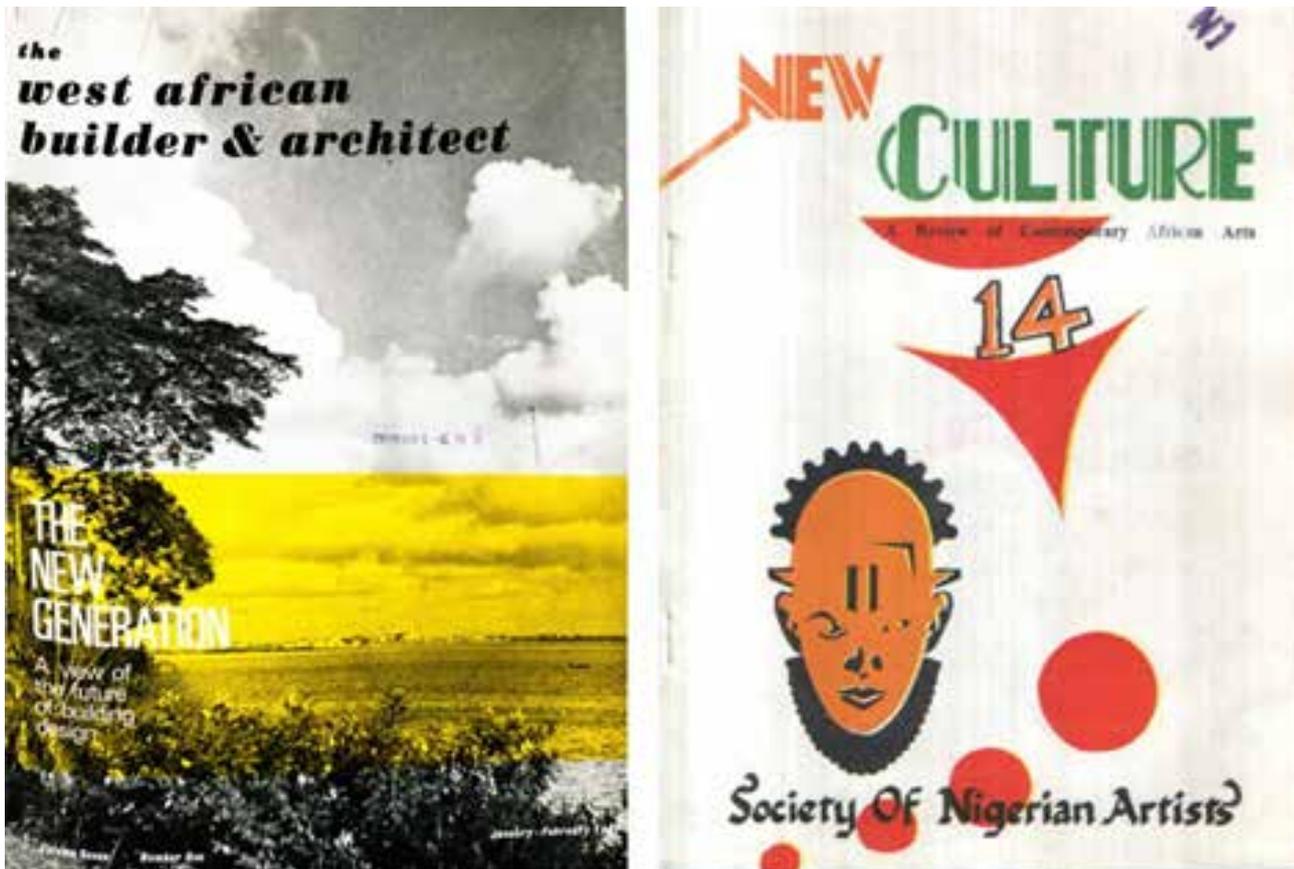


Fig. 1
The West African Builder Architects», vol. 7, no.1, January/February 1967 and New Culture: A Review of African Arts, no 14, November 1978-1979.

combine tradition and modernity, also starting from the verification of the experience of *Tropical Architecture*⁴. There are many essays published in the magazines *The West African Builder Architects* (WABA)⁵ and then in *New Culture: A Review of African Arts*⁶ (Fig.1) highly critical of the group of architects exponents of *Modern Tropical Architecture*, which had wide spread in the former British colonies of West Africa.

An architecture and form of urbanism will emerge closely connected with the set of ideas that have international validity, but reflecting the conditions of climate, the habits of the people and the aspirations of the countries lying under the cloudy belt of the equatorial world.

This is how Maxell Fry and Jane Drew, British architects who designed numerous projects in West Africa from 1949 to 1960, manifested in the book *Tropical Architecture in the humid zones* (1956) their optimism on the role of tropical architecture in the construction of African cities in the post-colonial period. An architecture defined and codified by culturally neutral quantitative parameters, in which objectives such as comfort, control of ventilation and solar radiation through passive strategies, replace any pretense of forced modernization.

Well in contrast to this position is Ulli Beier, a German intellectual expatriate in Africa, involved in the construction of the Mbari Artist and Writers Club in Ibadan, founder and editor of *Black Orpheus*, a magazine that gave voice to writers and artists of the Black Diaspora and to the new generation of English-speaking Africans, including Demas Nwoko himself. In *European Architecture in Nigeria*, an essay published in the magazine *Art in Nigeria* in 1960, he clearly criticise *Tropical Architecture*: «It is probably an inevitable result of historical, economic and social factors that nearly all public buildings of importance are being built by European architects,

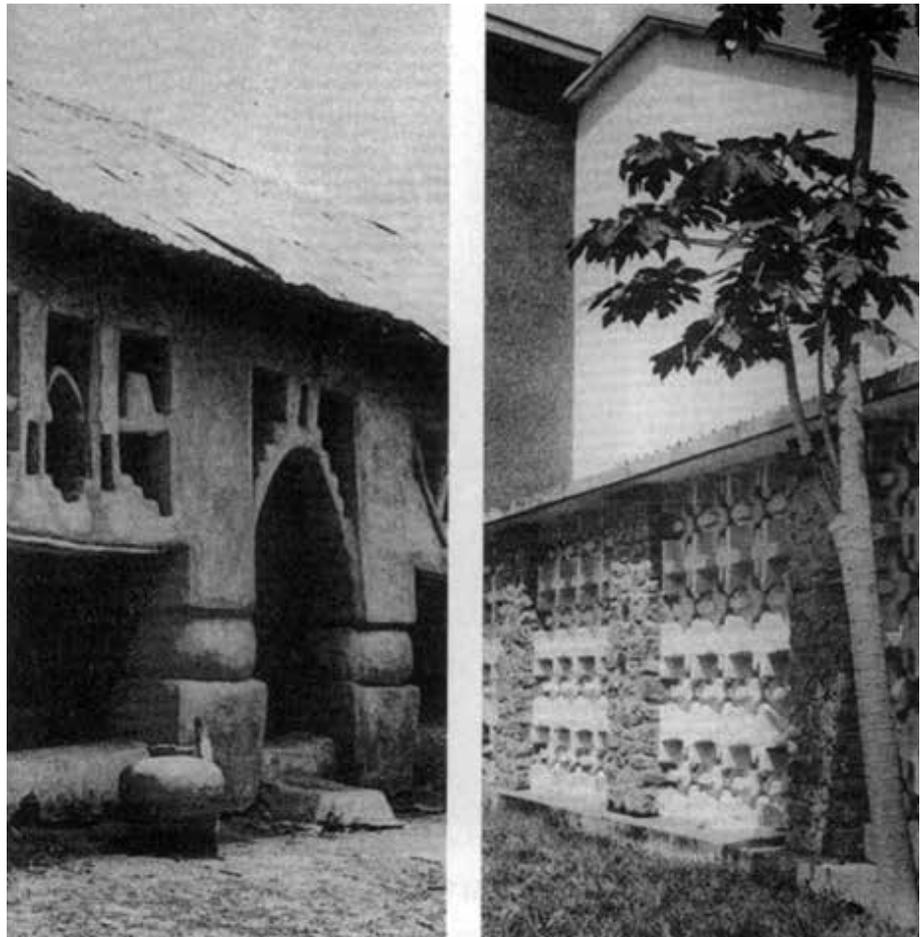


Fig. 2

Ulli Beier, *Art in Nigeria* (1960): comparison between the screen wall of University College (on the right) in Ibadan and traditional Yoruba architecture (on the left).

and in a style and technique foreign to the country». He refers specifically to the buildings created by the two architects in Ibadan, in particular those in the University College campus (1948-1958) located among the «soft undulating lines of a Nigerian town», which he describes as «hard, angular, glaring white, unapproachable, deaf to the most basic principle of African life [which is] rhythm ». Their quality is unsatisfying when compared with traditional architecture, even when they reproduce some devices for climate control, such as *patterned grills*, *breathing walls*, *perforated screens*, «symbol of the rigidity of mechanized, materialistic Western culture» (Beier 1960), whose abstract image Beier juxtaposes in the essay, by contrast, with the figurative and formal power of the *thick, patterned broken walls* of traditional Yoruba raw earth architecture. (Fig. 2)

Position also shared by Zbigniew R. Domochofsky, member of the academic staff of the Faculty of Architecture of the Kwame Nkrumah University of Science and Technology, founded in 1957 in Kumasi (Ghana) and committed to the diffusion of knowledge of Nigerian vernacular architecture. He observes, referring to the students:

They should not repeat the ancient patterns, nor copy them in any revivalist attempt [...] but [be, N.d.T.] fully aware being in the service of their contemporaries. In the same way the present-day Nigerian architects should fulfil their duties to the 20th century Nigerian society which their own. Accepting tradition as the starting point of their creative, independent thinking, they should evolve in steel and concrete, glass and aluminium, a modern school of Nigerian Architecture (Domochofsky 1990).

Moreover, already Udo Kultermann, who in *Neues Bauen in Afrika* (1963) underlines the link between tradition and innovation and how the art of

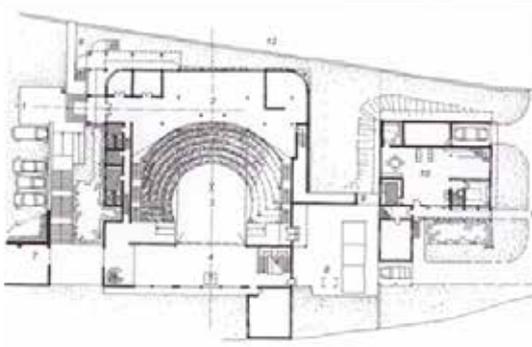


Fig. 3
New Culture Studio (1967) in Oremoji: plan of the amphitheater and the attached residence.

Fig. 4
New Culture Studio (1967) a Oremoji: images of the amphitheater within the courtyard space.

building does not simply consist in correctly adopting architectural devices in response to climatic needs but «*is related to space, volume, light, movement and harmony*», believes that African architecture, whose millenary value he recognises, has entered a new phase.

The innovative approach is placed in this cultural context, a sort of synthesis between the principles of *Tropical Architecture* and the elements of local tradition, undertaken by Demas Nwoko, painter and sculptor, artist-designer as he likes to define himself, and architect since the '70. Like «most Nigerian nationalists are not cultural nativists; they are eclectics, desiring to keep what is useful and attractive in the old and fuse it with the new» (Coleman 1958), Nwoko also presents himself as an atypical figure, with a multifaceted and entirely personal training path, so much that his work can be defined «individual modernism» (Bassey 2012).

The myriad of cultural influences that constituted the true African cosmopolitanism of post-colonial Lagos, the studies conducted at the *Nigerian College of Arts, Science and Technology* in Zaria then affiliated to Goldsmiths College in London where Nwoko joined the avant-garde group of the *Nigerian Art Society* (later called *Zaria Rebels*), as well as the time spent in Paris at the *École des Beaux-Arts* and the *Center Français du Théâtre*, and travels to Europe, Japan and the United States certainly had a decisive influence on his education. His research, result of a poetic expression carrying a strong emotional and symbolic charge, was first formalized in the manifesto *Natural Syntesis* (1960) the aim of which was the fusion between indigenous and Western ideas, forms and construction techniques, because «*our new society calls for a synthesis of old and new, of functional art and art for its own sake*» (Okeke 1982) and subsequently in the magazine *New Culture: A Review of African Arts* (1978), characterized by a high degree of experimentation from a formal and compositional point of view. His first architecture, The New Culture Studio with adjoining residence, which began to be built in 1967 in Oremoji near Ibadan, is its transposition, as well as a clear answer to Maxell Fry's polemical observation:

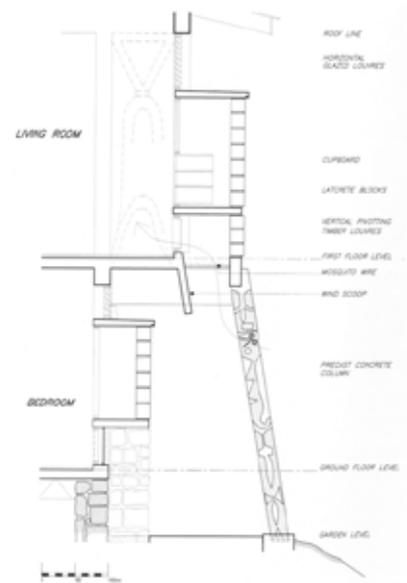
I am commonly asked to what extent the development of contemporary architecture draws on the cultures indigenous to the countries in which it takes place, to which I could reply: How much continuing life is there in these cultures? Have they contemporary validity? Are there artists (?) who can state them in contemporary terms? (Fry cited by Okoye 1993).

The building, conceived as a place to organize workshops, theatrical and musical performances and encourage cultural exchanges between artists, refers to the traditional architecture of Yoruba royal palaces, some of which still exist⁷.



Fig. 5
New Culture Studio (1967) in Oremeji: the living area of the residence with the impluvium.

Fig. 6
New Culture Studio (1967) in Oremeji: construction of ventilating wall.



Generally located in a large space within the city, they were made up of a succession of courtyards, square or rectangular, according to a system of hierarchies that regulated not only their public and private use, but also the political and religious one. In the public court, which was not conceived as a specifically theatrical space, enthronement rites, ceremonies and public meetings were celebrated.

It's in the central space of an open courtyard that Nwoko inserts a small amphitheater, around which he arranges the volumes of the ateliers (Fig. 3, 4) and on the opposite side the raised proscenium, as in the amphitheatres of ancient Greece or in the *theater in the round*, a theatrical typology particularly widespread in London in the '60s. A solution that Nwoko then experimented within the Akenzua Cultural Center Benin City (1972), of which the New Culture Studio can be considered the prototype.

By contaminating and reinterpreting references drawn from traditional Nigerian architecture and from the ancient and modern Western world, Nwoko builds a theatrical space that didn't exist in the architecture of royal palaces, and for performances that until then had not required a properly architectural arrangement, demonstrating the ability of African architecture to transform itself over time to respond to the new needs of society.

Just as the «ancestors created architectural solutions that resolved their natural environmental problems without any form of dependence on an outside source», so Nwoko, in order to guarantee the best comfort, uses materials and construction techniques taken from tradition, as well as a series of devices for the control of lighting and natural ventilation, which he will later propose in other buildings, accompanied by some significant transformations.

Considering that some solutions proposed by the architects of *Tropical Architecture* are ineffective, such as cross-ventilation by means of large windows screened by *brise-soleils*, in the living area on the third and last floor of the residence he placed an *impluvium*, a central tank for collecting the rainwater, channeled through a truncated-conical fibreglass element (*compluvium*) in order to moderate the temperature and lighting of the space (Fig. 5).

Natural ventilation is instead entrusted to the few openings located at floor level or in the upper part of the walls in order to trigger the *down draft* chimney effect, which is associated with the compactness of the volume in



Fig. 7
Mbari House in Obokwe, eastern Nigeria.

Fig. 8
Demas Nwoko's residence, Idumuje, Ugboko (1976): plan.

Fig. 9
Demas Nwoko's residence, Idumuje, Ugboko (1976): the public court illuminated by the impluvium.

Fig. 10
Demas Nwoko's residence, Idumuje, Ugboko (1976): section through the master room with the four-pitched roof.

Latcrete, a cement and laterite brick patented by the same Nwoko, which helps to thermally regulate the internal microclimate (Fig. 6).

Nwoko's refusal to establish a direct visual dialogue between the internal and the external, of perceptive continuity between the inside and the outside of the inhabited space through the window, as Bassey (2012) observes is very clear:

The house is a *shade* into which man retreats. In this shade, man escapes the harsh tropical glare as well as the heat. The house is thus a place to rest both the eye as well as the soul for the eye is the window to the soul [...] the exterior should not merge with the interior because both have distinct aesthetic attributes, which makes blending both artificial and uncalled for.

One of the most interesting aspects of his house in Idumuje-Ugboko, built in 1976, is the reinterpretation of the Mbari House (Fig. 7), also called the House of God, a sacred architecture characterized by an imposing four-pitched roof supported by four massive decorated supports and the traditional house ad *impluvium*, which gather together various rooms under a large roof organized around an open-air courtyard. It is a typology widely spread in the area that extends from Niger to Benin City, and a typical example is the Umera Ozi's House in Onitsha, illustrated by Domochowksy in his *An Introduction to Nigerian Traditional Architecture* (1990).

Reinterpreting the court, which in African culture is a multifunctional space where domestic life takes place and where social relationships are maintained, Nwoko designs a sort of micro-settlement divided into three courts: the external service court, the private court on which overlook the bedrooms, and the public courtyard par excellence in which family activities take place and guests are welcomed (Fig. 8).

Nwoko tries to highlight the impression of interiority of these spaces, denying the internal-external visual relationships, using for this purpose architectural devices with which to mediate the entry of light into the rooms: *brise-soleil* and screens with elements in stone (*claustra*) and the *impluvium*, located in the heart of the building, a device with which to guarantee ventilation, cooling and water collection. This is how Nwoko describes the inclusion of this traditional element:

The roof configuration was such that rainwater collected in the centre of the house. A pool of light was let into the centre of the house trough the impluvium opening. This created a dramatic effect of light and shade in the interior of the house...the funnel shaped centre of the roof reduced the amount of rainwater...to a gentle cascade...a sense of conquest of the harsh elements of weather pervades the peaceful atmosphere... (Nwoko cited by Godwin and Hopwood 2007) (Fig. 7).

Unlike traditional houses in which the *impluvium*, from a formal point of view, is an open void coinciding with the courtyard, here it is transformed into a space dominated by an inverted truncated conical *compluvium* also in fiberglass, that allows natural light to penetrate indirectly, giving the domestic space an almost sacred dimension (Fig. 9).

If the plan generates the project, the same attention is given to the design of the section: the area on the first floor is dominated by the powerful volume of the four-pitched roof covered with wooden panels, supported by a central pillar, reminiscent of a trunk of tree, and characterized by a steep declivity (Fig. 10). The reference is once again the construction typology of the Mbari House «a home of images, filled to overflowing with sculp-

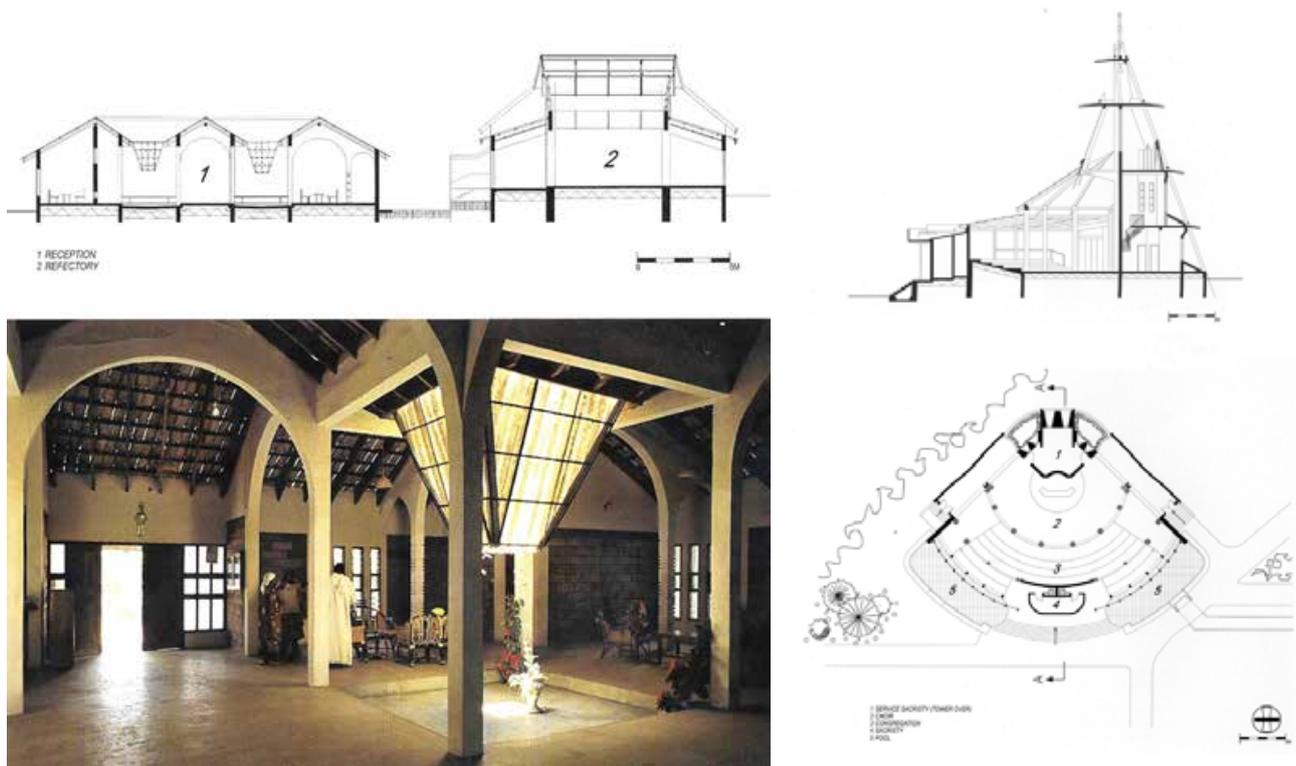


Fig. 11
Benedictine Monastery Complex in Ewu: section through the entrance with one of the two impluvium (photo).

Fig. 12
Chapel of the Dominican Institute in Ibadan (1970-1975): plan and longitudinal section.

tures and paintings in home to the presiding deity» (Achebe 1958) and the traditional houses of the Awka area, in the south-east of Nigeria.

The *impluvium* device is also proposed by Nwoko in some religious buildings: in the Benedictine monastery of Ewu (1987-2005), where the space for welcoming guests is dominated by two *impluvia*, which contribute to strengthening the two courtyards on which they are centered, further accentuating the dichotomy between inside and outside (Fig. 11), and in the chapel of the Dominican Institute Complex in Ibadan (1970-1975). Here, in addition to being a ventilation device, it acquires a symbolic richness: placed in correspondence with the altar, it lights up the crucifix directly from above, diffusing the light inside the church which, with its semicircular room centered on the altar, seems to refer to the theatrical space conceived for the New Culture Studio (Fig. 12).

It's no coincidence that in the paper *Art in Religion*, published later in *New Culture* (1979), describing the chapel, Nwoko confirms the idea of having aimed to create *an open stage auditorium of a theater*, putting believers and priest in a close relationship, which is not foreseen in the Christian liturgy. A choice strengthened by moving the entrance of the believers laterally – in most Christian churches the altar is in line with the main entrance – and by the construction of a sort of “cavea” with a semicircular system of elaborate carved wooden columns. The circulation area between the rear part of the seats and the external space, expanding, becomes a sort of churchyard, a meeting place, which evokes the interstitial spaces and courtyards between the homes within the *compounds* (Fig. 13).

As in the New Culture Studio, Nwoko does not limit himself to taking on elements of vernacular architecture, but reinterprets the spatial organization of sacred Christian and traditional African architecture, implementing a process of contamination and hybridization that gives rise to new formal and spatial solutions, capable of giving an original and peculiar response to the requests of the tropical climate. Referring to the chapel, Noel Moffat wrote in the *Journal of the Royal Institute of Architects* (1977):

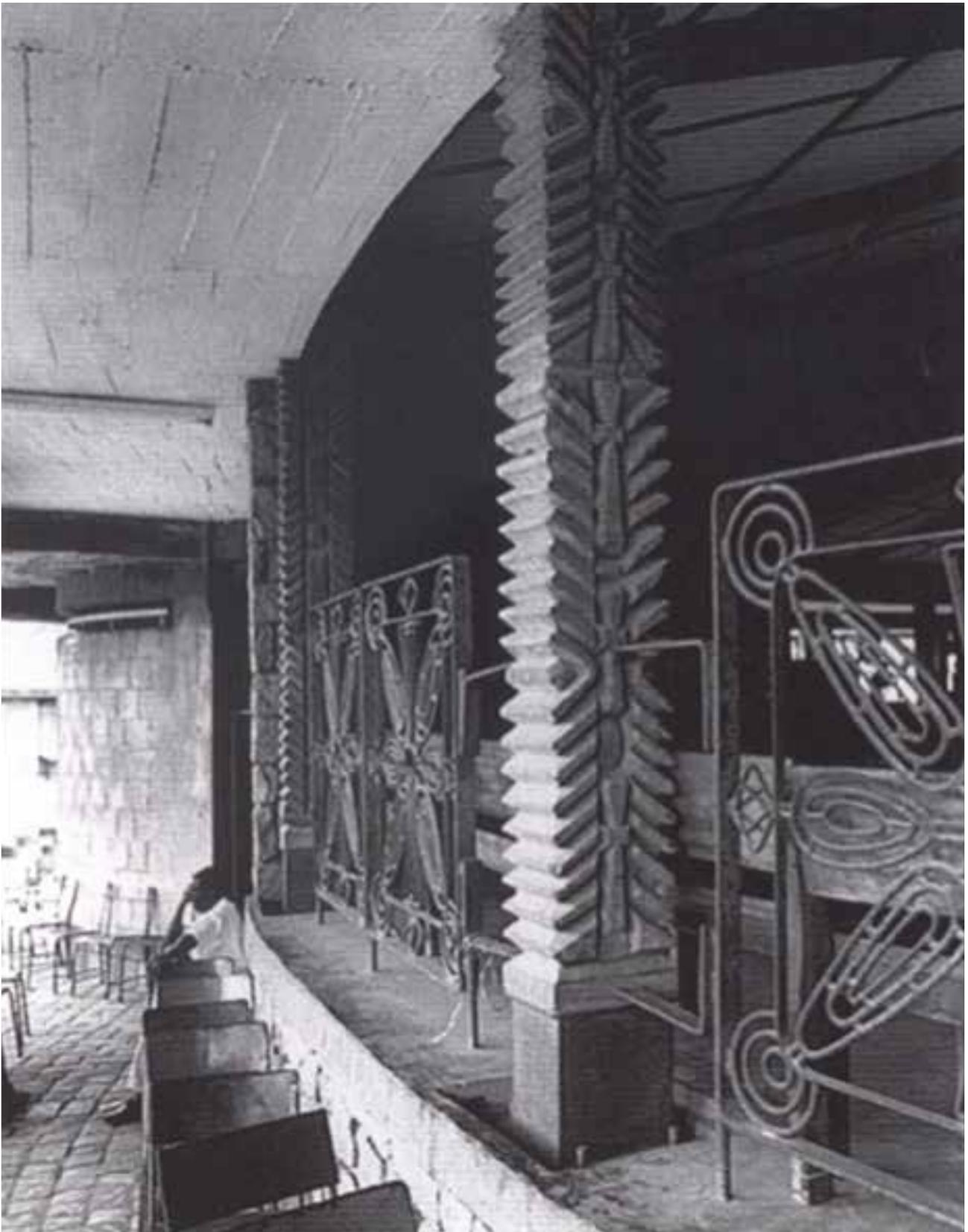


Fig. 13

Chapel of the Dominican Institute in Ibadan (1970-1975): side entrance and portico with carved wooden columns between the "cavea" of the believers and the outside.

«Here, under (the) tropical sun, architecture and sculpture combine in a way in which only Gaudi perhaps, among architects, has been able to do so convincingly». Reread the architecture of Demas Nwoko, in particular those created in the first decade of the post-colonial period and still little explored today, belonging to an "other" path compared to the Modern Movement and the experience of *Tropical Architecture*, with which they were however intertwined, offers new interpretative tools of concepts such as

hybridity, contamination and *métissage*, which become the object and tool of the contemporary architectural project. The subtended climatic thought, alternative to the lesson of tropical Modernism according to which the, [NdT] 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, NdT] remains an influence rather than something to copy» (Fry and Drew 1964), can instead indicate a new way forward, because as Doxiadis (1966) stated «[...] 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».

Notes

¹ The Art Society in Lagos, the Mbari Artist and Writers Club in Ibadan and Enugu and the Nigerian Art Society in Zaria, made up of a group of young artists from the Nigerian College of Arts, Science and Technology (now Ahmadu Bello University).

² Born at the end of the 19th century in the Caribbean and the United States as a movement of ideas and emotions, with the beginning of the process of decolonization of Africa, Pan-Africanism turned into a movement that aimed at the political unity of the African continent as well as the valorization of African cultural heritage and the celebration of the return to the motherland from which the diaspora began. Among the people associated to it, we can find the American W.E.B. Dubois, the Jamaican Marcus Garvey and Kwame Nkrumah, the first president of Ghana after independence, who brought together the first Conference of Heads of State of independent Africa in 1958 and the first Pan-African Congress in the African Motherland.

³ The first formulations of *Negritude* were developed by the group that in 1934 created the magazine *L'Étudiant noir*, in whose editorial team Aimè Césaire and Léopold Sédar Senghor participated. The magazine, which called for a radical reevaluation of African roots (the “Mother Africa”) and of transnational culture, distanced itself from Marxism and surrealism by affirming the priority of the cultural function over the political one, while claiming the need to propose an independent path for the construction of black identity.

⁴ The *Tropical Modernism* movement began in the late 1940s and lasted until the end of the 1970s.

⁵ The *West African Builder Architects* published in Lagos during the 1960s, engaged in debates regarding architecture and culture, architecture and responsibility, architecture and morality, was the only architecture magazine to document the most important projects carried out in the western African area.

⁶ *New Culture: A Review of African Arts*, a magazine of contemporary African art, founded by David Aradeon and Demas Nwoko in 1978, a year after the second African Festival of Arts and Culture (FESTAC) hosted in Lagos, proposed a return to the study of traditional arts. Unlike *Black Orpheus*, it remained a local magazine, although the most important, in which architecture was treated as complementary to art.

⁷ The royal palaces of the Yoruba tradition, that still exist and are part of the UNESCO heritage, are the royal palaces of Abomey and Porto Novo, both in Benin; the Royal Palace of Oyo in the state of the same name, in south-western Nigeria.

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Silvia Bodei
The Brazilian Modern of Crofton & Benjamin in South Africa, Las Vegas and the creation of a “style”

Abstract

The Las Vegas building (1956-57), a ten-story curved volume with penthouse, dominated by a large canopy, housing thirty-two luxury residential units, is located on the beachfront of the port city of Durban (South Africa).

Designed by South African architects Derek Crofton and Issy Benjamin, it embodies a type of collective residential architecture close to the concrete forms of Brazilian Modernism, but with specific local characteristics. The façade and the tripartite articulated structure, adapting to the surrounding subtropical climate and landscape, particularly constitute a prototype of residences where, as Benjamin himself explains, «our style really developed». In the subsequent years (1957-1964), the two architects would indeed build other residential complexes in the city. Despite their peculiarities, both are united by a common architectural and stylistic idea, which is amongst the most interesting of South African Modernism of the time

Keywords

South African Modern — Subtropical climate — Housing buildings



Fig. 1
 Main facade, Las Vegas Building, Durban 2023 (Angela Buckland).

