
Conservation Management Plan

Accra Children's Library



ArchiAfrika Accra

Published with the assistance of
the Getty Foundation as part of
its Keeping It Modern initiative

14 February 2018



The Getty Foundation



Publisher
ArchiAfrika Accra

Editor
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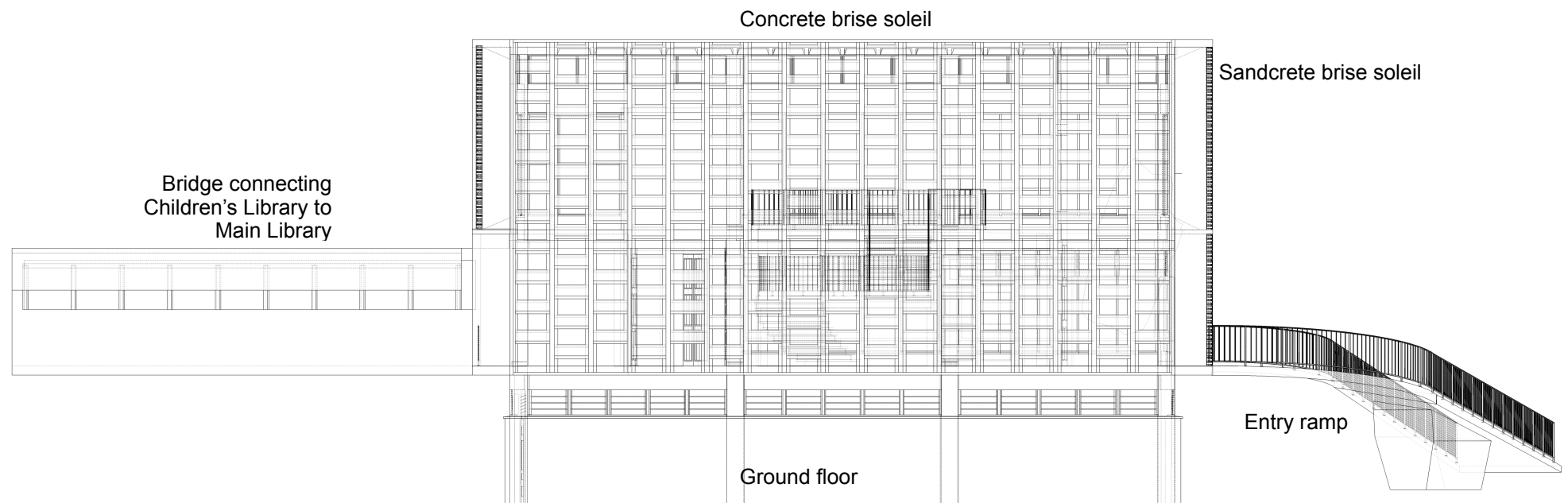
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William Milward and architectural students of KNUST &
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Cover photo
Tuuli Saarela

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Location: ArchiAfrika Gallery
High Street, Accra, Ghana
www.archiafrika.org



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Introduction

ArchiAfrika Accra received a grant from the Getty Foundation's Keeping It Modern Program to publish conservation guidelines for the Accra Children's Library in 2016-2017. This conservation management plan for the Accra Children's Library is an outcome of this grant assisted project.

Keeping It Modern Grant Program

The Getty Foundation developed Keeping It Modern, an international grant initiative that continues our deep commitment to architectural conservation with a focus on important buildings of the twentieth century. Keeping It Modern supports grant projects of outstanding architectural significance that promise to advance conservation practices. Grants focus on the creation of conservation management plans that guide long-term maintenance and conservation policies, the thorough investigation of building conditions, and the testing and analysis of modern materials. In select cases, grants may support implementation projects that have the potential to serve as models for the conservation of other 20th century buildings.

Getty Foundation

The Getty Foundation fulfills the philanthropic mission of the Getty Trust by supporting individuals and institutions committed to advancing the greater understanding and preservation of the visual arts in Los Angeles and throughout the world. Through strategic grant initiatives, it strengthens art history as a global discipline, promotes the interdisciplinary practice of conservation, increases access to museum and archival collections, and develops current and future leaders in the visual arts. It carries out its work in collaboration with the other Getty Programs to ensure that they individually and collectively achieve maximum effect.

ArchiAfrika Accra

ArchiAfrika Accra is a company limited by guarantee registered in Ghana; its mission calls for conserving and archiving African architectural forms. ArchiAfrika is a group of architects, designers and artists based in Ghana and other states in West Africa. We are dedicated to the exploration of contemporary architecture and the built environment through research, publications and symposia. Our mission is to educate the public on the built environment and to raise the awareness of the general public to

responsibilities to maintain and preserve it. ArchiAfrika's programs aim to broaden the discourse on Africa's built environment to encompass the role of socio-cultural design inspired development. In 2016, ArchiAfrika launched the ArchiAfrika Design + Architecture Gallery in Ussherstown, Accra. As part of an initiative of community revitalization, ArchiAfrika aims to transform historic buildings in central Accra into community spaces, including gallery, cafe, park and market.

Purpose of Conservation Management Plan

Ghana's modernist heritage buildings are in danger. Decades of neglect and poor maintenance have devalued the stock of buildings, some of which are in danger of demolition. Iconic buildings of the modernist tradition owned by the government of Ghana include the National Museum, Accra Children's Library, Independence Square, Kwame Nkrumah University of Science and Technology, and Bolgatanga Library, among others. ArchiAfrika believes that conservation of modernist buildings is financially, socially and culturally more viable than complete redevelopment. However, there is no legal framework to protect important buildings of national heritage from demolition.

Modernist buildings in Ghana, built in the 1950s and 1960s form an important part of our nation's architectural, social and cultural heritage. In particular, they stand for the ambitions of a young country during the independence era. The first African architects to graduate in the profession were as determined as the political elite to escape the odium of colonialism and they turned to modernist architecture for inspiration. They were drawn to the modernist style's rejection of ornamentation and its simplicity of form. These architects developed an ethos that was sympathetic to African cultures and climatic conditions. By the beginning of the 1960's, new countries of Africa needed schools, hospitals, mass housing, government buildings, sports complexes, administrative buildings, libraries which reflected their national character and ideals. Reference buildings of the modernist movement in Ghana are the Independence Square, Kwame Nkrumah University of Science and Technology, Accra Children's Library, the National Museum, and the Ministry of Women and Children.

Currently, there is no conservation planning or conservation policy of publicly owned modernist buildings. The buildings are under public management, and maintained by municipal governments. Many are not adequately maintained and have deteriorated over their 60-70 year lifespan. Some also stand on prime central business district lands, which are earmarked for redevelopment by government. ArchiAfrika worries that erasure and demolition may be preferred, over conservation and preservation.

Modernist buildings are important for architectural study because of their intelligent design solutions, such as passive cooling, natural lighting and acoustics. Their technical and scientific performance in a tropical environment is superior compared with present designs which feature glazed glass, air conditioning and mechanical ventilation.

ArchiAfrika has collaborated with groups interested in the conservation of Ghana's modernist buildings, and proposes a policy under which these buildings can be protected and effectively maintained, as an important part of national heritage. Previous cabinet decisions have been made on the

protection of heritage sites and buildings in Ghana but there is no specific policy on modernist buildings, in particular. As these buildings continue to age past the 60-70 year mark, a conservation policy is recommended.

The Accra Children's Library¹ is 63 years old this year. It is the hope of the conservation team that this Conservation Management Plan (CMP) can guide government policy to protect and preserve it as a place of Ghana's architectural heritage.



Sandcrete brise soleil



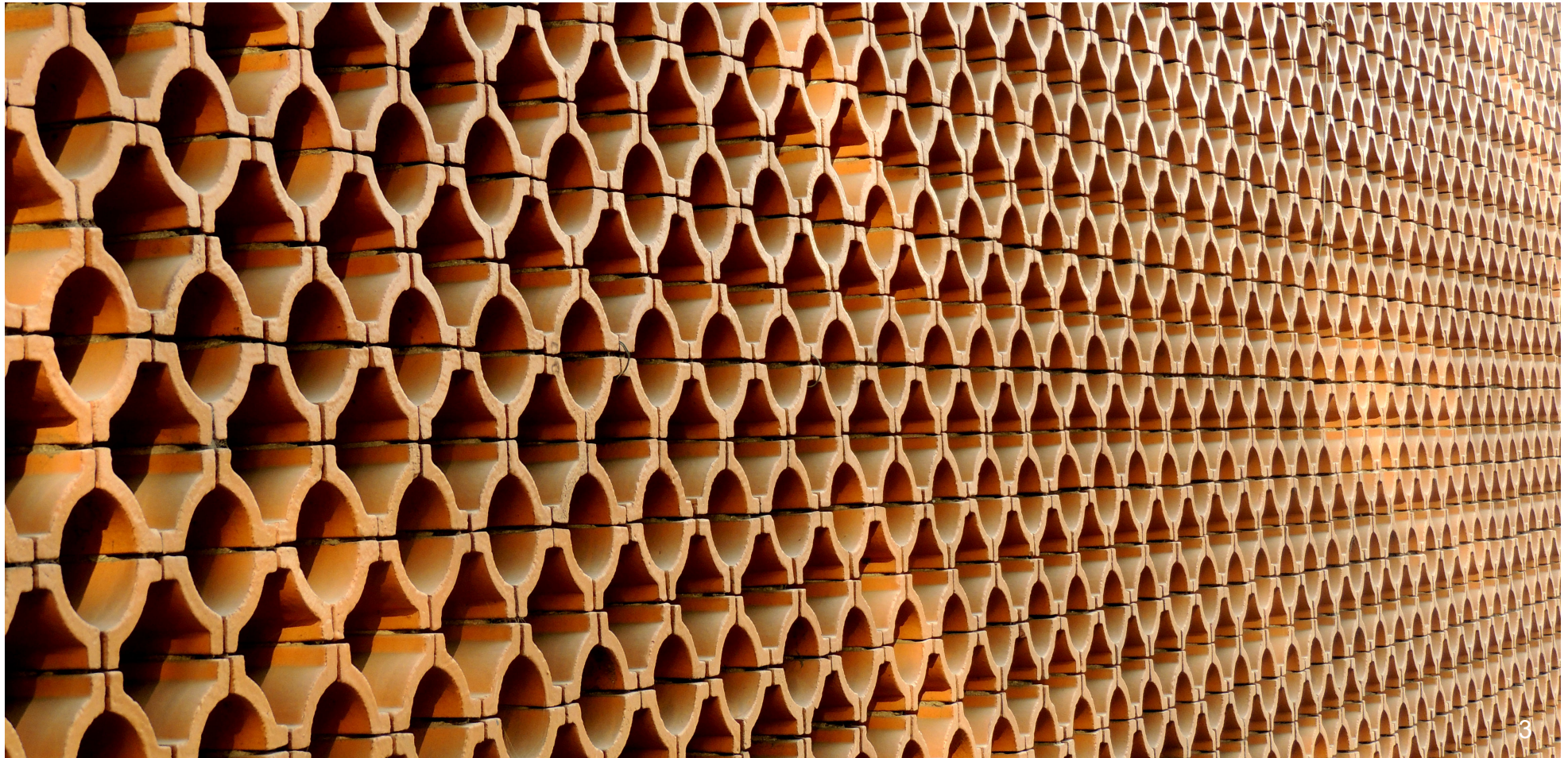
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Chapter 2

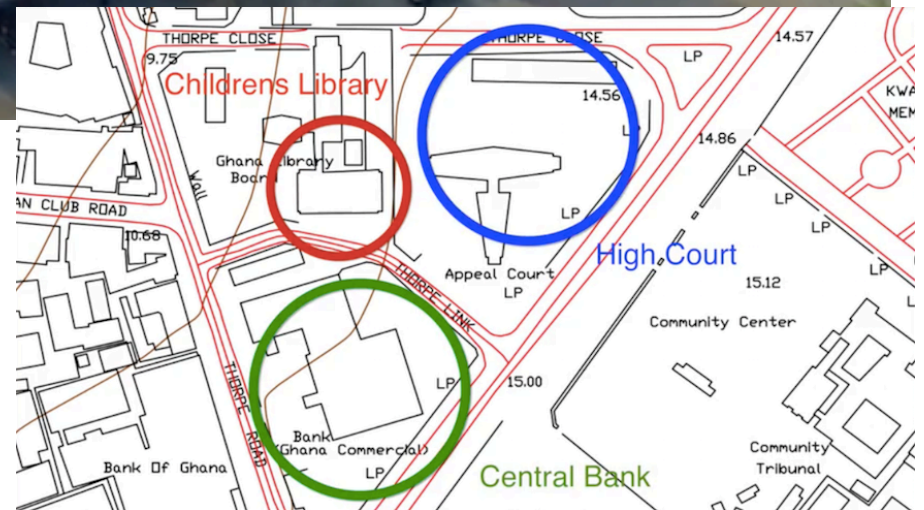
Significance of the Building

A case study in tropical modern architecture (Nathaniel Nuno Amarteifio)

Accra Children's Library is a case study as a best example of tropicalized architecture in the modernist idiom. The roof in the thirty feet high auditorium is held by free standing columns. The space is completely ventilated by floor to ceiling glass louvers. These are shaded from the harsh glare of the equatorial sun by tubular brick sunshade³ rising from the floor to the bottom of the eaves on all sides of the structure. The very best quality materials were used in the construction. Even today, half a century after the building was erected, it still stands as one of the best preserved buildings in the city. Like most modernist buildings in Ghana, it is a beautiful legacies for the city but showing the wear and tear of time. Most of the structural features are sound and in good shape, but the finishes show intense fatigue.



³ The tubular sunshade of the sandcrete brise soleil covers the entire north and south faces of the Accra Children's Library (Joseph Conteh)



A building of the independence era

In 1876, 2 years after Accra was chosen as the capital of the Gold Coast, the colonial government passed an ordinance regulating the acquisition and vesting of lands for Public Service (10th April, 1876). The government used this ordinance to appropriate a substantial bloc of land between the township of Ussher Town, previously known as Dutch Accra, and Osu, previously known as Danish Accra. It was named Victoriaburg. Today this covers the area

between the National Stadium at its eastern limits to the Central Post Office at its western limits. It begins on the coast and stretches to Legon in the north. It was used to house the administration of the colony and contains many of the buildings that service government activities.

The Children's Library of Accra sits on the coast near the middle of Victoriaburg. In 1962, when it was inaugurated, it was the jewel among the collection of modernist buildings in the city. It was designed by the British firm of Nickson and Borys. It is an elegant edifice with all the elements that defined modernist tropical architecture. The building is located on one of the most politically iconic neighbourhoods in colonial Accra. It is sandwiched between



4 Iconic and Corinthian columns of Ghana's Supreme Court (Joseph Conteh)

5 Picture of Accra Post office building (Collection of Nat Amarteifio)

6 Picture of front of the Children's Library (next page) (Joseph Conteh)

7 Picture of ramp of the Children's Library (next page) (Joseph Conteh)

8 Picture of lobby and stair of the Children's Library (next page) (Joseph Conteh)

9 Picture of meeting room of the Children's Library (after next page) (Joseph Conteh)

two significant examples of European architecture. On one side is the Supreme Court of Ghana, a large, imposing, white Greco Roman temple bristling with Ionic and Corinthian columns,⁴ a text book example of the Beaux Arts. Half a mile to the west of the site stands another example of British imperial architecture in Accra, the Anglo-Indian Central Post Office.⁵

The Children's Library was built with materials that were carefully chosen for quality, elegance and durability. Sixty years after its construction, the building is still unfaded. The lobby and reading room are on the ground floor of the three storey building. It is accessed from the street by an open air ramp.⁶ The floor of the ramp is finished with washed sea gravel and inquisitive children playing on it will discover embedded on its surface seashells and fossilized skeletons of tiny fish and sea creatures.⁷ The foyer is tiled with terrazzo. This material is also used on the spiral staircase⁸ that leads to a large two storey meeting hall above the reading room⁹. There are no partitions in these spaces which can be divided by simple temporary panels. The external walls are composed of louvre glass windows from the floor to the ceiling. This ensures maximum ventilation through the space. Concrete brise soleils on the face of the external walls shield the rooms from the glare of the bright sunlight and soften the ambient light.



ACCRA. Near Post Office.



Current state

At the Children's Library most of the louver windows are broken and the service facilities have broken down. An elegant flat roof structure has been entirely replaced by a pitched iron sheet roof, due to leakages. The beautiful

handcrafted wooden entrance doors have been replaced with sliding glass. There was a need to document the conservation needs of the building thoroughly using a detailed analysis of the original materials.



Research objectives

The objective of the project was to research and study the Children's Library in order to provide guidelines for the use of the building into the future. The Consultants examined the history of the building in the context of the architectural development of the nation as well as the world. The construction of the structure was explored to determine how materials were used and how successfully these materials have withstood time and the climate. The objective was to determine how efficiently the building's original specifications have maintained their integrity. The consultants also gauged how well the building fulfilled its original mandate as a space for children.

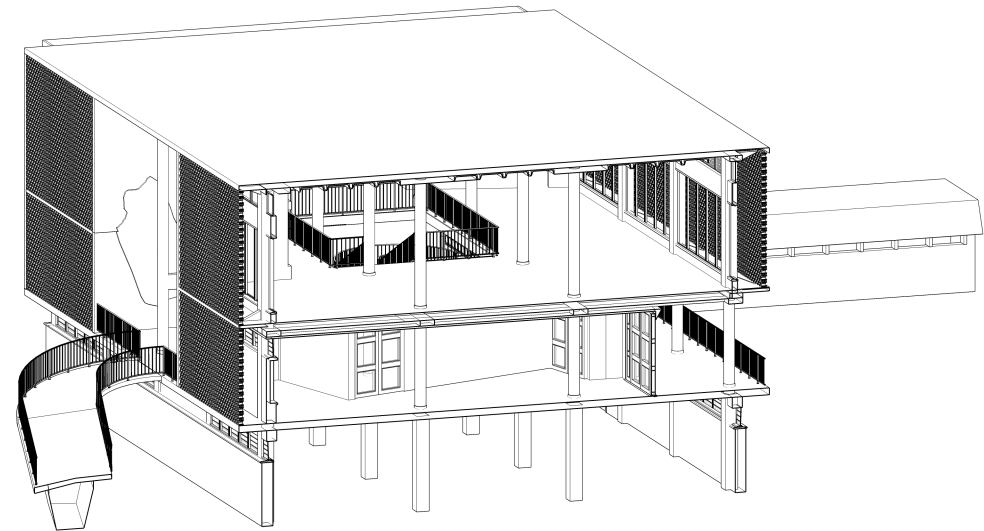
A main feature of the project was to use the building as a tool to educate architectural students on solutions to design problems in the 1960s. The students used the research to study how tropical architecture was developed and practiced in the period. When research failed to uncover original plans for the building, the students recreated them.¹⁰

The project team observed that the building was designed and built to be independent as much as possible from mechanical lighting and cooling systems. They measured the dimensions of the structure and located its openings to plot how effectively the building "breathed" and permitted natural ventilation. They examined how the placements of its windows allowed light to pour into its reading spaces and how the "brise soleils" softened the glare of the sunlight.