In 1956, Derek Crofton and Issy Benjamin, two young South African architects, had the opportunity to design a residential building on Snell Parade, north of the *Golden Mile*, the beachfront of Durban. Las Vegas, the architects' second project, was not only an occasion for them to solidify their collaboration but also to define a type of collective architecture that, starting from the principles of Modernism, would have specific local characteristics (Benjamin 2012) (Fig.1)¹. Having relocated to Durban from Johannesburg, the two architects developed their particular style in the city, which was consolidated in their works in the subsequent years until 1964, when Benjamin had to leave South Africa, partly due to the racial laws imposed by the *National Party* regime (1948-1994) (Benjamin 2012). After completing their architectural studies in the late 1940s at the University of the Witwatersrand (Wits) in Johannesburg², Crofton and Benjamin found themselves working together in 1951 at the prestigious studio of Harold Hersch Le Roith (Benjamin 1997; Conradie 2014), which executed projects, including residential ones, with a rigorous Modernist language (Greig 1971). The lessons from the Wits school, founded by Rex Martienssen and influenced by the Modern Movement and Le Corbusier (Herbert 1974), combined with their work with Le Roith, guided the two architects as they began to develop their own “style”, which drew on aspects of Brazilian Modernism, adapting it to the sub-tropical climate and landscape of the city.

Benjamin himself states:



Fig. 2
Main Facade, Claridges Hotel,
Durban (Architect and Builder,
November 1955).

Durban gave us the opportunity to become truly ‘functional’ architects, poetically functional [...]. We didn’t succumb to the tyranny of symmetry, of the axis and right angle. We did not fear the curve [...]. Difficult circulation and planning projects were solved on the beach in the wet sand (Benjamin 1997 p.6).

Genesis and Design of Las Vegas Building

A significant urban growth in the 1950s-60s, along with the racial city planning promoted by the apartheid regime, radically transformed the layout of Durban’s beachfront, which experienced its most significant development of the 20th century (Grant 1992 p.174). This was largely due to private entrepreneurship that chose International Style architecture, simple and free from ornamentation, to construct high-rise buildings for residences or hotels in the southern part of the beach, frequented by the privileged population of European origin (Bodei 2022). In this particular real estate development climate, Crofton and Benjamin had their first opportunity to work on a project together when, in 1952, they were offered the commission for Claridge’s Hotel³ (now Tropicana Hotel), named after a prominent London hotel, to be built in the southern zone of Durban’s beachfront, facing South Beach. The project, conceived in Johannesburg in just six weeks (Benjamin 1997), proposed a building composed of a ground floor with a free plan, a rectangular volume of eleven floors, ending with a penthouse with a vaulted canopy (Architect and Builder 1955) (Fig.2). Thanks in part to Benjamin’s effective volumetric perspective, the project was immediately approved by the Municipality, and construction was completed in 1955 (Benjamin 1997). With the money he earned, Benjamin moved in 1956 with his wife Gem to the island of Ibiza, where he lived for almost a year dedicating himself to painting and drawing.



Fig. 3
Las Vegas Building under construction (Courtesy Joan Standard).

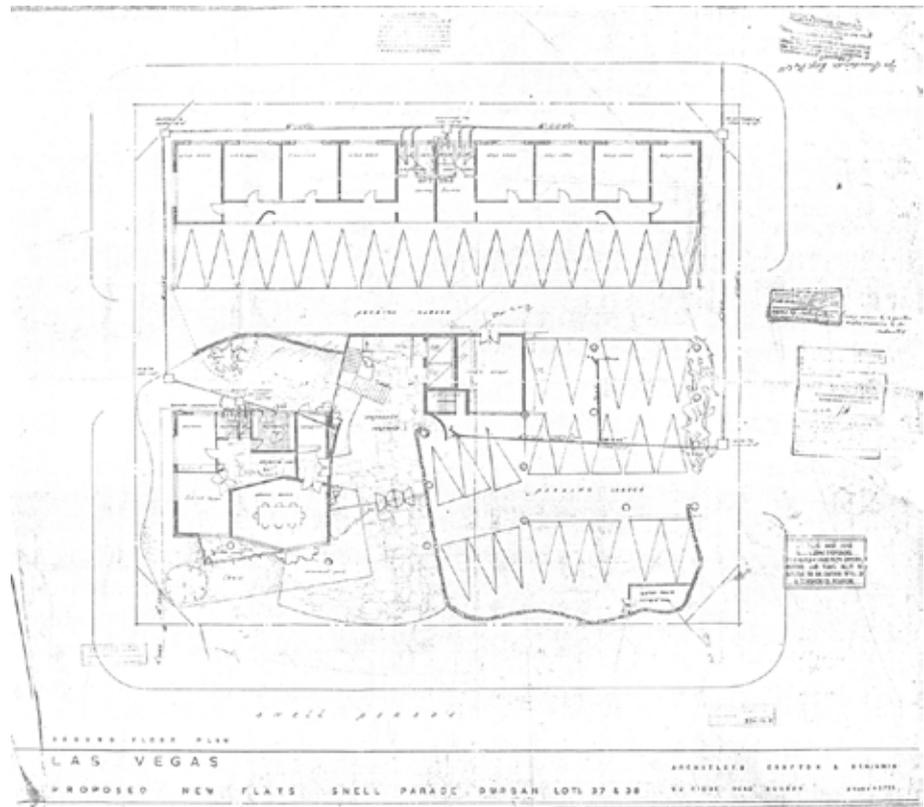


Fig. 4
Crofton & Benjamin, ground floor plan, Las Vegas Building, Durban 1956 (Courtesy Joan Standard).

The experience, as he himself says, «laid the foundations for the rest of our lives» (Benjamin 1997, p.7). During this time, the opportunity for their second project arose. The Las Vegas residence, situated in a rapidly expanding area north of the beachfront, was commissioned by a client who intended to make a distinctive mark in this touristy part of the city. Probably the fact that the two architects had already completed a hotel in the same area and that Benjamin was abroad studying Mediterranean and European architecture convinced the entrepreneur to assign them the commission. Benjamin recalls that the project began when Crofton sent him a scheme for the area and a proposal sketch while he was in Ibiza. In the kitchen of his house facing the Mediterranean Sea, starting from Crofton's suggestions, he drew the volumetrics as a watercolour perspective view and sent it to his partner in Durban. In a short time, the project was approved by the Municipality, and construction commenced, ultimately completed in 1957 (Benjamin 1997) (Fig.3).

Las Vegas is an eleven-story building, housing thirty-two luxury apartments. The volumetrics, oriented in length on the north-south axis, follow the tripartite scheme of the Claridge Hotel project (open basement, residential central body, and top floor with penthouse and terrace, dominated by a canopy), but with a more complex and readable volumetric articulation from the outside. It arises from a project conceived in three dimensions, with a strong connection between interior and exterior, precisely defined, also thanks to the perspective sketches made by Benjamin during the project's development.

At ground level, the building extends over an entire block, on a lot of about 40x40 meters, bordered by four streets, the main one being the Snell Parade along the beachfront (Fig.4). A canopy facing the street, frames the entrance door, inserted in a large atrium glass window with double height, flanked on one side by a single-story volume, intended for the porter's apartment and meeting room, and on the other by the internal parking lot,



Fig. 5
Double volume hall, Las Vegas Building, Durban 2023 (Angela Buckland).

with a mezzanine above, overlooking a terrace, originally intended as a common area (S.A. Architectural Record 1958, p.18) (Fig.5)⁴.

The significant aspect of the atrium is given by its spatial articulation, curved in plan and marked by double-height black pillars, while the glass walls at the entrance and the lateral one, adjacent to the porter's house's patio, provide light, expanding the space and creating views of the external vegetation. A noteworthy detail is a large black pillar, which conceals the structure and the service pipes of the various floors, is placed inside a large flowerbed next to the staircase and the elevators.

The ten apartment floors are superimposed⁵, distributed into three units per floor according to three different "types": two corner units, one with three bedrooms (Type A) and the other with two (Type C), and one in the centre of the main facade with two bedrooms (Type B), all facing east towards the sea (Figg.6,7). The volumetrics of the apartments feature, on the west facade in front of the beachfront, a double curvature in plan, marked on the facade by large glass windows and balconies, recalling the lines of the adjacent landscape, while on the rear a squared facade encloses the elevator and staircase area.

Each apartment, equipped with built-in wardrobes, coloured tiles, and parquet flooring (Architect and Builder 1958, p.37), is divided into common areas, articulated on a continuous space from the entrance hall, with the kitchen on one side, reaching to the living room, open to a large window and a balcony overlooking the sea. The ensemble is crowned by a penthouse, which houses a residential unit with a terrace, covered by a cantilevered canopy with a wavy profile, following the building's profile⁶.

A careful choice of colours and different materials further enriches the spatiality of the entire complex, while a vertical band, covered with pebbles from the nearby Umgeni River, highlights the external base and extends from the entrance to the building's interior. Here, the atrium's internal walls are clad in vertically slatted wood, in contrast to the white plaster of the cantilevered floor slabs of the staircase and mezzanine, while the floor is made of irregular mosaic stone blocks, a solution that continues on the upper floors along the common corridors and in the internal entrance to the dining area and apartment terraces. On the floors, the common corridors have white plaster walls interspersed with solid brick walls and screens

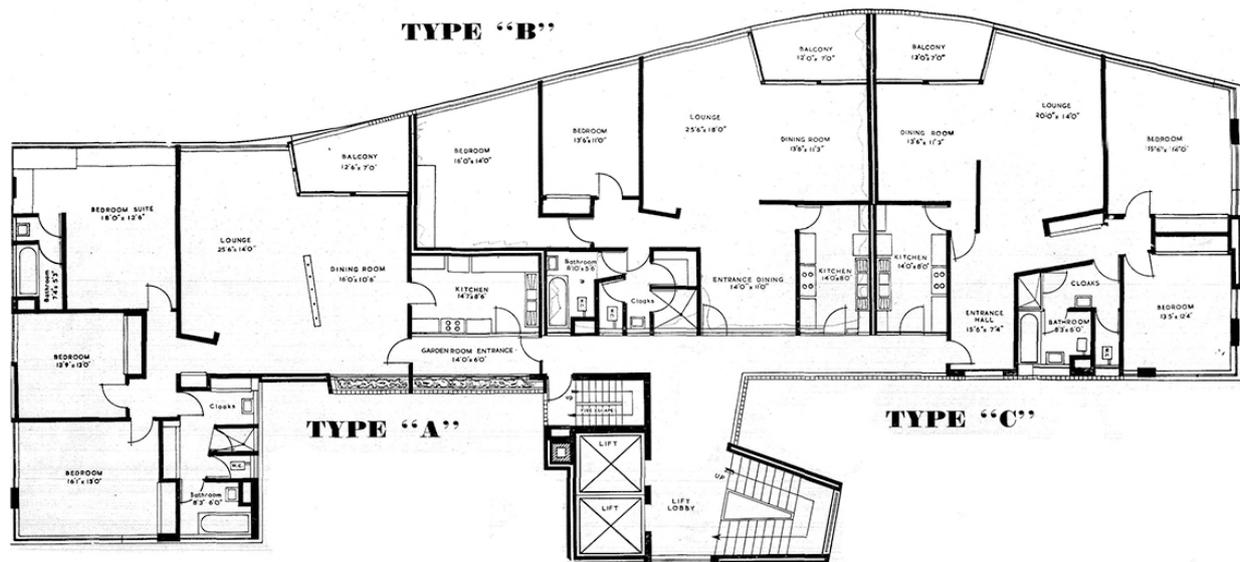


Fig. 6
Crofton & Benjamin, type plan,
Las Vegas Building, Durban (Ar-
chitect and Builder, April 1958).

with perforated brick elements, which filter light, illuminate paths, and allow necessary ventilation for the climate.

On the outside, the facades, painted in different colour tonalities⁷, alternate plastered parts, windows, balconies, and screens in perforated brick. This creates a chromatic play where the «structure is black, the walls white, the screens in terracotta» (Benjamin 1997 p.7), generating a contrast that continues in the details of the staircase and the bannister; its vertical elements are painted in white and the handrail in black. The insertion of circular openings on the concrete surfaces, vertically on the lateral facade of the parking lot and horizontally on the curved canopy above the penthouse, creates additional shading effects and adds depth to the overall surfaces.

Las Vegas and Brazilian Modernism

In an article from 1958, published in the South African architecture magazine *Architect and Builder* after the inauguration of Las Vegas, one reads the comment: «This building seems to be more on the lines of the contemporary with open areas to give the shade and ventilation for a sub-tropical climate similar to work being done in Brazil» (Architect and Builder 1958, p.37). As Benjamin also explains, among the references he observed as a young architect, «Le Corbusier was the hero of the modern movement but as part of a small circle of maverick students we were of course influenced by [...] the book *Brazil Builds*» (Benjamin 2012, p.4). Benjamin here refers to the catalogue of the exhibition *Brazil Builds: architecture new and old, 1652 -1942*, held at MOMA in New York in 1943 (Goodwin 1943). The catalogue, alongside Stamo Papadaki's monograph on Oscar Niemeyer (1951), circulated amongst the desks of young South African architects and students of the period (De Beer 2000)⁸. Its publication was the result of a trip lasting many months by curator Philippe L. Goodwin together with photographer G.E. Kidder Smith, and it provides an overview of Brazilian Modern architecture up to the most recent years. When flipping through the pages, there are evident similarities between Las Vegas and contemporary Brazilian buildings, which in turn had already used, and readjusted, known and widespread elements of Modern architecture, such as Le Corbusier's five points and reinforced concrete.

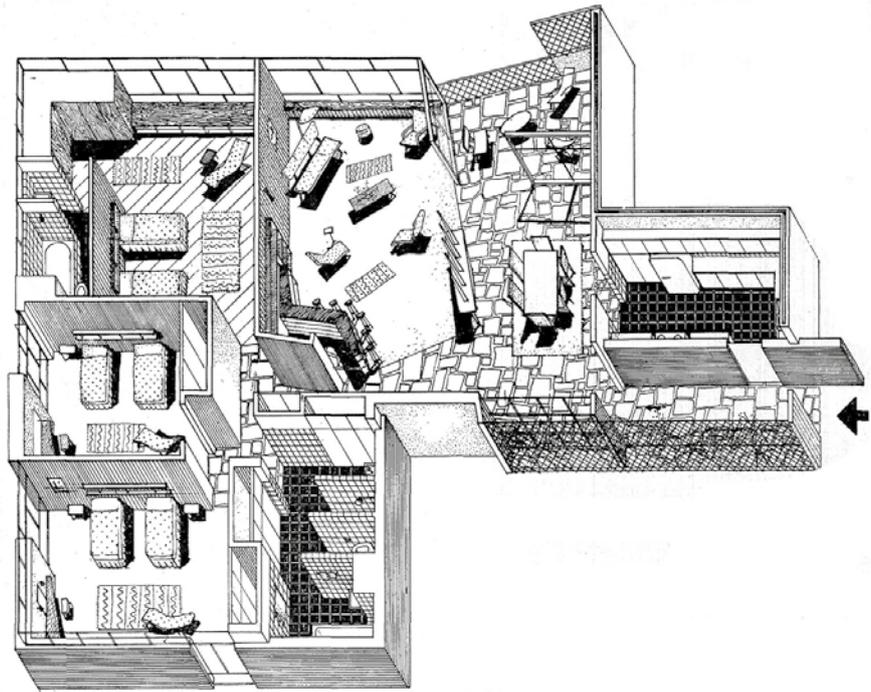


Fig. 7

Crofton & Benjamin, "Type A" axonometric view, Las Vegas Building, Durban (Architect and Builder, April 1958).

What is really important is the use of the tripartite scheme in the volumetrics (consisting of an open basement on *pilotis*, on which lies a monolithic central body, closed at the top by a garden/terrace roof with independent volumes)⁹, which returns to the first and foremost project of Brazilian Modernism, published in the catalogue: the Ministry of Education and Health in Rio de Janeiro (Lucio Costa, Oscar Niemeyer, and Alfonso Reidy, 1943). This is an office building characterized by an imposing fourteen-story parallelepiped, marked by large brise-soleils, for shade and ventilation, superimposed on a transverse two-story base on *pilotis*, intended for public functions and surrounding public space, while the top floor is dominated by a terrace with curvilinear forms that stand out against the sky (Goodwin 1943).

Observing Las Vegas and Brazilian Modernist architecture, their very close connection with the landscape and climate conditions of the place stands out. Le Corbusier himself, during his trip to South America in 1929, flying over Rio de Janeiro in an airplane, was struck by the extent and grandeur of the landscapes. He then drew up a city development proposal, depicting a highway integrated with long curved buildings that followed the topography and the coastline (Le Corbusier 1930), aspects that architects like Oscar Niemeyer will adopt in their projects. Durban, similar in this to Rio de Janeiro, is characterized by a humid, sunny climate rich in vegetation, and by a disruptive and extensive landscape, also due to the presence of the Indian Ocean. The curved shape of the Las Vegas volume conceived by Crofton and Benjamin indeed echoes the lines of the beach and sea facing the building, while the pillars, the cantilevered slabs, curved canopies (typical elements of Brazilian Modernism) recall the surrounding environment and landscape. In the important Pampulha complex, designed by Niemeyer in collaboration with landscapist Roberto Burle Marx and painter Candido Portinari (Belo Horizonte 1942), published in *Brazil Builds*, the large double-height windows of the casino create a connection with the outside artificial lake and the mountains in the background, while the



Fig. 8

Main facade, Farrington Building, Durban, no date (Technical Reference Library, University of KwaZulu-Natal Durban).

canopy, winding from the circular-plan restaurant, integrates with the shapes of the vegetation and the garden, marking the entrance to the structure (Goodwin 1943).

These are solutions that will lead Niemeyer himself to create the curved Copan building (São Paulo, 1952-66), which definitively breaks with the square and rational volumes of Modernist buildings.

There are numerous distinctive climate features that Crofton and Benjamin translate into Las Vegas, also through the use of perforated brick elements. Such as sunscreens, which mark the light in the internal corridors and the balconies' balustrade, and in which Le Corbusier's brise-soleils are re-elaborated, but also the sunscreens, rich in variations from traditional architecture in southern Europe and Brazil, particularly in Rio de Janeiro in the Ministry building. We also find grid perforations and balconies, creating intermediate filter spaces between interior and exterior, already present in the Ouro Preto Hotel (Niemeyer 1942), in the apartment building at rua Bolivar, 97 in Rio de Janeiro (Firmino Saldanha 1940) mentioned in *Brazil Builds*, but also in the long curved volume of Pedregulho in Rio de Janeiro (Reidy 1942) and in the Lagoa Hospital (Niemeyer 1952). All buildings that were surely known to the two South African architects and are the defining element of one of Las Vegas's facades, but which Benjamin also takes from the architecture of Ibiza and the Balearic Islands (Benjamin 1997 and Conradie 2014).

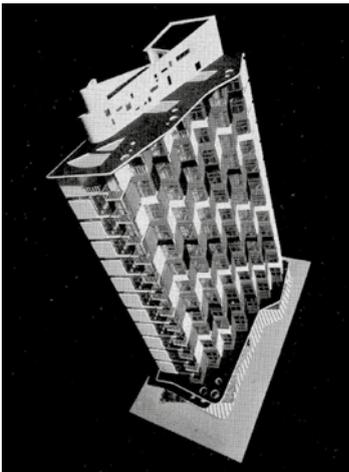


Fig. 9
Main facade, Hyde Park Building, Durban (Architect and Builder, November 1959).

Fig. 10
Crofton & Benjamin, West Point Building model (Architect and Builder, January 1960).

The Creation of a “Style”

As Benjamin himself reports, in this building, «that was where our style really developed» (Benjamin 1997, p.7). Las Vegas’s main features, as seen, are full of references but used with expressive freedom by the two South African architects to create an original “type” of collective residence, which, with numerous variations, was later proposed by them in subsequent works in Durban and surrounding areas.

As an example, we can look at the buildings of Farrington (1959), Hyde Park (1959), and West Point (1957-60), which, although different in size and contexts, present common traits and solutions: luxury residences set in a sloping terrain in Farrington (6 floors and 9 units), medium-sized apartments within a large private park in Hyde Park (10 floors and 37 units), both in the Berea residential area, and finally the West Point residence (13 floors and 84 units), intended for studios with shared bathrooms, built on a minimal plot (approximately 12x24 meters) in the city centre and near the port (Figg. 8,9,10)¹⁰.

The tripartition of the building into an open basement, a central body, and a top floor with a terrace is the main scheme that is always repeated, albeit with variations adapting to the conditions of the different sites: the basement represents the connection with the place and between the interior and exterior; the central volume, which characterizes the building’s main facade, is always intended for apartments; the cover consists of the penthouse/terrace, dominated by a canopy. Farrington, set in a steep terrain, has the entrance on the first floor, and the base, staggered over two floors, opens with a large “V” pillar towards the sloping terrain of the garden. Hyde Park, built on a park relief, relates to the topography and the landscape with a large curved canopy on cantilevered pillars, which leads from the park to the entrance (Architect and Builder 1959). West Point, finally, despite the small dimensions of the lot, has a ground floor open to the city’s public space. The central body of the apartments in the three cases has a linear shape and is mainly intended for common services and distribution at the rear, while on the main front, it appears as an articulated volume oriented towards the privileged view: a curved facade towards the city and the sea in Farrington, formed by broken lines in plan in Hyde Park, and a zigzag pattern in the case of West Point, both oriented towards the port. The use of colours to accentuate the perception of volumes is also particular, as in the original project of West Point, which presented facade colours and shades from grey to blue (Architect and Builder 1960), or different materials, such as river pebbles for the base of Hyde Park and Farrington, and finally, the insertion of perforations in the canopy of Hyde Park and West Point. These aspects are complemented by a series of distinctive architectural solutions: isolated and/or corner windows, individual projecting balconies, and openings along the corridors (Butler 1987). All elements that show a particular attention to creating a relationship between interior and exterior and viewpoints on the landscape.

As Benjamin explains, his work with Crofton was unprecedented in Durban at that time, and few buildings used the language of Modernism even for experimentation: «Our [...] work I think expressed a sort of gaiety, freedom and exuberance, working in harmony with the environment, natural and man-made. We were lucky too in sharing adventurousness» (Benjamin 1997, p.7). Unfortunately, in December 1964, Benjamin emigrated to Britain, and this interesting collaboration was interrupted:

With Derek, I had an ideal partnership, based on a handshake, we split everything down the middle [...] and when I left [...], it was with a handshake. It was more than a symbiosis... a synergy was created and we could almost read each other's thoughts (Benjamin 1997, p.6).

Notes

¹ Research studies on Crofton and Benjamin are limited. Worth mentioning is the exhibition "Crofton & Benjamin Architects" (KZNSA Gallery, Durban, 2011), partially published in the KZ-NIA Journal, curated by Leon Conradie, with photos by Dennis Guichard (Benjamin, 2012).

² Derek's registration with the South African Institute of Architects (SACA) dates back to 1949, while Benjamin's dates back to 1950 (Benjamin, 1997; VV.AA., 2023).

³ The commission was entrusted by the prominent private investor F.E. Jiran Esq (Lindsay, 2022, p.34).

⁴ For economic reasons, an additional apartment was added in the common area in front of the terrace, bringing the total number of residential units to thirty-two.

⁵ The entrance volume, consisting of the ground floor and mezzanine, has a height of 6 meters, also to ensure privacy for the upper floors. (S.A. Architectural Record, 1958, p. 18).

⁶ During construction, the Raimondo family, who lived in the adjacent building, requested the architects and the builder, who agreed, to add a penthouse floor for their family. Telephone communication with Frank Raimondo. (14-7-2023).

⁷ The original colours, now partially changed, were likely white, gray, brick red, and dark blue (S.A. Architectural Record, 1958, p. 18).

⁸ Among these were Norman Eaton and Helmut Stauch.

⁹ This solution was also utilized by Le Corbusier in numerous projects, including the Villa Savoye (1929), collective buildings such as the Cité de Refuge (1933), and the Unité d'Habitation (1945). Particularly, the Swiss Pavilion (1930) in Paris already presents a curved volume (in this case at ground level) and a stone-clad base similar to Las Vegas.

¹⁰ The building is situated between the Rivera Hotel and the Haven Court, both designed by Crofton and Benjamin.

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Anna Irene Del Monaco
**Experiences of Architectural Realism in Sub-Saharan Africa.
Settlements, health services and research in Sudan, Ethiopia,
Tanzania (2005-2023)**

Abstract

The text illustrates and comments on some design experiences developed for international research and professional organizations over the past two decades in Sudan, Ethiopia, and Tanzania: urban areas to be re-designed, small buildings intended for public services, research, and archaeological heritage. The design approach considers aspects concerning the tropical climatic reality and, more generally, contextual aspects of sub-Saharan Africa with the intention of contributing to the construction of a established idea of modern architecture.

Keywords

Realism and Architecture — Sub-Saharan Africa — Self-construction

Ambientism and Commotion

There is one character that unites the design experiences that will be briefly commented on below, elaborated for different places in Sub-Saharan Africa (Sudan, 2005-10; Ethiopia, 2010; Tanzania, 2023), over a nearly 20-year period; the character of “realism.”

It is not the purpose of this brief account to delve into the topic of *realism in architecture*¹ (Tafari 1985) – or *realism in Sub Saharan African architecture*, exploring in general and historiographical terms the validity of a possible new interpretive category (D’Agostini 2013)² – or *realism in the architecture of Sub-Saharan Africa* – exploring in general and historiographical terms the validity of a new interpretive category –, but to reflect through which cognitive and interpretative paths, more or less unconsciously sedimented in the experiences of the *Roman school* and practicing a recognizable *modus operandi*, *project responses* were elaborated, responding to the reality of the places and the demands of the clients. That is, there has been an attempt to interpret the identity of the contexts by renewing the sources of inspiration with respect to the models offered during the different colonial phases (both late 19th-century and 20th-century modernist inspiration).

The most mature experiences proposed and carried out by modern Italian architects in Africa and the Mediterranean area took place between the 19th and 20th centuries, and in particular during the period of the Fascist twenty-year period and after World War II, when works and interventions were carried out in Libya, Egypt and Ethiopia: the publications and research of Ezio Godoli (Godoli 2008) and Benedetto Gravagnuolo (Godoli, Gravagnuolo, et al, 2008) are among the most comprehensive and inve-

stigate different personalities and events. On French experiences in North Africa, one of the most significant works is *Casablanca Colonial Myth and Architecture Ventures* (Cohen and Eleb 1998) of Jean Louis Cohen and Monique Eleb. Always fundamental remains the enlightening reading offered by Giuseppe De Rita during an interview a few years ago, in which he stated that Italian architecture in Africa is the child of *Land Reclamation*, that is, of the agricultural reclamation carried out during Fascism and executed by companies such as Salini, later applied to road infrastructure, all over the world, but present in those years especially in the countries of the enlarged Mediterranean and in Africa (Del Monaco 2021). That is, architecture as an additional service that refines and amplifies the provision of infrastructure interventions and modernization.

Florestano Di Fausto, known for his architectural interventions in Libya (McLaren 2005), repropounded in those distant lands actions and language akin to some proposals for the cities of the Pontine Plain and for the Francoist *pueblos de colonización* in Spain (Lejeune 2021). So, a set of programs and interventions in agriculture and land transformation, in Europe and Africa between World War I and World War II.

In that same articulated historical phase, Italy was debating what the national *language* of architecture should be. In parallel, prominent Roman architects engaged in that debate, and professors in the Faculty of Architecture, had major planning and design experiences in the wider Mediterranean and Africa: think of the urban works of Marcello Piacentini and Arturo Mezzedimi in Asmara (Tecele 2015) that of that generational cycle and represents the last Roman, born in 1937, to have experienced projects directly in the field, with continuity, in the extended Mediterranean and Africa. In particular, after World War II, development and international cooperation policies had a great deal of impact: think of the more than ten-year experience in Tunisia—just to mention a significant and structured case-by Pietro Barucci, Piero Maria Lugli, Plinio Marconi, Giuseppe Nicolosi, Ludovico Quaroni, Luigi Vagnetti. And, from the mid-1960s to the late 1970s Lucio Barbera's professional actions with ProgRes in Egypt, Morocco, Togo,³ who of that generational sequence represents the last Roman to have directly experienced in the field a design activity, with continuity, in the extended Mediterranean and in Africa.

It is important to clarify that with the concept of *realism* we do not intend here to allude to *neorealism* or to discomfort *magic realism*, that is, to that set of experiences that a part of Roman architectural culture shared in the postwar period with film and literary culture (Reichlin et alii 2001),⁴ – but it is also inevitable that they remain active issues in the background. We refer, for this reading, to the experiences concerning the protagonists of the Roman School of Architecture, at a time when there was, in fact, a transition between Fascist culture, that is, the idea of architecture as an *art of state* and above all a *representation* of a political identity, to architecture as a profession of social relevance⁵ also interested in ordinary architecture and so-called “minor architecture” and that in the school in Rome had an important tradition in the activities of the Artistic Association among the Culturists of Architecture (Aacar) in which Gustavo Giovannoni was one of the most active animators.

In the years of the founding of the School, which had also long been under study by the Aacar Commissions and by Giovannoni in particular, those options for the search for an architectural Italian-ness—which, with evident approximation, can be referred

to at least three different declinations of the theme: historical/monumental, minor/ambientist and innovative/then even rational-were not yet all easily distinguishable. But Giovannoni tried to identify them, claiming only to himself the environmentalist option, which was instead certainly still cultivated, to varying degrees and with appropriate destination, by many of his colleagues, not excluding, as mentioned above, Piacentini. [...]: “to us Italians, who feel the architectural crisis more than others because of the greatness of our tradition, which we do not want and must not abandon, it is convenient to orient ourselves, towards the tendencies of simplicity [...] and here in the studies on past art appropriately prevail the researches on minor architecture [...] and here in the composition the modest and constructive themes [...]” A possible exemplification of this program is recognizable in Luigi Vietti’s graduation thesis—a hotel set in Cernobbio, a small rural village on the coast of Lake Como—which was awarded by Giovannoni in 1928, perhaps in controversy with the participation of some of the School’s students in the I Italian Exhibition of Rational Architecture (Pallottino, 2021).

Introducing Gustavo Giovannoni’s environmentalist option (*ambientismo*) and associating it with the social purposes of architecture, we do not intend to automatically establish a link between the category of *realism* and the category of the vernacular, the picturesque, regionalism, etc., that is, to attempt classifications according to predetermined historiographical schemes. Instead, we would like to highlight what methodological and operational tools developed in certain cultural contexts can be transferred and applied to different contexts, to different *cultural morphologies*. Introducing, therefore, what scholars of Africa such as Frobenius called *emotion* (*commotion*), an intuitive impulse with respect to the interpretation of reality, more similar to the instinctive condition of the child than the adult (Barbera 2014). More like a phenomenological and expressive interpretation than a rationalist one.

Beauty is in the eye of the beholder,” says Wölfflin. Decisive is the position from which I look at a picture, but also the lighting and the frame in which it is placed; and thirdly, the intimate predisposition of the person who produced it is decisive; calling him the “creator.” (...) The nineteenth century silenced this need in such a primitive way that it sometimes had even grotesque and barbaric effects. Consider the problem of the origin and individual “advances” of civilization. First of all, the Spencer-Taylor conception dominates. Everything was explained by a mental position determined by the worst tyranny of causality. It asked. “For what purpose, with what intent? And it was answered, “so that ... (...) Science discovered ‘the impulse to play’ as a remarkable phenomenon only insofar as it already occurs in the child, just naturally not originally aroused by education.” (...) man acquires two forms of life, that of “being” and that of play. In representing “his own part” is the origin of all civilization. And the part that the individual man, the people, a humanity bound by time or place must play is that which is written expressly for a man as an individual and for the very as a community. But that which “is written,” is revealed in the commotion [Ergriffenheit]. This is our narrow faculty of perception, which depends partly on the senses and intellect, partly on feeling and “paideuma” (Erlebte Erdteile, IV). To this distinction of the most important organs of vital synthesis perhaps corresponds an order of the surrounding world, which distinguishes a phenomenal sphere of facts and a phenomenal sphere of reality. (Frobenius 2013/1933).

In the course of his essay, Frobenius distinguishes and analyzes styles of popular poetry by distinguishing between the Styles of Romantic Realism (Ethiopian civilization), and those of Rationalistic Realism (Camitic civilization). We mention them here only to highlight how interesting a new approach for a critical theoretical investigation might be. Consider also the recent attempts (Santini 2020) sketched by some scholars to compare fig-

res like Aby Warburg and Leo Frobenius, long neglected, both German and almost coeval. And both coeval with Gustavo Giovannoni, that is, of that cultural moment of transition between nineteenth and twentieth-century culture, very fertile and perhaps too simplistically considered and pigeonholed by twentieth-century historiography within “traditionalist” definitions.

Urban settlements, health services and infrastructure for research and historical heritage in Sudan, Ethiopia, Tanzania (2005-2023).

On closer inspection, the methodological and interpretive tools mentioned so far would allow an approach to the transformations in contemporary African city architecture (settlements and buildings) to be developed by reasoning about continuity and not neglecting the desire for modernity, which is present and legitimate. Keeping in mind that Africa, in the global framework, still represents an important reserve with its territories to preserve the balance between city and nature, urban and extra-urban areas, not yet being completely altered to the extent that has happened in some Asian countries, where conditions seem irreversible. Approach, the one outlined, not so far removed from the position of Diébédo Francis Kéré who, in commenting on the school built in his home village, the Gando Primary School, argues as follows: «I did a modern building that is not westernised, and not a traditional African building,» and that his aim was “to create a building that responded the best to the need of the climate and the need of the people, using the most available material” (Block 2020). Different approach, however, from that promoted at different historical stages by French architects both in the suburbs of cities such as Paris and Marseille and in the former colonies, proposing a mass modernist architecture, among whose: «I did a modern building that is not westernised, and not a traditional African building,» and that its purpose was «to create a building that responded the best to the need of the climate and the need of the people, using the most available material» (Block 2020). Different approach, however, from that promoted at different historical stages by French architects both in the suburbs of cities such as Paris and Marseille and in the former colonies, proposing a *mass modernist* architecture, among the best examples of which are the works of Fernand Pouillon.

The experiences described below, on the other hand, focus on a demand for architecture aimed at improving the quality of life in small and medium-sized urban centers, social and health services in suburban areas, and places for research, study, and preservation of cultural heritage in prominent but relatively remote areas.

Regional Development Plan del Kordofan, KPP5 Khartoum Planning Project 2006-2010

In 2005, engineer Riccardo Raciti (Mefit Sudan⁶) contacted Lucio Barbera, dean of the Faculty of Architecture “Ludovico Quaroni” of Sapienza University, to start a research-consulting collaboration (today it would be called “third-party”), for the drafting of the Development Plan of North Kordofan and the main cities of the region, especially the capital city El Obeid. Between 2006 and 2010, then, the research agreement signed, an interdisciplinary team⁷ of Sapienza contributed to the setting up of spatial planning tools, urban design, and training of local professionals, with the contribution of some research fellows funded by the convention. Over the years, the Mefit Sudan agency, with Sapienza’s contribution, also won the

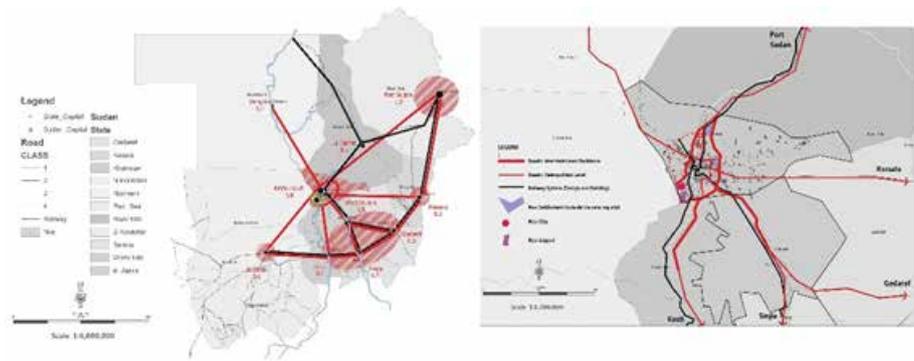


Fig. 1
Territorial and Urban Patterns KPP5, Khartoum Planning Project 5; elaborations by Lucio Barbera, Attilio Celant, Anna Irene Del Monaco (2010).

assignment for the *Regional Development Plan* of the White Nile region and participated in the call for proposals for the *KPP5 Khartoum Planning Project*: the grouping was the winner. The drawings presented here represent a summary of the complex consultancy work, which was interrupted by Sudanese national and international political events after the first phase of setting up. The missions carried out in the field, the confrontation and exchange with the local administrative and technical offices allowed to ascertain, the still essential role of the local population (partly nomadic and partly settled and agricultural) in the process of realization and management of residential settlements, what is more or less consciously and properly called *self-construction*⁸. Widespread technical and organizational capacities, therefore, should be preserved and regenerated and supplemented with the minimum technical instrumentation, which is essential to improve the average quality of the habitat and to establish in a broader geographical and cultural framework, Mefit Sudan appointed project manager Corrado Giannini, a Roman architect and designer of the design firm ProgRes-S.T.R directed by Lucio Barbera active in the Middle East and Africa during the 1960s and 1970s. Because of the serious charges, later dropped, brought against President Omar al-Bashir for his involvement in the Darfur crisis the work of Mefit-Centecs (Del Monaco 2023)⁹, continued without the Sapienza contribution, and was later documented by Sudanese scholars in the paper *Khartoum 2030 Towards an Environmentally Sensitive Vision for the Development of Greater Khartoum, Sudan* (Hamid and Bahreldin 2014). In summary, it can be said, that the proposed interventions, although not completed under Sapienza's supervision, due to the occurrence of external events, had as important precedents the work carried out in Togo by Barbera-Giannini with ProgRes in 1976 (and illustrated in this same volume), suggesting infrastructuring, stormwater and urban water governance, flooding and the introduction of some elementary basic rules for the construction of the foundations and ground floors of buildings, leaving the inhabitants to self-construct their own dwellings.

Health Operator Learning Center Adwa (Tigray), Ethiopia, 2010

This project, written by Lucio Barbera and Anna Irene Del Monaco, was prepared at the request of the Italian Red Cross, the Ethiopian Red Cross, and the Faculty of Medicine of Sapienza University of Rome (Sant' Andrea Hospital), whose reference was Professor Maurizio Simmaco. The project is a design study freely offered by the authors to the mentioned institutions. The initial requests from the institutions involved were for the design of a mother-child monitoring health center, taking into account the number of orphanages in the area and the related clinical problems, run mainly by religious and nongovernmental organizations.

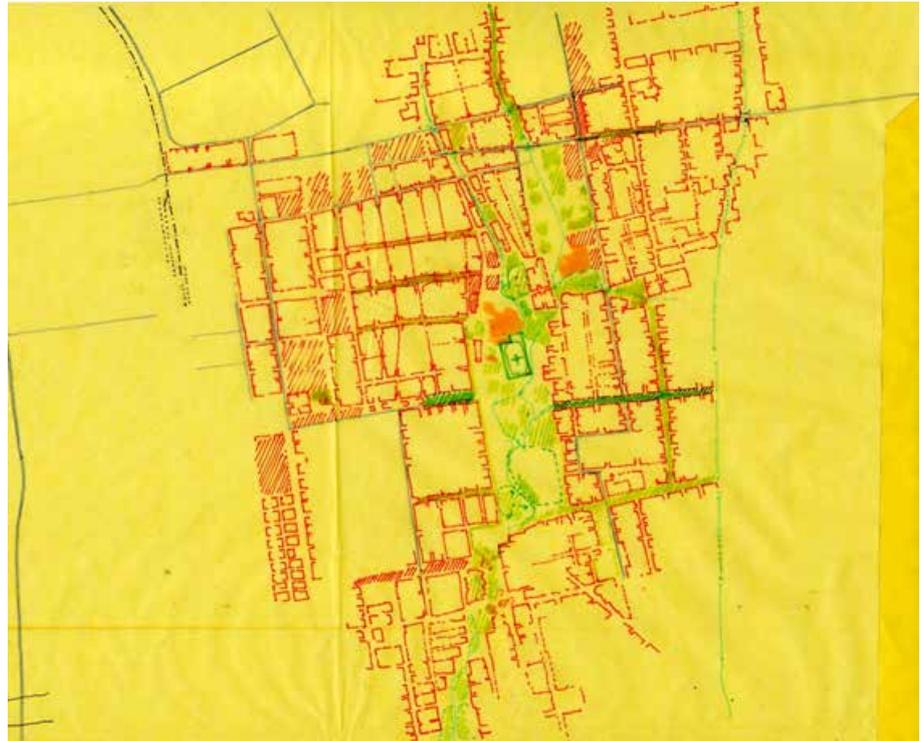


Fig. 2
El Obeid: Urban Redevelopment
Project Setting Sketch, drawing
by Corrado Giannini (2007).

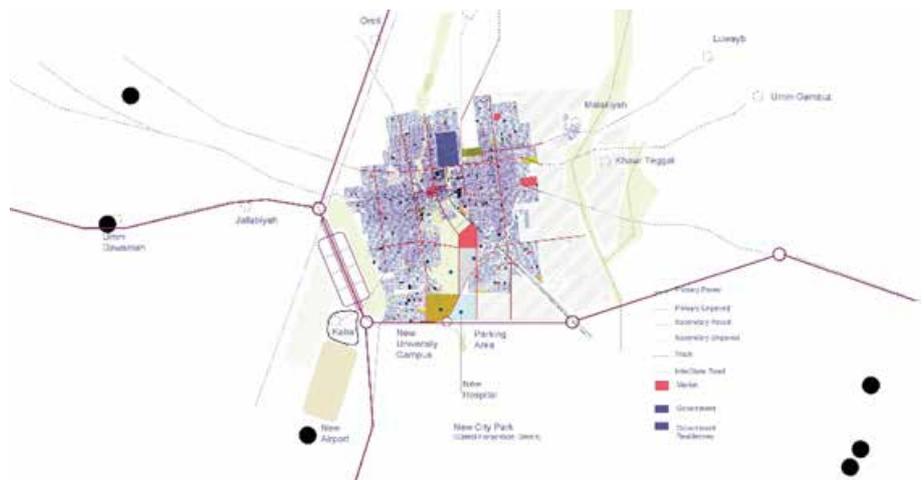


Fig. 3
Urban Redevelopment Outline
and Study for New El Obeid Ma-
ster Plan; elaboration by Lucio
Barbera, Anna Irene Del Mona-
co (2009).

During inspections and discussions with local institutions, the functional program was modified several times, and the final request—which from the outset attempted to retain a broad character of flexibility—became a learning center for health workers, with the addition of an outpatient clinic. The project had been accepted and approved by the local authorities, and the preliminary investigations for the project’s construction site had been completed when, suddenly, while on the ground already staking out the foundations, the program was suspended, possibly due to a lack of agreement between the local Red Cross and the various nongovernmental organizations in the area.

The proposed design idea considered the construction systems used locally, or that seemed to have produced the best outcomes, with the intention of trying to *extract*, from reality, elements of systematized and formalized architectural language to improve performance and aesthetic outcomes. Thus, it was important to interview local people and conduct site surveys among the buildings constructed in that same area by local workers. The design layout called for a sequence of courtyards connected by covered passageways and aggregated into pavilions that draw a sequence of open

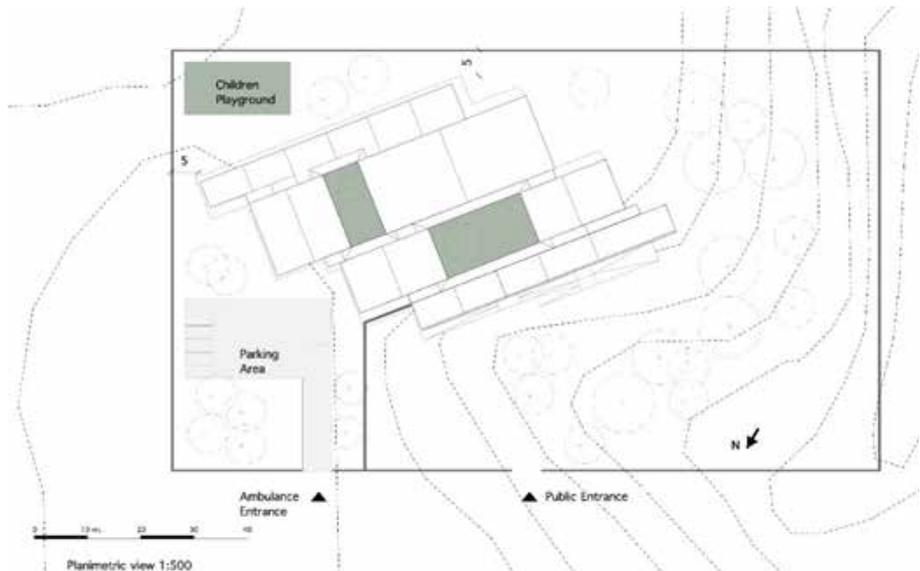
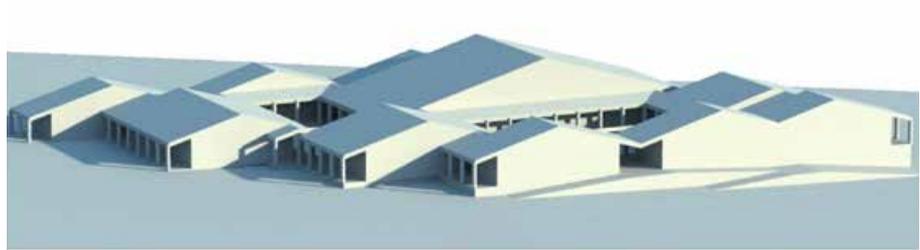


Fig. 4
Adwa: Health Center, drawing
by A.I. Del Monaco (2010).

Fig. 5
Adwa: Health Center, renderings
by Lucio Barbera and A.I. Del
Monaco (2010).

Fig. 6
Adwa: Health Center, General
Planimetry (2010).

and closed rooms connected by semi-covered passageways. The buildings aggregated in the manner of train cars, of different heights, depending on their functions, float like volumes in tension – due to sloping roofs of different heights and variations in the planimetric pattern – on a barren terrain opening onto a valley, populated by bushes, rocks and a few scattered trees. The direct connection between the window design and structural elements was intended to minimize possible execution errors and lack of on-site control during execution, and to still achieve a formally controlled result in the event of any use of low-quality building systems.

The arcades are a key place in the project, marking the spatial rhythm, and repurposing the semi-public outdoor space most used by local people. In fact, these are designed for outdoor educational activities as well as transit and temporary resting. The size, position and design of the windows are conceived to facilitate natural ventilation – a key issue for climatic and hygiene reasons – and air circulation in the different pavilions that define the articulated building fabric and sequence of aggregated semi-open spaces.

THOR Tanzania Human Origins Research – 2023

Thor is a *Science Center* to be built in Laetoli Archaeological Park, Tanzania, promoted by a consortium¹⁰ of research founded by the Perugia School of Paleontology involving five Italian universities and several institutions in Tanzania, as well as the Ministry of Foreign Affairs¹¹. There are pavilions in the park assigned to international missions, used for research, teaching, and storage activities.

Laetoli Park management has set a peremptory condition: the new Science Park Thor must be “inspired” by local settlements and architecture (e.g., Maasai villages, etc.). The allotted lot, on which the new building should be constructed, has a corner overlooking the central gathering area of the camp, used as a kind of plaza. That of optimizing outdoor spaces as places for gathering and for outdoor activities (research, treatments, teaching), was a second design prompt expressed by the consortium. The requests would also correspond to long-term intentions of the park’s managers, who would seem to be oriented toward gradually replacing the buildings already constructed to implement what could be called a landscape renovation of the field, eliminating *out-of-context* buildings. Thus, the Thor center would be a test for a possible new type of model building, with a view to future replacements. The mission members’ requests included two bedrooms with bathrooms, a storage room, a *dry* technical room, and a large room intended for public events and education on whose walls a bookcase, displays, and shelves for temporary storage and display of artifacts could fit. The requests of the members of the mission included two bedrooms with bathroom, a storage room, a *dry* technical room, a large room intended for public events and teaching on whose walls there could be space for a bookcase, displays and shelves for archiving and the temporary display of the finds. The roofs are designed with a double-shell attic, which functions as an air chamber; they should be finished externally in straw, using a process, and finishing that is quite common in Tanzania and is also not unrelated to some oriental and northern European traditions (thatched roof). The roofs would also be accessible for inspections via two flights of stairs which delimit and indicate the perimeter of the lot, and which, among other things, allow the landscape to be seen. The external wall could be finished in local stone, with an internal counter wall and cavity to promote thermal efficiency.

The project was developed by conducting intermediate comparisons, especially for the functional aspects, with archaeological colleagues, who however interacted with interest and effectiveness also with respect to morphological and formal options submitted to them in the phase of setting up the initial project ideas. Furthermore, an intermediate version of the project was discussed with the director of the Laetoli park, an engineer with a doctorate in preservation and cultural heritage research, during a trip to Rome. The discussion with him, together with the archaeological managers, was fundamental to finalize the issues of technical feasibility and to define choices on the construction systems which led to the final draft of the documents sent for the cost estimate. The project idea, delivered to the park management by the Italian mission, in the form of a preliminary project, was then estimated locally. Last summer, the archaeological mission began raising funds for the creation of Thor.

Will the new Renaissances come from Africa?

In 2005, a conversation was held between Arnaldo Bruschi and Lucio Barbera, at the Department of History of Architecture of the Sapienza, in which Barbera intended to consult the great Roman historian and sensitive designer, in view of the organization of a possible conference on the identity of the Italian architecture. Bruschi’s opinion, going into the matter, was rather firm and paraphrased below: today it doesn’t make much sense to question the problem of the identity of Italian architecture, because it is very probable that the Renaissance will come from other places: Asia, Africa.

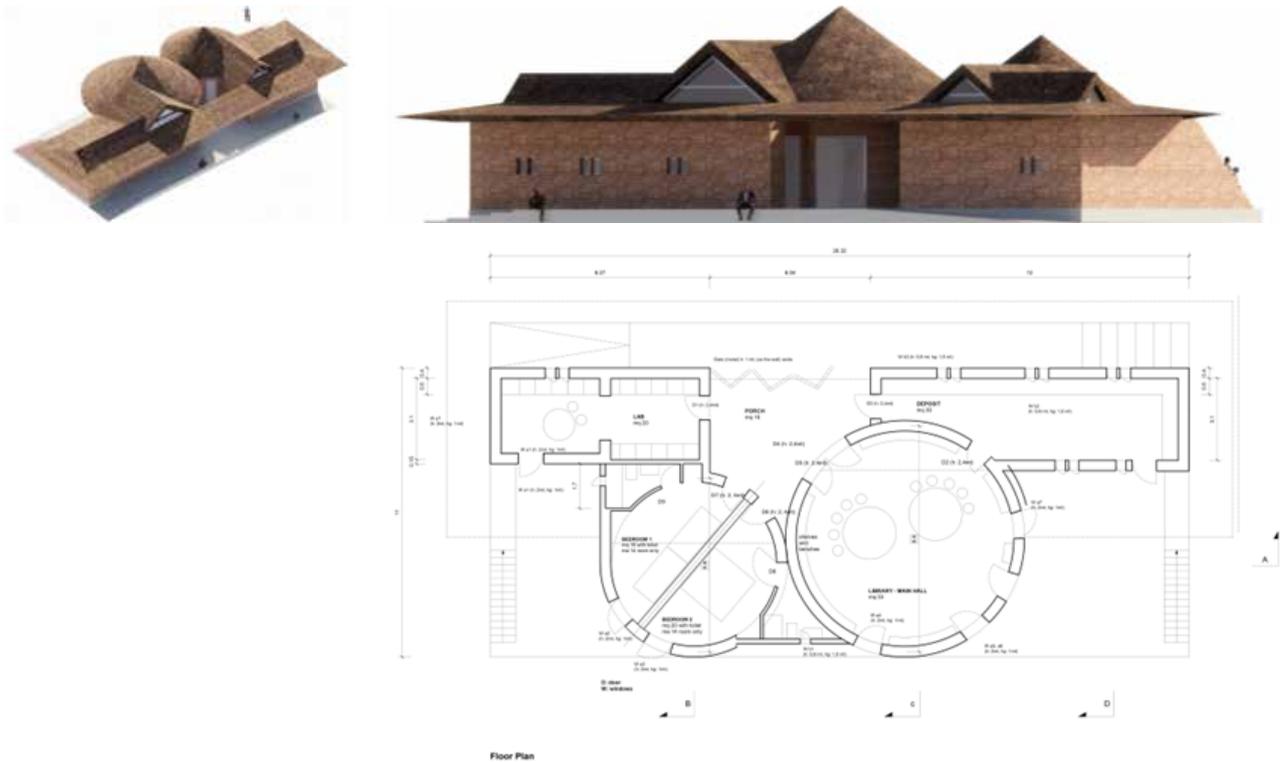


Fig. 7
THOR Science Center of Sapienza/University of Perugia et al., Tanzania 2023. Drawings by the author.

What we know from history, Bruschi continued to explain, is that in some moments, in some places a *koinè* forms and emerges: fifth-century Athens, Renaissance Italy, eighteenth-century France, nineteenth-century London, New York in the twentieth century. In Italy, in this historical phase, the political and economic conditions do not exist, Bruschi argued, almost proposing an anthropological interpretative key, for a new Renaissance to occur. It will be easier for some Italians to be called elsewhere in the coming years to contribute to other Renaissances, as happened to Leonardo and other artists, who in distant times traveled and applied their genius in other contexts.

Ideally continuing the reasoning of the Roman historian, we can add that it is difficult to predict whether in the future the success of some ways of doing architecture, such as the case of Francis Kéré and other good architects of all nationalities who have trained around the world, and that when they design they take into account the characteristics of the context, it will not depend so much on the emergence of a *koinè* specifically rooted in a place or if, as a result of global culture – now an irreversible reality – amplified by *artificial communication* (Esposito 2022), it will not be increasingly important renovate or preserve the specific identities of a cultural area, as Saverio Muratori would have said, and know how to read the reality of the architecture of cities, as Ludovico Quaroni would have said, and tell it and propose it again, albeit transfigured or re-imagined, according to renewed sensibilities.

Notes

¹ Read also M. González Pendás, *Realism Under Construction: Manfredo Tafuri's Other Road to Criticism*, in Proceedings, Annual Meeting ACSA, 2011, pp. 11-20.

² D'Agostini (2013) – *Realismo? Una questione controversa*, Bollati Boringhieri 2013. To better orient yourself on clichés and contradictions around the concept of realism.

³ Traces of this design activity can be found in the curricula, in the registers of works

and in some publications (see Del Monaco 2021).

⁴ “When Manfredo Tafuri was asked to write an essay on “Architecture and Realism,” he began his treatment of the theme by pointing out that “What I shall call here Realism ... is ... the fruit of a historic construction; (...) yet very real-debates about whether or not modern architecture lived up to the strict canons of socialist realism were, in any case, a bit casual, although entirely appropriate to the objects of his analysis, which, by and large, also coincide with the subject of this essay. Here, I will go no further than to indicate a few possible directions for study”. These interpretations are affected by the limited knowledge that even authoritative historians have of the early professional and study experiences of Tafuri and his Roman peers, in particular the AUA Architetti Urbanisti Associati Group (see L’ADC n. 20-21, 2021). Above all, for the fundamental idea of the social mission of Architecture.

⁵ AUA Architetti Urbanisti Associati, “Architettura e Società. Problemi e prospettive attraverso uno studio della situazione romana” “Superfici”» n.5, aprile 1962, p.19. (Text signed by 8 of the 14 members of the group: Lucio Barbera, Sergio Bracco, Giorgio Piccinato, Vieri Quilici, Bernardo Rossi Doria, Stefano Ray, Manfredo Tafuri, Massimo Teodori).

⁶ Mefit, was a design company founded by Riccardo Raciti, Vittorio Gigliotti, Paolo Portoghesi, very active in the Middle East and Africa during the Sixties; it won the competition and built the Mosque of Rome.

⁷ The Faculty of Architecture “Ludovico Quaroni”, therefore, became the leader of an interdisciplinary research group in which it involved scholars from the Faculty of Economics, coordinated by the dean Attilio Celant (Economic Geography), Enrico Todisco (Demography), Francesca Gastaldi (Financial Sciences), Paolo Mellano (Cooperation and Development); the Faculty of Letters with Antonino Colajanni (Anthropology); the Faculty of Medicine with Maurizio Simmaco (Molecular Biology, with experience of hospital cooperation in Africa); the Faculty of Engineering with Eugenio Borgia and Alessandro Ranzo (Transport Engineering); the Faculty of Geology with Sirio Ciccacci. The group carried out between six and eight site visits in Sudan, collectively or in groups, official meetings with governments and local administration, developing maps, reports, plan schemes and training for groups of young local professionals selected by Mefit Sudan.

⁸ The author discusses how self-construction can still be an essential possibility in some contexts, if reconsidered taking into account current knowledge and techniques, to resolve and regulate procedures that in any case occur spontaneously.

⁹ Further details, including on the composition of the Mefit-Sudan working group in Khartoum, are published in (Del Monaco 2023).

¹⁰ Sapienza University of Rome (Department of Environmental Biology, Giorgio Manzi), University of Perugia (Marco Cherin), University of Florence (Alessandro Riga), University of Pisa (Giovanni Boschian), University of Dar El Salam. The consortium also includes Italian Archaeological, Anthropological, Ethnographic Missions abroad MAECI.

¹¹ The writer, and therefore also the author of the project, was introduced to the aforementioned consortium by Professor Nicola Santopuoli, of the University of Bologna, who already collaborates with the same consortium for aspects concerning architectural restoration.

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Daniela Ruggeri
**André Ravéreau, Sub-Saharan Africa works.
Transpositions and Synthesis between North and South
Sahara**

Abstract

This paper investigates the Sub-Saharan works of architect André Ravéreau (Limoges 1919-Aubenas 2017), as interpretations of the Modern Movement in Africa. A student of Auguste Perret, Ravéreau was strongly influenced by Le Corbusier, so much so that he followed in his footsteps by making a journey to study the Saharan architecture of the M'Zab Valley, made known to the West thanks to Le Corbusier's 1931-33 *Carnets de voyage*. In the 1960s, Ravéreau moved to Algeria, where he worked for about twenty years, holding important positions. From 1965 to 1973 he was *Architecte en chef des monuments historiques d'Algérie*. From the 1970s onwards, his work took him beyond the Algerian desert, to Sub-Saharan Africa, where he received commissions for school and health buildings in Mali, Mauritania and Burkina Faso; he then took part in the competition for the French Embassy project in Uganda. In his discovery of this "new Africa", Ravéreau brings with him the experience learned in the M'Zab, which he transfers into his sub-Saharan projects, arriving at new "tropical" solutions always strongly contextualised.

Keywords

[Another Modern](#) — Tradition — Adaptation

The following pages present the design experiences conducted in Sub-Saharan Africa by architect André Ravéreau (Limoges 1919 – Aubenas 2017). His projects, achieved and unachieved, are always strongly integrated into the context and represent one of the many declinations of the Modern Movement south of the Sahara.

A French architect, little known in Italy, Ravéreau studied at the *École des beaux-arts* first in Rouen and then in Paris, where he became a pupil of Auguste Perret, from whom he learnt to admire above all constructive details (see Ravéreau 2007, pp.15-16). Although closer to Perret's teachings, Ravéreau became so fond of Le Corbusier's work that he decided to follow in his footsteps, travelling to Algeria in 1949 to study the Saharan architecture of the M'Zab valley, first made known to the West thanks to Le Corbusier's *carnets de voyage* (1931-33)¹.

André Ravéreau, a travelling architect «in search of opportunities to assert himself autonomously in his profession» (De Maio 2020, p. 6), moved to Algiers in the 1960s after various wanderings around the Mediterranean. Then, the Algerian capital was in full cultural ferment – a prelude to the independence season – and was at the same time the crossroads of architects and urban planners of the Modern Movement from the Old Continent². Among these was Ravéreau, who worked between Algiers and M'Zab for about twenty years, holding important roles including that of *Architecte en chef des monuments historiques d'Algérie* (Architect in charge of the superintendence for the architectural and historical heritage of Algeria) from 1965 to 1973. On his initiative, the M'Zab valley was included in the UNESCO World Heritage list in 1982.



Fig. 1
André Ravéreau, Mopti Health Centre, 1970-74 (from Aga Khan Trust for Culture, Genève).

In the cohort of European architects working in Africa after World War II, Ravéreau demonstrated a profound autonomy from modernist stylistic features, coming to elaborate a personal language closely linked to his own biographical experience. Starting in the 1970s, his work took him beyond the Algerian desert to Sub-Saharan Africa, where he received commissions for school and health buildings in Mali, Mauritania and Burkina Faso, countries freed from colonialism but still under French influence. He then took part in the competition for the design of the French Embassy in Uganda.

In his discovery of this “new Africa”, Ravéreau brought with him the experience he had learnt in the Algerian desert and from traditional Mozabite architecture, which he transferred to his sub-Saharan projects, arriving at new solutions that were always strongly contextualised to a specific place.

From the lesson of M’Zab to the Sahel, the Mopti Health Centre

The Mopti Health Centre, designed between 1970 and 1971 and built between 1974 and 1976, launched a new season of buildings designed by André Ravéreau: first of all, because of the confrontation with a geographical climatic context and urban structure different from those of the

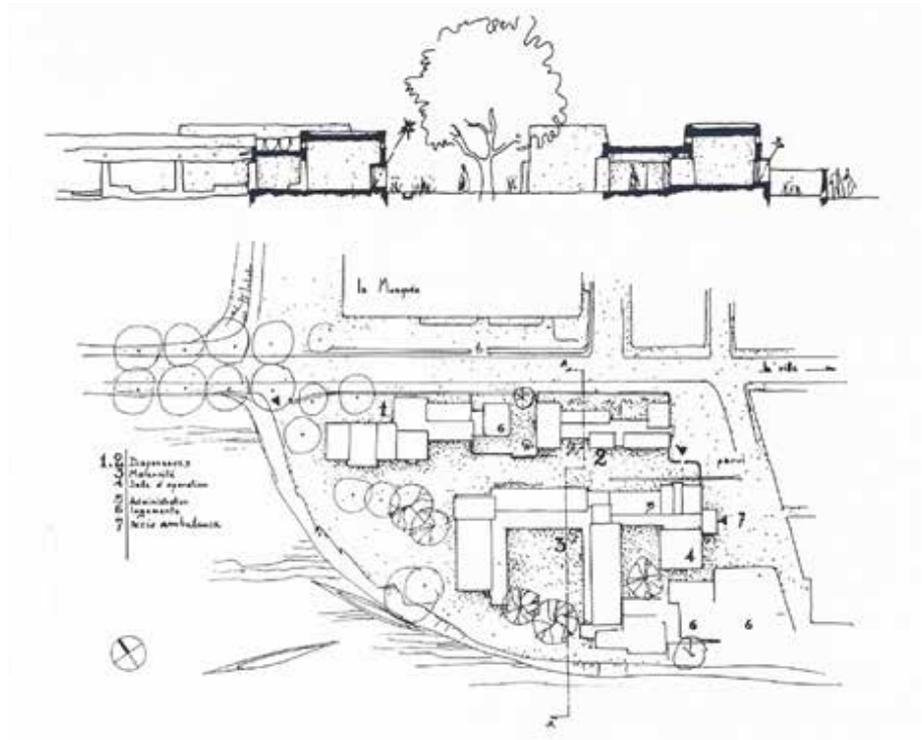


Fig. 2
André Ravéreau, Mopti Health Centre, 1970-74 (from Aga Khan Trust for Culture, Genève).

Saharan area, the main testing ground for his professional experiments. Philippe Lauwers, an architect who worked with Ravéreau for several years, described the experience in Mopti as follows (2003, p. 109): «another region, another climate, another challenge!»³. Moreover, on this occasion Ravéreau was able to test for the first time the *banco* construction technique that he had not been able to use in Algeria⁴.

Commissioned by the Ministère de la Santé du Mali and the Ministère de l'Aménagement et du Développement du Mali, the project was part of a programme financed by FED, Fonds Européen de Développement⁵. Ravéreau was chosen by the FED commission precisely because due to his «many years of experience working in Algeria [...], particularly in the hot and arid M'Zab region, he was particularly well prepared to grasp the climatic, social and economic constraints of the Sahelian situation» (Khan eds. 1984, p. 37).

Furthermore, although the experience in M'Zab constituted a specific geographically contextualised case study, it allowed Ravéreau to understand the relationships between climate and architecture. Referring to his first study trip to M'Zab in 1949, he himself stated (Ravéreau 2003b, p. 18):

**Fig. 3**

André Ravéreau, Mopti Health Centre, 1970-76, general planimetry and section (from the private archive of André Ravéreau), © André Ravéreau/ADAGP. Paris, 2013.