The consultants interviewed users of the library as well as some of the legal owners to what purposes the building can now accommodate sixty years since it was designed and built. The practice of reading has changed tremendously during that time and the library has to accommodate new ways of acquiring information. One objective of the study is to determine how the Children's Library can be redesigned to meet these new demands on it. The research is also geared to determine if the space can be used for other economic and cultural purposes aside from the traditional library services. Advances in internet technology has literally connected the whole world. The study of the Children's Library is to determine if it can become a functional part of this new network of global information in an imaginative manner.

The findings of this research will be made available in electronic format at the website of ArchiAfrika www.archiafrika.org. An exhibition of the CMP project will be on display at the ArchiAfrika Design + Architecture Gallery in Accra in early 2018. A permanent exhibition is also planned at the Children's Library itself.

ArchiAfrika plans to disseminate findings from the CMP as a means to lobby the government of Ghana to create a policy on conservation of modernist architectural heritage buildings around the country.



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Thematic history (Nathaniel Nuno Amarteifio)

Modernism as revolutionary architecture

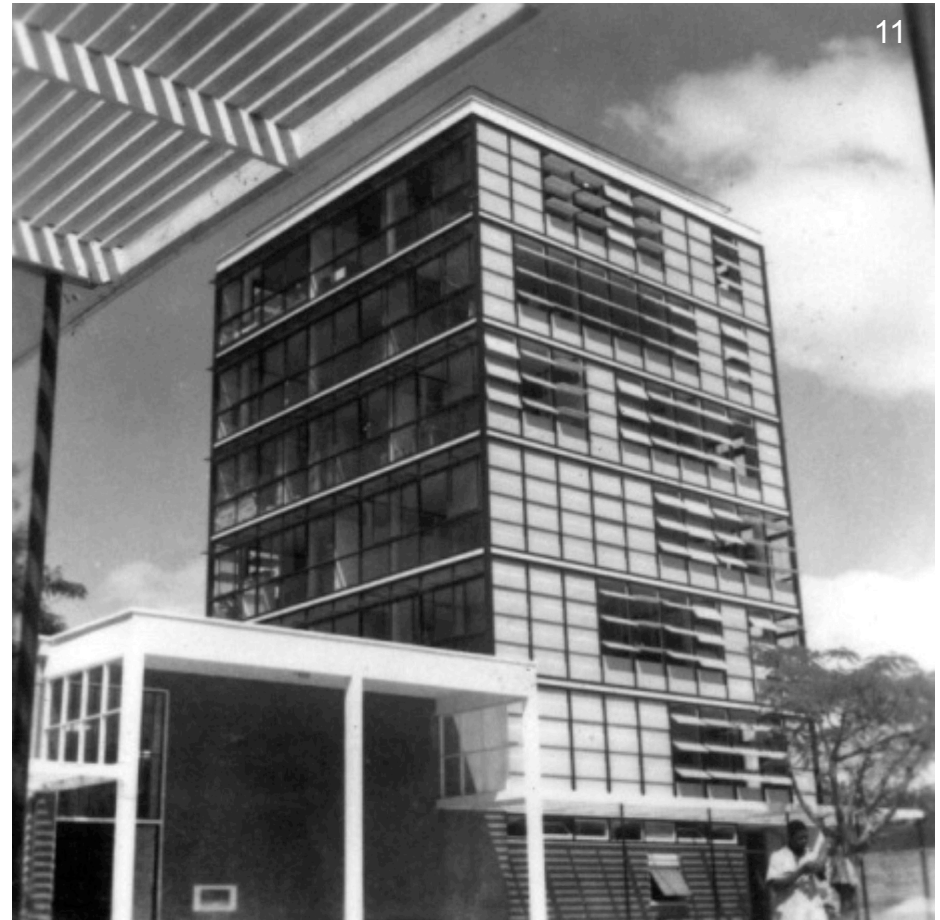
Modernism in architecture was part of the revolutionary movements that convulsed Europe at the beginning of the 20th century. There were major changes in global politics as ancient empires toppled and fell and were replaced by fresh ones with more vigor. Two world wars coupled with devastating social upheavals in Russia and China accelerated the convulsions and the extent of the changes. There were new directions in the arts. Music, literature, the visual arts, dance, etc. were all propelled to new dimensions by radical energies. In architecture the revolution began in the 1920's when groups of young European artists and intellectuals challenged the prevailing architectural orthodoxies of the era. This orthodoxy was represented by the Beaux Arts School of design that was inspired by classical Greco-Roman architecture and art. The Beaux Arts celebrated the old order of European nationalism and culture and it was this celebration that encouraged the revolt to overthrow it.

The development of steel as a construction material in the early 20th century led to alternative methods of building and opened avenues to imaginative designs. The radical approach included stripping extraneous ornamentation from buildings, reinforcing its structural systems and experimenting with new materials. Its mantra was "Form follows function". The movement spawned a school called the BAUHAUS. It was founded by Walter Gropius and Mies Van der Rohe in the 1920's. Their ideas were the most radical formulas in architecture for decades. Their influence spread around the world and acquired disciples on all the continents. In the United States it was called the International Style and it helped to define modern American corporate architecture. In Britain it was known as MARS (Modern Architectural Research System). In France and on the continent it was known as CIAM (Congres International de l'Architecture Moderne). In West Africa it led to the birth of Tropical Architecture (T.A).

Characteristics of modernism

Modernism was characterized by the following:¹¹

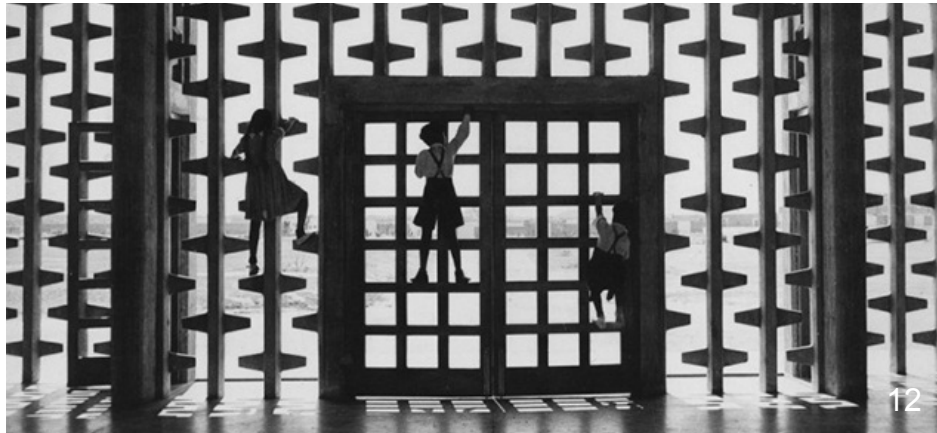
- a) Simplicity and clarity of form
- b) Visual acknowledgement of the structure that is columns, beams, etc.
- c) Honest expression of the construction materials. No attempt is made to disguise the construction material to resemble another.
- d) Use of industrially produced material



e) Emphasis on linear elements of the design.

The rise of modernism in Ghana

In the 1950's the era of British colonial rule in Ghana came to a close. European architects, especially those resident in the colony were engaged to design infrastructure for the nation. There was a burst of construction activity. Schools, hospitals, administrative structures, and industrial buildings were commissioned to prepare the country for independence. Talented architects like Jane Drew and her husband and professional partner Maxwell Fry received assignments that enabled them to shape colonial architecture of the



postwar years. They were the pioneers and leaders of the modernist movement and contributed to its success in West Africa by adapting it to tropical conditions. It was a style that incorporated the bright sunlight, the hot and humid climate, the force of tropical rainfall and the use of non-mechanical solutions for ventilation. The result became known as Tropical Architecture. Maxwell Fry and Jane Drew promoted this style through publications as well as the projects they executed in Africa and India. In Ghana, their works included dormitories and classrooms for schools like Adisadel College, Mfantsipim¹² and Wesley Girls School and Prempeh College. They popularized methods of design that emphasized the proper alignment of the building for protection against the sun, deep overhangs for shading the interior and keeping it cool, high ceiling for ventilation and concrete sunshades to obstruct the glare of the sun. Many of these solutions were used imaginatively in the Children's Library of Accra.

Technical education in modernism

In 1954, a technical college was opened in the country. It was located in Kumasi and was principally established to train engineers, architects and pharmacists. The college, later a university known as Kwame Nkrumah University of Science and Technology (KNUST), was initially affiliated with the Architectural Association (AA) and followed its syllabus. This turned out to be unsatisfactory. At that time and period, the AA was philosophically Eurocentric in outlook. It took inspiration from European art and culture and did not provide much instruction in tropical architecture. In 1962 the affiliation was revoked

¹² Archival photo of Mfantsipim School (Collection of Nat Amarteifio)

¹³ Archival photo of Dansoman Workers Housing (Collection of Nat Amarteifio)

and the college re-affiliated with the more multi-cultural and international Royal Institute of British Architects (RIBA). The RIBA was part of the avant garde of the modernist movement. It took a keen interest in tropical architecture and some of its members like Kenneth Scott and James Cubitt practiced in the tropics. The published accounts of their works became inspirational textbooks for tropical architecture.

According to Architect S. Larbi, one of the pioneering batch of students of the University at Kumasi, the change in affiliation had an immediate impact on the school. The students were assigned to rural communities as part of their training to explore traditional building methods and more significantly to study the prevailing social conditions. The objective of the assignment was to produce architects who understood the cultural environments of their projects and of their clients. This idea was central to the modernist movement. The first Ghanaian architects to be trained at KNUST graduated in the late 1950's. They spent the final two years of their education abroad in British universities where they qualified for their degree and attained membership of RIBA. They included OT Agyeman, the first Ghanaian architect to be engaged by the Ghana National Construction Company. Others are Ebenezer Akita who partnered with Martin Adu Badu and Nii Oman Mensah to form one of the country's first and most successful indigenous firms. Their company, Architectural Design Partnership designed and supervised workers housing¹³ in most of the principal Ghanaian towns for the Social Security and National Insurance Trust (SSNIT), a major insurance company. Others were D. K. Dawson, J. Owusu-Addo, A. K Amartey, M. Adu Bedu and Kingsley Osei. All these architects were trained in the modernist approach and their works implanted modernism in Ghana. Victor Adegbite was a Ghanaian architect





trained in the U.S. and who returned to Ghana to play a leading role in the development of architecture. He was a founding member of the Ghana Institute of Architects and his works included the State House, the original Ambassador's Hotel¹⁴ in Accra, and the headquarters of the Convention People's Party¹⁵ in Accra, now used as the Ministry of Information. Another architect who made significant contribution to modernism in the country was Max Bond, an African American whose works included the Children's Library at Bolgatanga.

Modernist buildings in Ghana

Architects from many nations contributed to the introduction of modernism into the country. Many were from the socialist republics of Eastern Europe. Ghana's first president, Dr. Kwame Nkrumah, a self-declared socialist was

¹⁴ Archival photo of Ambassador Hotel in Accra (Collection of Nat Amarteifio)

¹⁵ Modern photo of CPP headquarters building (Collection of Nat Amarteifio)

¹⁶ Archival photo of Job 600 (next page)



involved in an ideological war with colonial powers Britain, France and Portugal. They accused him of supporting armed insurrections in their colonies. He believed they were busy undermining his efforts to build and develop his country. At the height of the Cold War, he appealed for help from the eastern socialist bloc. In the 1960's hundreds of architects, engineers and planners from Russia, Hungary, Yugoslavia and Czechoslovakia flew to Ghana to help build a socialist paradise. Most of them worked with government departments as planners.

Several important modernist buildings in Accra and Kumasi were created by this socialist brigade of architects and planners. Their projects helped turn the campus of KNUST into a virtual showcase of modernist architecture. Job 600¹⁶, a huge block of offices in Accra was designed by Witold Wojczyński. It was used as offices for the Organization of African Union and was intended as permanent offices for the organization. It is currently used as offices for members of Ghana's parliament.





The Banquet Hall¹⁷ for the house of parliament was designed by Jan Druzynski in 1965. Stanisler Rgmaszewski designed blocks of flats¹⁸ on Switchback road opposite the President's office at Flagstaff House.

Modernism in architecture was enthusiastically welcomed by the new African intellectual elite. Many of them were Pan-African nationalists and advocates of a new "African personality." They were eager for any opportunity to invent fresh identities that distanced their nations from its colonial inheritance. Although modernism was the product of an European cultural movement it was not the creation of any particular European country. Its rejection of the flagrantly Eurocentric Beaux Arts architecture and ideas attracted their support and reassured them as impartial culturally. Its emphasis on adapting design to the physical environment appeared honest and sensitive to them.

The library stands south of the Old Polo Grounds. Before the country's independence in 1957, each March the British Empire was celebrated here. It was on these fields that on the 6th of March 1957, the British Union Jack was lowered and the flag of Ghana was hoisted to signal the birth of the new nation. The Old Polo ground now serves as the burial site for the mortal

¹⁷ Archival photo of the Banquet Hall at Parliament House (Nat Amaretefio)

¹⁸ Photo of block of flats opposite Flagstaff House (Joseph Conteh)



remains of Kwame Nkrumah and his wife¹⁹. The headquarters of the Bank of Ghana, the most imposing modernist building from the period stands adjacent to the south of the library.

The two decades from the fifties to the seventies of the 20th century were prolific in the production of modernist buildings. The following were among the most representative:

- a) The Children's Library of Accra – Nickson & Borys.²⁰
- b) The National Museum of Ghana – Max Fry and Jane Drew, Drake and Lasdun²¹
- c) The National Archives of Ghana – Nickson & Borys.²²
- d) The former American Embassy now the Ministry for Women and Children - Harry Weese²³
- e) The Cedi House – Owusu Addo, S. O Larbi²⁴
- f) The T.U.C headquarters of Ghana – Arthur Lindsay and Associates²⁵
- g) The Mobil House²⁶
- h) The Electricity Corporation building
- i) The Kingsway shopping center at Adabraka
- j) The former Ambassador's Hotel – George Paton
- k) Independence Hall (KNUST) – Mira Marasovic²⁷
- l) Flagstaff House housing – Charles Polonyi
- m) Job 600 – Witold Wojczynski, Jan Druzynski²⁸

19 Photo of Kwame Nkrumah mausoleum (Joseph Conteh)

20 Archival Photo of Children's Library of Accra (Collection of Nat Amarteifio)

21 Archival Photo of National Museum of Ghana (Collection of Nat Amarteifio)

22 Archival Photo of the National Archives of Ghana (Collection of Nat Amarteifio)

23 Archival Photo of the former American Embassy (next page) (Nat Amarteifio)

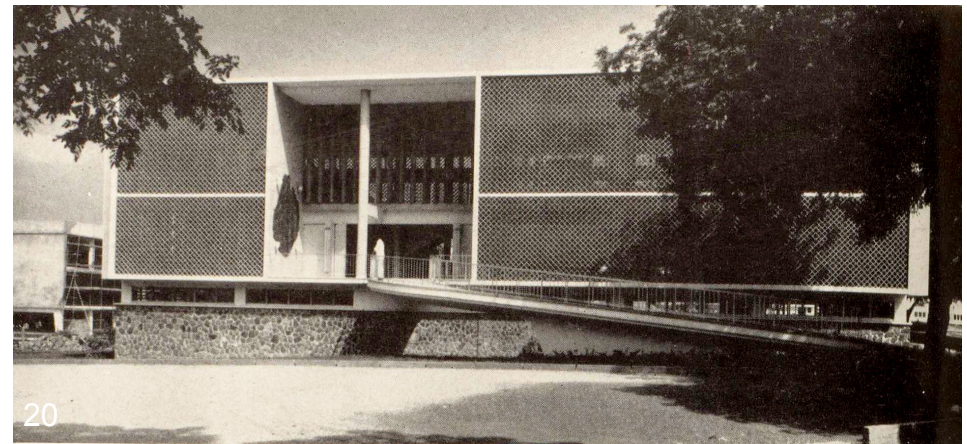
24 Photo of the Cedi House (page after next) (Joseph Conteh)

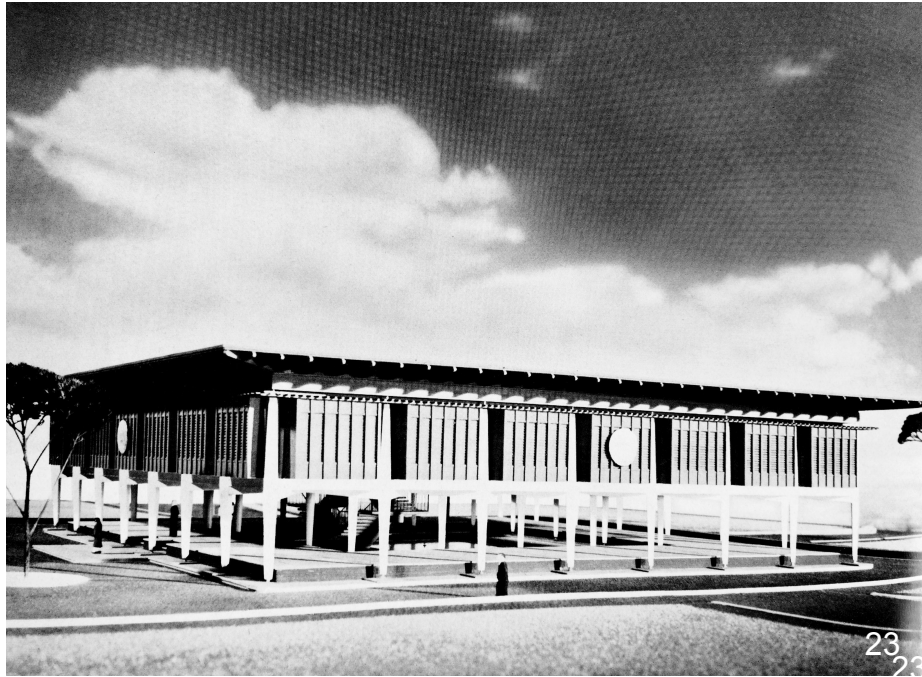
25 Current photo of T.U.C headquarters of Ghana (next page) (Joseph Conteh)

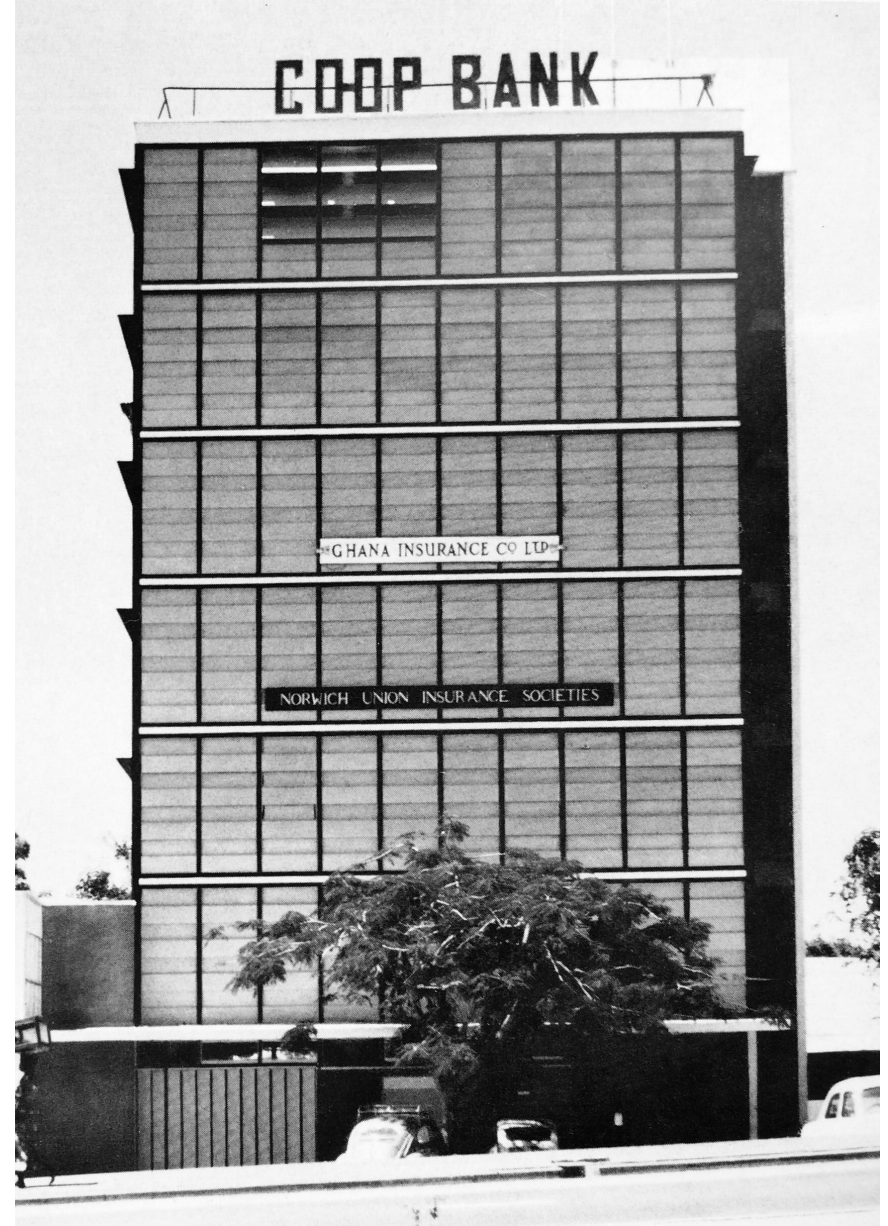
26 Archival photo of the Mobil House (next page) (Collection of Nat Amarteifio)

27 Current photo of Independence Hall KNUST (next page) (Leumas Yeckas)

28 See photo under caption 12







The rise of post modernism

Modernism was the favorite official architecture in the 60's and the 70's. The style dominated most of government sponsored projects during the period but occasionally there were startling exceptions. Another style that combined some of the historicized details of the Beaux Arts and the vocabulary of modernist design also emerged. It was called post modernism and it competed with modernism. It became popular in the 80's and the 90's in Ghana when the Ghanaian expatriates who fled the country in the 70's and 80's to seek greater economic pastures abroad begun returning home. Those who spent their exile in Nigeria brought details of the style that was emerging as a popular design motif in that country. This involved the use of Roman columns and arches combined with straight modernist lines. In Accra the headquarters of the Physicians and Surgeons Association²⁹ is an example. Curiously enough in this saga, a perfect example of post modernism was built in Accra before the concept was crystalized into dogma. It is in the campus of the University of Ghana at Legon. This was built in the 50's but its mixture of African style housing plus the whimsical use of pagoda style roof is very suggestive of the movement.



²⁹ College of Surgeons and Physicians Accra (Joseph Conteh)

Modernist design elements (Nathaniel Nuno Amarteifio)

The project team selected seven elements of the building which highlighted modernist design features of the time period; namely, the flat roof, brise soleil, landscape, railings, stonework, lighting/acoustics and finishes.

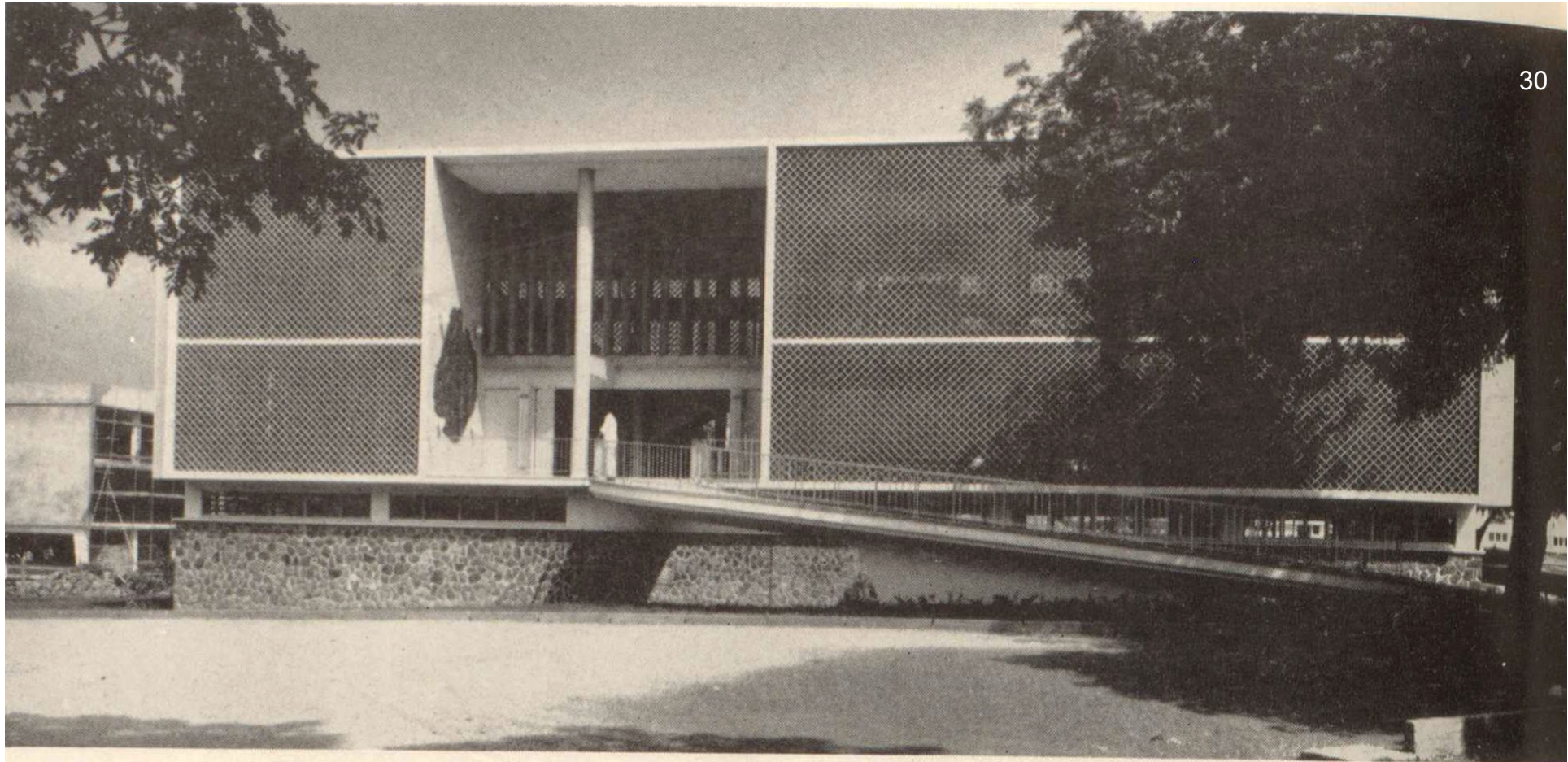
Flat roof

Original design

Archival photos of the library show a flat roof³⁰. A flat roof is indicative of modernist style. In the 1920s and 30s when modernism emerged as the

standard in European design, part of its orthodoxy is to get away from the heavily stylised roof line of typical designs of the 19th century. It was in keeping with the mantra that this school deliberately chose the design that did not emphasise the outline of a roof. The Children's library was designed with great fidelity to this notion. It marked the introduction of an architectural vocabulary in the country which sought to create a local statement about design. This was welcomed by the cultural and political elite.

An interesting note about the use of flat roofs in Ghanaian architecture is that it is also representative of traditional architecture from Northern Ghana and the savannah belt, which uses the same style. Flat roofs are used in the savannah belt for sleeping, as the air is cooler than inside the house, and is



³⁰ Archival photo of Children's Library (Collection of Nat Amarteifio)



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also a protection from predators and pests which operate at floor level. This design element not only is a key modernist element, but also resonates with local people.

It is well known that concrete flat roofs are notoriously prone to cracking undertropical weather conditions due to heat expansion. This is why the architect designed the first floor ceiling with heat absorbent coffered vaults.³¹

Another way that water damage from leakages was minimised was to coat the original roof with a water proof membrane. It is likely that the materials available in the 1960s were tar based and not as effective as modern plastic membranes.

Changes to design

It is clear that somewhere along the line, the original flat roof was replaced by a pitch aluminium roof.³² The building managers and maintenance workers did not remember when the roof was replaced, but theorised that it was probably due to water leakage. Ghana's tropical climate can be extremely harsh to this design of roof, causing heat and expansion on the roof and in the ceiling.

³¹ Heat absorbed coffers on the first floor ceiling (Joseph Conteh)

³² The flat roof was replaced with a pitch aluminium roof (Joseph Conteh)

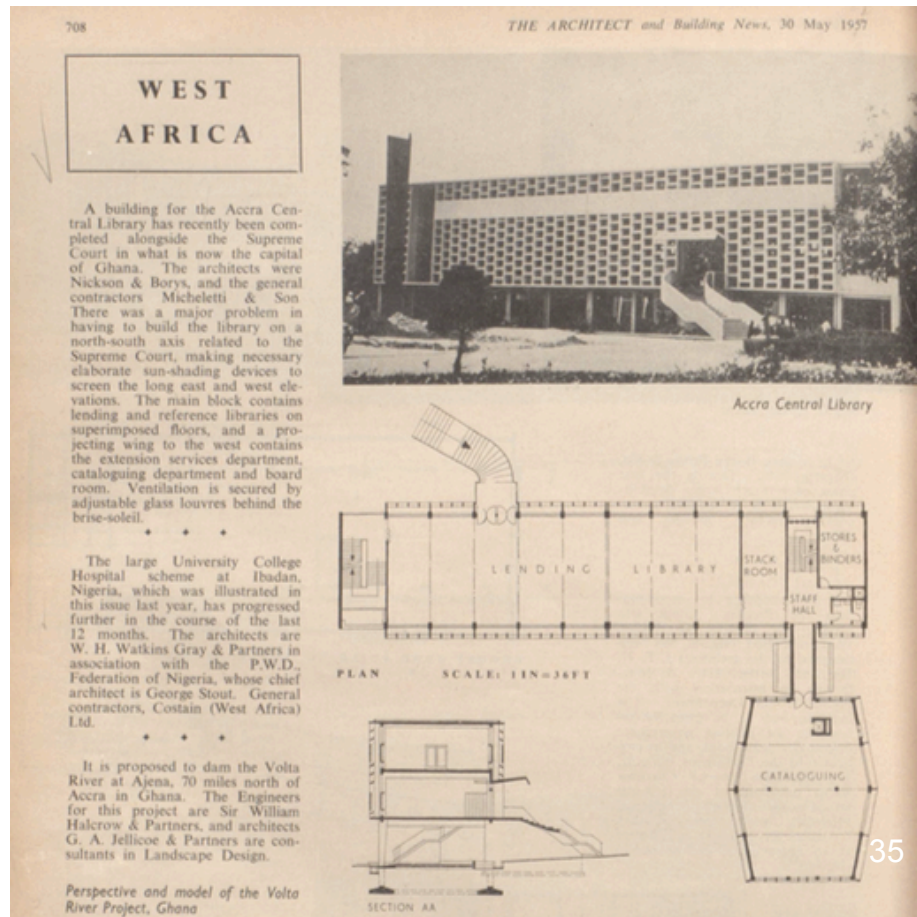


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Brise Soleil

Original design

To achieve optimum solar shading for the Children's Library, the architect made reference to a prior project to establish a continuum of ideas and thoughts. The reference was found just next door, Nickson and Borys had a few years earlier designed and completed the Accra Central Library. They employed the brise soleil sunshades in a particularly striking and effective

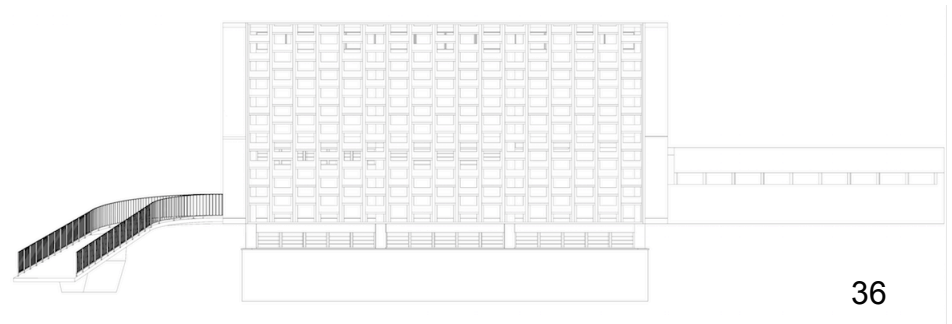


35 Photograph of Architect and Building News, 30 May 1957 (Joseph Conteh)

36 Elevation drawing of the East facade of the Accra Children's Library (William Milward)

37 East elevation photo from Thorpe Road (Joseph Conteh)

manner. At the Children's Library, Nickson and Boris decided to use this same solution because the conditions were the same. The Architect and Building News from May of 1957, explained that the solarshading featured in this first building was the solution to the design challenge of its elongated East to West elevations.³⁵ The magazine also mentions that ventilation was designed to work with the brise soleil and louvre windows.



The discipline and witted thinking of the architect must be applauded, for recognising a design element that has successfully worked especially in the settings of the tropics and re-applying it to the Children's Library.

The East to West facades of the Children's Library³⁶ is much shorter than that of the Central Library, although offering the same creative design solution regarding solar-shading. On approaching the Children's Library from Thorpe Drive³⁷ or from other surrounding perspectives view, the East elevation is read



as a complete authentic piece, a wall with bevelled slanted grooves that suspends sideways between the Meeting and Reading Room levels.

To fully appreciate what the solar-shading offers to this unique building, you're encouraged to stand closer and read the perforations and modulations that articulated the facade in playful translucencies. For instance, from the West elevation the top floor is read as full-height louvers, followed below by the remaining full-height louvers in the offices. However, to the left, you experience openings and large slender voids³⁸ a of vertical sections that carries the staircase throughout the entire building. once again, this references the Accra Central Library. These staggered openings of the precast solar shading are designed to improve comfort to the interiors of the library. To fully enjoy these translucencies and be delighted by their mechanical functions and striking aesthetics – visit or drive during the night-time from John Atta Mills High Street, and around the library at night. An archival photo of a feature done by an architectural magazine from the period reported that the purpose of this design was to achieve maximum ventilation and sun protection.³⁹

Changes to design

There are no changes to this design and the concrete and sandcrete blocks used for solar shading have been well preserved and still provide the function for which they were used.

Recommendations

The brise soleil elements of the building still serve the original function for which the building is used. Their main function is ventilation, and this is achieved masterfully in all parts of the building through this system. The air flow measurements of the student teams indicated that the ventilation system created by the brise soleil allows for the building to cool at a significantly more efficient rate as other buildings which do not follow the same design principles. Measurements taken in an office building across the street, without the assistance of an air conditioning unit for cooling the space, indicated a temperature difference between the buildings of 10 celsius degrees. Not only

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Accra Central Library

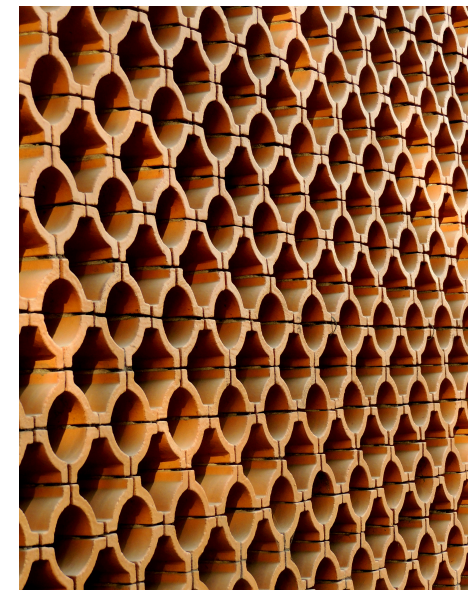
Nickson & Borys

The Library has been designed as part of the Supreme Court Precinct and particular care was necessary in order to achieve a feeling of harmony between this contemporary building and the Supreme Court, an immense colonnaded building in the Colonial Classical style.

The elevational treatment is designed to satisfy two main functional requirements: sun protection and ventilation.

A reinforced concrete frame was used for the construction, with concrete block panels and partitions, and window walls of floor to ceiling adjustable glass louvers.