I only understood what the humidity brought to Normandy after seeing what the dry climate brought to M'Zab. Through the difference, the phenomenon of M'Zab became clearer to me. I then worked for my degree on Normandy where I had lived since the age of twelve.

From that moment on, the reflections on the relationship between architecture and climate, which he developed over the years also through his professional practice, would constantly push him in the search for solutions suited to a new climatic context.

The Mopti Health Centre is located along an important and busy road axis of the city, Avenue de l'Indépendance, more precisely on a 4600 square metre lot, located between the large Friday Mosque –which is exactly opposite the lot, across the Avenue– and the Bani River, a branch of the Niger. Ravéreau therefore had to deal on the one hand with the dense urban fabric of Mopti, on the other hand with the direct river frontage, but above all with the imposing earthen mosque characterised by soaring minarets and pinnacles. Therefore, the new buildings of the Health Centre, respecting this important pre-existence, have a modest height of one storey or maximum two. Thus, to those arriving in Mopti from the river, the new building appears as a raw earth base on which the mosque stands.

The Health Centre is made up of a complex of buildings, which in turn consist of aggregated “cells” of different sizes. Ravéreau had already experimented with a similar compositional solution in some projects for the M'Zab, where he reinterpreted the Mozabite housing cell and readjusted its urban aggregation system to the scale of the building. For example, in the Hôtel des postes in Ghardaïa (1966-67), the matrix of the housing cell was repeated –although the ‘standard cell’ was never copied exactly– then dilated, in order to combine in the same architecture the spaces of a public building with the domestic and private spaces of the postmaster’s house.

The Mopti sanitary complex, set slightly back from the Avenue de l'Indépendance, is separated from it by a bench wall with two access gates – one to the north-west of the plot, the other further inland to the south-e-

ast – leading to a central pedestrian axis, so as to avoid direct access from the busy and dusty main thoroughfare. The inner axis, laid out parallel to the Avenue de l'Indépendance, «forms the backbone of the project, with various services interconnected through shaded passages, where narrow passageways alternate with open spaces and planted courtyards» (Khan eds. 1984, *Ibid.*). The buildings of the complex are arranged on either side of this axis; two blocks, arranged both along the Avenue and at the central passage, house two dispensaries, respectively, the west one specialising in Endemic Diseases, and the east one specialising in Child Education. At the head of the dispensary for Endemic Diseases is a two-storey cell, the resident doctor's house, which overlooks a private courtyard. The latter, which also has direct access from the main road, separates the building from the second dispensary.

On the other side of the axis, the block consists of a building parallel to the internal passage, onto which perpendicular buildings of different sizes are grafted. The two largest, housing the maternity wards with a capacity of 70 beds, enclose a semi-private courtyard open towards the river and served by a gallery. The third smaller building houses the delivery room and operating theatre, and also encloses a courtyard around which other buildings are developed at the western end of the plot, including service rooms, accommodation for workers, and a former administration building. In both the courtyards and the central axis, there are existing trees and vegetation, which have been deliberately integrated into the new healthcare complex. In this project, Ravéreau's greatest challenge was to find effective solutions to counteract the difficult local climatic conditions. In addition to the use of thick *banco* walls, which act as a good thermal insulator, he designed filter zones between indoors and outdoors that are always shaded. Once the centre was up and running, these filter zones were particularly liked by the local community, as patients could stay there while waiting for treatment, and meet their relatives, who in turn could cook for their loved ones in the traditional way. With this in mind, Ravéreau decided to rule out the design of a central kitchen, and to equip the maternity gallery with additional benches and a podium for group meetings of various kinds, the latter of which, however, were not built.

Inside the buildings, Ravéreau takes important measures to ensure natural ventilation and lighting. The different ceiling heights, together with the positioning of windows at the top, favour the escape of warm air. In the bedrooms of the maternity wards, additional perforations for natural ventilation of the building are placed close to the floor.

The windows are not glazed, but have metal shutters for both patient privacy and to filter light. These openings are deeply recessed in the walls and protected by protruding masonry 'eaves' to prevent direct sunlight from heating the metal shutters. Both the metal shutters and the wooden doors are strictly locally made.

The construction of the Centre with local building materials and techniques is in fact another objective Ravéreau sets himself during this experience. The complex is therefore built with local grey clay bricks, bringing improvements from a technological and static point of view: the walls and part of the horizontal partitions are built of *banco*⁶ stabilised with the addition of 13% cement (see Aga Khan Brief, 2013). The roofs, on the other hand, are made of reinforced concrete slabs with an earthen thermal protection layer. The use of raw earth as a finish gave the structure an ochre colour.

Terraces and floors were completed with locally produced terracotta tiles. The Mopti Health Centre was awarded the Aga Khan Prize in 1980 for the category ‘Research for a contemporary use of traditional language’, however in this regard Ravéreau stated (2003a, p. 149) that the category did not really reflect the guiding principle of his project, which instead consisted in «perpetuating the consistency of earthen construction under appropriate conditions. Its isometry, the quality of the natural material (so appreciated by ecologists) could be developed in the continuity of tradition, without the need to re-educate the local labour force». Because of this, because of its respect for the consolidated fabric and the pre-existence in general, and because of its attempt to integrate the new building into the life of the local community, the Mopti Health Centre is perfectly fused into the context from a formal, structural, climatic, social and economic point of view, even though some critical issues emerged once it was in operation, including the accumulation of dust in the interior rooms due to the lack of glazed windows and the need for improvements to eliminate waste water. However, it should be noted that the budget for the construction of the Health Centre was limited, so the construction site management was not entrusted to Ravéreau, but to the Direction Nationale de l’Urbanisme et de la Construction. Nevertheless, Ravéreau, who visited the Health Centre after construction was completed, was satisfied with the result⁷.

Transpositions and syntheses south of the Sahara, towards a “tropical” architecture

In 1980, in collaboration with Philippe Lauwers, Ravéreau drew up the project for the Boarding School of the Technical High School in Ouagadougou, promoted by FED. The project that went as far as the tender, according to Ravéreau’s testimony, was suspended due to political vicissitudes (Ravéreau 2003a, p.151).

The programme called for the extension of the existing lyceum with a boarding school for 360 beds, a refectory and other facilities, including communal bathrooms and showers.

Ravéreau proposed a building composed once again of aggregated cells, but this time of equal size. The study of the ‘mother cell’ was essentially based on the dimensions of a room with two beds, which is doubled to a maximum of four beds per room. The design envisaged three bodies for the rooms and a block containing the refectory and services articulated around a central courtyard covered by a roof terrace connecting the buildings. The complex was to be built in unfired earth and the roofs of the three blocks with vaults without supporting beams per cell.

Ravéreau spoke of this failure in an interview he gave to the magazine *Techniques & Architecture*, in an issue completely dedicated to architecture in Algeria, rebutting the main criticism made by the Ministry, which blocked the creation of the project by judging it too “Arab” (1980, p.76):

A vault is not Arab because it is a vault. If this is ventilated, if it meets the construction and climatic requirements above all, this is in accordance with tradition. Like the Mesopotamian peoples, after their ecological adventures, we are now in the position of inventing the vault ‘right now’ in the history of the country. If this turns out to be really good, it can become tradition.

This passage is fundamental to understand the logical thread of Ravéreau’s work: the architect prioritises structural and functional requirements, which, according to his reading, are closely linked to issues of climatic

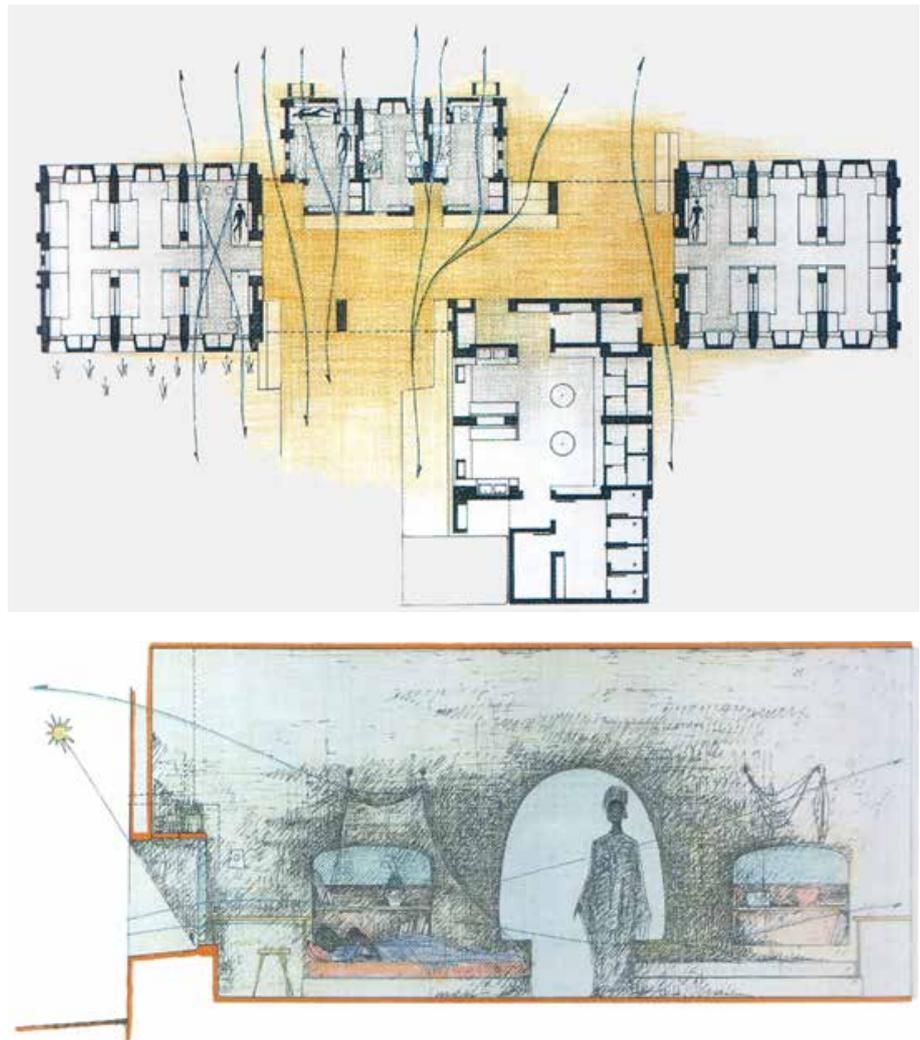


Fig. 4

André Ravéreau, Ouagadougou Technical High School Boarding School, 1980 (from Baudouï R., Potié P., 2003), © André Ravéreau/ADAGP. Paris, 2013.

adaptation. From these derive the formal aspects of tradition, which differ locally according to latitude; however, the original matrices of architectural elements, such as the arch or the vault, are universal⁸.

In the case of the Boarding School in Burkina Faso, while starting from a reading of the local tradition, Ravéreau arrives at results that distance themselves from it and draw on a syncretic imagery of forms and landscapes of the Mediterranean in the broad sense and Africa in general. It is precisely this process of synthesis that sometimes results in professional failure – a similar event occurred for the Hammam Salahine thermal complex (1965-66, not built)⁹ – as the proposals put forward were not understood by the administrations involved, while in theoretical production it led to the definition of important stages in that process aimed at identifying *a priori* categories in architecture (Ruggeri 2020).

A few years later, in 1982, Ravéreau worked for the French Ministry of Cooperation, in association with the architect Michel Charmont, on the French Lyceum project in Nouakchott, which was completed in 1986¹⁰.

The work represents a real departure from the projects previously proposed by Ravéreau. Here, he managed to combine the mastery in the use of reinforced concrete, initiated alongside Perret and acquired through professional practice, with the knowledge derived from the study of traditional architecture, although the reference to local architecture was more conceptual than direct.

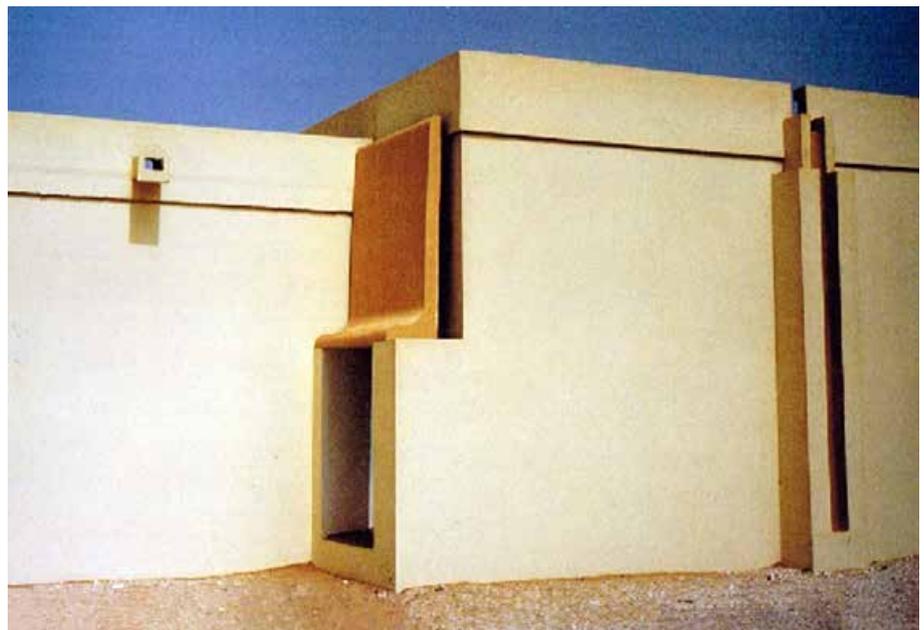


Fig. 5

André Ravéreau, French Lyceum of Nouakchott, 1982- 86 © Manuelle Roche/ADAGP. Paris, 2013.

In the French Lyceum of Nouakchott, Ravéreau reinvents some architectural devices tried out in Algeria, adapting them to the tropical climate of southern Mauritania, characterised by frequent sandstorms.

The complex, similar to the others described so far, consists of three blocks made up of aggregated cells of different sizes. The settlement principle is based on two constraints set by the architect: to expose the smaller fronts of the buildings to the wind and to ensure the greatest possible natural light inside, in relation to the position of the sun throughout the day. The block housing the administrative rooms, the services, the caretaker's gatehouse and some classrooms for special activities, develops along the enclosure wall bordering the Habib Ould Mahfoudh road; on the opposite side of the

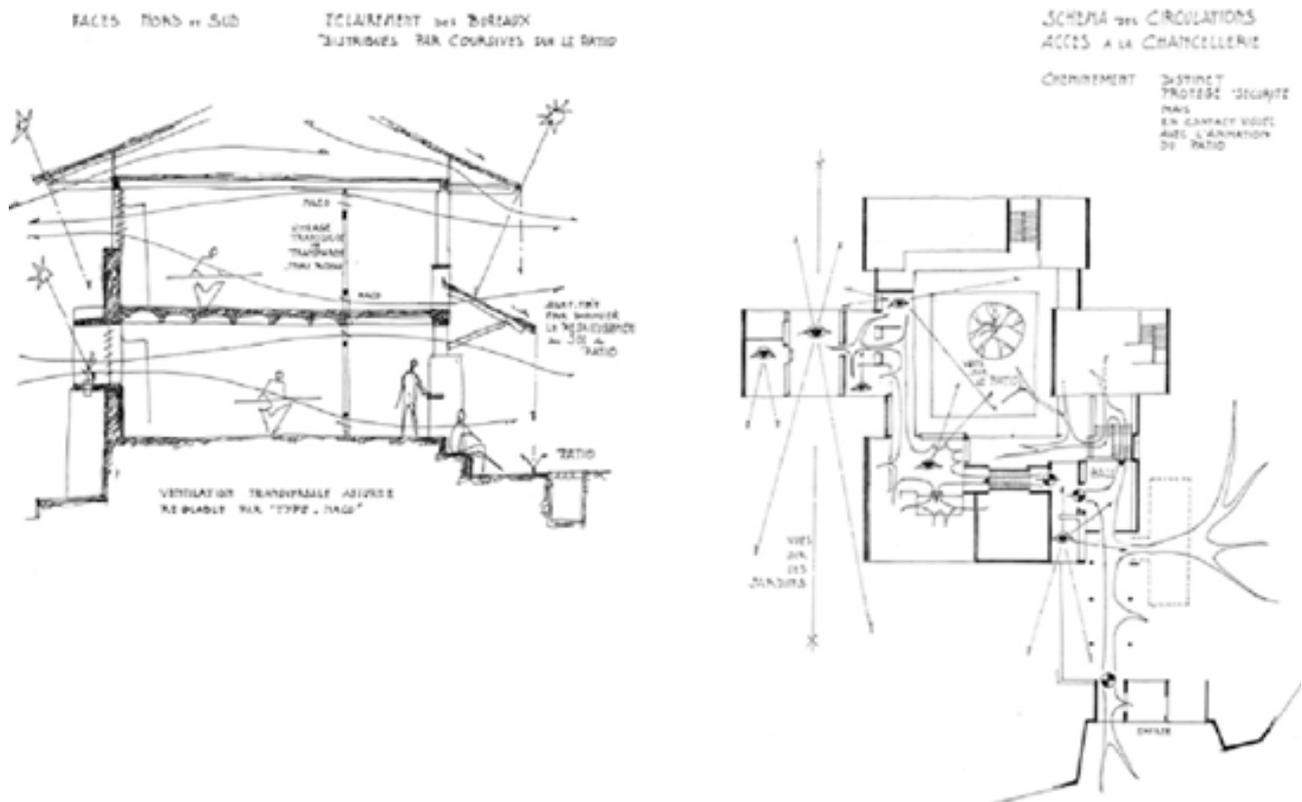


Fig. 6
André Ravéreau, French embassy in Uganda, 1987 © André Ravéreau/ADAGP. Paris, 2013.

road, the building has wooden porticoes and overlooks an internal garden. The other two school blocks –one for the primary school, the other for the secondary school– undergo a rotation of approximately 45 degrees with respect to the administrative block, following the direction of the winds, east-west. The cells housing the classrooms degrade in order to create wind-protected entrances from a courtyard.

Ravéreau here gave form to a new version of the ventilated double wall system devised in Algeria, which he called *mure masque*, “mask wall or screen wall”. Whereas in M’Zab the *mure masque* consists of cement blocks on the inside, and terracotta hollow blocks with a lime and sand plaster finish on the outside, in the Nouakchott Lyceum, for the first time, it is made entirely of prefabricated reinforced concrete pieces. In this particular case, the external part is obtained by using a single precast piece with an L-shaped section, a sort of panel-suspension, placed between pillars and resting on horizontal metal uprights. This device and the perforations placed close to the ground, in the form of French windows, provide effective shelter from the sun. In the windows of the classrooms, in addition to the wall panel, Ravéreau inserted seats to further reduce their height. In the classrooms, natural ventilation is also ensured by means of small perforations at the top, which can be opened by the pupils themselves by climbing up a special rise.

In the M’Zab *mure masque*, designed for a dry climate with sporadic rainfall, ventilation occurs laterally. In the *mure masque* of the Sahel, on the other hand, ventilation takes place vertically, allowing the windblown sand to evaporate naturally, and if sandy accumulations occur due to rainfall, they can be removed manually. Ravéreau reused other references from M’Zab repertoire, such as the water drains, clearly inspired by the Algerian *Seguià*, which are, however, here integrated with reinforced concrete pillars. These are recurring elements in Ravéreau’s works, and constitute a sort of toolkit that is updated and adapted to the sub-Saharan context.

The last page of Ravéreau's design experiences in the Sub-Saharan context remains on paper. It is the project presented together with Philippe Lauwers in the competition for the French Embassy in Uganda in 1987, of which little evidence remains. One of the requirements of the competition was that the building could be easily defended against possible sieges in the event of social unrest. This is why Ravéreau chose a wooded lot as the site: naturally defended by dense vegetation, the main buildings would be grouped around a central patio to facilitate communication in the event of emergencies.

The response to an extreme climatic condition is always the main consideration around which the project revolves. Here, the humid tropical climate is characterised by frequent rainfall which sometimes does not fall in a direction perpendicular to the ground but follows the inclination of the winds. Ravéreau therefore proposed very sloping pitched roofs, clad in sheet metal: «These roofs, in fact, belong to the Asian roofs in order to respond to this tropical climate close to that of Asia» (Ravéreau 2003b, p.255).

For the vertical partitions of the buildings around the central patio, Ravéreau proposed the *mure masque* masonry system, with few holes, on the ground floor, in order to achieve greater stability of the building. On the upper floor, instead, the walls would have been made of lighter materials, following the principles of local building tradition. There is no lack of *brise-soleil* and breathing walls belonging to a “tropical” repertoire and codified by the greatest protagonists of the Modern Movement in sub-Saharan Africa, Maxwell Fry and Jane Dre¹¹. Nonetheless, the project did not convince the competition jury, perhaps precisely because it represented one of the outcomes of that long and not always linear process of synthesis and transpositions between architectures from the “South of the way”, which the architect attempted to achieve in his works.

That of Ravéreau is a Sub-Saharan architecture which on the one hand reinterprets the Modern, on the other embraces the tradition of the place, and on the other draws on a repertoire now geographically localised, now imaginary, but always dictated by climatic needs, becoming progressively “tropical” depending on the latitude, according to his personal interpretation.

Notes

¹ See Pauly (2013).

² For further information see Cohen et alii (2003, pp. 160-265).

³ The translation of this quotation and all other quotations in the article were made by the author.

⁴ Ravéreau never used unfired earth in Algeria, not even after his construction experience in Mopti. In fact, for the construction of social housing in Sidi-Abbaz (1976), he used the same construction system as in the Hôtel des postes in Ghardaïa (1966-67), where he combined local materials such as stone and sand with cement. For the vertical partitions, Ravéreau used baked earth and concrete blocks. This solution was the most sustainable in that context (See Ravéreau 2003a, p. 140-141).

⁵ The Fonds Européen de Développement is a European Union aid instrument for cooperation in the development of African, Caribbean Pacific and Overseas Territories, initially established by the Treaty of Rome of 1959-64, which provided for aid to colonised African countries. The Mopti Health Centre is part of the second agreement signed in Yaoundé (Cameroon) in 1963 between the European Economic Community and eighteen African countries that had gained independence (Algeria and Guinea

rejected this agreement). In 1969, when the Mopti Health Centre project began, one thousand six projects were underway and two thousand training grants were allocated (see Potié 2003, p. 90).

⁶ Here, the bricks were produced with a hand-activated press, achieving two advantages over the performance of bricks commonly made in the region with wooden moulds: firstly, the compressive force exerted by the press on the bench produces a denser and more resistant brick; secondly, with the press, more bricks can be produced with fewer men and in less time (See Holod and Rastorfer 1983).

⁷ Statement made by André Ravéreau to the author of this paper during one of the many interviews held in Lentillères in March 2014.

⁸ For more details, see (Ravéreau, Bertaud du Chazaud and Ravéreau 2007).

⁹ As in the Boarding School project in Burkina Faso, the Hammam Salahine thermal complex envisaged an aggregative system based in part on the repetition of vaulted cells without supporting beam.

¹⁰ The building is still in good condition and was extended in 2018 by Segond-Guyon Architectes.

¹¹ For further discussion see Galli (2019).

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Guedesburg. Lourenço Marques and *Stiloguedes*

Abstract

The paper focuses on the urban dimension of the work by Amâncio d'Alpoim Miranda Guedes (1925-2015, known as Pancho Guedes). He worked in Lourenço Marques, the Mozambican pre-independence capital city (today Maputo), between 1950-1975. The city has a dual nature and a clear demarcation between the informal settlements and the colonial city (by mean of a semi-annular road). The presence of a Cartesian grid has allowed "anarchic" inventions within the colonial statement. Despite the short history and the unequal growth of the city, there is a stratification and a wealth of languages unprecedented for African cities of colonial origin. "Guedesburg" is positioned in this linguistic effervescence: the work of Pancho Guedes (about 500 buildings designed) which in the tumult of details places a different overall order.

Keywords

Pancho Guedes — Guedesburg — Lourenço Marques — Maputo

I am an artist. All art is autobiographical. Creation is concentric – not linear. Invention is instantaneous. Design adjusts and polishes. Buildings grow out of each other. (Guedes 1982)

The Capital of Mozambique, since its independence from Portugal ratified in 1975, is called Maputo (from the name of the river which marks its Southern border and evoked in revolutionary slogans). Before then, it was known as Lourenço Marques, in honour of the Portuguese explorer and merchant who explored its bay in 1544, and became the capital in 1907. It is a testament to the outcome of a dual planning concept typical of several colonial cities: the informal settlements (*caniços* – huts) and the structured city (*Xilunguine* – city of the white people) with a semi-annular circulation which separated them both geographically and ethnically. The former is still called 'city of reeds' and is inhabited by the poorer social groups, the latter is the 'city of concrete', or simply 'the city', where upper-middle classes live; the semi-annular artery – still very visible today – traced a well-defined demarcation line which was not untraversable (at least according to Pancho Guedes).

This paper is about the Laurentian city from 1950 to 1975, the economic, political, administrative and residential center of the former Portuguese colony of Mozambique. And it's about the contribution of an author (Pancho Guedes, 1925-2015), which makes the architecture-urban plan dialectic evident in relationship between the architecture and the city. The individual projects (architectures) of the author can be individually interpreted as epiphenomena of the city or as fragments of an *otherwise* modern authorial interpretation¹.



Fig. 1
Lourenço Marques through the plans (Murgia 2024) ©Samuele-Murgia.

This production is equally connected to the *genius loci* as much as the *genius temporis*, and confirms both the duality and the identity of the city. «Creation is concentric – not linear. Invention is instantaneous. Design adjusts and polishes. Buildings grow out of each other» (Guedes 1982). Reference is made to the texts of A. Magalhães and I. Gonçalves: *Moderno Tropical. Arquitectura em Angola e Moçambique 1948-1975* (2009), and of A. Faria Ferreira: *Obras Públicas em Moçambique. Inventário da Produção Arquitectónica Executada entre 1933 e 1961* (2008) for a more comprehensive description of the importance of the Modern Movement in Mozambique, of the Ciam's influence both in architecture and city planning before the independence, and of the relative autonomy with respect to the impositions of a *português suave* architecture (both nationalist and neo-traditionalist). It is also worth remembering Italian studies on the subject, from the most recent ones by F. Vanin (2013, 2008) to the previous ones by F. Accasti and G. Ferracuti (1987). In order to correctly recreate Laurentine trend, the rich volume by A. Lobato: *Lourenço Marques, Xilunguine* published by Agência-Geral do Ultramar in Lisbon 1968 must be quoted. Although it is the *Obras Públicas* which add new information and detailed descriptions on emblematic buildings of this period, highlighting the work of the most active architects, the majority of whom were trained in Portugal ('the African generation'²), with the exception of A. d'Alpoim Miranda Guedes, who had studied at the university of Martienssen, the Witwatersrand of Johannesburg. It is always Faria Ferreira who brings out the role of Lusitanian architects within the Portuguese department in charge of public works in Mozambique. The author outlines the role of Fernando Mesquita (1916-1990), who the introduction of modern principles of architecture within the institutions is owed to. The Lusitanian architect proposed, in fact, an architectural planning inextricably linked to the con-

Fig. 2
Guedesburgo (redrawing by F. Quaggio, 2022).



text, especially in relation to weather conditions, and promoted projects for schools in rural areas (which Lisbon was not particularly in favor of). Mesquita influenced generations of professionals and was also a mentor (and a supporter) of Guedes. Upon his return to the city and fresh on his studies (1945-1949) Mesquita encouraged him towards an informed independence from the stylistic drift of the Modern Movement which was already raging in town, justifying speculations and eclecticism with a *tropical taste*³.

In the 1950's and 1960's there was something restless and extraordinary in the beautiful city built by the Portuguese in less than 50 years and that was called Lourenço Marques [...] At the time, Mozambique was a closed and ideal world in which there was only good news, inaugurations and speeches from the Império (Empire). It was a world of rumours, secrets, gossip and an ever-growing web of informers and agents, but where, in spite of everything, anything seemed possible (Guedes 1998, p. 9).

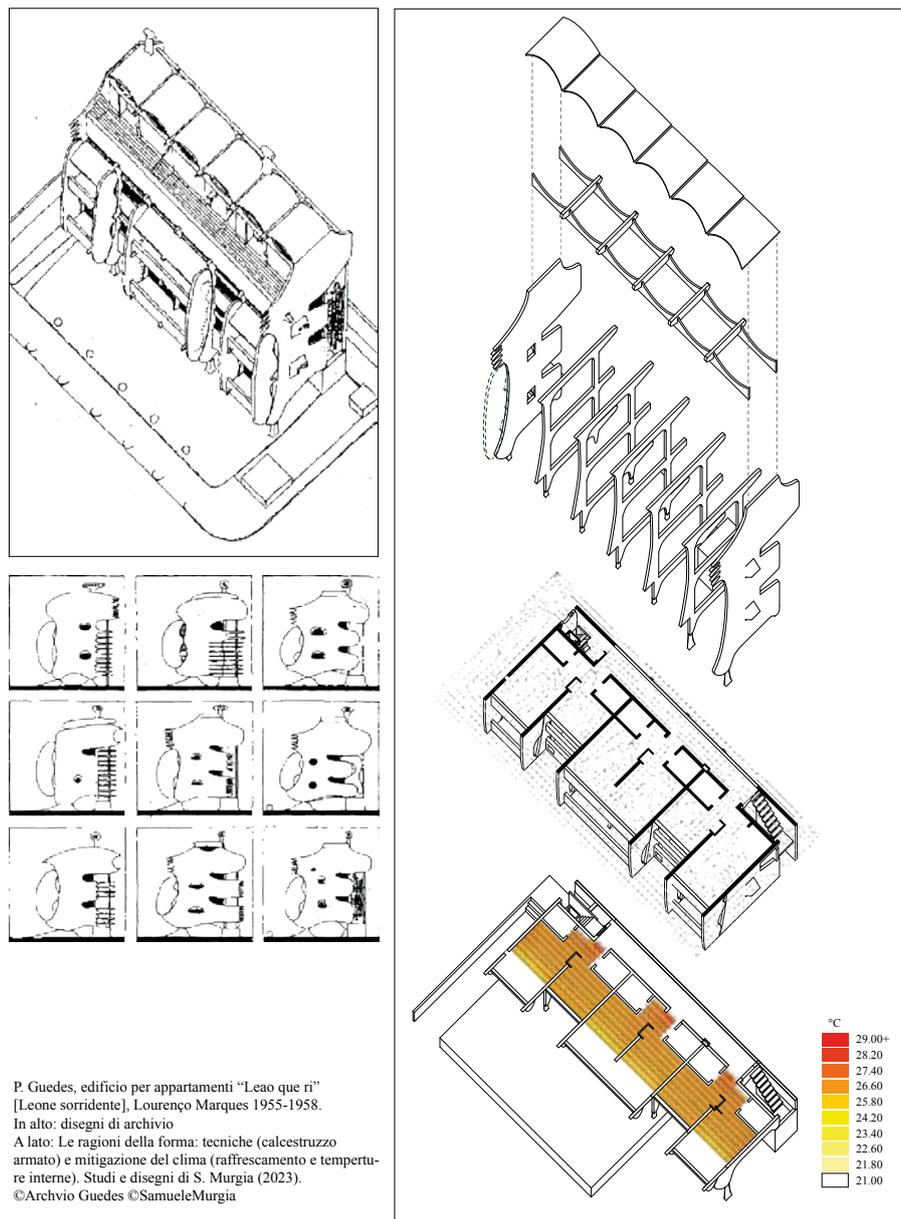
The 'city of concrete' of the Guedes years was still the one of the Plano Araújo (1887-1895), based on a Cartesian grid which tied the three most important and representative locations of the status quo at the time (the railway, the harbor and the hospital) and, with a clear mark, traced the border by means of a belt, linking the Governor's palace to Ponta Vermelha and to the train station. The 'Regime Provisório' picked up the legacy of the Araújo's plan, and in 1909 defined the contours of the new capital. Its center has been situated at the crossroads between avenida Pinheiro Chagas and avenida Castilho and a 2017 meters radius that would trace an annular separation between the city of the settlers and that of the natives. The radial strategy, initially conceived as a defensive measure, had been preserved until the last Portuguese city plan (Azevedo Plan).