Right: children's library and exhibition hall block



³⁸ Various solar shading motifs used at the Accra Children's Library (Joseph Conteh)

³⁹ Archival photo of feature from architectural periodical of the Accra Children's Library (Joseph Conteh)

is this system efficient, but it is also visually beautiful. Each brise soleil has a different form and cast, creating light and shadows across the buildings interior surfaces.⁴⁰ The restoration planning team discourages the use of artificial air conditioning in public buildings, due to the extravagant use of energy and cost

of maintenance, which is something that public agencies in Ghana can certainly do without. The Children's Library is clearly one of the best examples of how natural ventilation can happen effectively and at a reduced cost in a major public space.



⁴⁰ The various brise soleil casts from the exhibition hall of the Accra Children's Library (Tuuli Saarela)

Landscaping

Original design

The original landscaping included shade trees and a lawn of green grass in the back of the building. In front of the Children's Library was an open field of gravel.⁴¹ We could not find the original landscaping drawings but can extrapolate from government buildings of that period and they were usually located on daily generous pieces of land. When looking at an image of the Accra Main Library from the same period, lush and well kept gardens are a main feature of the public space around the buildings.⁴² In the 1960s labor was relatively cheap and the government could employ lots of young men and women to maintain gardens. The children's library was designed to sit on one such municipal garden and is adorned with several large trees and big shafts of lawn. Sadly, the landscaping is not maintained at the level as it was intended.

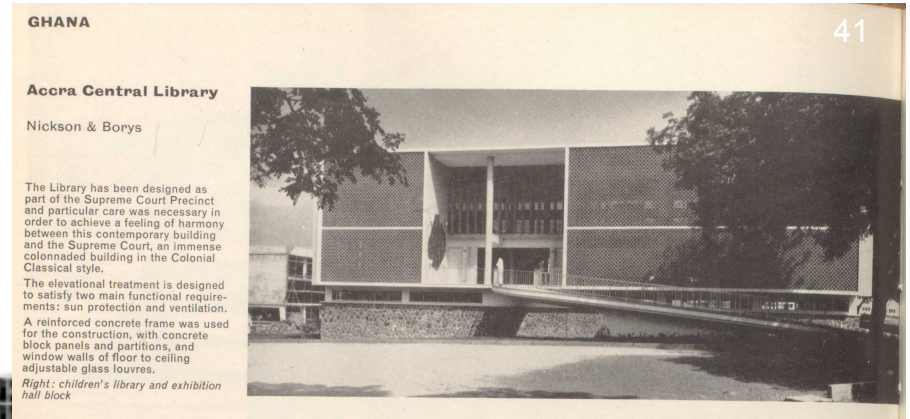
Changes to design

The landscaping has been neglected over the decades in favour of other more important repairs and maintenance programs.

Unfortunately the site has been increasingly appropriated by the city's vehicular traffic and eventually, the government was forced to recognise this by physically building a road to connect two major neighbourhoods in the area; John Atta Mills High Street which hosts the headquarters of three major international banks and the municipal market, Makola

⁴¹ Archival photo of the Accra Children's Library shows an open field of gravel

⁴² Archival photo of the Accra Main Library shows a manicured garden



Market where the biggest market in the city is located.

However, the trees planted have grown into remarkable shade trees, providing much needed respite from the sun and the noise of the vehicles. In the heart of the tropical city, this space is a welcome green space for the residents.

Recommendations

Our recommendation is that the management of the children's library should revert to the original design and implement the open lawn system. This would give the children a place to run and play when they are not using the materials in the library. The lawn is large enough by the standards of the city to permit the construction of a children's playground where pre-school children can be entertained by their parents or elder siblings. This one element would distinguish the Children's Library from all other municipal buildings of the area, and emphasise its continued function as a children's emporium.

1. The city should be encouraged to reset the original plan and emphasised a children's playground on this lawn.⁴³
2. The Children's Library has a lot of land around it but it is under-utilised. The construction of children's play structures could be a wonderful antidote to the severe modernist lines of the library. The best example of such a transformation is the Phillip Johnson house in Washington. He was one of the heroes of contemporary modernist architecture who studied under Mis Vandero. For a masters thesis, he built a glass house, which became quite iconic in showing how a museum building. Years later, the building was looking rough around the edges and the university decided to rehabilitate it. One solution was to clothe it as a children's playground. This was very well received.
3. There is nothing on the exterior of the building that indicates it is a space for children. Landscaping and landscape design can help to hint at this use from the street view.



⁴³ Photo of the existing lawn, where a children's playground could be constructed (Tuuli Saarela)

Railings

Original design

The railings of the main ramp and the internal helical staircase form a very important introduction to the Children's Library.⁴⁴ The railings are made of aluminium tubes of the simplest form with plastic coating. This use of materials has preserved them from exposure to the salt laden sea breezes from the Atlantic, which is less than half a mile away.

Inside the main vestibule, the second important railing element is formed by the helical staircase.⁴⁵ The building is entered through a sizeable vestibule and this is filled with a two story high open helical staircase. There is an abrupt change of material from the playful encrusted ramp to the terrazzo tiles of the vestibule. All these materials date from the 1960s and has shown remarkable tolerance for the heavy traffic they have borne all these years.



⁴⁴ The entrance ramp railings of the Children's Library (Joseph Conteh)

⁴⁵ Photo of the helical staircase at the entry vestibule of the Accra Children's library (Tuuli Saarela)



A third railing element is a metal lattice screen, which separates the main vestibule from the adjoining public spaces to the back of the building.⁴⁶

Changes to design

The railings remaining today are all original appendages or elements. They are part of the original built design and have weathered the passage of time remarkably. Apart from one or two distortions in the railing, the rest of it looks as pristine as the day they were installed.

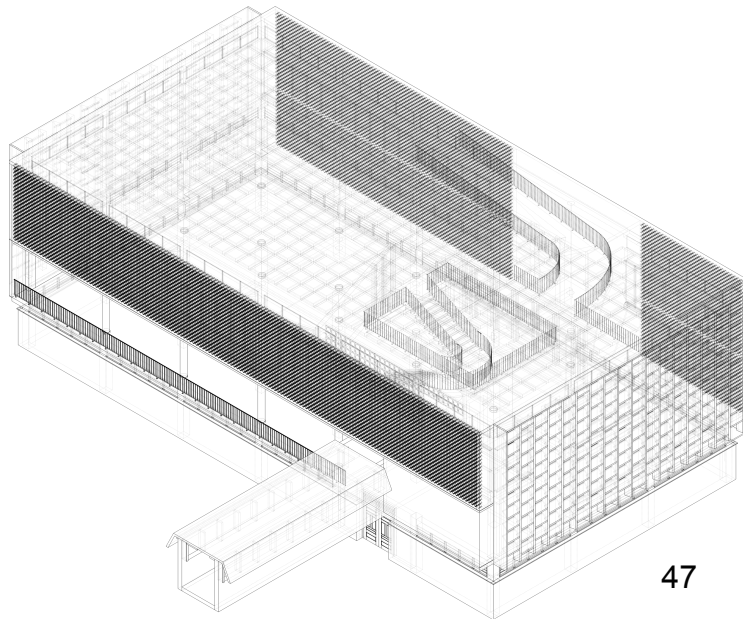
Only three percent of the railing show any deformation. We recommend that the deformed pieces be matched as closely as possible with replacement sourced from the local market.

⁴⁶ Photo of metal lattice screen detail (Tuuli Saarela)



Recommendations

The conservation team proposes that these three elements be maintained as they are. The simplicity of the design is the best advertisement for modernism in Accra and the fact that it has been maintained in the last 50 years despite destructive corrections made to similar buildings, which have ended up destroying them all, the lasting quality of these elements are a testament to the original design⁴⁷ and this should not be disturbed.



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⁴⁷ Architectural 3D drawing of entrance ramp and helical staircase within the building (William Milward)

Stone ground floor

Original Design

The ground floor of the building is at the street level.⁴⁸ The frontage of the building is clad with stones. The ground floor is used as a storage space for the library, and is filled with old files from floor to ceiling. The space is dark and dusty, with no ventilation as the louvre windows openings at ceiling level remain closed.

Changes to the Design

Despite a search in the archives, which could have revealed an original use for the ground floor, no document or picture was uncovered. However, it is clear that today, the space is under-utilised. Additionally, the exterior stone wall disconnects the street level from the library.

Recommendations

There are no major design elements that need preservation on the ground floor, so more could be done to change the original plan or use of the space without compromising the stylistic elements that the conservationists have identified for protection.

1. The ground floor space is under-utilised. The conservation team thinks that this space could be better utilised as a means to draw ordinary citizens who pass by on the street to use this public building. Re-imagining this space, and even opening the exterior wall would increase accessibility.
2. An appropriate use for the ground floor must be identified. The audience for the building as a Children's Library is children and youth. As the city continues to grow toward the north, more and more the young people are being drawn away from the coastal areas to the developing suburbs. A survey of the whole area shows very little in entertainment or meeting places for young people. A redesign of this space could be a possibility to create a youth oriented public space.



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⁴⁸ Photo of stone ground floor from street level (Joseph Conteh)

Lighting and acoustics

Original design

In this concrete framed-building, natural light and lighting are an integral design element and pivotal to the layout and function of the Children's Library. The architects were unusually successful in using the abundant sunshine of the tropics to craft the space. They were so successful that one easily overlooks the fact that there is a lot of physical evidence employed in constructing the space, much of it in wood and concrete or metal.

The architects were also very successful in using artfully placed openings in all the walls in the building.⁴⁹ This artful placing of concrete openings allowed the air to flow and cool the interior down. There are three different types of windows used in this building, allowing maximum entry of natural light aided by these windows.

Louvre windows are used on both sides of the building, allowing for abundant natural light to enter the reading room on the first floor⁵⁰ and conference room

on the second floor.⁵¹ On both sides of the building, louvre windows are designed to be easily opened to improve ventilation. The Louvre windows are



49 An architectural window and door detail drawing (William Milward)

50 A photo of the library reading room in 2015 before renovation which shows the light allowed in by the louvre windows (Tuuli Saarela)

51 A photo of the exhibition hall on the second floor, showing the quality of light (next page) (Tuuli Saarela)



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placed within a wooden frame, painted white – in keeping with the colour language of this Modernist element.

The light changes throughout the day and creates wonderful play of light and colour inside the building. At noon, when the sun is at its most oppressive, the light inside is soft and coloured with the orange hue of the brise soleil. The

light also creates angular shapes through the different shapes of the brise soleil, and even creates spotlights as a natural phenomenon. At sunset, the light filters more densely through the orange sandcrete facade of the brise soleil and creates a tranquility to the interior spaces.

In the exhibition hall, the louvres windows are 2.4 metre high and 0.88 metre wide and designed in four vertical sections. Within the 4.2 m high section of the exhibition hall room, seventeen glass louvres can be fitted.

Another variation of windows can be found designed as full-height glass walls in wooden frame spanning 11.8 m width flanking the Reading Room and a generously spaced balcony on the entrance level for social events, gatherings and children to play with their friends.

Horizontal strip windows were also used, which are considered to be part of the five points and principles of Modernist architecture championed by Le Corbusier in his book "Towards a New Architecture".⁵²



The basement level provides archive, backrooms for storage materials, book and children's publication. This function lends hugely to the design of the exterior walls and envelope, limited daylight while improve passive ventilation with adequate floor to ceiling provisions. In true Modernist form, strip windows are found at high-level similar to the Reading Room. These windows span between rectangular columns on all cardinal points of the building's facade at basement level.

52 A photo of the horizontal hinge Louvre windows designed for ventilation (Joseph Conteh)

53 A photo of the original wooden doors from 2015, now replaced with aluminium glass doors (Tuuli Saarela)

Changes to the Design

The original full-height windows in the second floor exhibition hall are today left without the louvre-glass. The blades have fallen out through the passage of time and have not been replaced. They will have to be replaced because of the rain, which can damage the interiors.

The Reading Room on the first floor has been recently renovated with generous support from donors (2016). Presently, the high level louvre windows in the Reading Room are kept shut and the horizontal windows have been covered with bookshelves. As a result, the ventilation in this space is largely provided by the use of ceiling fans and newly installed air conditioning units. An individual does feel very comfortable with the temperatures created in this room, the reading room also has the lowest floor to ceiling height at 2.8 m.

The original wooden entrance doors⁵³ have been replaced with aluminium glass windows. There remains a wooden curtain wall detail window in the Reading Room, which reflects the original wooden doors at the main entrance, now replaced with cheap aluminium material, The replacement of these windows and doors is a clear deficit to the overall aesthetics of this building.



Above the entrance is a strange infill within the peripheral wall. The language of this infill is similar to brise soleils, however the execution unsuccessful, again another area where a conservation policy would've greatly been effective. This surface above the entrance glass door was designed with wooden frame-glass windows, unifying the south facade and creating a break

between two sections of brise soleils double-storey frontage address the Bank of Ghana and commercial district.

The only place in the entire building that still has full-height Louvre windows remain is found in the offices to the left of the entrance. This highlights an important restoration need, as the building was designed predominately for the use of louvre windows.

Recommendations

In future, implementation of policies for heritage and conservation, replacement of original features should be like-for-like or where possible as close to the original, bespoke should be sourced and re-specified.

In studying the uses of the building today, a close observation reveals that the busiest period in the afternoon after 2pm. This coincides with when the school children finish daily and visit the library for additional reading and support, often helped by young students who are on their national youth service programme. The designs should take this into consideration.

Some clear recommendations from the conservation team include:

1. Considering the low maintenance budgets of public buildings in Ghana, one should stay away from fixed glass, as this would invite the need for air conditioning.
2. The original louvre system should be re-installed.⁵⁴ This system is efficient, low cost and offers ventilation. The system should continue to be used as a



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54 Photo of the louvre sections to be replaced (Tuuli Saarela)

teaching aid for students and conservation architects as to the efficacy of walls that breathe. The temperature can be modulated by shifting the angles of the louvres.

3. Pollution from the cars can be minimised with shrubs to absorb exhaust fumes. Pollution coming from the street inside the building should not be an argument for changing the design.

Finishes

Original design

The architects Borys & Nickson were meticulous in choosing finishes for this building. In the absence of correspondence and communications between them and the client, it is difficult to map their fastidiousness. Presumably, the intended use by thousands of school children dictated a high maintenance regime for the material. Fifty or more years after the building was handed over,

it still looks remarkably well preserved in its essential elements. It is obvious that the very high quality of the materials has ensured this preservation.

Wooden floors

Wooden floors are the triumph of the building. The conference room and the library employ highly polished mahogany wooden floors. This is an original design element from the 1950 and 1960s, which are unfortunately no longer in popular usage, as they require too much to maintain them properly.



That said, wooden floors add a lot of value to the general appearance and utility of the space. It is difficult these days to justify their use because of the high labor costs they impose on any institution, especially public buildings. But it is probably for the same reason that institutions engaged in the up bringing of children should not shy away from using them, in order to encourage an appreciation for the beauty of wood. This is especially important in a tropical country like Ghana, which has historically sustained a natural abundance of hard wood. It is unfortunate that in the last 20 to 30 years, a lot of this resource has been depleted. This provides us with an opportunity to educate young children, public agencies and citizens on the beauty and utility of this natural resource.

The ramp

The first element that the children encounter is a ramp that connects the entrance foyer to the street.⁵⁵ It was designed for the rough and robust use by thousands of feet running up and down its surface. It is about 3 meters wide and rises from 0m elevation to about 3.5 meters. Its surface is covered with hard pieces of rubberised panels consisting of sea pebbles, exo-skeletons of tiny fish and other crustaceans.⁵⁶ The material is of very high quality, because in spite of 50-60 years of use, it shows remarkably little wear and tear. It provides the children with the first discovery as they go into the library. The scene at their feet seems from the sea, and other water animals. It is an imaginatively presented detail to attract the attention and curiosity of small children to whom the library is dedicated.

Changes to design

Remarkably, the original wooden floors remain, although they are poorly maintained. The entrance ramp with the sea shell details is also very well preserved.

Recommendations

The conservation team recommends to keep and maintain the wooden floors and ramp details exactly as they are. These two materials are unique, which in our experience cannot be found jointly in any other public building in the country. So it is appropriate that they are remarked upon.

⁵⁵ Photo of entrance ramp (Joseph Conteh)

⁵⁶ Photo of entrance ramp zoom detail (next page) (Joseph Conteh)



1. The floors should be refinished with sanding and polishing. The Library should include in its budget funds adequate to support this expenditure.



2. The entrance ramp finish can remain exactly as it is, it is well preserved and does not even require patching.



Conservation Policy

Protective Designation (Tuuli Saarela)

ArchiAfrika and its network of allies advocate that the Ghana government create a new policy for the conservation of modernist buildings. An intervention is needed to ensure that modernist buildings are maintained and conserved as a permanent part of our national heritage. ArchiAfrika has collaborated with groups interested in the conservation of Ghana's modernist buildings, and is proposing to government a policy under which these buildings can be protected and effectively maintained, as an important part of our national heritage.

Legal Framework in Ghana

Previous cabinet decisions have been made on the protection of heritage sites and buildings in Ghana. However, there is no specific policy on modernist buildings, in particular. As these buildings continue to age past the 60-70 year mark, a conservation policy is recommended.

ArchiAfrika advocates for the creation of a “*modernist heritage building*” designation under the laws of Ghana. This designation would be approved by the Ghana Museum and Monuments Board. Buildings with this designation would be earmarked for rehabilitation and renovation using a conservation approach that is sensitive to maintaining the architectural style of the building, while implementing new technological improvements.

The current designation of buildings as national monuments occurs under Section 11 of the National Museum Act, 1969 (Act 387), which provides for the proclamation of national monuments belonging to the Republic by the Minister through executive instrument, upon recommendations of the National Museum and Monuments Board.