Despite an intense political strategies' activity and accompanying economical deviations that impacted the capital of Mozambique, few and vague city-planning instruments have accompanied its growth and shape. In fact, the choice of a pattern characterized by long and wide tree-lined *avenidas* managed to compensate for both the expansion and the city design, fostering a polyphony of architectures which seemed to speak different languages but had a common grammar. After the Plano Araújo, the Aguiar Plan dates to 1952 and the zoning studies of the Polana and Pott areas date to the early 1960s, as well as those proposed by Mesquita. Mention should be made also of the Azevedo Plan (1965-1969), conceived to eliminate the urban discrimination in favor of neighbourhood unity (typical of informal settlements). The demographic growth (both within and outside the belt) and the political pressure (the start of the African colonies' independence movements) together with cogent sanitary requests, convinced the central Salazarian government to undertake a serious reflection on the actual status of the 'province'⁴. Azevedo changed the paradigm and, for the first time in Mozambiquan urban planning history, turned the attention to territorial scale. He recorded in 23 volumes almost one hundred chapters on as many topics and actions, both original and slavishly described. By reducing the written part to the strictly essential, a sizable number of urban planners and architects put a great effort in a vast number of designs and diagrams in order to make them universally comprehensible (in other words, not only by those knowledgeable in the trade, but also specifically accessible to the villages' heads). It is still unknown whether Guedes and the urban planner-engineer in charge Mário de Azevedo ever cooperated on the subject, however for the first time a representative of the institutions included the villages and the multiple ethnic groups of Mozambique in a masterplan.

If previous plans were only aimed at the city of the settlers⁵, this last plan conveyed visibility and *urban status* to the informal/formalized *caniços* settlement, to Guedes' *sick city*⁶. The Azevedo Plan would never be implemented: since the 1950s, communist and dissident cells found fertile ground on the very same *palhotas* (huts) of the informal city (*caniço*): Eduardo Mondlane's (1920-1969) Frente de Libertação de Moçambique was born.

For complete disclosure and conclusion, it should be noted that independence did not manage to produce structural plans until the 2000s, thanks to the work of the Luso-Mozambiquan J. Forjas (2008). The newly-born People's Republic of Mozambique, of Marxist-Leninist nature, prioritized a commendable literacy and sanitary hygiene campaign, which covered the whole country in a few years. At the same time, first President Samora Machel (1933-1986) invested a lot of effort in changing the appearance and stain of the informal city of the Laurentine capital re-naming it Maputo, and therefore confirming it as the Republic's capital city. Formalizing the former Lourenço Marques capital, to many signified not unburdening themselves from the economical dynamics that had actually legitimized it⁷. The city is in fact located in the Southern-most part of the country: for many, the natural choice should have fallen on the more central, fertile and densely populated Nampula. With regards to this, Guedes referred to Maputo as a 'schizophrenic city'⁸ because of its insane duality between the *caniços* and the *cidade de cimento*, between natives and settlers, between indigenous Mozambiquans and Luso-Mozambiquans, but also due to the stretch of confirming it as the political capital, despite the benefits (political, pro-peace process) that Nampula would have definitely guaranteed. Machel's policy, in reality, was exacerbating the toxic colonial-style dichotomy: by trying to change the appearance of informal settlements he was implicitly depriving them of value and identity. The expropriation policy of the 'city of concrete' in favor of the inhabitants of the *caniços* produced the opposite outcome: huts and shacks (*palhotas melhoradas*) were in fact immediately occupied by new internal migratory waves (rural population) while the city center's buildings were being inhabited by former residents of the *caniços*. New residents but same divisive dynamics: the belt continued and continues to this day to mark the city. At the dawn of independence, the new residents of the former white people's city didn't know how to inhabit buildings that were so different from their shacks, and ended up vandalizing those quarters so desired yet so alien. Eventually preferring to relocate again beyond the annular belt, confirmed the *alternative* and *suffering* nature of those quarters. It has taken years to bring back a *settling procedure*, by adopting the very cautions and micro-interventions advocated by Azevedo. Before the end of the millennium, thanks also to the newly created Maputo Faculty of Architecture (1986), many of the expropriated buildings had found a 'new balance': the government, after implementing a 'planned occupation' with an *ad-hoc* committee (APIE: State Property Administration) selected and matched functions-buildings and inhabitants-residences through 'merit' and roles within the *governance* of the country and city criteria. This choice ratified the transition to today's political-social context of certain construction projects and influenced the current real estate market.

The city, until the independence of the country, can be charted, therefore, as a semicircle within which a well-ordered set of lots are serviced by the same number of broad streets, perpendicular to the north-eastern coast,



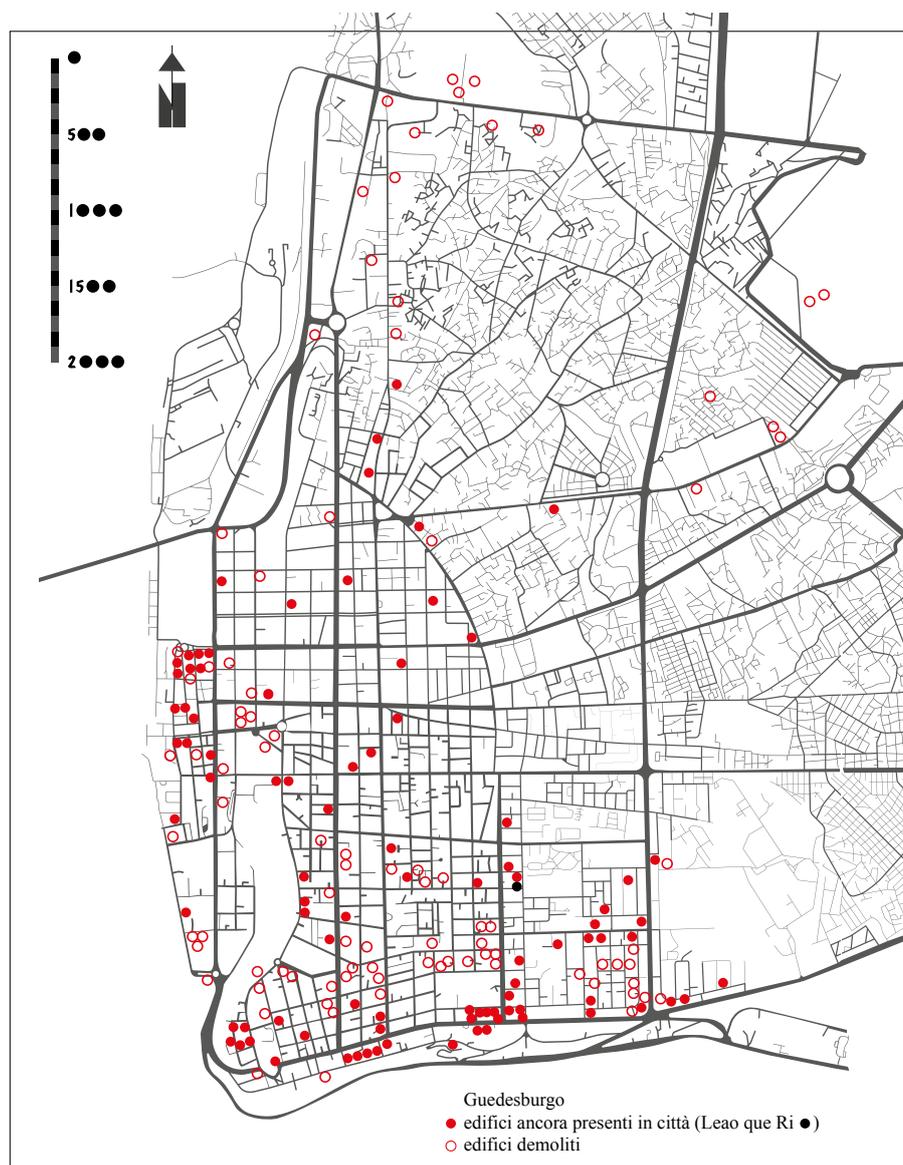
and of orthogonal *avenidas*. Within the grid there were luxurious gardens, governmental and institutional buildings. The years following the Second World War saw an important agreement between Portugal and the United Kingdom, that was asking to use the railways system to reach the mines and the harbor (which was also used by the Dutch), in exchange for customs duties and support in case of internal aggressions. The Salazarian dictatorship's isolationism had brought a progressive impoverishment to the Country which had to surrender real estate investments in its Eastern African colony to private individuals. If during the 19th century Lourenço Marques had been the Eldorado of city planners and engineers (at the beginning it was a conglomerate of huts with a vast swamp separating it from the bay), during the 20th century the circumstances favored the architects. The 'free' lots of land identified by the urban plans were available for construction: commerce and naval companies, banks and services companies invested in the overseas colony and future province, which was acquiring the profile of an «African city with a continental atmosphere» (Vanin 2008, p. 137)⁹.

In Mozambique, access to a private-style economy allowed for a certain

amount of independence from the overseas motherland which also translated into architectural freedom, enriching the city with an unusual quantity and quality of *new citizens*. Quoting Guedes: for twenty years, there would be more customers than architects in Lourenço Marques (many of whom were trained in Portugal – these are the years of F. Távora and A. Siza). During the same period, in Europe, focus was directed to the post-war reconstruction and to the CIAM's debates. If on one hand the non-participation to the international discussion (due to the dictatorship) had influenced the choice of certain Portuguese architects to emigrate, on the other hand the frantic work commitment (in Lourenço Marques, Nampula, Beira) left no time for internal debates nor for sharing ongoing experimentations. Experimentations concerning the geography of the Tropic of Capricorn (in terms of weather and techniques) and the varied provenance of customers, influenced the design of the buildings, especially in Maputo, where the vast majority of them are still present (Faria Ferreira 2008).

It's a known fact that the architectural production in an African colony is often the work of a limited group of professionals, who are culturally homogeneous (in this case, Lusitanian architects) operating in a relatively limited timeframe. It is also the result of the role assigned to the (extreme) weather conditions, of the (limited) amount of building materials and of the (basic) available techniques¹⁰. In order to understand the unusual range of architectural languages present in Lourenço Marques, in addition to these factors, it should be also taken into account the provenance of the clients (tastes and requests) who arrived in the city not only to invest but also to permanently settle and live. The absence of particularly restrictive urban planning instruments generated even a more favourable situation for so many diversified architectural designs to establish themselves in a self-regulating fashion. Within so many non-dogmatic architectural writings, Guedes' work finds permanent placement and substance (Accasti 2002, pp. 105-112).

Guedes, after the experience at Mesquita's, chose to join the practice of engineer Vitale Moffa¹¹, who will make the calculations for the first projects of the author, substantiating its plastic shapes. If on one hand the Portuguese mentor had steered the planning process of Amâncio Guedes towards an approach aimed at finding solutions for the environmental factors (temperature, ventilation, light and shade), on the other hand the Italian Moffa would put such approach in place through building techniques in an audacious synthesis of performance and expression. The peculiar plastic use of concrete provides Guedesian architectural designs with an eccentric character known as "stiloguedes"¹² and will give the city a vibrant tone and character. Out of the almost five hundred projects registered in Mozambique between 1950 and 1975, today in Maputo, some 112 have been traced and identified¹³. The office buildings and company headquarters have become ministries and institutions; banks, churches and certain schools have retained their original purpose; villas were 'adopted' by privates¹⁴; survived single-family houses, semidetached housing and the residential buildings Dragão and Prometeo are inhabited by today's metropolitan middle classes. The Zambi restaurant was the best at the time of its construction (1954) and is still the most elegant location in town, together with the Polana hotel. The Coop (*Cooperativa de construção de habitações*) houses in the former ghetto-neighbourhood of Mafalala are inhabited by 'intermediate' population (for the major part people of mixed origins), as are several apartment buildings (Torre Parque and others located in outer zones

**Fig. 4**

Guedesburg and the stilloguedes: examples of (realized) architecture. ©Arquivo Guedes, ©SamueleMurgia.

which are closer to the belt). Like anywhere else in the world, the buildings inhabited by more frail social classes are managed by the government and are in various stages of neglect. Following the success of the retrospective *Vitruvius Mozambicanus* (Lisbon 2009) and the exhibition *Pancho Guedes. A Aventura da Arquitectura, o desafio ao formalismo* (Maputo 2010), the attitude of condemnation and oblivion towards this uncomfortable architect who notably animated the cultural life of Lourenço Marques by promoting a dignified independence from Portugal, seems to have steered towards a more favorable opinion. In 2010, five of Maputo's buildings by Pancho Guedes came to the attention of the commission for the Pritzker Award (the former Saipal Bakery, the Leão que ri apartment building, Santos e Rocha offices building, Casa Avião, Casa Três girafas). At the same time, some works have been bound by national decree and a dozen entered the register of the 'representative of national heritage' works (Lage, Carrilho 2010). On the contrary, some buildings were demolished or are about to be demolished, in favor of real estate speculation.

The famous house for dr. Luz de Sousa (House of the Three giraffes, 1953), is also destined to this unfortunate fate, though being shortlisted by the Hyatt Foundation's commission.

A challenge to formalism (*o desafio ao formalismo*): the alien ingredient, for

which the *diversity* of the Guedesian language is recognized, seems to be the author's biography. Pancho Guedes in fact, was raised in Africa from the age of three and was educated at the post-Martienssen school (non-Eurocentric modernism), unlike his colleagues who were working at the same time in the city. They were coming from the Lusitanian school and because of the dictatorship destined to an orthodox architecture of nationalistic style (*Português Suave*) therefore bound to be ousted from the debate on the Modern, although its echo would nurture their forbidden fantasies. Although buildings characterized by organic geometries were deeply rooted in the architectural culture and training trends of the time, the Lusitanian architects who relocated to Mozambique experimented, for the most part, the so-called Tropical Modernism, adopting the practical British characteristics (*Tropical architecture in the humid zone* dating to 1956) and paying particular attention to Chandigarh, whose project was also joined by Fry e Drew in 1951. Guedes was getting his inspiration from Le Corbusier too: he was very interested on the corbusian subversive freedoms of figurative interpretations. Guedes was quite tepid towards the more (at the time) acclaimed projects, whose shapes to his opinion were not representative of the Swiss' architect poetic. Not ordinary are the works by Amâncio d'Alpoim Miranda Guedes and extra-ordinary is the volume of projects completed, a peculiarity that did not escape Alison Smithson's attention when in 1962, during the presentation of Guedes to Team X, renamed Lourenço Marques as 'Guedesburg' (Smithson 1991, p. 39).

It's not just building, per se. It's building worlds (Hejduk 1991)

Guedesburg is a thick grid of marks, traces, notes, images that inhabit, speak, describe, organize and interpret an artificial landscape that overlays a mix of shapes and objects of the growing African city. A language that is arbitrary, necessary (Ferreira 2013), recognizable in the multiple combinations and variations of morphemes: an itinerary that must be chased, from one object to the other, to tie together the threads of a narrative still imbued with *pathos*. The first guedesian known building to be built is from 1950 (Polygonal House, for the Barbosa family) that was followed, one year later, by the first apartment buildings (Dragão, Prometheus), the first office building (Jossub) and the family house Casa Avião (for the Leite Martins family). In one year, and before earning his license (translated in Lisbon in 1953), Pancho Guedes had started to populate the capital with objects that had designs never seen before, with coatings made of revisited *pebbles* or colourful murals of Dadaist style. *Appearances* that occupied the Laurentine grid's lots of the Aguiar Plan, abiding to the applicable laws: 5-10 meters from the border opposite to the entrance, 14 meters in depth (or 17 meters if patios are present) with overhanging objects allowed for maximum 60 cm, and an height depending on the base of the building, following a 45-degree angle. Every architect, respecting those rules, was free to execute his project to his own preference. Vanin calls it *Maputo città aperta [open city]*: a sum of houses that was being rapidly built while exploring multiple directions.

After I arrived in Lourenço Marques I learnt that Otto Barbosa wanted to build a new house. I went to him and presented him with a batch of drawings for polygonal house, based somewhat on the floor plan of the Annie House that Wright had built in California. The drawings were a success and in fifteen days the project was put out to tender (Guedes 2009, p.130).

Among the several captions of the projects in the *Vitruvius Mozambicanus*

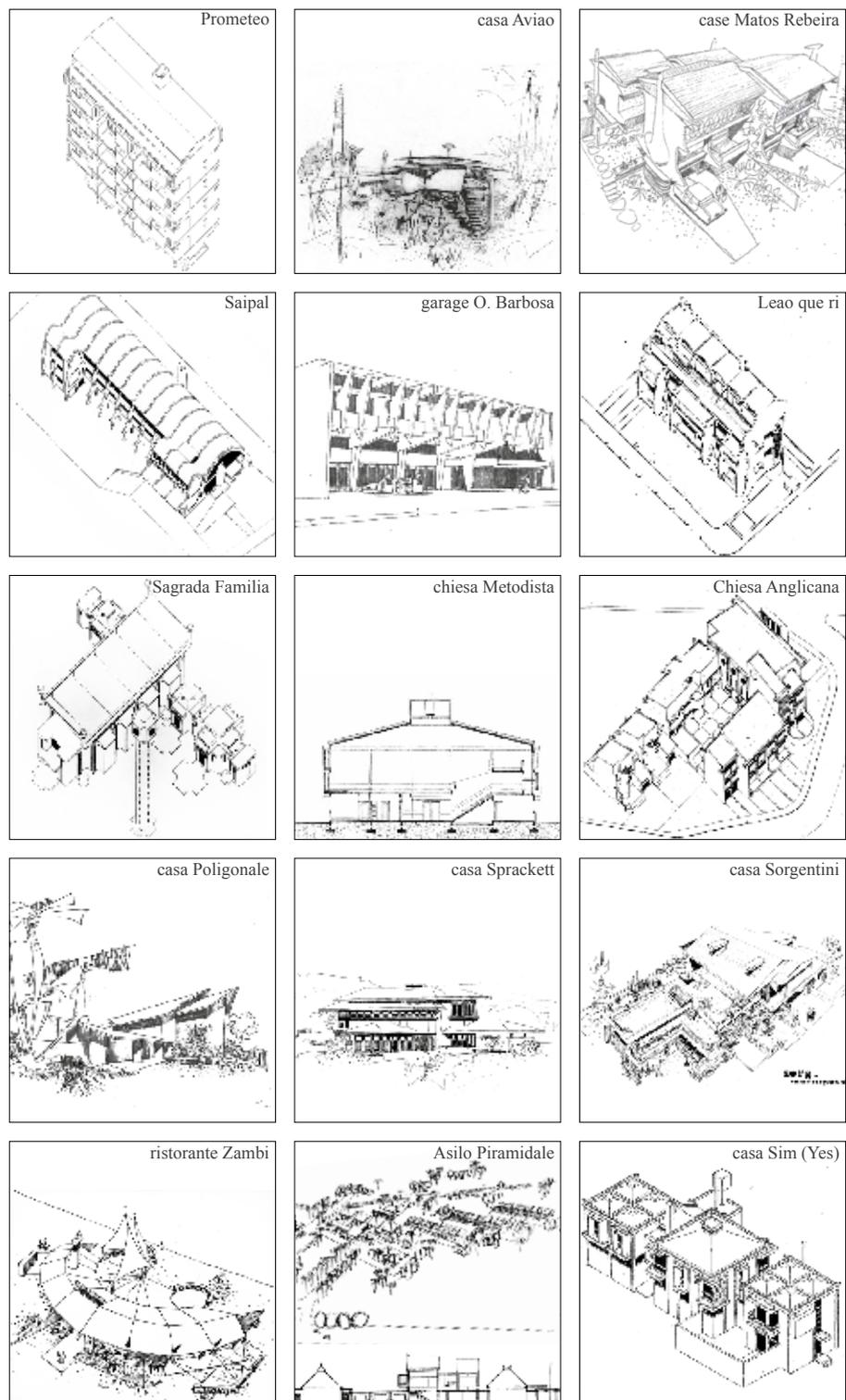
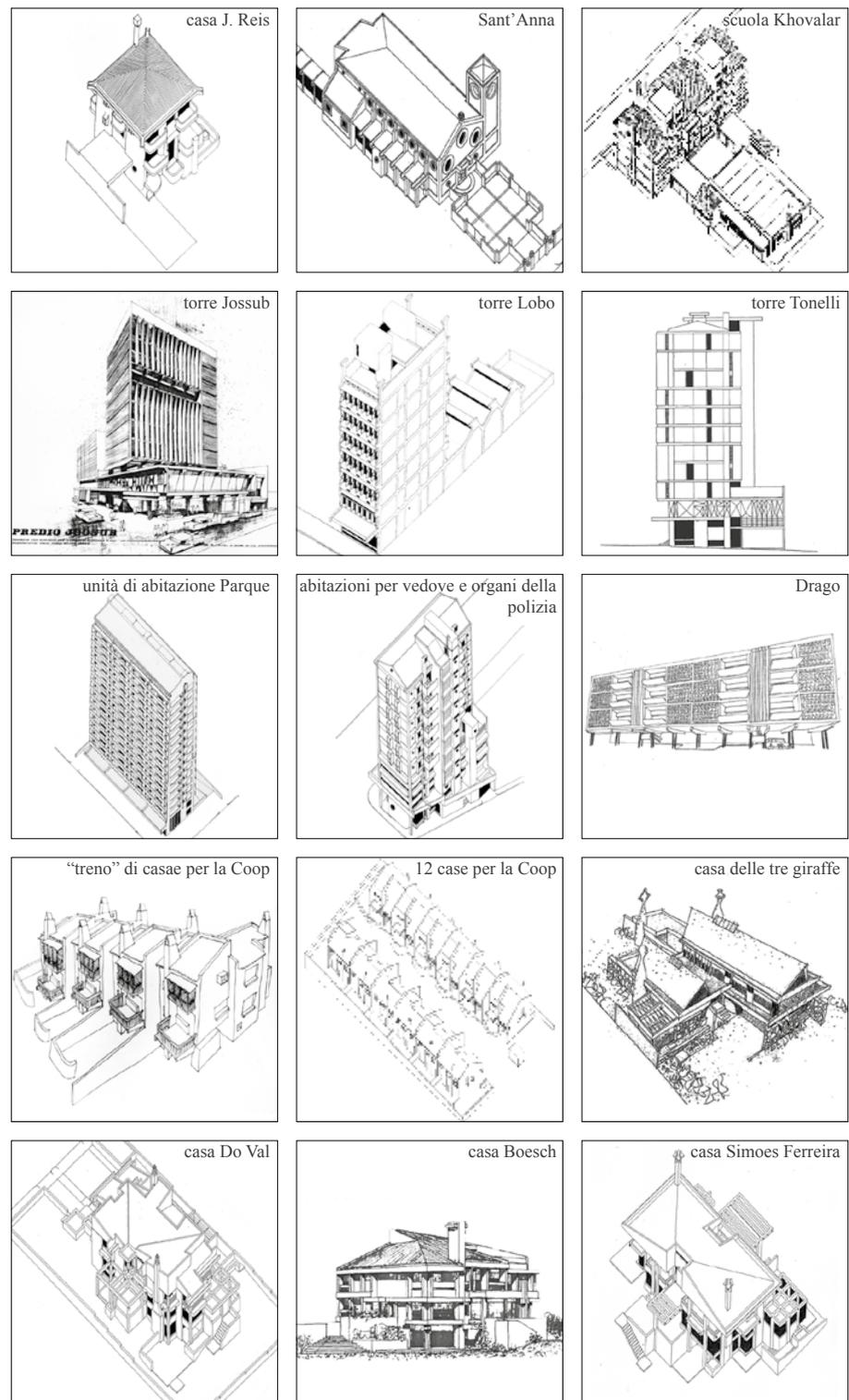


Fig. 5

Guedesburg and the stilogue-des: examples of (realized) architecture. ©Archivio Guedes, ©SamueleMurgia.

of 2009 (the catalogue of the most complete Guedesian *corpus* available to date) it is not uncommon to find descriptions of building sites, with completion and design timeframes. There we learn that a project would enter the building site phase fifteen days after the client's *placet* (to whom Guedes would submit three separate proposals), that it would take six months to realize a single-family residence and up to two years for a tower-like project. Guedes preferred to describe his work through thematic-focusing, grouping projects into families¹⁵, but if one was to go through his projects chronologically, recurring names can be found: the director of Banco Totta after the bank's headquarters will commission his single-family residence

and then maybe also an investment (town houses for renting), same for the Barbosa (first the family house, then the garage) and for the Boesch (the company's offices, the family residence, the daughter's house, a hotel), the Simões, the Lopes da Silva, the Spence, the Tonelli families and others. Guedes built customer loyalty: the author's style adapted to the function, the location, the scale, and at the same time would feed the client's imagination. The language is recognizable, it's meant to impress without flattery. Guedes is first of all his own customer, with his house in rua Navala n. 915 (twin houses, 1950) where he experiments unusual (unseen) and cheap shading systems (ceramic cylinders tightly arranged to fill the vast window openings) and through a double asymmetrical garden (one in front and one on the back) he allows cool and private spaces, moving many domestic activities in revisited 'winter gardens'. The floor plans are instead academic in nature, traceable to the modernist teachings he had just learnt through his studies. But it is with the adjacent building that Guedes experiments his most daring language: the Leão que Ri apartment building (1958), the most iconic of Guedes' body of work. Initially conceived for the family (one floor dedicated to living quarters and the atelier-workshop, four apartments to be rented out and the housekeepers quarters on the roof level), it was instead used to house the numerous community of Mozambiquans that inhabited his studio (the very same Malangatana and Honwana with their families, to name the most known ones, but also designers, artisans and workers etc.¹⁶). A classical pillar-beam system ensures the building's stability, the floorplans are simple and the choice of a layout distribution that uses external walkway provides the apartments with a double view, which translates into the precious cross-ventilation (Murgia 2024). The Lion stands on six unevenly tall pillars, clearly defining the contour of a continuous partition on which the upper part of the supports would lean on leaving an horizontal ring through which the canopies of the Guedes residence's trees garden can be seen. The pillars on the front side, shaped with a descending section (and whose bases sink into the ground highlighting the firmness of their hold) are at full length and craft a covered and shaded clearing on the façade (today the bays have been filled and are housing retail shops). If the plan layout is not innovative, the sections translate the author's imagination within the environmental constraints and architectural limitations. The long sections interpret the role of the double-façade to safeguard the apartments from the heat and direct sun radiation in favor of internal comfort (Murgia 2024): walkways on one side and loggias on the other are enclosed by winding partitions that appear to be sliding off their respective support surfaces. The precious structural overhangs (allowing for fewer sections and a lower usage of iron) end with lines of whalebone-like elements that, pointing up to the sky are also ensuring the flexing momentum balance (Murgia 2024). Exotic wall-paintings frame the Lion's neck whose head is protected by a light vaulted cover. The roof is a tray populated by volumes protected from the sun, of Corbusierian memory. The shorter sections are made of continuous brickwork and, by containing any potential deformation due to horizontal actions, they give shape to profiles that challenge the most grotesque formalism and highlight the presence of the Smiling Leão. Today, though being part of the 'national monuments' and being inhabited, is in a serious condition of neglect. The residential contracts are of a social nature and the maintenance should be guaranteed by the government, which however does not consider this a priority. The Lion, 'well-tamed' by Guedes, continues to smile at us notwithstan-

**Fig. 6**

Guedesburg and the stiloguedes: examples of (realized) architecture. ©Archivio Guedes, ©SamueleMurgia.

ding its apparently inevitable destiny as a *ruin* and as everlasting memory of the style it heralds:

family of buildings with spikes and fangs, with beams tearing into the spaces around them, made as if some parts are about to slip off and come crashing down, with convulsive walls and armoured lights (...) The plans of the Stiloguedes buildings are simple, quite straightforward and functional. It is the sections that are contorted, decorated and full of exaggerations. It is the sections and their reflections on the facades that are the architecture. They stretch the mysterious relationship between plan, section and facade and turn these works into strange apparition. (Guedes 2009, p. 79). Guedes was also an architect of the *Cooperativa de construção de ha-*

bitações and by putting his signature on several low-cost semidetached houses, he broadened his audience of European admirers. Working *pro bono* he also made his mark in the *caniços*, therefore earning the natives' respect. This was both unheard of as well as troublesome, confirming and hardening the hostility of the party scrutinizing officials (the PIDE, Portuguese Secret Services, which had a significant file on him). Guedes conquered the outskirts of the city with the Coop Houses (1955, 1956), the Methodist Wesleyan Church (1967), Santa Ana da Munhana (1966) and most of all with the Clandestine Asylum (1968, demolished).

The calculations are easily made and explain the author's 500 projects. When in 1962, aged 37 and not even ten years after graduating, he joined the Team X, he presented himself with a selection of 25 completed projects¹⁷. In the span of 20 years the Mozambiquan countrysides were populated by 'ultramarine Portuguese homes' in search of a Portuguese-African style, and the capital would put in action a relevant modernist repertoire, in line with the emerging work of Drew-Frey and Königsberger but with most uncertain outcomes, as demonstrated by the Guedesian *appearances*.

If we accept Vattimo's interpretation, that the identity is defined through the differences (Vattimo 1988), then the heterogeneity defines the identity of Lourenço Marques whose Guedesburg is a whisper.

Guedes' fantastic and magical architecture arises from the incitement of a vast network of artists and thinkers that Guedes himself had supported, drawing from multiple contexts. In the Guedesian landscape, the Modern Movement of the South African declinations of Martienssen and the Brazilian of Costa and Niemeyer, the special experimentations of Gaudi, Wright, Kahn and Nervi, all coexist. The Guedesian landscape includes the activism of the "Black Morpheus" magazine and Ulli Beier, the African Art Congresses and Franck McEwen, CIAM and Team X, and lastly the new African artists he sponsored (from Bettina Lopes to Malangatana). During the 1950s, in an Apartheid Africa from Mozambique, Rhodesia and South Africa, Guedes understood the need of producing an authentic and primordial art, 'art for authentic artists', which would herald in a personal dimension, an authorial research centered on all formal dimensions, and on the possibility for architectural elements to carry and express emotions: «I *claim for architects* the rights and liberties that painters and poets have held for so long»¹⁸. Guedes tries to master the universal motifs of the primitive, blending them with his own heterogenous architectural culture. The author, from the magazine *L'Architecture d'Aujourd'hui*, argued that architecture should not be perceived as an intellectual experience, but rather as a feeling, as an emotion (Guedes 1962). Guedes was devoted to the research of such a quality «that had been lost among architects but was able to reach a spontaneous architecture capable of magical intensity» (Guedes 2007, p. 12). The unbiased need to discover an alternative modernity was the response to an internal call, but also to an Africa that was being born in the midst of contemporaneity, to a new world in ferment and of which traces still remain in Maputo to this day, the Guedesburg of the day. Guedes is witness to and operates in an era in which architecture was open to popular culture, in which architecture without architects and architecture of fantasy were accepted. But it is also the era of complexity and multiple solutions open either to continuity and to the Modern Movement crisis, which resulted from the equation between reason and emotion (Giedion 1941).

Notes

¹ For the *Altro Moderno – Otherwise Modern*, refer to the studies by L. Semerani. As Ana Tostões remembers: «*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. Pancho witness and acts in a time when Architecture is open to popular culture, when *architecture without architects* and *architecture of fantasy* are accepted» (Tostões 2011, p. 20; italic is not of Tostões). ‘Visionary Architecture’ is the title of the renowned 1960 exhibition at MoMA.

² “The African generation”. J. Aires, F. Castro, J. Garizo do Carmo, C. Lopes, F. Mesquita, B. Ramahete, P. Sampaio, A. Soerio, J. Tinoco and others

³ «Pour certains, le mouvement moderne a rempli sa tâche, et l’architecture est entrée dans l’ère du raffinement et du classicisme. En réalité, le cancer des styles prolifère à nouveau, plus mortel et terrifiant que jamais. Mais pour nous autres, qui demeurons jour après jour dans notre totale solitude, nous savons que nous resterons toute notre vie des hors-la-loi, ou que nous nous trahirons.» (Guedes 1962, pp. 42-48).

⁴ In 1951 Mozambique’s transition from the *status* of Colony (that is a country controlled by another country) to that of Province (1951), that is a non-subordinated part of the Portuguese territory. It must be noted that in 1949 Portugal became a member of NATO, with all the conditions thereof, among which guaranteeing peoples’ freedom of self-determination. The Portuguese assimilate and are assimilated. This condition is true for both Mozambique and South Africa. The Luso-Mozambiquans are a ‘new society’ settled in Mozambique and coming from Portugal. This deep-rooted belief made the natives even more hostile, as they considered the Portuguese on one hand as usurpers of their country with ensuing identity shift, and on the other made the 1975 expulsion even more painful. Even Guedes defined himself as an exile.

⁵ With a surprising exception of the 1940s: the Munhuana-type neighborhood, an urban-planning for the city periphery.

⁶ *A cidade doente – The Sick City. Various Prescriptions for Curing Reeds Disease and the Handbook for the Self-Taught City Councillor* is a manifesto where Pancho Guedes by highlighting the extreme lack of balance of Lourenço Marques, promoted initiatives for an urban redevelopment aimed at bringing the two souls of city closer to one another. This manifesto was censored, nevertheless it was published in 1963 on the daily paper «A Tribuna» edited by J. Reis (Vaz Milheiro 2007, pp. 30-33, 66-73). Guedes will expose himself again on the issues of the *caniços* with a paper published in 1971 by Pau Oliver in *Shelter of Africa* (pp. 200-209).

⁷ Lourenço Marques-Maputo was born as an outpost to defend the colonial economic profits of the 1900s. Until 1887 the capital city was *Ilha de Moçambique, in the central region of Nampula*, waypoint for the routes that connected Portugal with India.

⁸ Guedes calls it ‘schizophrenic city’ in the manifesto *A cidade doente* (cit.).

⁹ Vanin reports a slogan from an illustrated pamphlet dated 1954 and published by the Portuguese Ministry of Tourism. The author makes an interesting reflection on the role of tourism (of its propaganda) in the creation of the Mozambican collective imagination (and myth).

¹⁰ There was no iron and steel industry in Mozambique: iron for constructions and infrastructures was imported from South Africa. There was instead an important cement factory (the CCM - *Companhia de cimento de Moçambique*) to which Guedes and Moffa would turn to for experimentations of structural prefabrication. There were no training schools nor specialized workforce. All these circumstances favoured small inventions both from technical-structural and morphologic standpoints and led Guedes to train locals in order to have specialized teams of workers that Guedes employed in all his building sites, even beyond urban and national borders (Guedes 2009, p. 272).

¹¹ Vitale Moffa (Campobasso 1910 - an. year of death) arrived in Mozambique in 1942, surviving the Nova Scotia shipwreck. Besides his collaboration with Guedes, at present nothing else is known about him.

¹² «Stiloguedes is my own most *idiosyncratic* manner, my royal family as it were. It is a family of buildings with spikes and fangs, with beams tearing into the spaces around them, made as if some parts are about to slip off and come crashing down, with convulsive walls and armoured lights» (Guedes 2009, p. 79).

¹³ During the exhibition ‘A Aventura da arquitetura, o desafio ao formalismo’ (Maputo, March-May 2010), Walter Tembe, a former student of Guedes mapped and identified 112 buildings by Amancio Guedes on behalf of the Camões Institute, which

was sponsoring the exhibition. Meanwhile another half a dozen buildings have been ‘rediscovered’ (2023).

¹⁴ Casa Salm (1965, where the Smithson were hosted in 1970), is currently the residence of the Italian ambassador, Casa Simões Ferreira (1968) is the residence of the ambassador of Finland and Casa Almiro do Vale (1966) is the residence of the ambassador of South Africa.

¹⁵ Guedes groups and talks about his buildings as if they were members of families or books, using a terminology borrowed from *De Architectura* by Vitruvius. The Guedesian families make ‘formal islands of signs’ real, their features representing the very vision of the author and, in the same fashion, changing according to the situation. (Santiago 2007, p. 113).

¹⁶ The Guedes family was anti-colonial and strived to let the entire population have some sort of rights through the only possible process at the time also known as Assimilation. The term *assimilado* referred to natives who had officially and entirely abandoned the customs and traditions of their origin, who could speak, read and write in Portuguese, were monogamist, had an occupation of some sort that was compatible with the ‘European civilization’ or that «had been acquired through lawful means, that allowed them to feed, maintain, buy clothes and provide themselves and their families with a proper abode». The Guedes family employed many people, some of whom were also offered accommodation, scholarships and opportunities to go abroad.

¹⁷ In the same period Aldo Van Eyck, founder and member of the Team X, who was seven years older than Pancho Guedes, had ‘only’ worked on the projects for the three schools of Nagele (1955-56) and the orphanage of Amsterdam (1955-60). Van Eyck wasn’t particularly drawn to Guedes although he recognized his ability to grasp the many opportunities he encountered. «Whatever space and time mean, place and occasion mean more» he said in 1963 to the students of Wits who had organized a workshop and had invited Pancho Guedes, J. Beinartjenk and Peter Smithson to participate in it too. (van Eyck 1962, p. 20).

¹⁸ Introduction statement to Guedes’ graduation thesis which he presented in Johannesburg in 1952.

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(Bologna 1973), architect, she obtained her degree from the Istituto Universitario di Architettura in Venice (IUAV) mentored by G. Carnevale, with whom she still conducts research and teaching activities. After the Berlage Institute, in 2005 she obtains a Ph.D in Architectural Composition from the Università Iuav in Venice (mentor, L. Semerani). She has extensively studied the Venetian industrial district and is involved in studies, researches and experimentations on the Project Didactics. Since 2020 she has been studying the life and work of Pancho Guedes. Dating to 2023-24 is the in-depth analysis by S. Murgia: *Oltre la forma (Beyond the style) Works of Amâncio Guedes* (mentor, E. Giani).

Alexis Tshiunza Kabeya, André Ockerman, Jonathan Nkondi
**Tropical modernism in Léopoldville and decolonization.
Case study of Lovanium by Marcel Boulengier**

Abstract

In 1949, the Belgian Congo benefited from a major development program called the ten-year plan. But the policy of segregation is strongly encouraged. Nevertheless, in 1950, architect Marcel Boulengier (1909-1976) is asked to draw a general plan for the construction of an interracial University. After careful examination of the plan, several detailed adjustments were made in order to avoid any segregation. Many Belgians rightly thought that this project would accelerate independence. The article examines how the architecture and urban planning proposed for this project built on an uninhabited site reflects decolonization and even indigenization.

Keywords

Tropical — Modernism — Decolonization — Boulengier — Léopoldville

Introduction

Although less interested in teaching the Congolese, Belgium had accepted for health needs the training of medical personnel with FOMULAC in 1926, then agricultural training with CADULAC, in 1932. These institutions, run by Catholics, eventually expanded and the need arose to create other schools, including the School of Indigenous Medical Assistants (AMI) (Malengreau 2010). The ever-increasing need eventually necessitated the expansion and relocation of institutions giving university education to the new Capital (since 1923), Leopoldville, which was under construction.

In 1949, the Belgian Congo benefited from a major development program called the ten-year plan. It comes with a significant policy change. The exploitation colony becomes a settlement colony. But the policy of segregation is strongly encouraged. The urban plan drawn up by Georges Ricquier consecrates this segregation with a neutral zone supposed to keep the natives at more than 500 meters. Several indigenous cities are designed by the Office of African Cities for blacks who needed permission to cross the Neutral Zone.

With its ideas of decolonization, the Church had an opportunity to give the new university a humanistic aspect. The church and the administration will create Lovanium, latin name inspired by the Catholic University of Louvain. The objective was to create an African university from which a local culture would emerge (Lacroix 1972, p.47). It was the start of a unique project, the oldest university in Sub-Saharan Africa (Ndaywell 2010). The article examines how the architecture and urban planning proposed for this project built on an uninhabited site reflects decolonization and even

indigenization: it was question of removing the characteristic elements of the dominating culture for those adapted to the dominated culture. Three examples are given: the auditoriums, the church and the university clinics.

A local architect with “connaissance du terrain”

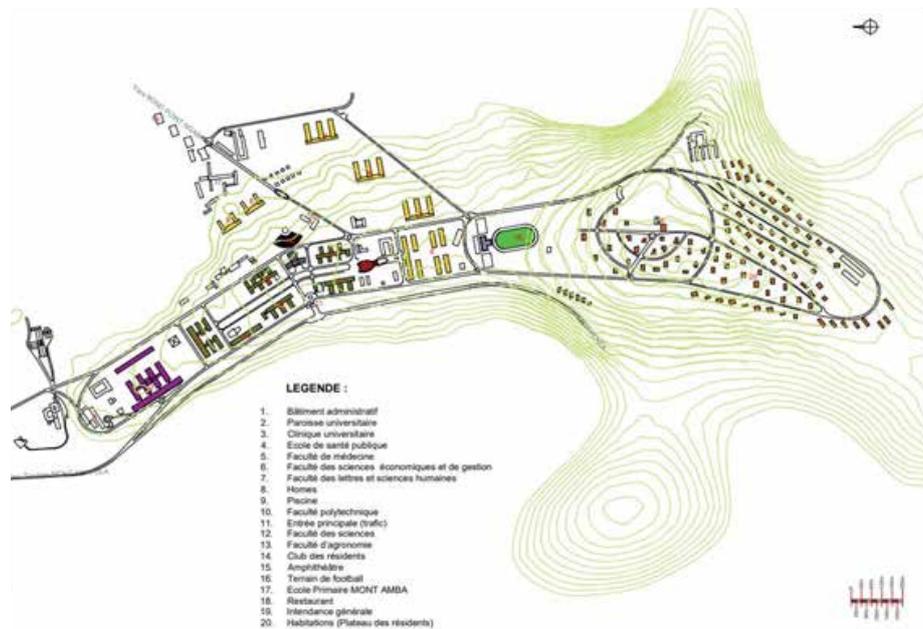
On the 29th of July 1950, the Board of Directors of Lovanium decided to ask architect Marcel Boulengier to draw a general plan for the construction of a new University. The Belgian architect Marcel Philippe Boulengier (1909-1976) was the son of a construction contractor who graduated as an architect from l’Académie des Beaux-Arts, Mons, Belgium in June 1930. After his military service he started working as an independent architect from 1932 till 1938. He entered the Army in 1939 and emigrated to Congo with his wife and two children to work as an urbanist-architect for *la force publique*. In 1950 he left the Army to start his own *Bureau d’Architecture* in Binza (Kinshasa) – one of the first to set up his own independent firm in the colony – to work on the ambitious project of the new University Campus, including a new university hospital.

M. Boulengier had created within the Belgian colonial community a solid reputation as an architect and urbanist when he realised in only two years (1947 – 1948) an impressive *Ecole militaire des cadets et sous-officiers* at Kananga (former Luluabourg). Several members of the Board, in particular Joseph Van Wing¹ and Pierre Ryckmans² were impressed by his technical and organizational talent and his ‘connaissance du terrain’. (Ndaywel 2010). In de 50s and 60s, M. Boulengier was a highly valued architect and involved in many projects of great interest³.

The tropical lay-out avoiding segregation

At first, the objective of the Board of Lovanium was to transform and enlarge the existing University Centre of Kisantu into a more comprehensive university complex. However, due to the observations made among others by the architect about size, environment and building requirements, it was obvious that a completely new construction site had to be found. Two Jesuits from the nearby mission of Kimuenza, Pol Meulenyzer and Pol De Vuyst, suggested to prospect the site of Mont Alba (Kimuenza), a hill nicely situated about twelve kilometers from the centre of Kinshasa (Gillon 1988, p.81). The site was located on a sloping terrain, quieter and less polluted than the otherwise overcrowded and dirty parts of the metropole. It took M. Boulengier a few months of very intensive work in order to present his first general lay-out plan on the 3th of August 1951. After careful examination of the plan, several detailed adjustments were made, especially to the conception of the residential neighborhood in order to avoid segregation (Ndaywell 2010, p.123)

There were many within the colonial administration and the Belgian government that were not in favor of this idea (Kestergat 1985). The question of higher education in the colonies was problematic. Many colonials were opposed to it, either for fear of seeing the Black supplant the European in the various jobs of the colony, or by the false idea they have of the intellectual capacities of the native (Malengreau 2010, p.65) . The final lay-out, presented by M. Boulengier in 1951, is based on an ancient but even so very modern principle: *universitas docentium et studentium* (Ndaywel 2010), a community of teachers and students, people who work and live together with scientific study as their common interest and where distinction between race, ethnicity, gender, religion, etc can be overcome.

**Fig. 1**

Layout of Lovanium by Boulengier, from archives of Unikin, redrawn by Nkondi, 2023.

In this conception, students, staff and teachers form a living community of learning, teaching and research, e.g. students and staff, even the Rector Magnificus, shared the same swimming pool and restaurant (Tandt 2003). Along the ridge of Mont Alba, the different sections were aligned along a clear major axis that followed the wedge-shaped line of the plateau:

- the academic buildings are located in the northern part and are surrounded with lots of open space and planted vegetation;
- the large medical complex is situated at the far north with on the one hand the faculty of medicine and on the other the university clinics;
- the southern part is a more bushy environment, reserved for housing and recreational facilities for both staff and students;
- In the heart of the lay-out, a modernist church in the shape of a fish rises up and invites the community to advance from the living area to the working area.
- In the vicinity of the church and facing the entrance stands a large administrative building (*le Rectorat*) that houses the academic hall (1200 people) and the central library.

Auditoriums, synthesis of tropical modernism

The work of a European architect in Congo in 1950 was indeed particularly challenging. He had to be prepared to dynamically adapt his plans, and involve local communities and techniques, as opposed to imposing a static master plan based on Western ideas. Many architects who build in Congo have chosen modernism adapted to tropical architecture as solution. The auditoriums with a selection of materials, colours, brutalistic language are a synthesis of what was the tropical architecture in Léopoldville in 1950'. The architect managed not only the issue of occultation of the sun but also that of ventilation, both in the building of each faculty and in the distance between each wing and the different buildings.

The auditoriums have an imposing architectural language with a rhythmic play of claustra curtains, quarry stone with protruding joints and ochre stucco. Claustra are widely used by Boulengier as a sun protection method and in an intelligent manner. Sometimes the ventilating effect of claustra becomes fumbled due to the fact that the material stores heat.



Fig. 2
The Church Notre-Dame de Sagesse and auditoriums in 50s.
Courtesy of Roland Minnaert.

Furthermore, the little holes might restrict the view of the outside world and could thus enhance claustrophobic feeling. The use of *claustra* and *brise soleil* by Boulengier shows his technical mastery. A constant fresh breeze is created through the practice of natural aeration and transverse ventilation. Vents and windows are placed on two sides and in the right constellation, influx low, outflow high.

Claustras are sculpturally designed in a vernacular way and executed in precast concrete. Boulengier deliberately looked for one African formal language, using the *brise-soleils* as a sculptural design. His modernism does not appear ornamentless.

Tropical architecture was an appropriate architectural response because it took up solutions known for millennia in the tropics using modernist language. The hybrid result could appeal to both Europeans and natives and be part of a dual architectural tradition.

Notre-Dame de la Sagesse Church

Marcel Boulengier is asked to design the centrally located church in 1956, one year after Le Corbusier finishes off his chapel in Ronchamp. Boulengier draws a plan based on the form of a fish – an old Christian symbol – with a curved sloping roof and the sacristy hidden in the tail fins of the fish. The choice of constructing an oval church as a place of encounter around an altar is a bold one, nearly ten years before the Catholic Church decides to bring the altar forward, away from the choir. Dequeker Paul explained this by the the politics of inculturation, gothic and roman styles being too European (Dequeker 1984).

When designing the church, M Boulengier choose to drop all concrete piles, detaching them from the roof slab. A metal framework, resting on top of the piles, supports this inclined roof slab. A large open space of 4m high between the church ceiling and the underside of the roof slab serves for free influx of air currents (and light) through the vent openings of the *claustra*. This space can be reached by a ladder made of steel bars in the bell tower. A concrete gallery of 3 m wide allows the parish caretaker to walk around the inside perimeter of the church and to replace the square elements of the ceiling and the lights that illuminate the inside of the church as little stars. Quite a remarkable constructive idea in 1957.



Fig. 3
An Auditorium, photo Nkondi,
2023.

The northern facade of the church is decorated by a large relief in aluchromie (..), representing an abstract aerial view of a *cité populaire* (Matonge). It's a monumental sculpture made by the award-winning Belgian artist Paul van Gysegem⁴ who wanted to emphasize that this place has been designed to welcome the whole population. The design in aluchromie was originally in different shades of ocher and sand. Its abstract lining and playful geometrical forms reflects in a way the whole lay-out of the campus. It has recently been painted, giving the dove figure a more prominent role.

The entrance of the church is a stylisch three-part structure with an angular pediment, wrought-iron bronze-coloured doors and three aluchromic plates in blueish tones by Paul van Gysegem and Roland Monteyne representing Notre Dame de la Sagesse and biblical figures. The same angular canopy has been used by the architect to decorate other buildings, in particular the university clinics⁵.

The poetica of the architectural language that shapes this church, with its curved forms, its meticulous design of claustra and vents, its elegant colonnades (inside and outside), is impressive to anyone visiting this place for worshipping, meeting and singing. Today, the Bantu liturgy fills the building with its colorful and warm offices, where sung and danced prayers alternate. And indeed, the famous choral of Notre Dame de la Sagesse has been able to enjoy the excellent acoustics of this building for more than 70 years and establish its beauty worldwide.

The indoor of the church is illuminated by a delicate play of patterns. Incoming sunlight is filtered by small stained glass windows and by stone curtains of claustra, thus creating a very pleasant indoor climate. Even when the outside temperature soars above 30°C, the inside stays cool.



Fig. 4
Notre-Dame de la sagesse Church, with a representation of the indigenous city of Matonge, photo by Nkondi, 2023.

This is partly due to the metal framework that holds up the roof creating a large ventilated area between the roof and the ceiling. Students and staff, whose homes and villas are situated in the southern part, approach the Campus from the rear of the church, which tail fins slightly sink into the ground to open up towards the faculty buildings. In a way, the architectural lay-out invites those who live on the Campus to walk past this spiritual meeting place in their search for more wisdom.

The university clinics

Building a hospital is a complex matter. Firstly, because it provides medical, nursing and paramedical care, the diversity of which has to follow the extraordinary development of medical sciences and the application of cutting-edge technologies to the hospital world. And secondly, because it should take into account new insights in human sciences and cultural and psychological phenomena. Marcel Boulengier gained an ‘indisputable reputation’ as an expert in the organisation of hospitals by the way he designed the university clinic in Kinshasa and the E.M.I.⁶

Boulengier’s expertise was based on the fact that in a tropical environment one had to rethink completely the architectural models for building and organising a hospital, still currently used in Europe and the USA during the 50s. The main reason for this must be found in the way Boulengier, in collaboration with prof. med. Gérard Van der Schueren, adapted his design to specific local needs (population, climate and medical needs)⁷.

The constructing of the clinics was first given to Otraco. They had the finances, the technical abilities and the man power. But the Board of Lovanium rejected the initial plans made by the engineers of Otraco (de Broyer, Buissé, Delire) and asked Boulengier in 1956 (Board meeting 18.08.56, Archives UCL) to study and (re)design this complex building.



Fig. 5
University clinics. Northern facade of the hospital with large mosaics ordered by Gillon. Photo: Nkondi, 2023.

Before defining the new plans, the team formed by Gillon (architects, doctors, engineers) thought long and hard about the new program needs to be integrated into the works, namely:

- human values: availability, benevolence, sense of welcome and collegiality;
- academic values: excellence, creation of knowledge (research), education and professional training;
- a more holistic and interdisciplinary approach, necessary in the Congo because of the dominant presence of polypathology;
- the creation of a calm and pleasant indoor climate (heat, light, etc) in interaction with outside courtyards.

When Mgr Gillon was invited by the Americans, Boulengier and Van der Schueren accompanied him to visit health care projects in the USA (Archives KULeuven). Once returned, the main architectural concept was clearly defined and was a revolutionary one: the idea of placing architecture at the service of the patient. The hospital had to fit around the objectives and characteristics of the 3 H: *High technicality*, *Hospital hygiene*, *Humanization*. The architect's watchword was the creation of a friendly and warm space in which all patients and staff, whether white or black, could feel good. Alongside care, the hospital provides a series of other functions (administrative, technical, and logistical) and hotel services, involving the presence of a multitude of professionals. The synergy between all, with the common objective of excellence in the service of the suffering human person, determines the quality of this type of social and non-commercial organization that is the hospital.

The new university clinics were constructed in several stages during 1958 – 1965 but the overall conceptual site strategy was marked from the beginning by Boulengier's design. Utilizing the existing topography, the architect designed footbridges and outside stairs thus connecting the three different levels and allowing interaction with the large courtyards.

Very innovative is the long overarching frontal structure that serves as a visual barrier between the more public program and the more private, in-patient facilities. This creates a gradual progression from the entrance with its playful canopies to the more formal volumes at the interior of the site. Compared to the big block structures used in Europe in the 50s and 60s, these university clinics have a design that is open and more horizontally oriented. There is plenty exposure to filtered sunlight. Courtyards with bushy vegetation and outdoor pathways enhance the interaction with nature. The organization chart of the university clinics allows the diversification of service areas and comfortable conversation areas, for patients waiting for consultation or exam results. This is perhaps the concrete physical image of this new understanding of hospital facilities, opposed to the compact labyrinthine system, dominant at that time, with tight undifferentiated corridors, and interior waiting areas, rarely equipped with a TV and where patients are concentrated, some-times without proper regard for necessary air renewal or a hygienic distance. Circulation and waiting areas are open to family visitors who, from the Congolese point of view, take on part of the care.

Conclusion

The University Campus of Kinshasa as it was designed by the architect Marcel Boulengier from 1951 onwards and was built under the mastership of Luc Gillon, represents a historical, cultural and architectural heritage of exceptional quality and it is hard to find, certainly in Africa, any other educational/medical complex that can equal its beauty and appearance. It combines *la science de la haute technicité, la beauté de l'art architectural et la philosophie de l'humain* of a modern humanistic approach in architecture. Furthermore, it reveals to architects, working today in Congo and in Belgium, a whole vector of opportunities when taking into consideration durability, heat protection and form vs function. Boulengier died 50 years ago, his work hasn't.

Opened the 12th October 1954 with 33 students (Nkondi 2022), the Campus of the University of Kinshasa (UNIKIN) has been the home of many thousands of Congolese students – too many nowadays considering the initial scale and lay-out – and has suffered a lot from the lack of maintenance. But for everyone working in or visiting this vast complex of buildings at, what is commonly known as *la colline inspirée*, it is obvious that this place is unique for its architectural lay-out, its technicality, its atmosphere and beauty.

The oldest university in Sub-Saharan Africa and that it has been attended by famous scholars, politicians and pioneers that shaped the RDC life probably contributed to the independence in 1960 as many feared. Other institutes will be erected in the 1960s but none of them will be as Lovanium, now the University of Kinshasa.

Notes

¹ Joseph Van Wing (1884 – 1970) was a Belgian Jesuit priest with a strong interest in education. In 1939 he was appointed superior of the Jesuits of the whole colonial region. From 1948 onwards he was a member of the Belgian colonial council and of the *Conseil d'Administration de Lovanium*. His competence was much appreciated and his opinions are listened to. In *Le Congo Dérailé* (1951) he defended the principle of indigenous property against the economic interests of the colonial power. In 1970 his body is repatriated to Kisantu to be buried there in the cathedral Notre-Dame-des-Sept-Douleurs.

² Pierre Ryckmans (1891 - 1959) was a Belgian colonial official and governor-general of the Belgian Congo from 1934 to 1946.

³ A clear reference to Boulengier's fame is to be found in a lettre written by Justin Bomboko, *Ministre des Affaires Etrangères et du Commerce Extérieur* to Paul Henri Spaak, 9 juin 1962 (In: PH Spaak, archives.eui.eu/files/documents/13446) where Boulengier is qualified as “technicien belge de grande valeur”. (Boulengier also designed the new office building of the *Banque Nationale du Congo-Belge et Ruanda-Urundi* (1957), the A.M.I. (1959), several residential houses (Parc Joly, former Parc Hembise) and participated as an architect in the construction of the *Palais de la Nation* (from 1957 onwards) with Lambrichs. In 1956, Houyoux-Diongre, *architecte en chef*, commends to assign five architects to construct the palaces of the colonial section of the World Expo 1958 in Brussels: Ricquier (Palais), Strebelle (Energie, Transports), Boulengier (Urbanisme et Habitation).

⁴ Paul van Gysegem is a Belgian sculptor, painter, graphic artist and jazz musician. He designed the aluchromies, Walter De Buck produced them and they were set in place in 1963 by Van Gysegem and a bunch of Congolese craftsmen.

⁵ It's a pity that the Intendance Générale decided to build the fenced memorial for Mgr Tharcisse Tshibangu so close to the church, spoiling a bit the inspiring view from behind where the semi-raised huge plastered cross, tone on tone, has a dominant position. Perhaps the initial choice to put no cross on the front but only at the rear was not that well understood.

⁶ Later, during the 60s, when new cliniques had to be build in Belgium (Saint-Luc Woluwé, ULiège, Mons) Marcel Boulengier was hired as an expert for the architectural organisation (Haxhe, 2001, pp 43-44, Woitrin, 1987).

⁷ Gérard Van der Schueren was membre of the Board of Administration of Lovanium. The archives of Van der Schueren, containing 17 plans by Boulengier for the cliniques, are kept at the archives of KULeuven (B).

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Lucio Valerio Barbera
Participation and town design in the construction of the contemporary city. An African experience: Togo (1976-78)*

Abstract

The text recalls and describes, in the form of a dialogue, the integrated design experience of study and planning in Togo by Lucio Barbera and the design firm ProgReS, – which he directed – during the 1970s. The dialogue illustrates the expectations of the local institutional clients as well as the research and design method adopted. The text also testifies to the richness of the human and professional relationships for which it is necessary to be prepared in order to complete a work of such commitment: the territorial plan of the Maritime Region of Togo, the urban plan of the State Capital, Lomé, and that of the six provincial capitals constituted an attempt to endow the young African state with a unified document of territorial reorganization to deal with the problems and prospects of modernity. What matters, it is finally argued, is that the study of urban settlements in developing continents be recognized as an indispensable tool for understanding and addressing everywhere in the world, the problems of urbanized cities and territories.

Keywords

Togo — Lomé — Immigration — Self-Construction — Inhabit

Anna Irene Del Monaco: *In your curriculum vitae as an architect, as part of an intense professional activity that has taken place in the extended Mediterranean and in Africa since the mid-1960s, your experience in Togo around 1976 stands out. What was the occasion of the assignment? How did it unfold and how was the work in the field and from Rome set up?*

Lucio Valerio Barbera: The events you refer to took place in the mid-1970s (1976-78). In those years I was a director of ProgReS - S.T.R. S.P.A, a planning company built around my resume, supported by a financial group specializing in construction and infrastructure design; a large engineering company, Technital S.p.a. of Verona, which is still active today, was part of that group, but it did not have specific architectural and urban planning expertise within it. But also, part of the same group was a company that dealt with economic planning, Technosynthesis, headed by a valiant engineer, Giuliano Cannata, who often associated himself with us at ProgReS, depending on the assignments, and who used qualified consultants for his work because of consolidated experience, or young emerging personalities. Prominent among them in the mid-1970s was a young Neapolitan scholar, Enzo Caputo, of strong social sensitivity and undoubted intellectual audacity. He was a few years younger than me. He had married a young woman from the Sebregondi family about whom, at that time, some other young people roughly my age – I was then in my early forties – who were militating in alternative left-wing groups were better known. Today referring to that era one would say they were revolutionaries, certainly *extra-parliamentarians*. Let's say: they were very politically engaged intellectuals.



Fig. 1
Togo, the Gulf of Guinea, the cities of Togo: Dapaon, Lama Kara, Sokode, Akpame, Kpalime, Aneho, Lomé.

Or that “history” that lets not only politicians, strategists, leaders speak, but also myths, monuments, natural and human, their insoluble mystery, traditions, all placed on the same level, each worthy of attention because they are the fruit of human cares and fears and torment? Architects, we naturally hung for Herodotus, but the discussion did not have a conclusion; it lasted among us in the facts. Perhaps it still lasts. But we certainly began with the journey, understood as the supreme statement of ignorance and the will to knowledge – don’t laugh. Throughout our work we considered ourselves fortunate followers of Herodotus. Unworthy, incapable, untidy. Yes, you can laugh now. We can laugh together, come on.

AIDM: Ah, what are you saying, professor? As you were talking, I was reminded of the work of Leo Frobenius, the controversial and great German historian of African cultures; after all, in Italy his work had a “progressive” baptism; if I am not mistaken, his book “Monumenta Africana” was first published in Italy – in a very critical period, between 1943 and 1945 – by Nuove Edizioni Ivrea (by Adriano Olivetti, Luciano Foà and Bobi Bazlen). A publishing house that after the war, in 1946, was transformed into Edizioni Comunità. Frobenius, then, was a true emulator of Herodotus. We could say of him, Erodotos africanus. How many journeys did he undertake to learn about Africa? And how many books to illustrate, as you say, “its myths, its monuments, natural and human, its insoluble mystery”? It is the creative mystery of African civilizations – and of every true civilization – that Frobenius attributes not to a proceeding guided by nascent rationality toward superior human reason, but to a “dark and profound force” that he calls “moved knowledge,” paideuma. Ouch! Professor: you have set in motion the inexorable mechanism of my searches for coincidences. Now I was thinking of a phrase that Aby Warburg, the revolutionary German art critic, traced in his notes: “why does fate assign to creative man the spheres of eternal restlessness...?”

LVB: Frobenius, *Erodotos Africanus* you call him, I like that. Of course, in our – your and my – knowledge of Africa Frobenius has something to do with it; and how! Certainly, he will come forward on his own, in our dialogue. But now let us return with some order to the study and planning experience I had the opportunity to have with my group in Togo. For Togo. Let us be led by the hand, as we were then, by Enzo Caputo.

In the mid-1970s he had been chosen as a consultant – if I remember correctly – by a UN institution whose name I do not remember; and then – this seems certain to me – by the Directorate of Development Cooperation of the Italian Ministry of Foreign Affairs, which – according to its statutory purposes – had among its tasks, also that of promoting solidary but equal relations with African states, especially with those of more recent formation and weaker from the economic point of view. Togo was among them as a small and young independent country located in the middle of the northern coast of the Gulf of Guinea, on which Liberia, Côte d’Ivoire, Gana, Togo precisely, Benin, and Nigeria face each other in sequence from West to East. Enzo Caputo was supposed to liaise with the Togolese government and administrations by helping to outline the general directions of a development plan for the capital city of Lomé and its sea-facing province, the Maritime Province.

Enzo Caputo in that assignment represented, or called in the Technosynesis Study Society, which I have already mentioned. His initial consulting assignment was crucial, because it could have resulted in a full-fledged urban and land-use planning assignment for the Master Plan of Lomé, and,

in prospect, of Togo's other provincial capitals and their territory. For the time being, however, in order for Enzo Caputo's commitment in Togo not to be in vain, it was necessary for the Italian study group that he officially represented and that scientifically supported his commitment, to produce development guidelines for Togo's capital city; guidelines that were convincing, innovative and, above all, adapted to the fragilities of the economy and the specificities of the culture of a country that is not large, but very complex, such as Togo.

Togo, in fact, is a narrow strip of territory – width, on the East-West axis, averaging about eighty kilometers – maximum 130 – but more than 550 kilometers deep on the South-North axis. From the littoral palm groves of the coast, the territory of the Republic of Togo, pointing northward, penetrates all the climatic and ethnic belts that follow one another between the Ocean and the Sahel: from the coastal lagoon waters to the rainforest, to the savannah, almost at the edge of the semi-desert expanses that cross the continent from west to east. To study Togo by traversing it from south to north is, therefore, tantamount to drilling a “core drilling” – excuse the construction-site term – rather a “deep core drilling” representative of much of the characteristics of the vast African territory that stretches between the Atlantic and the Red Sea following, according to longitude, the southern edge of the Sahara, the Sahel, that is, that continental zone that by geographers, is also called Sudan, the great Sudan, far broader than the already very broad Nilotic state that takes this name . . . and which we, you and I, unworthy followers of Herodotus, have been fortunate enough to know quite well....

But now back to Togo. The capital, Lomé, is on the sea, as are almost all the capitals in that part of the world, because from the sea the Europeans came, docked on the coast and immediately built their forts from which they ruled the requisitioning – we want to call it that – of natural goods and, above all, of men and women, of slaves. Local populations flocked around the European port and fort out of curiosity, interest or violent compulsion: Lagos, Porto Novo, Lomé, Accra, Abijian, from east to west, from Nigeria to Côte d'Ivoire, the major cities of the Guinean states lined the Atlantic coast insisting on colonialist port bases. Even Liberia's capital, Monrovia, was founded on a Portuguese colonial base, Cabo Mesurado.