The Ghana Museums and Monuments Board (GMMB) which currently serves as the legal custodian of Ghana's cultural heritage was established under the National Museums Ordinance. The ordinance was then repealed and replaced by the National Liberation Council Decree (NLCD) 387 in 1969 and further enforced by Executive Instruments 118 in 1969, 42 in 1972 and 29 in 1973. The GMMB operates as a body concerned with acquiring, protecting,

conserving and documenting Ghana's tangible and intangible material cultural and natural heritage for posterity, for purposes of research and public education and with the aim of fostering national identity and unity⁵⁷. It consists of:

- The Museums Division which gives technical assistance to museums in the country
- The Monuments and Sites Division which is responsible for
 - Creating an extensive national register and inventory of Ghana's cultural heritage and immovable cultural property
 - Undertaking inspections and reporting the level of deterioration of historic buildings and undertaking preservation and restoration processes.
- The Heritage and Education Division which is charged with public education of national and international cultural and natural heritage and
- The Administration and Finance Division which oversees the general administrative management and finances of the Board

Structures classified as “monuments” by the GMMB enjoy statutory protection. Buildings and sites that fall under this designation are:

- Forts and castles
- Ashanti traditional buildings
- Ancient mosques
- Chiefs' palaces
- Town halls
- Individual private houses
- Royal graveyards

Following a re-examination of the functions of the GMMB by the National Commission on Culture in 1991, draft legislation was proposed to broaden the board's mode and scope of operations.⁵⁸ However, the draft legislation is still awaiting parliamentary approval. The proposed legislation:

- Recognises the possibility of private or commercial ownership of shrines, cemeteries, memorials, parks and gardens etc.
- Highlights the rights of private owners and the functions of state agencies in the control of listed heritage sites
- Implements a scheme backed by statutory authority for the protection of historic buildings that had the potential of meeting Ghana's development needs in the present and future

⁵⁷ The Ghana Museums and Management Board, http://www.ghanaculture.gov.gh/modules/mod_pdf.php?sectionid=640

⁵⁸ F. K. Amekudi, [Legal Instruments Concerning Immovable Cultural Heritage Protection in Ghana](#)

- Proposes the designation of ‘conservation areas’— buildings or sites that were laden with townscape, archaeological, cultural and historic value

Ghana's legal framework for heritage protection also acknowledges international charters and conventions. The internal laws conform to the principles guiding the protection, conservation and restoration of ancient buildings as can be found in Articles 2-7 and 10, 13 and 14 of the 1964 Venice Charter for the Conservation and Restoration of Monuments and Sites.

Although the modes of enforcement between these legal frameworks and customary protective laws differ, they by no means stand in opposition. In fact, they complement each other and have served as an effective means of protection especially concerning the Ashanti traditional houses, which have also received World Heritage designation.⁵⁹



⁵⁹ UNESCO, Ashanti Traditional Houses, <http://whc.unesco.org/en/list/35>

⁶⁰ An archival photo from a 1960s brochure shows children at the Children's library (Ghana Library Board)

Engagement of stakeholders

To conserve modernist heritage buildings, engagement of the community of users ensures that the wishes and aspirations of all these diverse groups are met. Under the proposed new policy, conservation plans will only be approved if the diverse user groups are consulted. It is imperative that the restoration must be flexible enough to envision future technological changes and how these could be accommodated in the structure. In these days of universal government cutbacks, especially on culture, a new design must make room for broader uses of the faculty to generate revenue to sustain it.

Several parties have a stake in modernist buildings and each must be given a voice in plans of restoration.

- Heritage designation:** The Ghana Museums and Monuments Board has a responsibility for designation of national monuments across the country under Section 11 of the National Museum Act, 1969 (Act 387).
- Users of buildings:** The users of the buildings have an obvious interest in the building. In the case of the Accra Children's Library, for example, the users⁶⁰ are represented by the Ghana Libraries Board.



- City authorities:** In Accra municipality, the Accra Metropolitan Assembly is the leading local government authority of all public buildings located

in Accra. The Mayor is an official chairman of all relevant Boards of public agencies using the buildings.

4. **Government consultant:** Per the Architectural and Engineering Services Corporation Act of 1973 (Act 193), the Architectural and Engineering Services Limited is the agency in charge of renovation and maintenance of public buildings. AESL has supervised a number of renovations of the Accra Children's Library.
5. **Minister:** The Ministry in charge of the users of the building has financial oversight of the building. In the case of Accra Children's Library, this is the Ministry of Education. The Ministry is also in charge of the GET Fund, which funds education in Ghana.
6. **Location of building:** The neighbourhoods where the building is located and whose citizens have used them for the past half-century have a voice in the ultimate decision. The Accra Children's Library is utilized daily, by children from the Jamestown and Usshertown communities. For years many after school activities as well as community events have taken place on its premises and the members of the community are very proprietary about it.

Several international advocacy groups have an interest in the preservation of modernist buildings:

7. **Getty Foundation:** The Getty Foundation developed Keeping It Modern,⁶¹ an international grant initiative that continues the Foundation's deep commitment to architectural conservation with a focus on important buildings of the twentieth century. The Foundation believes that modern architecture is one of the defining artistic forms of the 20th century, and recognizes that today, this modern architectural heritage is at considerable risk. Heritage professionals do not always have enough scientific data on the nature and behavior of these materials and systems to develop the necessary protocols for conservation treatment. The Keeping It Modern program supports grant projects of outstanding architectural significance that promise to advance conservation practices. Grants focus on the creation of conservation management plans that guide long-term maintenance and conservation policies, the thorough investigation of building conditions,

and the testing and analysis of modern materials. In select cases, grants may support implementation projects that have the potential to serve as models for the conservation of other 20th century buildings.

8. **DOCOMOMO:** In the last decades, the architectural heritage of the modern movement appeared more at risk than during any other period. This built inheritance glorifies the dynamic spirit of the Machine Age. At the end of the 1980s, many modern masterpieces had already been demolished or had changed beyond recognition. This was mainly due to the fact that many were not considered to be elements of heritage, that their original functions have substantially changed and that their technological innovations have not always endured long-term stresses. DOCOMOMO's mission is to: 1) act as watchdog when important modern movement buildings anywhere are under threat, 2) exchange ideas relating to conservation technology, history and education; 3) foster interest in the ideas and heritage of the modern movement; 4) elicit responsibility towards this recent architectural inheritance.⁶² Docomomo International has the ability to bring together historians, architects, town-planners, landscape architects, conservationists, teachers, students and public officials, and includes 69 chapters and more than 3,000 members, in Europe, America, Asia, Oceania and Africa.
9. **UNESCO:** At the start of 2001 the UNESCO World Heritage Centre, ICOMOS (International Council on Monuments and Sites) and DOCOMOMO (Working Party for the Documentation and Conservation of buildings, sites and neighbourhoods of the Modern Movement) launched a joint programme for the identification, documentation and promotion of the built heritage of the 19th and 20th centuries - the UNESCO Programme on Modern Heritage.⁶³ With financial support from the government of the Netherlands, this programme focuses on raising awareness concerning the heritage of architecture, town planning and landscape design of the modern era, which is considered to be particularly vulnerable because of weak legal protection and low appreciation among the general public. The Programme on Modern Heritage aims to establish a framework of conceptual thinking on the significance of this heritage, its preservation and some of the pivotal issues concerning identification and valorisation. This framework is being developed through the various

61 www.getty.edu/foundation/initiatives/current/keeping_it_modern/index.html

62 <https://www.docomomo.com/mission>

63 UNESCO Programme on Modern Heritage whc.unesco.org/en/modernheritage/

Regional Meetings on Modern Heritage, which have been implemented by the World Heritage Centre, and should facilitate further, more concrete studies and exercises undertaken by the States Parties concerned. There are currently 24 sites that are listed as UNESCO modern heritage sites.⁶⁴

Financial implications

There are no financial implications for government to this policy proposal. The conservation plans will be developed by the users themselves, or by community interest groups, to protect the building from demolition or insensitive redevelopment. However, it is noted that protective heritage designations must create space to encourage both public and private investment to revitalize the use of heritage buildings. Current protective designation offers little opportunity for true public private partnerships.

Legislative implications

According to our research, ArchiAfrika believes that the only legislative implications of implementing this policy paper is the creation of a regulation by executive instrument. However, ArchiAfrika also advocates that the long-term protection, renovation and promotion of national monuments as tourist destinations should be considered under new and innovative legislative measures, which create an opportunity to attract financing for such initiatives from private, public and non-governmental agencies. The conservation plans must include disability entrances and features.

Government involvement and leadership

ArchiAfrika has created publicity around the need for conservation policy by promoting its conservation plan for the Accra Children's Library. Per our agreement with the Ghana Library Board, the Board is to be consulted on our press statements on the building. Unfortunately, the Ghana Library Board was disbanded in January 2017 and new appointments are yet to be announced by the new government. In November 2017, a new appointment was made for the Director of the Ghana Museums and Monuments Board.

Policy recommendations

ArchiAfrika recommends that government implement the following policy:

1. That Cabinet agree to **designate** selected modernist buildings important to national heritage as "modernist heritage buildings," which are to be offered a level of protection from demolition. Both public and private buildings can apply for designation.
2. That Cabinet require the development of a **conservation plan** to apply for the designation of the "modernist heritage building." This template is recommended by UNESCO, and is a necessary precondition to applying for UNESCO modernist heritage designations.
3. That Cabinet require physical **redevelopment work** to follow the recommendations in the conservation plan. This creates an additional level of oversight over the renovation and maintenance work done in modernist buildings by requiring them to conform to the recommendations in the conservation plan.
4. That Cabinet direct the departments of architecture and the Ghana Institute of Architects **train and certify** at least 2 architects in conservation architecture per year. Training at KNUST and Central University Architecture Departments in the principles of conservation is limited and must be expanded.

⁶⁴ A list of modern heritage sites is found at whc.unesco.org/document/117571

Principles of restoration and use (Esi Johnson)

Good conservation practice demands that the historical authenticity and integrity of any monument be maintained⁶⁵, and the architect-conservator concentrates on prolonging the material, design and historical accuracy through carefully planned interventions. Preserving buildings creates a connection to a nation's cultural heritage. It imbues within modern societies, a spirit of the past; tell-tale signs of civilisations and cultures long ago. It is a means to reinforce values significant to certain places and to create a resource for gaining and sharing knowledge. Maintaining historic buildings and sites can serve as an economic boost to a country, creating jobs through the possibility of promoting tourism.

Ghana's architectural preservation history

Prior to the arrival of Europeans, Ghana's domestic architectural tradition was primarily based on a wood and mud technology which is now referred to as "wattle-and-daub."⁶⁶ This building style dates as far back as the period between 2000 – 500 BC. It was adopted in areas such as Hani in the Brong Ahafo Region, and Ntereso and Chukoto in the Northern region.⁶⁷

In this traditional building style, circular or rectangular foundations of houses were constructed with stone or laterite blocks and a wood framework was erected for its walls and roof. The builder would make an earthen paste (daub) of clay and sand to plaster the exterior and inner faces of the walls until the wooden frame was entirely concealed. Finally, the building was finished off with a thatch roof.

Additionally, the "Atakpame" method which emerged around 8 BC was also adopted by ethnic groups such as the Akan, Wala, Dagomba, Ga-Adangme and Mamprusi⁶⁸. The name "Atakpame" was derived from regions in what is today's Benin and Togo.

This building technology was similar to the wattle-and-daub style in the sense that a form of mud paste was used. However, the Atakpame building tradition avoided the use of a wood frame. The mud paste known as "waga" was also derived from clay and sand but underwent a process of several days of fermentation until it was tough and versatile. Using the fermented mud paste as the main building material, the builder would dig a circular or rectangular trench based on the preferred design of the house and then proceed to laying several courses of the "waga" from ground to roof level. In doing this, the builder would ensure that the mud paste courses at foundation level were taller and stronger than the rest. Wood and thatch were then used for the roofing⁶⁹.

Due to the short lifespan of such buildings, there was a need to preserve them in diverse ways from the harsh effects of the region's climate. Preservation, however, in the sense of the word was not an organised affair. It was more artisanal and required community or household collaboration. In some Northern towns like Sirigu, preservation of mud houses was a woman's task. The women painted stylised totemic symbols and geometrical shapes using their generic red, black and white paint derived from crushed red rock and



⁶⁵ A. Hyland, *Monuments Conservation Practice in Ghana: Issues of Policy and Management*, 1995.

⁶⁶ Prof. J.K Anquandah, *Building Technology*, National Commission on Culture, 2006.

⁶⁷ Ibid.

⁶⁸ Ibid

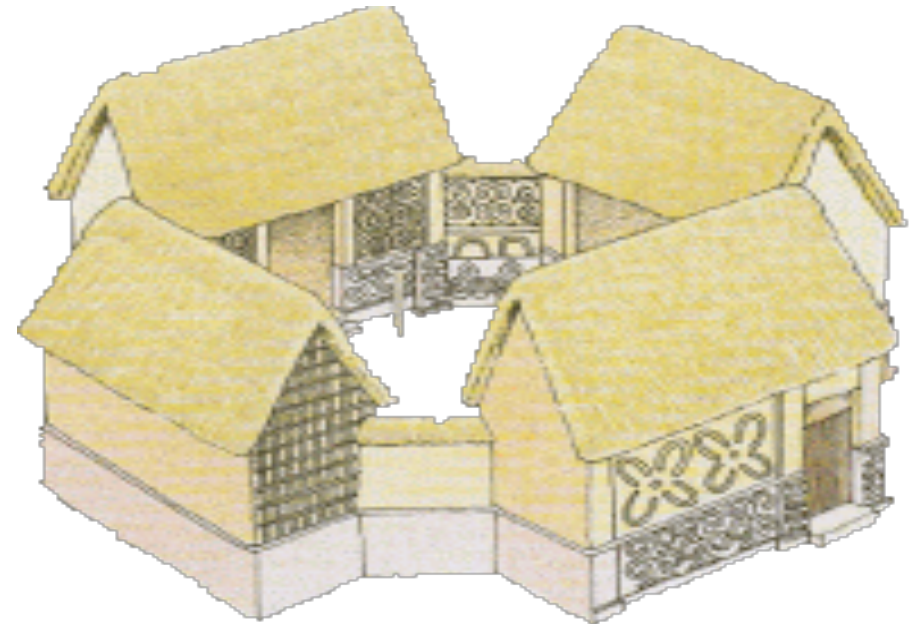
⁶⁹ Ibid

other natural local materials⁷⁰. Apart from their aesthetic and conservational qualities the painted mud houses expressed the longing for a continuity of their culture and beliefs. It was hoped that these murals would serve as motivation for other women to continue the legacy and the totemic symbols they showcased denoted continuity, protection and long life of clan members.

To protect such structures from insects, they were painted with lime wash – a mixture of mollusc shells obtained from lagoons, oceans and streams that were ground into powder and mixed with water⁷¹. Unfortunately, however, these buildings which could last 3 to 4 years in rainfall prone areas such as southern Ghana and a bit longer in the hot and humid zones of the savannah

belt were torn down and rebuilt upon exhibiting signs of weakness. Also, the houses with wooden frames lasted relatively longer than those made solely of mud especially when the wooden core was preserved from insect attack⁷². In the capital city of Accra these buildings could last as long as 5 years but only with periodic plastering of surfaces after a heavy rainfall season or filling of cracks during high temperatures.

The Ashantis also did a fine job of preserving their traditional houses that served as abodes or mausoleums for the wealthy, royalty or deities. These have served as testimony to the rich and powerful civilisation of the 18th and 19th centuries. These structures inculcated the generic mud paste and thatch that characterised traditional Ghanaian architecture and introduced longer lasting materials like timber and bamboo. The king's palaces for example, served as the focal point to a highly centralised civilisation and were periodically kept up to standard by using native building techniques. The unique architectural style was characterised by rich external colour, as well as ornamental and symbolic bas-relief decorations.



⁷⁰ Ghana's painted villages-Sirigu, The Candy Trail, <http://www.thecandytrail.com/sirigu-painted-houses-ghana/>

⁷¹ Prof. J.K Anquandah, Building Technology, National Commission on Culture, 2006

⁷² ibid

All of which pointed to an elaborate, technical and spiritual heritage. Traditional houses such as those that can be found in Ejisu Besiase, Abirim, Asawase and Patakro for example, were made up of four separate rectangular single room structures arranged around a courtyard⁷³.

The walls were adorned with Adinkra symbols –representations of Akan proverbial sayings in the form of birds, animals, reptiles and plants that offered advice and upheld society values.⁷⁴ Protection of these sites from desecration, harm and destruction was enforced by a traditional punitive system, moral code and taboos that transcended generations.

During the colonial period, rampant westernization and urbanization took a toll on Ghana's traditional buildings. The introduction of new building materials such as sandcrete blocks and corrugated aluminium replaced indigenous construction materials. Moreover, the introduction of Christianity and Islam and consequently the building of mosques and churches superseded and led to the neglect of traditional shrines and fetish houses.⁷⁵

Early in the 1900s when the first stone buildings began to appear and when new and foreign forms of architecture such as the modernist movement⁷⁶ were introduced in Ghana, there was a jump from the traditional norm to an unfamiliar complex architectural system. After the British left, the country continued to struggle with the preservation and management of buildings such as the Children's library. This is not to imply that our native traditional buildings are all in perfect condition. There have also been challenges to preserving most of these buildings due to varying factors: the fragile nature of such buildings makes them susceptible to aggressive climate changes of heat and rain in Ghana. Furthermore, heavy rainfall and high humidity have encouraged rapid mould formation on mud walls as well the activities of termites and other insects⁷⁷. Perhaps, more importantly, the traditional maintenance of mud walls has become less common as a result of access to industrial materials. The vernacular expertise needed to restore and maintain them is gradually dying due to gaps in the tradition.



Principles of Restoration

Historical sites and buildings like the Children's library once held within them people and resources from a different time. As these buildings have been inherited by one generation, ways and means to prolong their existence must ensure that the next generation can enjoy a piece of this heritage. As previously discussed, these buildings hold significance in the lives of citizens and must be treated as a shared resource that can be transferred to others.

⁷³ Asante Traditional Buildings, Ghana Museums and Monuments Board, <http://www.ghanamuseums.org/asante-traditional-buildings.php>

⁷⁴ Asante Traditional Buildings, UNESCO, <http://whc.unesco.org/en/list/35>

⁷⁵ A.D.C Hyland, Conservation Practice in Ghana. A Case Study: The Fetish house at Asawasi (Ashanti), Kumasi, 1971.

⁷⁶ The modernist tradition in Ghana has been substantially addressed in the first chapter

⁷⁷ Asante Traditional Buildings, UNESCO, <http://whc.unesco.org/en/list/35>

They are a way to learn about ones history and they possess economic, aesthetic and sentimental values that ought to be relayed.

In restoring buildings, communal participation is of the essence. This suggests that all people from all backgrounds ought to be allowed to enjoy the heritage site, and everyone should be able to participate in making and influencing decisions that affect them. There is also the need to teach people to appreciate, tend to and utilise these spaces and at the same time experts must offer knowledge on its importance to boost the value people have for them. There should be an all-inclusive approach with equal opportunities and access to information due to the fact that the more people know about these places and sites, the more they will appreciate them and campaign for more protectionist policies in their favour.

Obviously, historical sites and buildings are not exempted from natural disasters and the ever-changing patterns of temperature and weather conditions. This is what makes the management of conservation processes a matter of inerasable significance. When managed accordingly, conservation processes can go a long way to minimise the effects of these natural factors. In doing so however, management of conservation practices would require that certain trade-offs are made and certain processes given up in favour of reducing risk and managing cost. It requires an astute study of how these places may be subject to change and the extent to which they may be affected by factors such as their location. It is only with this that actions can be taken in a timely and proportionate manner. Moreover, conservation management must ensure that the overall integrity and uniqueness of the place is maintained – those special qualities that set it apart from others of different time periods and which mirror the values that are attached to them.

Finally and of most significance, is the practice of documentation of all processes and materials used in the restoration process. The untrustworthy characteristic of oral tradition has heightened the need for a sound system of documentation that can be easily accessed or even replicated in similar settings and contexts. Results from expert monitoring and evaluation of the restoration process can then be used to inform future decisions.



Assessment of values (Tuuli Saarela)

The desired goal to be derived from the restoration and conservation of the Children's Library in Accra can be summarised in three main values that users and stakeholders of this and the next generation can benefit from.

- Architectural and Aesthetic Value

The Children's Library is a monument of international significance. It represents a point in time of the modernist movement and its expression in tropical Africa. The building is a jewel of tropical modernist buildings in Ghana, West Africa and Africa. The Children's Library and the modernist style influenced the first wave of architects trained in Ghana, and this influence can be seen across the country in numerous building projects. It is due to the significance and high quality of the architecture that the Children's Library should be restored to modern uses.

ArchiAfrika lobbies government for a protective designation for modernist architectural buildings.

- Historical value

The Children's Library represents the ambitions of the national government for universal education and literacy. The modernist style of the building is embraced by Nkrumah and his government as a departure from the colonial traditions and practices. The building encouraged and motivated important figures and personalities of the time, who fought against old traditions in that period of Ghana's independence. The building reminds citizens of an era of optimism, youth and social equality.

ArchiAfrika plans to exhibit independence era history and its relation to architecture at the ArchiAfrika Design + Architecture Gallery.

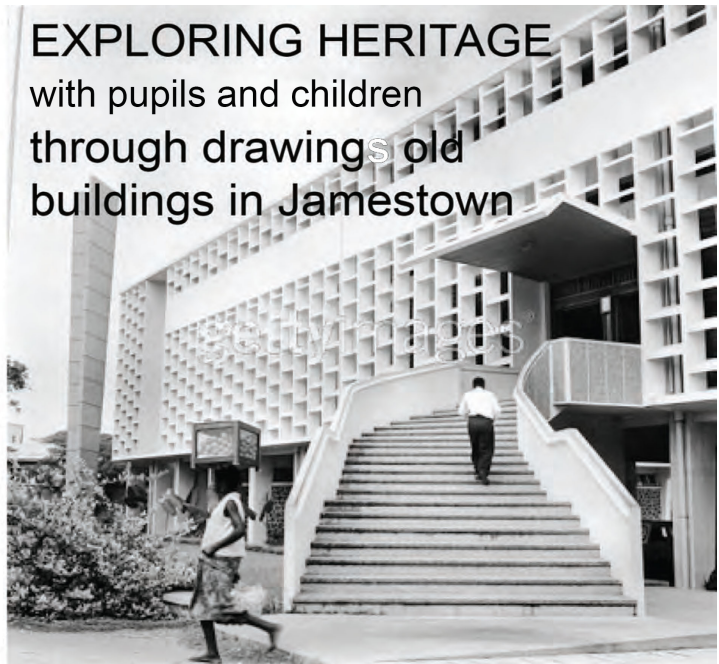
- Social value

The Children's Library is an ideal space for communal learning for the children and adolescents in the Jamestown and Usshertown school district. It is a reading room for both historical and contemporary knowledge and encourages children in a culture of reading. The space can be used for seminars and after school programmes to keep children off the streets.

The primary users of the library are school aged children from 7-18 years, ArchiAfrika engaged them in a full day workshop and in a series of after school activities both at the library and at the ArchiAfrika Design + Architecture Gallery.



ACCRA
CHILDREN'S
LIBRARY



Chapter 4

Implementation Strategy

Guidelines and Recommendations (Joseph Osae-Addo)

The main objective of the restoration planning is to preserve the original architectural forms that make the building so unique. The good news is that the majority of the buildings unique design features can be restored and preserved.

While the building has gone through some previous renovations, a decision must be made that the original designs should be carefully restored. Nevertheless, planned renovations should still enable new uses of the spaces as required by the Library Board.

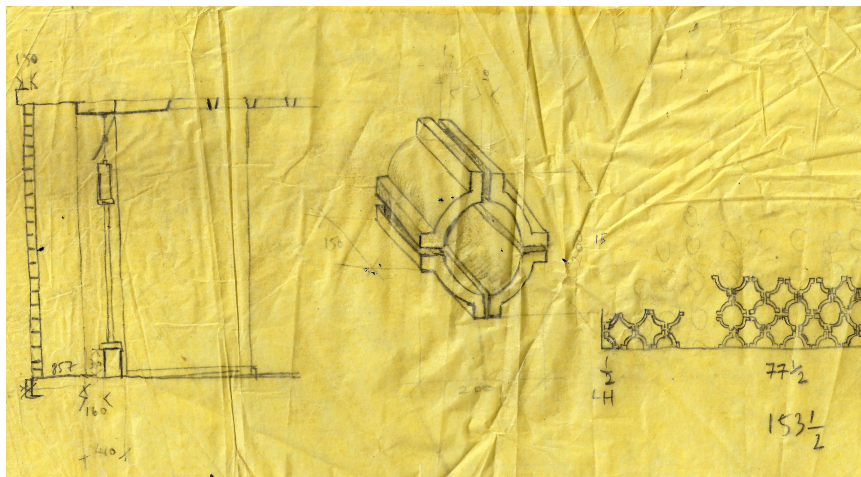
Alterations to the original design should only be made when they are technically or functionally necessary.

Designing new structures is to be limited. But if allowed, the materials and textures of the original design must be taken into consideration and can be applied to new structures. Therefore, it is recommended that a conservation architect approve any plans for restoration, so that any peculiarities can be avoided.

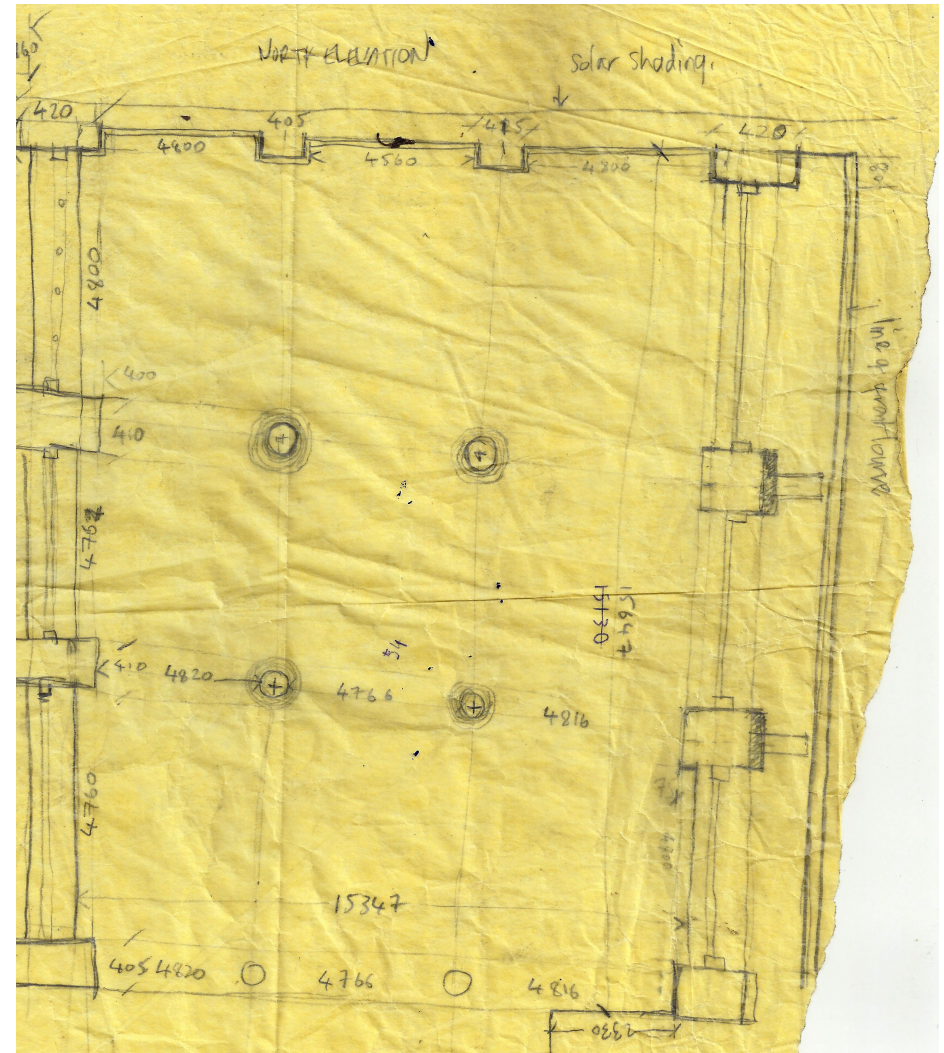
The deterioration of the landscape architecture has changed the spatial layout and general appearance of the Children's Library, as it relates to the buildings

around it in the central business district. The replanting of the landscape will have the most immediate impact on changing the image of the building.

One thing that has changed, is the increased busyness and noise level of the street scape beside the library, so restorations should keep the noise level in mind and solutions designed around this.



⁷⁸ Sketches of restoration elements (Joseph Conteh)

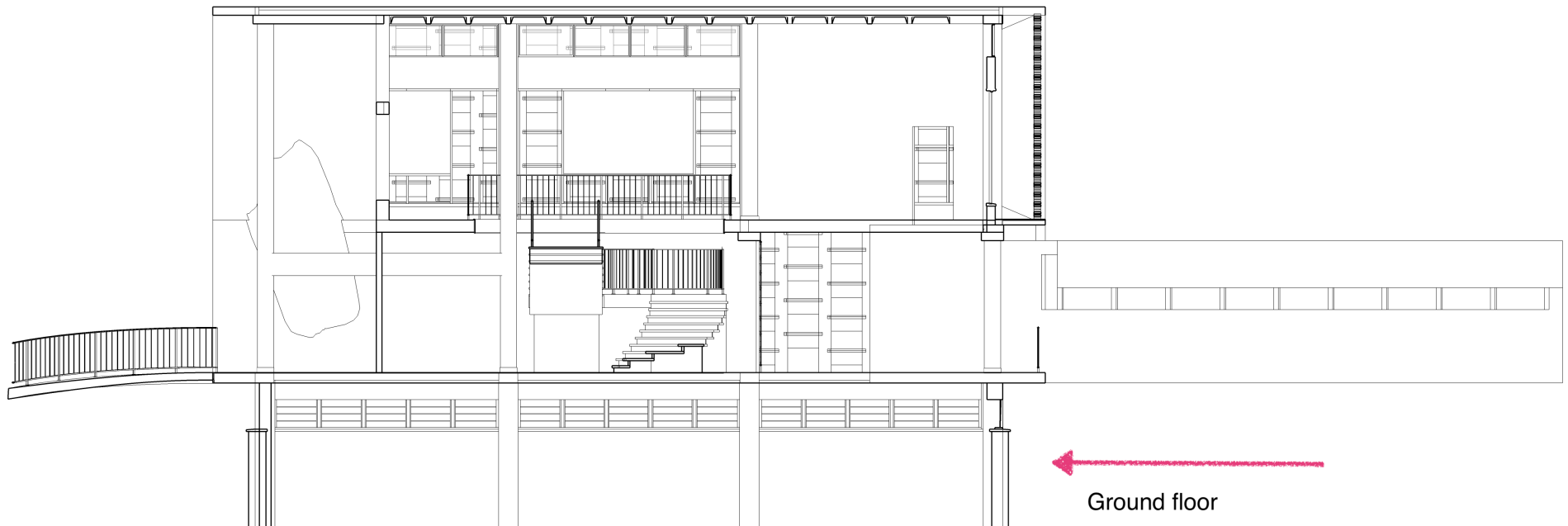


Stone ground floor: street level

The ground floor space is not of architectural significance or attraction. Therefore, the conservation team believes that the space could potentially be altered without compromising the unique design features of the building.

- The ground floor is currently used as an archival storage room for old files, books and furnitures. It is essentially a basement and not for public use. The storage rooms can be gone through to examine whether files could be sent to the National Archives or to some other storage area. It does not seem that the files have been arranged in many decades.
- The space could be altered to allow direct access from the street, if such utilisation would come under consideration for the management of the building.
- The ventilation in the ground floor basement is poor, due to the louvre windows being closed permanently to prevent dust from settling on the stored files.

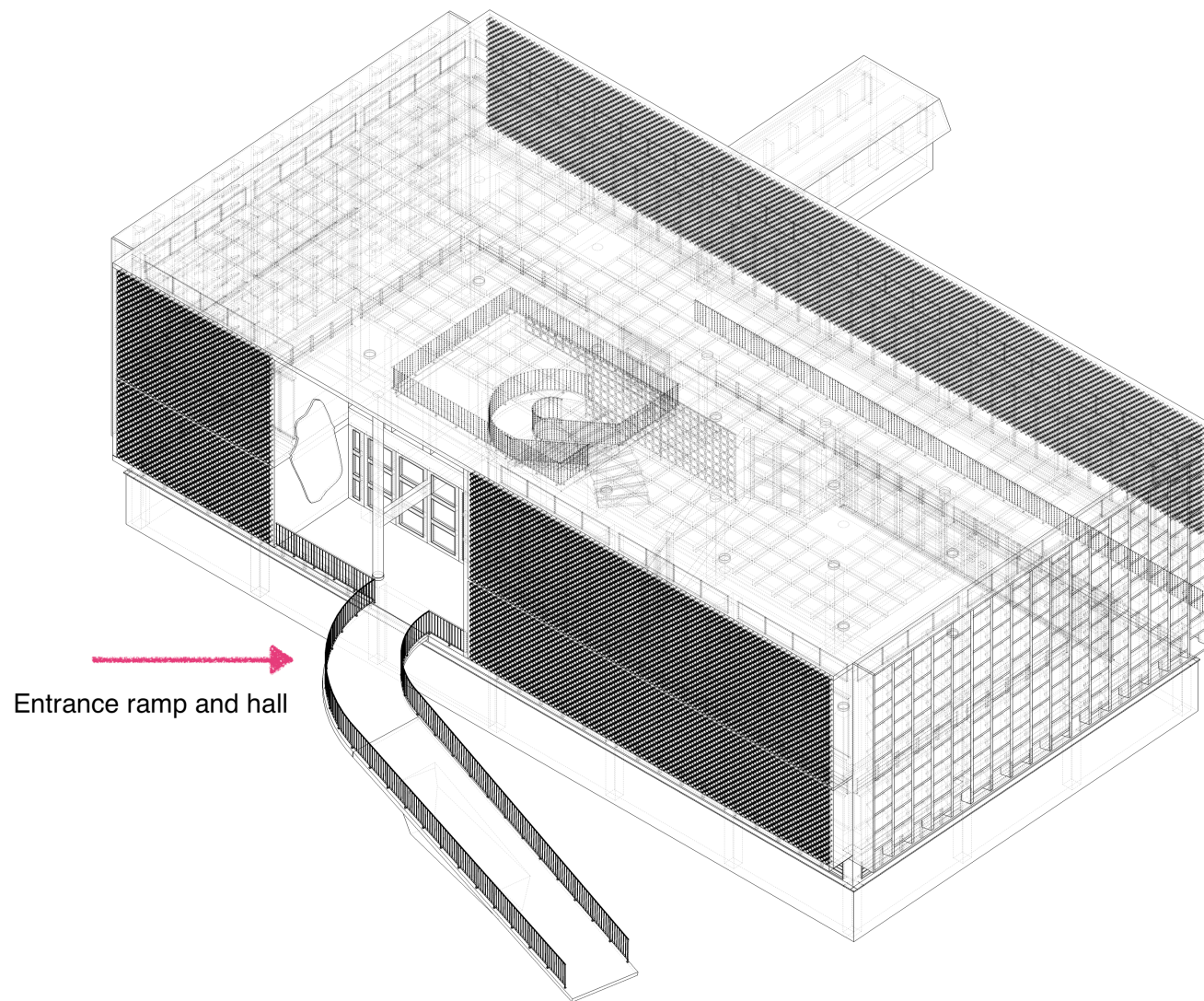
- This space has potential for creating new space usage for the library. For example, the library could receive rental income from a private company or franchise such as a coffee shop, or youth programs offices, or even a new media centre for watching films and electronic media. Another idea are a copy center for generating revenue for the library.
- It is clear that the Accra Children's Library struggles with generating funds to maintain the building at an acceptable level. Adding an income generating activity to the building has the potential to create a consistent cash flow for maintenance, improvements and repairs. Because the ground floor is not architecturally significant, it can be altered without endangering the integrity of the building's original design.



Entrance ramp and main entrance hall: street level to first floor

The entrance ramp, with its fine inbuilt details and finishing, is in good condition and should be maintained as is.

- The ramp meets current requirements for wheel chair accessibility for public buildings.
- The original manufacturer of the railings was not found, but the conservation team suspect that the railings were imported from outside of the country.
- The railings closer to the street level need repair, but only two or three sections due to distortion of the frame.
- To repair the distorted sections, it may be possible to approach local aluminium manufacturers to remold the sections in their workshops by hand. It may also be possible to recreate these sections from new material entirely. The cost of this repair, while specialized, should not attract too much cost.
- In the process of commissioning local companies, it may also be possible to discover the level of artisanship of local aluminium manufacturer workshops, in order to meet future demand for the same products. The availability of corrosion resistant metal works is a pressing need for sea proximate communities who are continually exposed to the harsh sea air and its corrosive effects.
- As mentioned previously, the entry hall doors have already been altered from the original wooden doors⁷⁹ to sliding aluminium doors.⁸⁰ While the conservation team would prefer re-installing the wooden doors, it is also important for the library management staff show appreciation to the donors who had agreed to replace the doors at no cost to the library. However, going forward, it would be preferred if the library management refer



⁷⁹ Photo of original wooden doors in 2015 (next page) (Tuuli Saarela)

⁸⁰ Photo of new aluminium doors installed in 2016 (next page) (Joseph Conteh)

donors to this conservation management plan and its recommendations before allowing any alteration to the original design.