Lomé at the time of our work in Togo, had a population of about 300,000, but was growing at a rate of population increase that would bring it in about ten years to a million inhabitants in a country that had a couple of million in all at that time. Enzo Caputo's initial assignment, obtained from Togo's Ministry of Plan, if I remember correctly, was not to take an interest in the capital's plan, but to help implement the 1976-80 five-year investment plan geared particularly to agricultural development. But I think Enzo Caputo understood well that without governing the massive growth of Lomé – which was draining the most fertile countryside of inhabitants – any development plan would be in vain. This realization, in my opinion, led him to emphasize to the local government – and perhaps to some international bodies – the need to immediately address the problem of the development of Togo's capital and its region, perhaps the most interesting from the point of view of production and food, but also-in the future... perhaps-industrial. Evidently, he convinced all the authorities; for the success of the city study he obtained from Technosynthesis, the study company to which he was, or became, a permanent consultant, that he could “enlist” an architect-urbanist, whom he trusted.

Techosynthesis, as I told you, had no architects in its ranks. The work began with this hand-sketched drawing of mine (Fig. 1); it is a general idea sketched on one of the centers we were asked to study, Tabligbo, which was also subject to significant, though certainly minor, immigration from the innermost areas. The local government had been given a small but important budget with which to begin to do something about the masses arriving in the Maritime Region. Tabligbo, not far from Lomé was presented to us as an experimental sample. A classic Examination Theme, I would say. It was relatively easy to convince them of our idea: social housing was not to be built as it was then in France, or in Europe in general.

The limited affordability would have allowed only a few, very few families to be housed. Instead, if they had acquired vast land the land even in the Maritime Region (in those days it cost very little and there were still vast expanses of public land) and if they had then infrastructured it in an essential way (primarily a simple sewage system and drinking water distribution points), designed its settlement development simple, but complete and extendable over time, and, finally, had they helped the immigrants to self-build their dwellings according to their own uses, but with better materials and some more efficient techniques – especially for foundations and roofing – the initiative would have involved a large number of inhabitants, – the urban majority you would say quoting Abdoumalig Simone – with significantly lower costs per dwelling. In addition, the new inhabitants, involved in defining their own living space, would have better overcome the impact of being uprooted from their place and relocated to an unfamiliar or completely unfamiliar environment.

In the Italian school of architecture, particularly in the Roman school, the direct participation of local cultures and knowledge in defining the living form of the city is still felt – I hope – as a fundamental need. After World War II, when the growth of cities had been accelerated not only by a rapid industrial upswing but also by migrations due to the dramatic outcome of wartime conflicts and brought with it harsh social conflicts, Giovannoni's *Environmentalism* (Ambientismo) had already been grafted onto the social and cultural concern of Quaroni's and De Carlo's generation for respect for the identity roots of the communities to be settled or re-settled; an attention and respect that animated the basic and detailed choices of every project of those masters of ours and that today should return to dominate the thought and initiative of those of us architects who intend to deal with cities. And this is true by now – I am very convinced of this – not only for those who work in the less fortunate areas of the world, but also for those who work in areas like ours, which consider themselves more fortunate and stable, but which are nevertheless within the immense flow of changes that seem destined – by now – to inexorably overcome every boundary, even the most resistant. We see this every day.

But going back to Togo, Enzo Caputo, – on the basis of the working hypothesis I had drawn up with the ProgReS group for Tabligbo, a minor center in the Maritime region, accompanied by cost hypotheses for the necessary public interventions and a social and cultural approach of which Enzo Caputo himself had been the fundamental coordinator – was able to obtain not only the approval of our line as far as the Plan of the Maritime Region was concerned, but also the commission for the Master Plan of Lomé and of all the provincial capitals of Togo. So, basically ... we found ourselves planning ... all of Togo, from North to South, in all its different climatic, naturalistic, cultural situations.

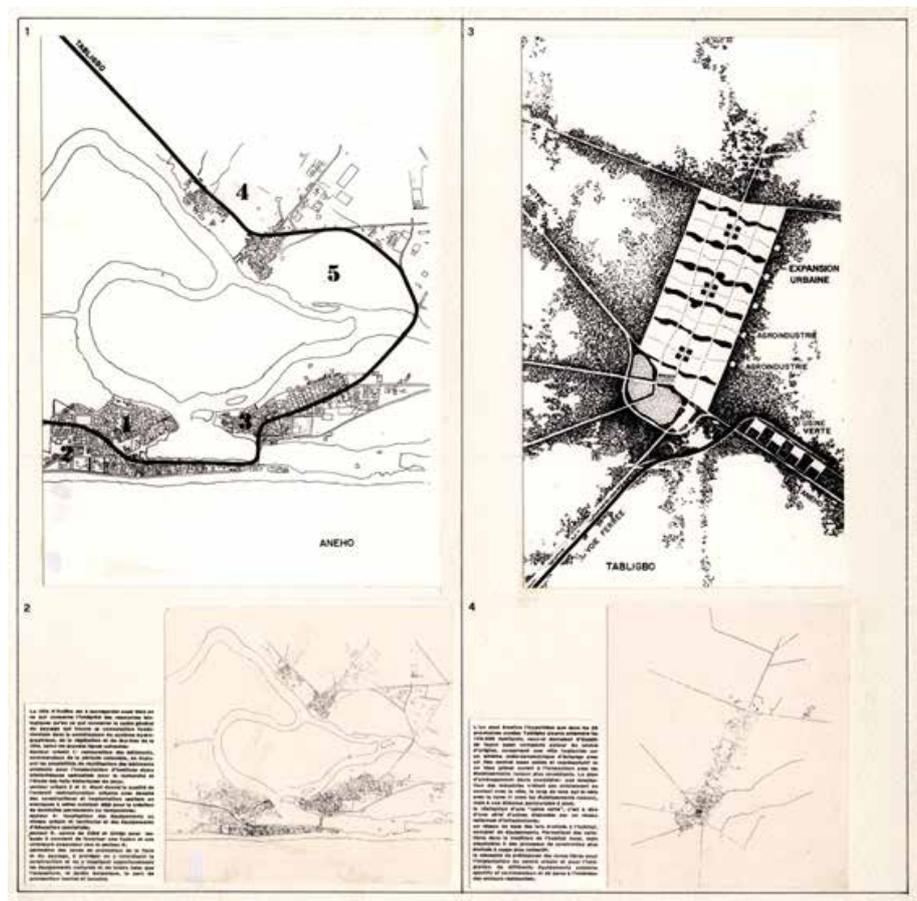


Fig. 2

Hand drawing by Lucio Barbera. General idea sketched on one of the urban centers analyzed, Tabligbo, subject to significant, but certainly minor (compared to Lomé), immigration from the innermost areas. Spatial settlement pattern.

Lomé, considering its size, the speed of its growth and the fact that its actual urban body straddles the border between Togo and Ghana, represented, of course the most complex and articulated case. As always – as is also the case in Italy – I don't think our plan has really been implemented. But looking on Google Maps at what has happened since then, I see that the growth of the city, at least in part, has happened according to what we had envisaged by convincing even the authorities – local and international – to choose the intervention program I have already told you about, based on effective, but very simple infrastructuring and substantial assistance to the self-building work of the new immigrants. We had soon realized that around Lomé, in the Northwest, there was a large expanse of public land, land requisitioned – in colonial times – to increase cocoa cultivation, but no longer – or never – used for this purpose. It was to be expected that most immigrants – most of the future *urban majority* you would say – would settle where there was great availability of public land, without having to bargain or clash with the interests of one or more local chiefs.

The essential infrastructure system of our Plan included a few roads, regularly spaced considering the average size of the *courtyard-dwellings* that represented the most common settlement type throughout the country. Essential sewer conduits were planned along the streets. Water was distributed by a system of fountains in public places regularly distributed throughout the settlement grid (as had been done in working-class neighborhoods in Morocco in the 1930s). But the most important part of the plan was the proposal to establish a technical assistance service for the future inhabitants, which would also provide them with building materials, especially those intended for an embryonic *domestic* plant system, and help them *rationalize* the traditional construction methods still the *natural* heri-

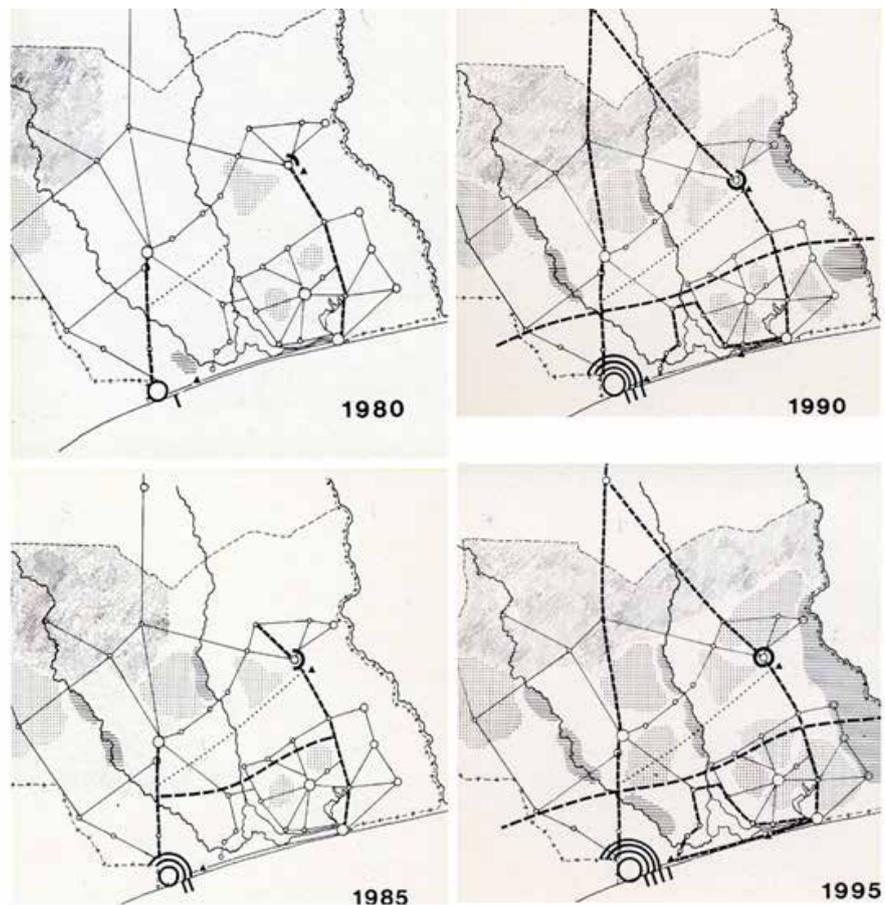


Fig. 3
Outline of the Togo Maritime Region: projection to 1995.

tage of each group, each family. From the point of view of the footprint on the ground, this was a very simple settlement mesh (Fig. 3 a-b). This is a drawing by Luisa Anversa (Fig. 4), our regretted colleague and friend, also a student of Ludovico Quaroni, whom I involved in the work because of her valuable experience in the field of spontaneous typologies. Typological elements are hinted at in the drawing, but these are only to be understood as indications. The actual choices within each *lot-courtyard-dwelling* were left to the decisions and social culture of the new inhabitants-self-builders and the approach that the technical assistance protagonists would want to give to the new dwellings taking into account the needs of each group, ethnicity, community.

It was a job that involved us a lot; in addition to Lomé and the Maritime Region with its smaller centers, we studied and planned all the provincial capitals, as I already told you. As we went up from the Gulf of Guinea toward the Sahel, slowly but surely, everything changed. Along the sea, a large and thick coconut palm grove crowned the low dunes, defended against the sun and yielded precious fruit. In the outline of the Maritime Region Plan (which had 1990 as its maximum horizon for implementation) (Fig 2), one notices first the road parallel to the coast, linking Ghana to Benin, through the most beautiful and pleasant area of the former Slave Coast: the Togo coast, in fact. Along the beach under the very long palm groves stood palm leaf villages, fenced off, enclosed; the huts, inside were empty for much of the year. They were the villages of fishermen. On the coast of Guinea lived a special ethnic group of nomadic fishermen. In those days they traveled throughout the year the entire extent of the beaches of the Gulf of Guinea crossing almost all the states bordering the sea. They fish with a simple, manual system that is laborious and not very profitable,

**Fig. 4 a-b**

Lomé Master Plan, 1979-81.
Bird's eye perspective of a planned urban area study.

but of sure result: it is a system very similar to what on the southern coasts of Italy is called a *Sciabica* (African Saber). The fruit of the catch is collected on the beach, sorted by type of fish, and allocated in part to the local tribes, who in return keep the fishing villages under the palm groves intact during the months when the nomadic fishermen are absent. The part of the fish not ceded to the local kings is given to the women, who sort them further and either sun-dry them – the most efficient system was to lay them out on the asphalt of the roads – or smoke them over large, slow wood-burning braziers. With heavy baskets placed on their heads, finally, they transport it on foot or by poor means of transportation, northward... all the way to the farthest interior – all the way to the Sahel. It is an excellent fish. Protein, very good quality protein almost all the way to the Sahara.... On fishing days those beaches are a spectacle of crowds and fumes and colorful boats and resonant voices from everywhere. Sometimes large, unfortunate fish, giant stingrays that happened, despite themselves, to be in the nets of the African Saber (*Sciabica*), thrash about on the beach, dying,

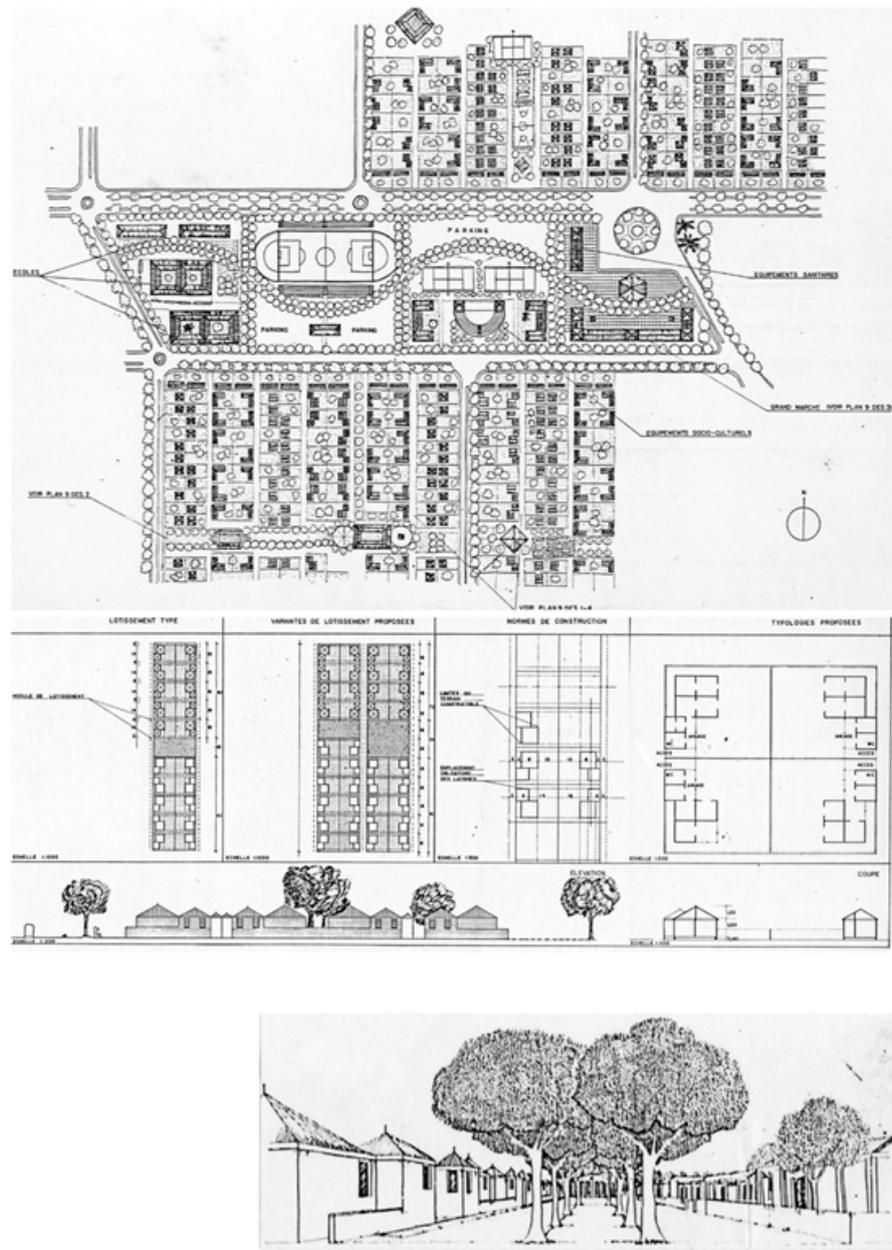


Fig. 5

The drawing hints at typological elements, which, however, are intended only as an indication. Drawings by Luisa Anversa.

while excited children play at escaping from the sting of very poisonous *ball-fish* that some younger fisherman, laughing more than the children, pretend to throw at them.

But before the long and very crowded evening fish feast, more than once we followed the fishermen during fishing, which takes place from morning to late afternoon; divided into two teams they pull ashore the two ends of the large semicircular net cast out to sea early in the morning by means of long and heavy multi-oar boats hollowed out of large tree trunks. The pulling of the *Sabre* is done by two groups of athletic fishermen who begin without seeing each other; more than a kilometer of distance separates them; the net is very wide. But as the final sack of the net approaches the beach the two teams draw closer together until they meet to share the fruit of their common toil and participate, protagonists, in the evening feast. But during the fishing there is absolute calm and solitude all around. Only the beat of the ocean and the song of the fishermen, rhythmic as a sub-measure of the beat of the sea, sounds. It is a two-step chant, as tight as the pulled and strong little passes with which, perfectly synchronized with

each other, the fishermen slowly shorten the rope of the net and the lives of their unsuspecting and then desperate marine prey. When the tug gets harder, toward the end of the work, the rope is sinuously passed between two, three, four palm logs so that the friction of the wood brakes the rope itself in the moments – albeit necessary – of very brief catching of breath... Sorry, they seem like insignificant details. I told you. The work in Togo involved us greatly. Understanding a place, the people you work for – what I call the social principal – means not only studying the physical and human environment with the canonical tools and modalities of our profession, but also with direct experience of collective and domestic customs, family and public rituals, moments of celebration and mourning. I remember in Kpalimè – a minor town on the rainforest-covered mountain – a Sunday mass; the majority in that town was Catholic, the mass included the funeral of a person, I no longer remember whether man or woman. At the height of the funeral rite a sudden, unexpected explosion of trumpets, slide trombones and horns made our ears and the entire church vibrate with sound pressure; and under that ringing and bright blanket of modern brass, the collective singing – open vowels and clucks, rhythmic clapping of hands – and an irrepressible, perfect swaying of the hips, without any vanity, but with the awareness of all being part of a consonant community. Here: that collective strength, that cohesive trust in the expression of one's own culture, strengthened – certainly not canceled – by the adoption of modern tools coming from a different culture, is perhaps not what we would like to see as a protagonist in self-construction – or rather: in *self-determination* – of the modern African city?

As I have already told you, the initial elaborations for the Maritime Region had produced a very convincing model which earned us not only the planning of the Lomè Plan, but almost simultaneously (I don't remember the sequence of tasks) the planning of the whole of Togo.

The group, including architects-urban planners, geographers, economists and sociologists, was solid. Enzo Caputo represented it with great intelligence and ability to coordinate between the different disciplinary souls. The cities were very different from each other. The original layout of the city of Lomè was created by the Brazilian-Africans I have already told you about, who came to Togo when Lomè began its journey as a colonial capital (Fig. 5). The original layout of the other minor cities – sometimes very minor – included an interesting series of different origins: they were founded on small settlements, sometimes spontaneous, sometimes military – or rather, of territorial control – sometimes, in the North, as knot between two very ancient, traditional, historical itineraries I mean. And moving from one city to the other, from South to North, you went through the history of the ancient African cultures in the area.

For example: while in Lomè the Muslim quarter is very small, in Sokodè and Lama Kara, the main cities in the center of the country, everything changes; the Sokodè market, for example, sees together, in equivalent proportions, the Christian and animist part – managed mainly by laughing women, in bright clothes, uninhibited, rotund, loud, kindly mocking foreign visitors – and the Islamic part, managed exclusively by men in long white clothes, a turban, like cloth on the head, often a black beard, the slender figure of the nomadic shepherds of the Sahel with a hieratic and studied quality in the slow yet eloquent movements, the voice never too high. Further north, urban life seemed to become rarefied, the settlements light and silent. In the thickets along the scarce waterways, you could see – wi-

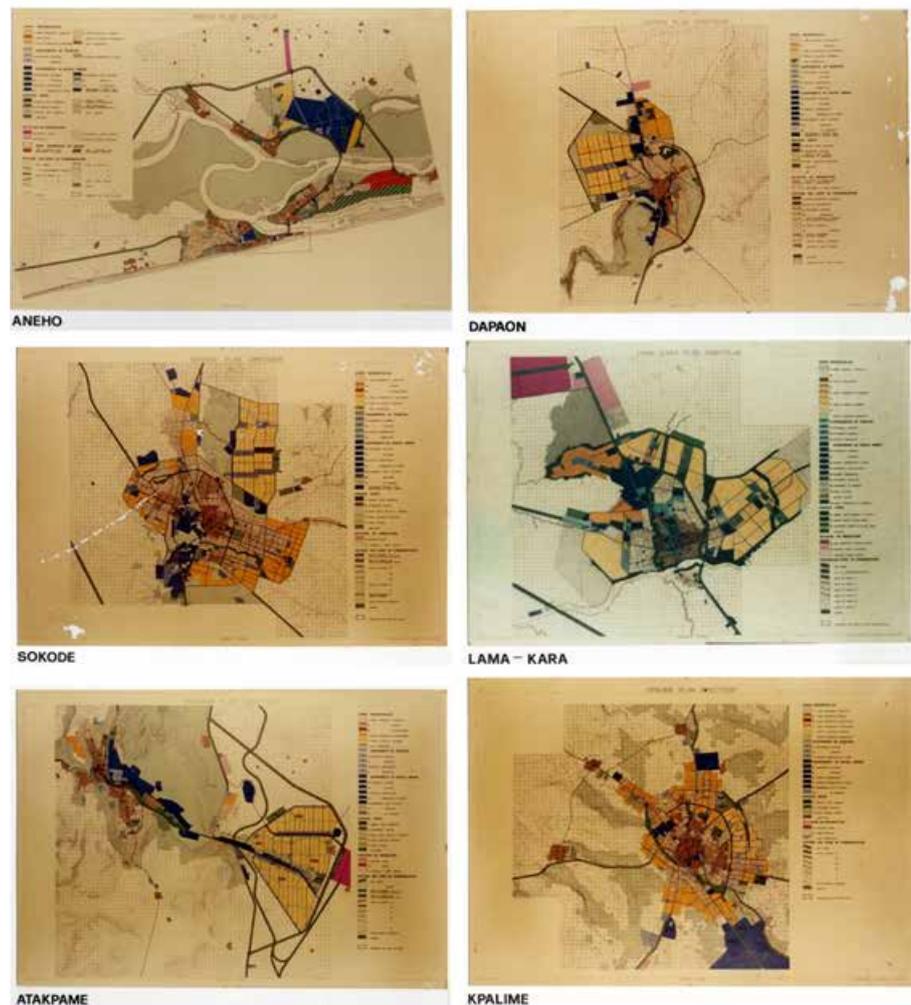


Fig. 6
Plan of Aneho, Sokode, Atakpame, Dapaon, Lama-Kara, Kpalime, 1979-81.

thout getting too close – the backs of small groups of elephants and you noticed the ambiguous, treacherous strolling of monitor lizards of the same lineage as those of the Nile. Under the Baobab trees, high termite nests. Light, silence. At that time everything seemed at peace. I cannot think about what is happening now in Africa, along the lines of what, as I was taught, I call “the great Sudan”. I do not want to think about it. We had a house in Lomè, large enough to also be used as an office. Domenico Menchilli, perhaps you have met him, is from Puglia like you, son of an important architect from Bari. He had a Californian wife. Domenico was our resident; an extraordinary architect, one of those rare ones, who instantly understands the place where he finds himself working and the people who live there, the natural language of things and architecture, therefore the culture of the environment that he wants to study. A younger, South African-Portuguese architect born in Joannesburg, Xico Meirelles, nephew of Giovanni Corsini, my Florentine architect friend, but born in Mozambique, went to help him; Xico is an African-European, therefore, who in Togo experienced the cultural complexity of Africa with the naturalness of someone who is already steeped in many cultures: the Italian one – the Corsini family of Florence – the Russian one – his grandmother, the Oulsufieff family of Moscow, – Portuguese – his father Meirelles. However, for the study of building materials available to self-builders, we were helped by a Neapolitan engineer who was passionate about the traditional construction systems of ancient African civilizations. He lived in Paris, scion of a family of builders whose company had built the Valtur tourist village in Capo

Rizzuto that I had designed with Luisa Anversa and Claudio Maroni in the late Sixties. The company was called Caròla and his name was Fabrizio Caròla. We studied together the Nubian vaults already used by Hassan Fathi in his *modern traditional villages* in Egypt. I had already encountered those singular and highly intelligent vaulted structures in Nubia, but also in Morocco. I had noticed that in the north of Togo some communities used them, but in a very basic and not solid way.

Since the main problem of self-construction is always the covering of the house, with Fabrizio Caròla we developed a didactic method to teach how to build Nubian vaults also in the spontaneous neighborhoods of Southern Togo, where, moreover, people from the Savannah were now converging and the Sahel. Yes, Togo, for me, for all of us who participated, was an extraordinary experience; who then helped us in the work we did, with you, many years later in Sudan where, in the evening, Antonino Colajanni, our friend, our anthropologist, recited the Fairy Tales collected by Frobenius; to our delight. And here; ... the circle closes.

I smile at myself, of course. I reflected that ultimately – and you can confirm this for the work done together in Africa in other contexts – the line of research and design study that I have supported is always the same, as in Morocco (Fig. 6) as well as in Togo, in Sudan, Egypt, South Africa...: careful study and re-evaluation of traditional *self-construction* in order to be able to give life, with simple urban planning systems and refined and effective technical assistance, to cities suited to the actual needs of the people, who number in the millions people still well capable of *making their home*; cities, however, which are hygienically and infrastructurally equipped, albeit with the minimum of necessary interventions, but designed and executed professionally, modernly, by specialists. Certain! many talk about *self-construction*; but in reality we prefer to build, with public or private money, only buildings of *traditional European or American modernity* – very expensive – and the resources are certainly not enough for everyone. Most of the population of the cities (the *urban majority* to put it again with Abdumaliq Simone...) remains crowded in the oceans of shacks covered in corrugated iron without any infrastructure, any hygiene, any decency and none of the practical and cultural aspects of the housing tradition, which however still lives vigorously in the souls of *the majority* of new citizens, in their lifestyle habits.

AIDM: You must forgive me if I return to my arguments, but actually both Abdumaliq Simone and you, Professor Barbera, one from the point of view of the sociologist/urban geographer, the other of the architect, have consistently argued since the beginning of your career “in the field” this cultural and technical line. It’s certainly not something to scoff at. Instead, we should understand why the opposite tendency prevails. In his latest book Abdumaliq Simone argues that “practices for living with instability will be found in those places equipped with an infrastructure to move forward despite persistent marginalization. It is for these places that we must imagine the infrastructures to create livable spaces starting from less than ideal and less privileged circumstances.”

But before ending this conversation I would like to ask you something more. Nothing specific or technical; I would like to imagine better, if you like with greater possibility of involvement, the conditions of your work in those years in Togo. This is also a way to participate, isn't it? The question that pushes me – don't laugh – is this: how did you get from Italy to Togo in those years. When we worked together in Sudan, more than thirty years la-

ter, we went to Frankfurt and then reached Khartoum with a direct flight...

LVB: Ah well. Thirty years earlier, for those who wanted to go to Togo, the conditions were not very different. Maybe a little more uncomfortable, but not much different. To get to Lomè, you usually went to London and took a direct flight to Accra – the capital of Ghana – and then, once you landed, you reached Togo by driving all night. Or we passed through Paris after booking the rare flight to Lomè. In that case we stopped for a few days in the French capital, met Fabrizio Caròla – who lived in the French capital – we discussed his and our research, and then we left for Togo. Every time I visited Togo I crossed the whole country again and again, making increasingly more aware and targeted inspections of all the cities. Domenico Minchilli and Xico Meirelles, the residents, moved around depending on their needs and the stage of the study they had reached: I joined them where they were. We had a couple of cars in Togo, Russian Fiat 124 brand, built in Togliattigrad. They were indestructible cars and cost very little. Fiat made a series of them for Africa, “tropicalized” cars, they said, with a particular and very effective oil cooling system. They were really solid machines, with which you traveled along difficult tracks, trying to run in balance on the famous and very annoying corrugated pavement (pavé ondulé) that the passage of heavy trucks creates on the African dirt roads, making them similar to an infinite sequence of small parallel and hard waves, on which you can drive without subjecting the car’s shock absorbers to an endless series of stresses by simply reaching a speed that allows the car’s wheels to pass from one crest of the small waves to another without ever falling into the – equally infinite – valleys that divide them. Ours was always truly an interesting job, one of those jobs made up of multiple life experiences and opportunities for practical learning as well as professional experimentation...intellectual – can I say it? It was essentially – I repeat – a period... of peace. We knew we had the privilege of attempting to understand – by working for them – vast territories and singular places, regions that overlooked large continental sectors and provinces as pieces of marked individuality of the great cultural mosaic that is Africa. It was tiring, but it was also a pleasant way to work.

In Lomè there was a westernized multi-ethnic community still dominated by French customs. In the evening, baked foods were cooked outdoors in the gardens of old colonial homes transformed into resorts, not very luxurious – fortunately – but comfortable. We often bathed in the ocean, although the sea was not pleasant for us Mediterraneans. But we were also hosted in the traditional villages of the coast and inland, where the main dinner of the day was served under a canopy of branches in the centre. of the village with a series of simple convivial rites served, however, with Bordeaux wine. This was followed by pantomimes that recounted the vicissitudes of the village to the sound of the drum, a community pushed on a long odyssey towards the South, towards Lomè, periodically but inexorably expelled from the places where it tried to put down roots. The main dish, in those hospitable villages, was stewed mouse. A big field mouse. They called it, in English, *Grass-cutter*. Very good, red, tender meat. They hunted it with long single-shot rifles and sold it, hanging by its tail, along the streets. More than a few times we spent whole days watching a family build their first peri-urban accommodation – don’t laugh – helped by the most experienced people in the village. We took photos and notes. We spoke with the builders, the self-builders I mean, we tried to understand...

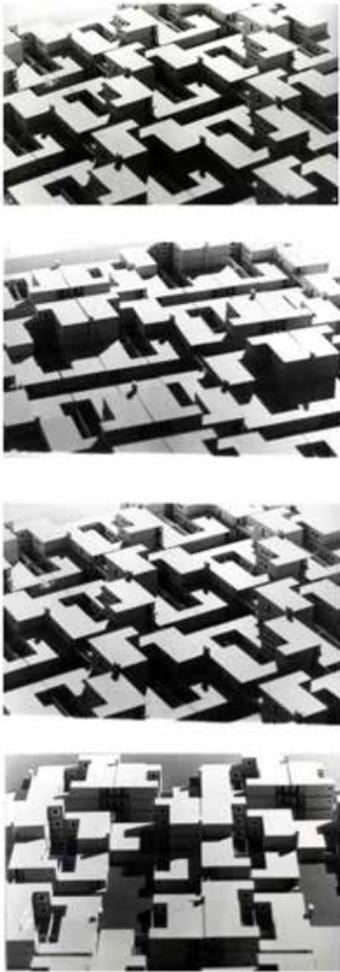


Fig 7

ProgReS-Lucio Barbera. Project for an economic residential fabric for the Kingdom of Morocco 1974-1957. Fabric studies and variations. Study models. Reconstructed digital model by the author.