- The terrazzo tiles in the entrance hall are in perfect condition, and do not need any replacement. The railings of the helical staircase and the iron lattice screens are also in good condition and need no maintenance or replacement.
- However, the southern wall of the entrance hall has exposed wires,⁸¹ which could be hidden into the wall. This will require careful chipping of the wall, patching using cement and a repainting of the wall.



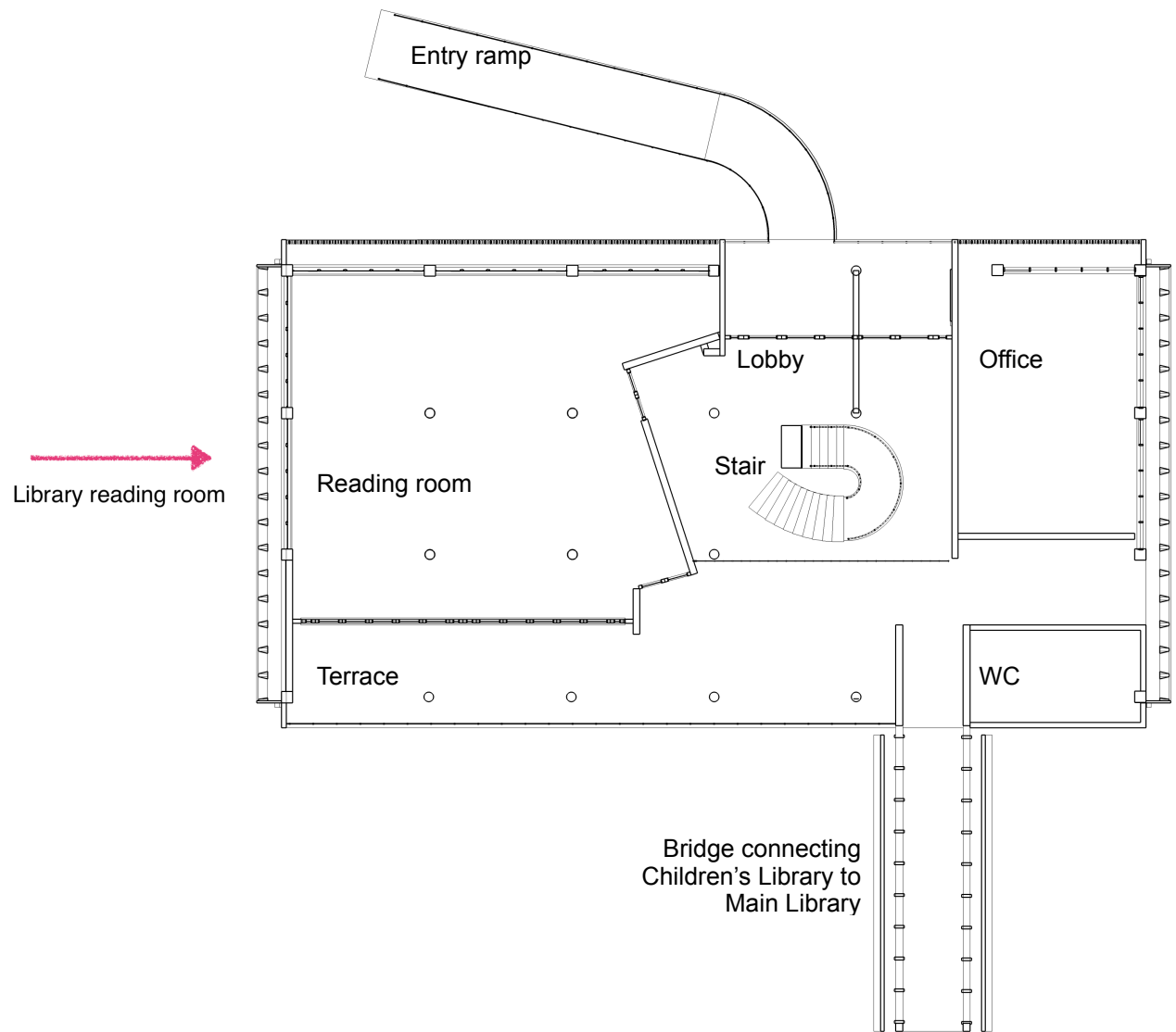
⁸¹ Exposed wires in the entrance hall (Tuuli Saarela)

The library reading room: first floor

The library reading room has been renovated in 2016 with notable changes from the original design.

- The reading room is located on the first floor, next to the main entrance. It has been renovated recently and a significant change was effected. The renovation was effected before this project of conservation began.
- The clear story windows, just under the ceiling were boarded up. With that alteration, the single source of ventilation was eradicated and replaced with air conditioning.
- The space used to have high clear story windows above the book racks and under the ceiling, which allowed the air to flow through the space. These windows consisted of four louvre blades and ran the whole length and sides of the room. These windows have now been closed over with wooden panels.
- The boarding of the windows also prevents natural light from filtering into the room, which softened the hard edges of the space. Now installed are fluorescent tubes, giving a harsh but effective light for reading.
- It is too late to reverse this decision, because donors money has been spent and it would be embarrassing to the government to reverse this voluntary contribution, which was received with the best of intentions.
- Apart from the major changes to ventilation and light, the wooden floor has been polished and cleaned, and child sized furniture has also been repaired and maintained. The floor is composed of the same high quality mahogany parquet flooring and we notice that it is being maintained at the same high level as the floor in the conference room above.
- The conservation team believes that the boarding up of the clear story windows has not been in the best interest of the users of this space. They also recognise that it will be embarrassing for the management of the

library to reverse this decision. It is recommended that if any time of the future, the government contemplates rehabilitating the building, these two elements should be restored to the original design.



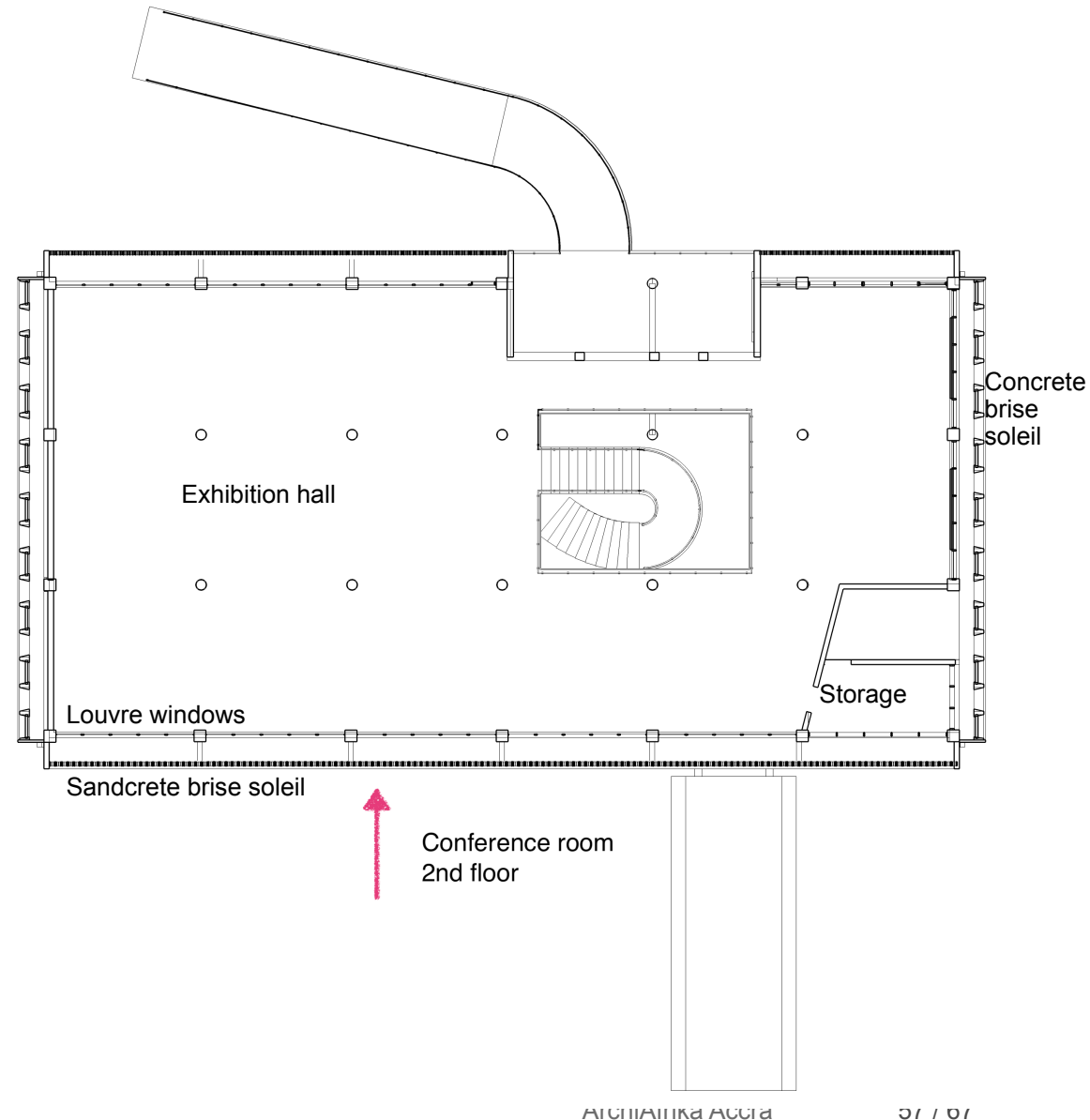
- The conservation team can note that the two elements that were employed very fastidiously by the original design were ventilation and light. These design elements eliminated the need for air conditioning entirely. The building was designed with a succession of spaces and openings in the outer skin which allowed a consistent air flow. Despite the ambient tropical heat, the sea breezes from the Atlantic flowed through the building and cooled it appreciably. There is no need for mechanical cooling or ventilation, if the original design is maintained.
- The dimensions and height of the rooms also encouraged the air flow and added to the beauty of the structure. The room height of the second floor is critical to the success of natural ventilation. It is one of the most comfortable rooms in the building and has just a few well located ceiling fans to help drive the air through.

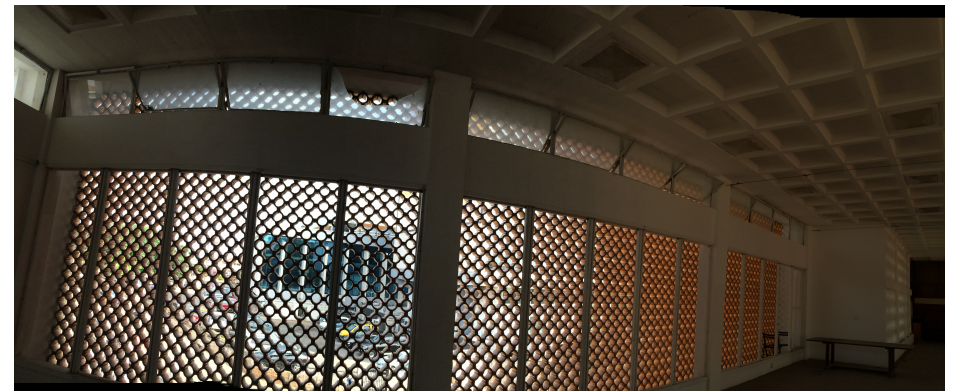


Exhibition hall: second floor

The exhibition hall is a jewel in the crown of the building.

- It is on the second floor, with 1.5 story high ceilings. It is a grand room, with high ceilings and louvre windows enveloping it on all four sides.
- The north and south faces of the building are protected by the brise soleil and louvre glass windows. There are three sizes of louvre windows and they are placed for the most efficient transfer of air through the space.
- The floor is the high quality mahogany parquet which has been well maintained.
- The ceiling has coffered ceiling vaults, very efficient at trapping heat from the floor which rises and is trapped in the vaults to be blown away by the fans towards the strategically located horizontal ventilation windows just under the ceiling. The surface of the vaults is finished with a fibroid material.
- At this moment, there is some confusion to the ultimate fate of the exhibition hall due to renovations planned by the management team. The conservation team notes that this is one of the most versatile spaces in any public building in the city of Accra. It can be used for conferences, musical entertainment, book readings, exhibitions, academic lectures and civil marriages. Its open plan can easily be subdivided simply by placing panels or curtains. The lights in the ceiling vaults guarantee an equal lighting throughout the space.
- The team recommends that the exhibition hall is preserved for use by all the above stated reasons, and a policy be created by the management team to encourage its use to gain income to maintain the building in the long run.
- In its current state, the exhibition hall is not functional enough to be used commercially. However, with a repair of the louvre windows, polishing of the floor, and light electrical works to allow multimedia presentations and wiring, it can actually generate rental income for the library. A reference in use of libraries for both public and private events can be made in the New York Public Library. Events like toddler story time, building tours, concerts, exhibitions, civil weddings and book signings, all happen within the library.

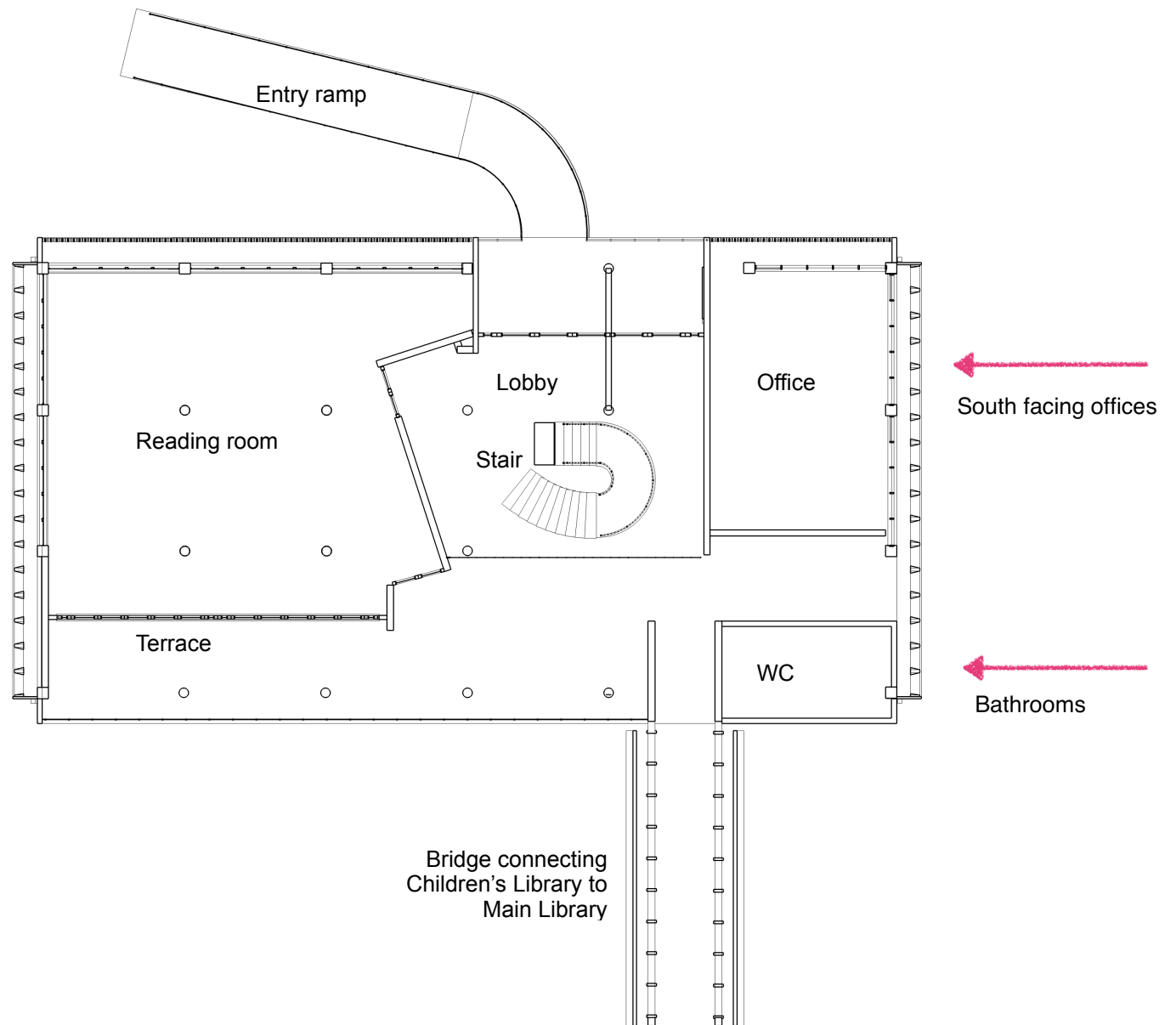


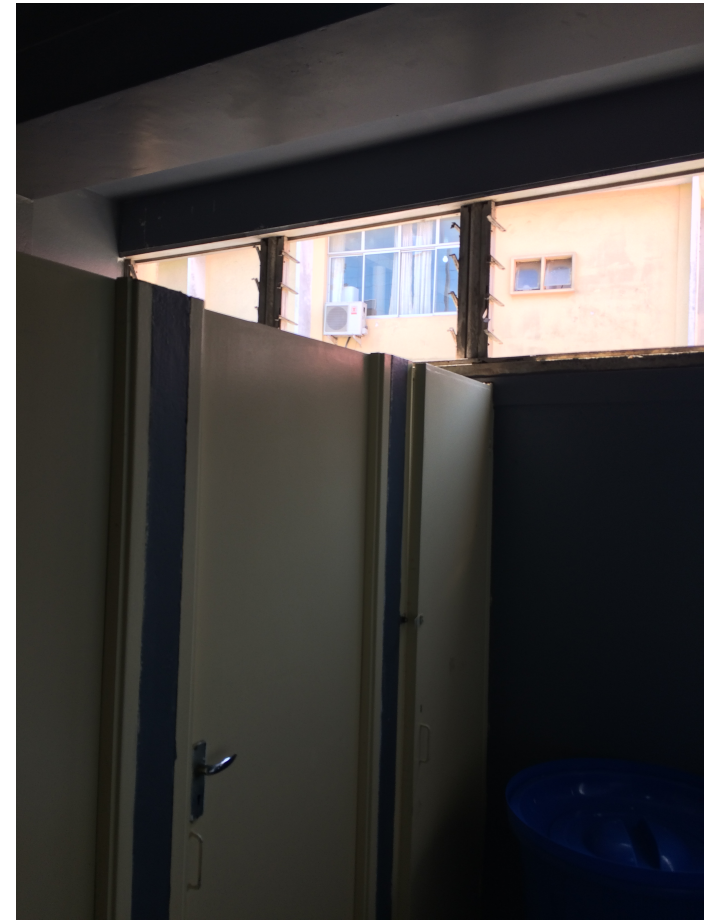


South facing offices: first floor

The existing offices and bathrooms are features from the original building design.

- The administrative office has not been well taken care of. The room is old and has not been serviced. It stays mostly locked.
- The administrative office must be renovated. It forms an important part of the architecture of the building and it is a shame that it has been discarded. For example, floor to ceiling louvre windows are a distinctive feature of this space.
- Some of the original furniture still in the office could even be renovated by hand.
- The bathroom went through some renovations sponsored by ArchiAfrika and Michelletti in 2015. This was to restore basic plumbing features, which had stayed broken for almost two decades. The bathrooms are now functional.
- However, the bathroom needs further renovation, including a bathroom stall for children and a sink that is the appropriate height.





Landscaping: street level

The original drawings for landscaping are lost but it is relatively easy to extrapolate the intentions of the landscape architects from the few remaining elderly maintenance workers on the site.

The original site was a little less than twice the existing size of the lot. It accommodated the library, a broad manicured lawn, and a small children's playground. The library is sandwiched between venerable institutions like Bank of Ghana and the Supreme Court of the country. It is also located north of a major market, Makola Market.

A few years after independence, traffic around the library increased to such an extent that a large portion of the library land was appropriated to ease vehicular flow in the center of the city. This resulted in the loss of the children's playground and much of the lawn. However, a significant parcel of land still exists, which can be redesigned to accommodate a workable children's playground, which is a facility that the library lacks.

The grounds contain trees, which are not well maintained. We believe that a concerted effort should be directed towards turning the grounds into a nature reserve. Especially in that densely urban downtown, where children have very little opportunity to interact with nature. Government can be lobbied to include in the new protective designations, a policy to restore the once lush gardens around modernist buildings.

While the original species of trees and shrubs are not documented, inspiration for re-creating the landscaping can be drawn from other examples of the time period, which have been maintained. For example, the University of Legon is well planted with trees and shrubs from the 1950s and 1960s. Achimota Secondary School is equally rich in tropical fauna.

Some of the trees planted by the British colonial administration were not native to Ghana, but were transplanted from other colonies of the British empire. For example, the central business district avenues used to be lined with Neem trees from India, which offered both shade and protection from mosquitos. Other trees include silk blossom, cherry blossom and the local variant of Royal Palm.

The conservation team recommends that, as much as possible, the restoration works should transplant medium sized trees from the gardens of the University and Achimota School at the children's library and use them to green the space almost instantly. The need for green spaces in the central business district cannot be overstated. The community surrounding the children's library has over 20 public schools, mostly junior secondary schools, and the loss of trees

has begun to negatively affect public health. The surrounding communities are sweltering hot from lack of shade, and mosquito ridden.

As a means of community engagement in the new green space, local schools should be encouraged to adopt small plots at the garden, where they will maintain the gardens for annual competitions, during which prizes will be given for the school with the most flourishing gardens. Activities such as this will encourage urban gardening and the eventual greening of the surrounding neighborhoods.





Maintenance and Housekeeping (Tuuli Saarela)

The Accra Children's Library has an in-house maintenance team, as is usual for public buildings in Ghana. This team has little or no access to important maintenance documents, such as original plans, specifications, instruction manuals or other maintenance documents. The conservation team notes that the maintenance team is handicapped by this lack of information being passed down.

Nevertheless, the maintenance team has done a highly commendable job with maintaining the building, often with no budget or resources. Most of the finishes are in good shape and the main modern features of the building which are worthy of preservation have been saved.

In many cases, public buildings are maintained by external maintenance companies. However, this is not the case at the Accra Children's Library. The maintenance team is in-house, and their personal knowledge of the building is much deeper than if the building was maintained by an external company. Furthermore, they pass down knowledge of the building by personal, daily training of newer staff.

The conservation team believes that this maintenance model should be maintained, as it seems to be one of the most significant factors in the preservation of the building features.

The Venice Charter for the Conservation and Restoration of Monuments and Sites provides an international framework for conservation and restoration of heritage buildings. Maintenance is central, as well as documentation of all preservation and restoration works

Article 4 of the Venice Charter states that :

“It is essential to the conservation of monuments that they be maintained on a permanent basis.”

Furthermore, the Charter forbids the alteration of the building, even while it is still in use. Article 5 states:

“The conservation of monuments is always facilitated by making use of them for some socially useful purpose. Such use is therefore desirable but it must not change the lay-out or decoration of the building. It is within these limits only that modifications demanded by a change of function should be envisaged and may be permitted.”

It is within these restoration principles that the maintenance program should be agreed and designed; as a collaborative effort between conservationists, building maintenance teams and library management.

The needs of users according to the plans of the library management will be considered, but in the larger context of preserving cultural heritage. According to the World Heritage Resource Manual for Managing Cultural World Heritage, a good management plan “balances and coordinates the cultural heritage needs with the needs of the ‘users’ of the heritage and the responsible governmental and/or private/community bodies.”⁸² Therefore, new maintenance plans that alter the building should be done in consultation with conservation architects.

The maintenance plan should identify the distinction between repair, conservation, restoration and improvement. The maintenance works should be approved within the parameters of the overall principle of preservation and restoration of the building as a place of heritage architecture.

The maintenance and repair actions that require a building permit are referred to the Architectural and Engineering Services (AESL), which is a government department responsible for the construction and maintenance of Ghana's public buildings.

At this point, AESL should commence consultation of the Ghana Museum and Monuments Board. However, without any government policy to protect modernist buildings, as is the situation now, the protection of the original architectural features is not guaranteed. The architectural drawings for the conference room improvement works is a testament to this lack of communication.

For works that do not require a building permit, the in-house team often completes the repair under the maintenance budget. While the current team tries to preserve the features of the building, they are also clearly handicapped by a lack of funds to maintain the integrity of the original features.

The following recommendations are made for the maintenance work:

1. Maintenance work should be prioritised. Works carried out to prevent damage to the features should be carried out first. This includes weather-proofing the building by replacing the louvre windows which currently allow the rain to damage the floor finishes. Potential repairs in the roof also fall under a high importance category or works. Emergency works such as fixing leaky pipes are also within this critical category.

⁸² UNESCO, World Heritage Resource Manual for Managing Cultural World Heritage (2013), p.124

2. When the major repairs have been secured, the focus of the maintenance team should shift to minor works that are aesthetic in nature, such as re-routing of electrical wires, plumbing fixtures, lights, painting and furnitures.
3. Next, the fixtures of the building should be codified, and the proper level of use and care should be captured in instruction manuals. To prevent loss of original building parts, all original parts should be identified through a list.
4. A training should be organised for the maintenance staff to appreciate the architectural and cultural significance of the Accra Children's Library to national heritage. It is through a sense of pride, from library management to the maintenance teams, that the building will be protected and cared for into the future. A training manual should be produced, which can be used in on-boarding new staff of the library to appreciate the significance of the building.
5. As was discovered by the conservation team, who met very little documentation about the building and its history in their research and findings, the recording of ongoing maintenance is very critical to achieving the objectives of restoration. A recording and filing of maintenance actions should detail the repair works carried out, including the date, location, techniques, materials, cost and approval process for the repair.

Management System, Structure and Practices (Nathaniel Nuno Amarteifio)

It is clear from the already executed alterations of the building, which were instituted by the library management staff, that management itself could be the biggest single threat to the preservation of the building. This is understandable, because as new appointees begin their work at the library, new ideas are required to maximise use of the building. The problem is that these appointees may or may not have an understanding or appreciation about the importance of the design of the building. The continual push by management to renew programming can create new spaces and renew building features, but in the process, the restoration worthy components of the building can be put under threat.

The library management staff have little knowledge of the premises technical features, the wear and tear of building parts and big and small repairs carried out. This lack of knowledge is a real threat to the future of the building. This is

evident in the management's new plans to convert spaces in the building into offices.

It is this inherent conflict that must be carefully managed, and this can be achieved by redesigning the building permit approvals process to capture conservation principles.

Unfortunately the library management and library board lack the political clout to implement this new process, which is why private groups such as ArchiAfrika and its allies can become indispensable advocates for the preservation of these buildings.

Government must be lobbied to create a designation for modernist heritage buildings, and only then they can regulators exercise oversight into the plans of management regarding maintenance, repairs or alterations. Government has recently instituted a Ministry for Culture and Creative Industries. It is within this ministry that private citizen groups can locate allies for implementing a government policy document which creates heritage designation for modernist buildings worthy of protection.

There is also a heritage foundation, but their definition of heritage is limited to forts and castles. So this designation clearly falls outside their remit.

World Heritage (Tuuli Saarela)

Ghana ratified the Convention Concerning the Protection of Cultural and Natural Heritage in 1975.⁸³ The Convention ensures protection for monuments, groups of buildings and natural heritage sites. Groups of buildings are protected, which "because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science."

Ghana's World Heritage Sites

Ghana has two world heritage sites, and both are classified as cultural heritage sites.

The first is the Asante Traditional Buildings, Kumasi, which received world heritage designation in 1980, representing dwellings which are made of earth, wood and straw. The Asante Traditional Buildings are the last remaining testimony of the unique architectural style of the great Asante Kingdom. The traditional motifs of its rich bas-relief decoration are imbued with symbolic

⁸³ UNESCO website

meaning. They are also highly susceptible to the damages caused by the “onslaught of time and weather.”

The Asante Traditional Buildings are protected by national laws including National Liberation Council Decree (N.L.C.D) 387 of 1969. Executive Instrument (EI) 29 of National Museums Regulations, 1973, provides legal protection for the properties as National Monument. The GMMB is responsible for all conservation activities on the properties. Routine inspections are carried out by staff of GMMB and there are Caretakers at all the sites who report to the Regional Office of the GMMB.

The second World Heritage Designation is for Ghana’s Forts and Castles in the Volta, Greater Accra, Central and Western Regions, which received world heritage designation in 1979 and includes remains of fortified trading posts built along the coast of Ghana between the years 1482 to 1786.

These forts were links along the trading routes established by the Portuguese in many areas of the world during their era of great maritime exploration. The castles and forts were built and occupied at different times by traders from Portugal, Spain, Denmark, Sweden, Holland, Germany and Britain. They served the gold trade of European chartered companies. Latterly they played a significant part in the developing slave trade, and therefore in the history of the Americas, and, subsequently, in the 19th century, in the suppression of that trade.

Ghana’s forts and castles can be seen as a unique “collective historical monument”⁸⁴: a monument not only to the evils of the slave trade, but also to nearly four centuries of pre-colonial Afro-European commerce on the basis of equality rather than on that of the colonial basis of inequality. They represent, significantly and emotively, the continuing history of European-African encounter over five centuries and the starting point of the African Diaspora. The Castles and Forts have been respectively established and protected as National Monuments under the National Liberation Council Decree (N.L.C.D) 387 of 1969 and Executive Instrument (E.I.) 29 of 1973. All sites are in the custody of the Ghana Museums and Monuments Board (GMMB). Also James Fort, Accra, and Fort William, Anomabu, are no longer in use as prisons and have been handed over to the GMMB. The Monuments Division of the GMMB provides technical advice and management. Regular state-of-conservation inspections are undertaken. Priority programmes are established to help ensure that appropriate interventions are carried out. The existing legislative

framework is to be reviewed, and it is expected that a new legal framework will enhance the existence of the heritage resources, the socio-economic developments and improve the quality of life of the local inhabitants. A management plan still needs to be prepared. There is an on-going need to ensure adequate resources and training for staff, and to demarcate the boundaries of the sites and establish buffer zones.

Criteria for World Heritage selection

The criteria for selection as a world heritage site are ten. We believe the Accra Children’s Library and perhaps even modernist buildings in Ghana may qualify under two criteria:

(ii) to exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;

(iv) to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;

The nomination process for world heritage lists is comprised of three steps.⁸⁵ Firstly, a state signatory will make an inventory of its important natural and cultural heritage sites located within its boundaries. This inventory is known as the “tentative list.” Upon inclusion of a site on the tentative list, the second step in the process is for the World Heritage Centre offers advice and assistance in preparing the nomination files. Once the nomination file is complete, the property is evaluated by the UNESCO Advisory Bodies and the World Heritage Committee. If it meets at least one of the criteria for selection, the site can be included in the World Heritage List.

Modernist buildings have rarely qualified for world heritage protection, but it is not unheard of. An example of a modern architectural landscape that has been protected by the World Heritage designation is the Pampulha Modern Ensemble in Brazil.⁸⁶ Finland also seeks to protect the modernist architectural treasures of Alvar Aalto under the world heritage designation.

The conservation team believes that the modernist buildings of Ghana, constructed during the independence era, represent a unique lexicon of the

⁸⁴ UNESCO website

⁸⁵ <http://whc.unesco.org/en/nominations/>

⁸⁶ <http://whc.unesco.org/en/list/1493>

independence era ideals. Modernist buildings across Africa represented social mobility, a rejection of colonialism and the optimism of independent African nations.

A Conservation Management Plan is a requirement for applying for World Heritage designation. The Ghana Museum and Monuments Board is responsible for preparing nominations from Ghana.

The Future of Contextual Tropical Architecture (Joseph Osaë-Addo)

What is clear from this research is that modernism is an integral part of, and deeply engrained into, the cultural fabric of Ghana. Post second World War Africa saw the development of a new vocabulary in building, that is now being taken for granted.

Most Ghanaians alive today lived and experienced these modern and hopeful public spaces, from boarding schools, public libraries, hospitals and new housing developments. The post war generation accepted modernism, but never developed it further. Why?

The gems of this era of architecture, such as the Accra Children's Library, are frozen in time, alongside equally terrible examples of modernism from this era. ArchiAfrika advocates for the recognition of the best examples of these modernist buildings, and for the continued development of the modernist style within the architectural stock of the country.

In other regions of the world where the International style flourished, new hybrids have evolved over the decades when local architects put their stamp on the great 'chassis' of modernist structures to create viable and relevant versions of the theme. In India for example from Doshi to Studio Mumbai, modernism is transformed with its 'Indian-ness.' In Southern California, Neutra is complemented by Morphosis and Frank Gehry to Richard Meier.

The question that the findings from this document presents is why this has not happened in Ghana and most parts of Africa. But all is not lost. A few architects have begun to introduce their version of a new Tropical Architecture, with Francis Kere, Issa Diabate, Mariam Kamara and others finally reaching maturity and global recognition.

ArchiAfrika has been at the forefront of promoting this vanguard in contemporary African architecture both in Africa and abroad. Our recent exhibition⁸⁷ at our gallery, entitled INNO-NATIVE(TM) AFRICA highlighted new

strands of modernism emerging on the continent, alongside more established alternative movements exemplified by the work of Demas Nwoko,

The future is bright indeed for a more contextual response to the legacy of modernism, but sadly it still remains on the margins. One of the goals of this document is broaden the discourse on restoration and conservation, to look back at heritage in all its guises, deconstruct its meaning and glean appropriate uses for the future, underpinned by an African identity and culture.



SCHOOL LIBRARY, GANDO, BURKINA FASO, 2012



www.kere-architecture.com - (click to find out more about the project)

BIO
Francis Kere founded his office, Kere Architecture, and the non-profit association Schulbausteine for Gando, to reinvest knowledge gained in his home country. Today, Kere's main focus is on the use and development of local materials and techniques; the adaptation of technology in simple but meaningful ways, and investment in the potential of the local community. He is widely recognized as an expert in preserving and re-developing traditional clay technologies, a rich architectural heritage found in his part of Africa.

The school library forms the transition between an extension. The library is the only unit built with inspiration from the original architecture of the place, and it therefore differs from the school building in its organic form. In this way the building can house both the traditional tribal style of schooling, where the older pupils teach the younger children, as well as more modern educational methods.

The characteristic lighting of the space has been created by embedding earth ware jars produced by the local women in the roof construction so that they create a number of circular holes. The holes ensure natural ventilation, and an overlying semi-transparent roof provide shelter from rain and strong sunlight.

The facade is from eucalyptus wood, which is usually only used for fuel. The clay pots are normally produced for storage of fruit, which the women sell at the market but since new storage options have also come to Gando, the pots are no longer as important in that respect. The architect gives the pots a new function and at the same time adds testimony to the original culture of the building. Both the clay-pot roof and the facade are elegant new interpretations of the materials and crafts that characterizes Gando- a textbook example of new site-specific architecture.



⁸⁷ Panels from inno-native(TM) Africa featuring tropical architecture from Africa at ArchiAfrika Gallery



THE ASSINE-MAFIA CHURCH, ASSINE-MAFIA, IVORY COAST, 2008

The church is the first part of a larger urban expansion project. A new 'green' neighbourhood is to be built at the coastal town of Assine-Mafia. The church functions as the neutral gathering-place for the new area.



www.koffi-diabate.com (visit to find out more about the project)

BIO

Issa Diabaté is principal of Koffi & Diabaté Architects. He is passionate about re-defining the role of the architect to become an activist, and in communicating the architect's point of view to respond to development challenges in his home city in Abidjan.

The church rises from the ground as a gigantic pitched roof with a tall, pointed elevation. The roof construction is in dark wood, and the bearing rafters end in small, visible concrete piers. There are no inner or outer walls in the large rectangular church interior, so light and air both penetrate the space directly. The design of the church is an attempt to bring a new architectural style to the area, adapted to the coastal climate.



www.united4design.com (visit to find out more about this project)

BIO

Mariam Kamara is an architect from Niamey, Niger. She received a Bachelor of Science in Information Systems with a minor in Fine Arts from Purdue University, a Masters in Computer Science from New York University and a Masters in Architecture from the University of Washington. Mariam has worked in the U.S. and Niger in the areas of housing, public works, education and urban design.

The Niamey2000 project is a response to the current housing and socio-economic conditions found in the city of Niamey, Niger. It proposes a new model that increases density in order to counter the city's aggressive sprawl. Towers and apartment buildings are not culturally appropriate and do not respond to the social norms of the country. Niamey is a city of mostly one-story homes, and the architects found that a degree of densification could be achieved by simply adding a story or two. In this context, going up in height and decreasing the typical building footprint dramatically increases the number of homes that can be built on a particular site.