Even in the most remote savannah, the concrete block vibrated with the almost portable machines of Rosacometta, the famous Italian factory of machines for forming concrete products, began to spread. Years later, I also found Rosacometta machines in the Galapagos Islands... But Adobe, the mixture of earth, sand and straw, the same one used five thousand years ago in the Euphrates plain, resisted and still provided *the majority* of large blocks with which the walls of houses were now built even in the South rich in palm trees... it was a school, a real school for us architects... it certainly was for me.

Notes

* Transcript of a dialogue between Lucio Valerio Barbera and Anna Irene Del Monaco.

Lucio Valerio Barbera, Professor of Architectural and Urban Design at Sapienza University of Rome, Chair-holder of the UNESCO Chair in "Sustainable Urban Quality and Urban Culture, notably in Africa" (2013). Director of the journal *L'architettura delle città* – The journal of the Scientific Society Ludovico Quaroni (2013). Dean of the Faculty of Architecture "Ludovico Quaroni" at Sapienza University of Rome (2003-2009). Coordinator of the PhD program in "Composition, Theory of Architecture." Co-founder, together with Clementina Panella, of the Master's program "Architecture for Archaeology-Archaeology for Architecture," and director from 2007 to 2009. Culture Councilor for the Municipality of Rome for Culture and the Historic Center (1992-1993). He has worked internationally as an architect, urban planner, and landscape architect since the 1960s. He recently published the book *La città radicale di Ludovico Quaroni*, Gangemi 2019.

Valerio Tolve
**Learning from the Masters.
 Notes on Stefano Perego's 'Portuguese Conversations'**

Author: *Stefano Perego*
 Title: *Conversazioni portoghesi. L'eredità di Fernando Távora*
 Language: *Italian*
 Publisher: *LetteraVentidue Edizioni, Siracusa*
 Series: *Alleli/Research*
 Characteristics: *15 x 21 cm, 164 pages, two-tone printing, paperback*
 ISBN: *9788862428637*
 Year: *2023 (October)*



The book *Conversazioni portoghesi. L'eredità di Fernando Távora* by Stefano Perego, part of the 'Alleli/Research' series by LetteraVentidue, stems initially from the author's elective (and personal, as it could not be otherwise) affinity towards the thought and work of the Porto-based master, and more generally towards Portuguese architectural culture. It therefore represents the will of a militant architect and teacher to seek elsewhere the root of his education, contributing to feeding the millenary chain of *correspondences*¹ between experiences distant only in time and space, as they share the same intention. For Stefano, this affinity has over the years become almost an obstinacy² that has remained unaltered in all his work, without yielding to other temptations: each time his mind and hand instinctively returned to the same point, following an almost cyclical, or circular trajectory, as always happens for the best traditions. And it is for this reason that Stefano, in a period of profound critical, intimate and personal reflection, rather naturally returned in his thoughts to the first moment of his architectural education, to that 'original', pure and uncorrupted instant, free from excesses and conditioning, in which problems and solutions are expressed with the greatest possible clarity, with the utmost rationality. Equally natural was the place of arrival of this long mental journey that led him back to Portugal, to Porto and to Távora: places that became mythical on the benches of the Politecnico di Milano, or rather the School of Civil Architecture in Bovisa. Only later did the decision mature to translate this research into a publication, generously offering it both to the Master – as a tribute on the occasion of the long celebrations for the centenary of his birth – and to the public, both the loyal and expert, but above all to those who are taking their first steps towards architecture, thus approaching the knowledge of one of the most decisive figures for the history of 20th-century architecture.

Travel is one of the fundamental themes of Távora's work and was also adopted by Stefano to guide his research program, conceived from the beginning as a long itinerary carried out between Porto, Coimbra and Lisbon from the summer of 2020 to the summer of 2022, collecting «testimonies from the direct voice of those who shared moments of life with Távora in the professional and teaching fields».

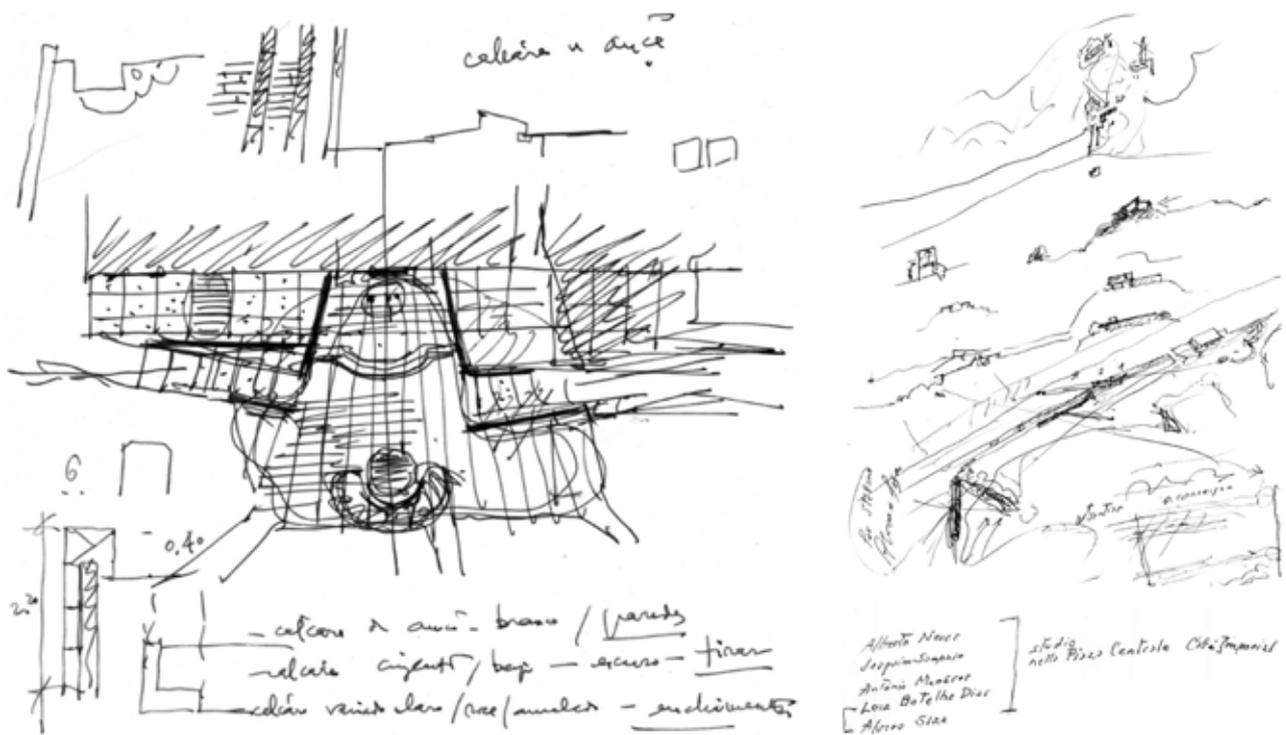


Fig 1
Praça 8 de Maio (1992-1997), Sketch by Fernando Tavora donated to João Mendes Ribeiro (João Mendes Ribeiro private collection).

Fig 2
Description of the design process of the Casa do Chà in Boa Nova and the project for the Piscinas das Marés. Sketch by Álvaro Siza, 2020.

Eight testimonies were collected, allowing «the actors of this journey as much freedom as possible, giving them the liberty to follow the flow of memories through a freehand path, without a predefined route, starting from a project, a reflection, or a consideration». Practically ‘a stick book’, and it could not be otherwise when dealing with Távora, his figure and his work in which the *arquitetura de bengala*³ is a consolidated and recurring practice, borrowed from the ancient tradition of transmitting the project to the construction workers by tracing it with a stick on the bare and living ground, a true initiatory moment of construction. Once again, a testament to the role of tradition and memory that resurface strongly in contemporary times, affirming their precise identity but above all offering their contribution to guide the debate of our discipline, even in moments when this appears increasingly heated and less inclined to refer to experience but, on the contrary, more and more accustomed to the consumerism of forms and thought, to the immediacy of response. This book by Stefano, the latest – but only in chronological order – of a long series of studies on Távora’s work, and the work itself of the Porto master, in this sense, seem to offer a possible support – a *bengala* or a stick, *ça va sans dire* – to try to get out of the quagmire of a debate that too often trespasses into other themes that do not strictly pertain to our disciplinary field and instead denying the role of the architecture project as a critical process of questioning and interpreting reality.

In defining the structure of his book, Stefano intended to exactly confirm the chronology of the meetings, as well as the colloquial structure of the texts, to the point of consciously choosing the term ‘conversations’ even in its final title. The result is a collection of memories that attempt to reconstruct the trajectories of Távora’s thought and reread in strongly operational terms – therefore aimed at discovery, learning and transmission, in one word at teaching – some of the most significant works of the Porto master, with the support of archive drawings and photographs, to shore up the memory of those same relived moments, as well as sketches, some of which were made by the same witnesses during conversations with Stefano.



Fig 3
House of the Twenty-Four, Porto.
Photography by Stefano Perego.

The journey begins with João Mendes Ribeiro – *Coimbra rises, Coimbra falls* – primarily discussing the urban reform project of *Praça 8 de Maio* in Coimbra and bringing out precisely the nature of the ontological interpretation of the project that rediscovers the value of the ancient orography of a large part of the historical fabric of the centre, in addition to the role of drawing within the project process – absolutely decisive even in the Coimbra project, at various scales – and the value of didactics and teaching.

With Álvaro Siza Viera Stefano «begins a long chat about Távora, about friendship, about the profession, a story made of anecdotes and advice, lasting eight cigarettes of Siza, the equivalent of an hour and forty-five minutes». Many projects are discussed, but above all many possible references emerge from the ‘smoky’ (only for Siza’s immoderate consumption of tobacco, certainly not for the themes and contents) conversation that ends with Stefano’s departure from the mythical studio on Rua do Aleixo: «I leave the studio and inevitably imagine all three together, Távora, Siza and Souto de Moura, leaving that building which is not just the place of their respective studios but a place that guards the Porto architectural culture of more than half a century».

The conversation with Giovanni Tomaso Muzio – *May, 1991* – is the only one that does not take place in Portugal but in the Milanese studio on via Barbavara where Muzio’s grandson works and keeps his grandfather’s archive. Here Stefano has the opportunity to discuss with Giovanni his arrival in Porto and his work in Távora’s studio, which lasted about two years, until May 1993. A long and articulate dialogue, on many themes and projects, which also addresses the story of his arrival in Portugal and the meeting with Távora revealing a fortuitous coincidence that greatly amused Távora himself: Giovanni Tomaso’s arrival in May 1991 followed that of his grandfather who, exactly fifty years earlier, was called by the Porto Technical Office (in which Távora worked, ed.) to replace Marcello Piacentini in the assignment for the Regulatory Plan project.

The *Casa sobre o Mar* and the *Casa di Ofir* are recurring works in the various conversations, including that with Carlos Martins – *Facing the Atlantic Ocean, looking towards Boa Nova* – particularly focused on the residential theme and for this reason with some references also to the *inquérito*⁴. Some methodological themes also emerge that characterize Távora’s work transversely, such as the role and value of topography, certainly matured following the investigations on the traditional house and developed in progressive sublimations in future projects: the same *Casa sobre o Mar*, perhaps still too modernist in forms, represents a first attempt at openness in this sense, seeking a primordial relationship with the ground by wanting to elevate above it to protect the remains of an ancient granite wall.

In the conversation with Pedro Pacheco in his small *Porta 14* atelier, the discussion returns to the house but especially to the school, the teaching of architecture and the value of history beyond chronology – in a fundamentally more chronological and transversal atemporal dimension compared to the sequential ordering of events along a linear axis –, the studio work – without a clear separation from the teaching activity – and the long lunches during which discussions, confrontations and drawings never ceased.

Again, houses are at the centre of the conversation with Fernando Barroso – *Every house is a case* – a historical collaborator of Távora’s office, for this reason also necessarily very focused on the master’s workspace itself in the *Rua do Duque de Loulé* studio right in the centre of Porto, before moving to the new studio in *Rua do Aleixo*: «around Fernando’s (Barroso,

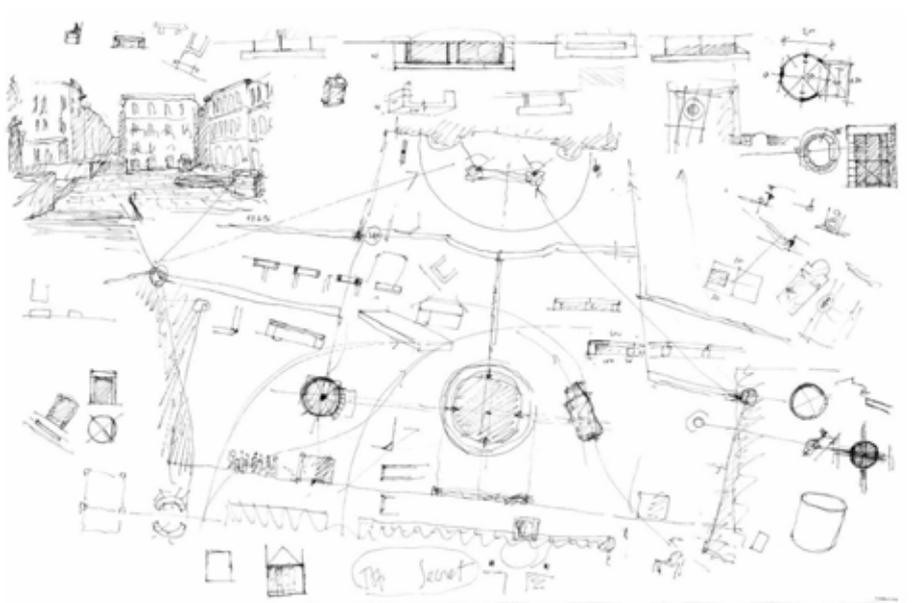
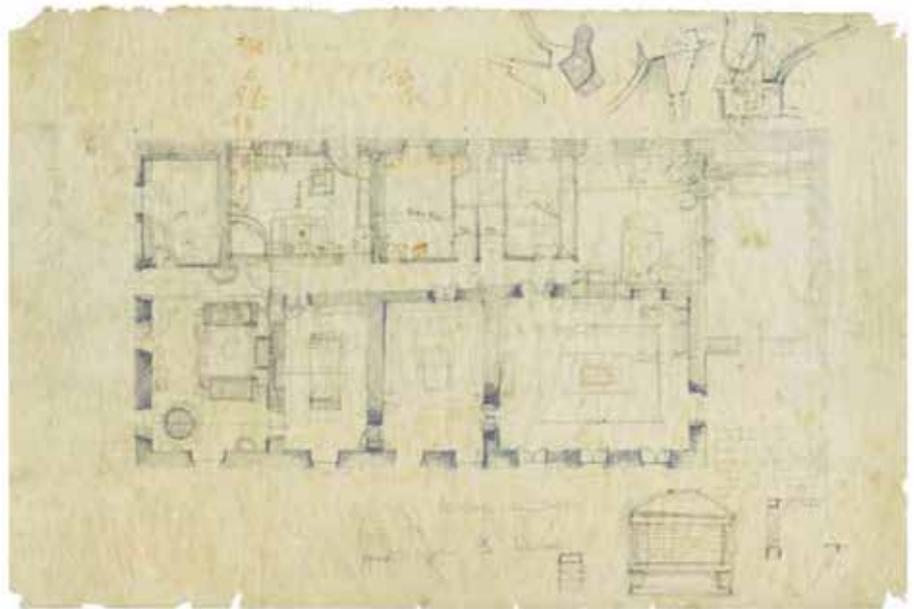


Fig 4
Covilha House, 1973-1988. Fundação Marques da Silva, Arquivo Fernando Távora (PT/FIMS/FT/0191-pd0042).

Fig 5
Praça 8 de Maio, 1992-1997. Fundação Marques da Silva, Arquivo Fernando Távora (PT/FIMS/FT/0266-pd0026).

ed.) workstation, many objects tell of his passion for the past. Tools, photographs, a milestone in granite. A passion, I think, passed down by Távora as he himself confirms to me shortly after». In the *estirador* of Alexandre Alves Costa's studio, «a pleasant chat takes place about the role of history in Fernando Távora's thought» – *Architecture is like papas de Sarrabulho* – and it could not be otherwise given the context – «a studio that is a step back in time. Two drawing tables, paintings and large drawings hanging on the walls» – and the interlocutor, with Alves Costa having held the chair of History of Portuguese Architecture at FAUP.

The conversation with Sergio Fernandez closes the picture of the eight testimonies collected by Stefano during his two years in Portugal: *In the presence of the masters. A young student at CIAM in Otterlo*, because Fernandez – at the time a student of the *Escola das Belas Artes* and an apprentice in the studio of Viana da Lima – had the opportunity to participate as a listener at the final act of CIAM. In Otterlo, Távora presented two works, the Vila da Feira Market – much appreciated, and the Casa di Ofir which, on the other hand, didn't receive great favour, certainly misunderstood for a supposed historicist regression: moreover, one must also frame the deli-



Fig 6
Plan of Fernando Távora's studio drawn by Fernando Barroso during the conversation in December 2021.

cate historical and cultural context of the 1959 Congress which definitively marked the end of CIAM and opened to the radical revision of the Modern Movement. For this reason, a large part of the conversation with Sergio Fernandez focused on the role of history in Távora's work and the relationship with Italian architectural culture.

The conversation with Fernandez ends with a pivotal question, which certainly represents a warning to readers and those who intend to make use of the master's remote teaching: «what teaching do you take from Távora?» Sergio's answer is frank and concise:

The teaching of modesty. He taught me to be simple and at the same time as profound as possible, and this depth refers to history, to the life of people. [...] And it is precisely this that Sergio learned from Távora: humility. His accounts of the CIAM experience in Otterlo as a listener – an aspect he emphasized several times – make him a witness of the time, of that time so dense and foundational for Portuguese architecture and for Fernando Távora's architecture. His story is devoid of emphasis, of protagonism, but instead filled with the desire to pass on the memory by clearly recognizing the roles of history.

The same qualities that much of contemporary Portuguese architecture still knows how to express, and that we can continuously renew by referring to those who still practice it, drawing inspiration precisely from Távora because, as these Conversations have shown us, Távora was the Master of Masters.

Notes

¹ «I was struck by the phrase in which Baudelaire states that there are correspondences». See Aldo Rossi, *Autobiografia scientifica*, Pratiche Editore, Parma 1990.

² «The first principle of a theory, I believe, is the persistence in certain themes, and it is precisely the artists and architects in particular who focus on a theme to develop, to make a choice within architecture, and to always try to solve that problem. This persistence is also the most evident sign of an artist's validity and autobiographical coherence; just as Seneca stated that the fool is the one who always starts over and refuses to continuously follow the thread of their own experience». See Aldo Rossi, *Architettura per i Musei*, in Aa.Vv., *Teoria della progettazione architettonica*, introduction by Giuseppe Samonà, Edizioni Dedalo, Bari 1968.

³ Literally 'stick architecture'.

⁴ The *Inquérito à Arquitectura Popular em Portugal* is an inquiry into Portuguese popular housing promoted by the National Union of Architects starting in 1955 and published in two volumes in 1961. The research is organized by geographical zones, with Távora being assigned zone 1 of Minho ('a region made of granite'), which he developed together with Rui Pimental and Antonio Menéres. Fernando Távora, born in 1923, was just over thirty years old at the time of the *Inquérito*. Already in 1947, Távora had published *O problema da casa Portuguesa*, an essay that concludes the anguished season of the forties, seeking to find concrete answers to the many uncertainties he saw in the profession of the architect and in his own approach to the project, in comparison to the Masters.

Gianni Gaggero
Inescapable Analogy

Author: *Valter Scelsi*
 Title: *Osservazioni su architettura e analogia*
 Language: *Italian*
 Publisher: *Quodlibet*
 Characteristics: *14x21,5 cm, 176 pages, paperback, black and white*
 ISBN: *9788822920522*
 Year: *2022*



Dialogue between analogy and architecture. Skirmishes, winks, a sort of giga-call (rationality and freedom) to the multiplicities of reality. Scelsi's book published by Quodlibet is all this and more. There is nothing to explain, nothing to demonstrate, but to venture accompanied by the author on a reading path, at times logical and at times evoking, states of mind into the world of analogy when it shows itself through architecture. Throughout the text, one is accompanied in a kind of serendipity. At times the flow of the narrative seems to want to be rational, at others it is imaginative, open to different perspectives. Images and stories emerge that compose a varied and articulated cultural description through architecture. An interdisciplinary, multi-experiential, geometrically one might say multi-dimensional dimension, which remains suspended but enriching.

Analogy is the theme from which *a number of* variations develop, but which always eludes definitive description. The theme, the analogy through architecture in the contemporary, is never fully defined, because there is no need to do so. It is not a matter of circumscribing and delimiting, but of acting and observing.

It is a theme with variations that develop on different planes and where the thematic material, the analogy, is read from different voices. *Machines to forget, Laurel & Hardy, The construction of the Caprarola image, From Cyber-flanerie to Electronic Iconology*, these are the titles of some of the chapters that give an idea of the spacing.

The many protagonists of contemporary architecture cited and commented on in relation to analogy are another example, very different but, in the end, very related: there is no escaping an *analogical logic*, even if always interpreted otherwise (by Rossi and Ungers, among others).

Analogy is still relation. But what kind of relation? How many kinds of relation are possible? And then, is it possible to distinguish architecture from other places of being in the world. Heidegger is immediately evoked. To be there, to be here, in the contemporary, now with all the contradictions and hidden coherences that are masked, but which ultimately connote the structure of this, and not another, reality.

By association, another of Heidegger's words comes to mind (from that *Building Dwelling Thinking* contained in Gianni Vattimo's *Essays and Discourses* edited for Mursia in 1976), according to which 'dwelling comes

before building', where the theme of relations with the memory of contexts and contexts interpreted in the light of memory and, therefore, of the innumerable analogical forms of understanding and interpretation inevitably comes into play. In a lecture in 1985, held for the inauguration of the Bra Cultural Centre, where the theme was the legitimization of the architectural project, Vattimo understood this

legitimation as a form of constitution of horizons of validity through dialogue, which is dialogue with the tradition to which we belong and dialogue with others [...], where constitution is at bottom rather a modification of the environment to which we already belong than the institution from scratch of a structure.

And it is precisely in this dimension of relationship and modification that analogy deserves to be understood and made aware, as it is rich in interdisciplinary interrelationships and subjective interpretations of experience, but which inevitably, as architecture, lands in the concreteness of living. Wearing different but, somehow, always similar forms to something.

What also emerges strongly in the moods and modes of the *now* that we are experiencing is precisely the dialectic between recall and resonance of the deep structure of reality, and the need to escape from codified schemes and languages. How, in essence, through the worlds of analogy, a way is sought for languages and thoughts that are necessarily current, but which always recall at root some presence of memory, of cultures, of the partiality of knowledge. It is not just any old way, heterogeneous among many, banal, imitative of fashions, but a way rich in culture and thought that is not mapped out, it is to be discovered and constructed cooperatively through multiple experiences. What appears to be a contamination between 'the arts', the different knowledges, the range of performers has underlying a weave of more or less transparent analogies, nonetheless present. What could Oliver Hardy, the 1890 design for the *Great Tower of London* (a London Eiffel Tower, fortunately never built), Gabetti and Isola, Le Corbusier and Botticelli's Communion of St. Jerome have in common? Underlying this is the intuition of analogies present in all, but not reciprocal, similarly structuring, yet completely independent.

The relationship between thought and doing, or rather between thought and realised work, between desire and 'facts' - which for architecture are the very concrete places in which one lives, works and lives - cannot but possess an analogical dimension, where memory, but also the direct observation of the multiple expressions of the different cultures of a globalised and increasingly interconnected world, determines factual consequences. Thought is matched by facts and questioned facts are followed by new thought, emerging thought. There is, therefore, an underlying stone guest that cannot seem to escape: the analogical dimension of any emergence of thought and reality, the presence of any possible development. All the opposite of a single thought, but the expression of a single generative root of behaviour, albeit very different, where architecture, if questioned and realised, is an implacable witness. But it is precisely the richness of perspectives that requires critical and non-superficial thinking. Scelsi's text in this regard is rich and generous.

The significant reference, neither exclusive nor characterising, to Aldo Rossi, to whom the title of the book's second chapter, *Forgetting Machines*, refers, who uses the expression in his *Scientific Autobiography* where he states, precisely, that we are all inevitably machines for forgetting, is a



Fig 1
Reconstruction of Aldo Rossi's Teatro del Mondo in Genoa on the occasion of the designation of Genoa as European capital of culture, 2004-05.

relevant key to Scelsi's book, also because 'inevitably' the relationships with what is at the basis of all reasoning of building, but not only, are always partial both out of necessity and will, out of limitation and desire. In other words, it is always impossible to possess all the elements, particularly today in a complex reality, articulated by sectors, but globalised by dynamics, where divisions clash in globality and almost always do not compose themselves but remain united only in their common heterogeneity. It thus becomes consequent to have to choose which evocations, which suggestions, which elements to bring to the outcome of the project and the concretisation in the moment of implementation. Hence, forgetting something, often too much (comment in the margin), when choosing some form of analogy. But the wealth of quotations, of references brought into the field in some of the most important chapters of the book, certainly *An Analogue Education*, *Analogue and Contemporary* and the aforementioned *Forgetting Machines*, have the merit of showing - not so much for those who approach with a didactic enumerative interest, but for those who go beyond it and form a critical thought - opens up a wide range of references that does not exclude, but often arouses, the ethical dimension of thought. The picture that emerges, therefore, analogous to the expression of architecture and the life to which it is inextricably intertwined, even in design thinking alone, is an open scenario, laden perhaps with intrinsic contradictions, but rich and fertile with developments.

Amalia Salvestrini
Phenomenological perspectives between space and architecture

Author: *Matteo Vegetti (ed. by), Fabrizia Bandi (ed. by)*

Title: *Corpo, spazio, architettura*

Subtitle: *Fenomenologia dell'esperienza spaziale*

Language: *Italian*

Publisher: *Morcelliana, Brescia*

Characteristics: *15x2x21.1 cm, 352 pages*

ISBN: *9788837238476*

Year: *2024*



The anthology edited by Matteo Vegetti and Fabrizia Bandi offers an important opportunity in the Italian context of philosophy and architecture studies to explore such a fruitful theme as spatiality. The theme is also fruitful because it allows a comparison, we might say a heuristic comparison, between the arts, precisely because of the theoretical foundation of phenomenology. The texts collected here are based on the idea that space is always that of a *possible experience*, then not measurable objective space, nor the solipsistic space of a single subject, but rather open space in an intersubjective sense, since it is constituted and constitutable by those who experience it. The relationship between philosophy and architecture, which in fact has very ancient roots, is therefore redefined by phenomenological themes that draw possible bridges for an open dialogue with other fields, arts, and knowledge: for example, with music, psychology, and new media – in short, with every aspect that implies the sometimes synaesthetic interweaving of the senses involved in the spatial experience, redefining notions such as “reality”, one’s own body, and architectural design, which today are being re-discussed in the confrontation with the virtual. Architecture thus becomes a privileged field for a multi-sensorial experience of space, a stratified experience that can be developed through phenomenological investigation, bearing in mind the implications not only on the perceptual plane but also on the level of emotion, imagination, memory, and judgements.

The common thread that guides the reader – who, as stated in the *Foreword*, may be a professor, a student, or professional architect – is therefore phenomenology, which allows the reader to delve into and develop the four fundamental nexuses in which the *Sections* of the volume are articulated. These nexuses connect the spatial experience (1) with one’s *own body*, as the extension and pre-reflective centre of every spatial perception, amplified by the multisensory interweaving; (2) with the *lived space*, where perception is sometimes related to emotion in the constitution of a space that is neither subjective nor objective: the *atmosphere* thus circumscribes a lived space, in tune with a landscape or an architecture. The anthology goes on to explore the connections (3) with *psychology*, which analyses spatial experience by tracing fields of forces in which fullness and emptiness stand out, relations between objects that determine the rules

of perception, and surfaces that indicate *affordances*; (4) culminating in a reflection on the spatiality constituted within the perimeter of a peculiar form of spatial experience, namely *virtual space*.

The volume is thus presented as a significant anthology divided into four *Sections*, preceded by a general *Introduction*, with further *Introductions* for each *Section* that contextualise and explain the texts. The original writings are in French, English, and German, and most of them have been specially translated. They are accompanied by explanatory notes and up-to-date bibliographical references, which will certainly be useful to readers who wish to delve more deeply into the many lines of enquiry that the texts reveal. As mentioned, the volume is open to dialogue with multiple disciplines. The multisensory experience of space, for example, leads to further insights that could be explored for the different senses and their interaction. I will mention here only one emblematic case, which also appears in some of the anthology's texts: the experience of sonic spatiality, which can be carried out in an imaginative and environmental sense (Piana 2013). This would open up a new chapter and further dialogue with architecture precisely on the terrain of space, configured both as a tuned space, a lived space, a space crossed by lines of tension and force, and as an imaginative integration between the senses, in a potentially infinite constitution of the whole.

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Lamberto Amistadi The Game of Planning

Author: *Daria Bal, Tomasz Bradecki, Błażej Mól, Marta Sanigórska*
 Title: *Housing Estate Game*
 Subtitle: *Cards game, urban design game, board game*
 Language: *Polish and English*
 Publisher: *Silesian University of Technology*
 Characteristics: *185 pages, color*
 ISBN: *9788378809678*
 Year: *2024*



The *Housing Estate Game*, an urban planning game, card game and board game – the result of two years of work as a supervisor of the Urbanmodel research group of the Faculty of Architecture on the Silesian University of Technology in Poland. The test of the game's prototype for the first time was surprising at first, but after verification and playing the game together I think it is a good idea to implement didactics through games.

The *Housing Estate Game* is made up of two decks of dedicated cards and a set of boards, and with the help of these you can simulate the development process of a settlement area. The cards represent the different cases of possible development of a one-hectare site. Cards have been arranged cumulatively according to the density of development. Different colors approaches/expectations are represented by the different decision-makers in the planning process (diamonds-developer, spades-ecologist, hearts-resident, clubs-planner). The implementation of a 2D deck (which allows for the laying out of estate plans) and a twin 3D deck (with models of housing complexes) and QR codes – links to the 3D models that can be displayed on a smartphone – should be considered innovative. The 3D deck also shows the values of urban indicators specific to each ensemble. The set of cards and the boards are useful in didactics for classes related to the field of architecture and urban planning for different age groups without specialised knowledge and experience. The combination of two decks of 2D and 3D cards and the reference to digital models through links to model pages and through augmented and virtual reality models allows for the creation of interaction in both the real and digital worlds at the same time. The estate game offers entertainment at different levels for use as a card game, a puzzle game or an urban planning game. The cards and boards used in the game are registered industrial designs and utility models, which is worthy of recognition, especially since it is a work co-created by students. On the basis of the game, a multi-author compact publication entitled *Housing Estate Game* was published. The *Housing Estate Game* with a description of the dedicated games, its application possibilities and references to the existing literature in this area. The *Housing Estate Game* has been presented and tested in several centres, including the Faculty of Architecture at the Cesena campus, University of Bologna. According to the data on the game's website www.housingestategame.polsl.pl, the game has received



numerous recommendations from TUP o. Śląsk (Silesian branch of Polish Town Planners association), SARP (Polish Architects Association) o. Katowice, PLGBC, (Polish green building council) IARP (Chamber of Polish Architects) Silesian Branch, WO SARP Sustainable Architecture Circle and a recommendations from Polish and foreign universities. The *Housing Estate Game* is a board game, that provides new entertainment possibilities for existing cards dedicated pawns, dice and card connectors were designed, which we realize in 3D printing the game was awarded a special prize and medal during the international Invention Fair INNOTARG in MCK Katowice. These confirm the high value of the game. Moreover it is worth appreciating that the game co-created by the professor together with his students has been patented and commercialized: the game can be purchased as a product in an online shop <https://esklep.polsl.pl/shop-full-width/strona-glowna-2/gadzety/gra-w-osiedle>.

The *Housing estate game* has become a teaching aid used at the Faculty of Architecture of the Silesian University of Technology and beyond, a game created by students with a view to teaching differently. There were touches of joy, there were no winners and there were no losers because, after all, in the game of urban space there are rules, but the goal of the game is to understand them.

