

CAPACITY BUILDING IN ADAPTIVE REUSE THROUGH COLLABORATIVE WORKSHOPS FOR STUDENTS: ON-SITE AND REMOTE EXPERIENCES IN RWANDA AND ZANZIBAR

by Achilles Ahimbisibwe, Michael Louw, Manlio Michieletto, Mark Olweny, Stella Papanicolaou and Berend van der Lans

Africa's architectural past continues to fade away due to its exposure to the cruelty of natural and man-made forces. Iconic buildings are being torn down because they are "old", with little consideration of their conservation or heritage value.

- Mark Olweny

The idea of 'adaptive reuse' is relatively new in the African built environment. The value of working with existing under-utilised buildings as a resource for the future lies in the inherent potential for addressing sensitive issues that often originate from their colonial past or previous regimes during which they were built or occupied.

As part of the International Forum *Cultural Spaces for Kigali*, a workshop for students was hosted at the University of Rwanda's School of Architecture and Built Environment from 10 - 14 March 2019. The participants included the University of Rwanda (UR), Uganda Martyrs University (UMU) and the University of Cape Town (UCT). The objective of the workshop and the Forum was to test the adaptive potential of unused buildings near Kigali's city centre, and to evaluate whether disused buildings – such as the Kigali Central Prison (also known as Nyarugenge Prison, Gikondo Prison, or simply "1930") and the Ecole Belge (the former Belgian School) – could be adapted for use as precincts for the production and performance of art and culture.

The project was launched and run by the Rwanda Arts Initiative (RAI), with African Architecture Matters and the Centre for Fine Arts Brussels (BOZAR), and funded by the Fédération Wallonie-Bruxelles.

The workshop targeted students, who, navigating their cultural differences, presented a variety of options or possibilities using visualisation methods. This was done in cooperative workshops, with presentations by students and professionals from across Africa, developing an independent, continent-specific approach.

The success of the Rwandan workshop, and its reiteration in Zanzibar, are presented here.



Fig 1: Kigali Central Prison. © Berend van der Lans



Fig 2: The Ecole Belge. © Michael Louw

ON-SITE ADAPTIVE REUSE WORKSHOP: “CENTRAL PRISON” AND FORMER “ECOLE BELGE” IN KIGALI

Before travelling to Rwanda, the students familiarised themselves with the Rwandan context through preliminary desktop analyses of the materials provided.

On arrival in Kigali, the students were divided into four groups, with at least two students from every participating University. The groups performed walking and mapping exercises to familiarise themselves with both the tangible and intangible characteristics of their sites and the surrounding urban context. They were provided with a digital map of the city of Kigali, visited the premises of the former *Ecole Belge*, and viewed the Kigali Central Prison from the outside. An old plan of the Prison from the Belgian archives and photos taken from within the Prison’s outer perimeter were made available. Unfortunately, no drawings of the *Ecole* were available. This highlights a regular challenge of adaptive reuse, which has to make do with limited information and access.

The sites are complex, contentious and charged with history. The Prison was built in the 1930s during the Belgian League of Nations mandate, and housed *génocidaires* and opposition figures before being vacated in 2018. The *Ecole Belge* was initially reserved for Belgian citizens, and later for Rwandan citizens, before being moved out of the city centre due to increasing real estate pressures. Students had to interpret the available information of these challenging sites and summarise it in a coherent set of materials that could be used as the basis for their proposals.

The director of RAI briefed the 26 students on the needs and urban visions of the artistic community of Kigali. Presentations by local film-makers, actors, a comedian and an installation artist gave the students a clearer picture of the planning requirements and wishes of the arts community. The workshop method was framed through theoretical inputs on types of building adaptation and adaptive reuse as a tool for transformation, by Michael Louw and Stella Papanicolaou. Mapping presentations were given by Berend van der Lans and Laura Nsengiyumva.

The Rwandan students in each group played a key role in interpreting the contextual cues, keeping the proposals relevant to the context and providing the groups with valuable resources, including laptops and Wi-Fi connections. The UR students involved not only shared their knowledge on Rwandan culture and history, but also their direct experience of Kigali’s rapid growth and urban development.

The students immersed themselves in the city – its past, present and its ambitions for the future. They had to make do with resources available, and produced visual materials on their ideas: diagrams, collages, analogue models, drawings, smartphone renderings and short videos.



© Michael Louw
 Fig 3: RAI's Dorcy Rugamba briefs the students.



© Michael Louw
 Fig 4 & fig 5: Students developing their work at the University of Rwanda.



© Michael Louw
 Fig 6, 7 and 8: Students developing their work at the University of Rwanda.



© Mark Olweny



© Jonathan Kateega.

A first critique session with prominent local practitioners assessed the initial design ideas developed over the first two days. The best proposals were then selected for further development.

A second crit session with a panel of international experts generated feedback for the final presentations at the International Forum.



Fig 9: Seminars with architects from prominent local practices (seen here are Chris Scovel, Nicki Reckziegel and Symphorien Gasana from MASS Design Group, Paul Ssemamanda from FBW and Alice Tasca from ASA). © Michael Louw



Fig 11: Students present their work to the panel of international experts during Session Two. © Michael Louw



Fig 10: Students presenting their work to local architects and stakeholders. © Michael Louw



Fig 12: Students discuss their design ideas with Dorcy Rugamba after the presentation. © Michael Louw

The workshop produced very good results, considering not only how challenging the sites are but also the fact that the wide range of students, in fairly large groups, only had four days to design and present the work. The ideas were developed in different stages, starting with remote contextualisation and previous study, progressing through local immersion, theoretical and thematic inputs, various design exercises, reiteration based on two intermediate presentations, and culminating in a formal public presentation,

which resulted in a diverse but coherent corpus of co-produced work.

Proposals included a project that focused on an urban cultural route linking the two sites of investigation, three proposals for the Kigali Central Prison and three for the *Ecole Belge*. Analogue posters of the projects were exhibited for the forum at the School of Architecture and Built Environment, accompanied by contemporary art and performances by artists affiliated to RAI.

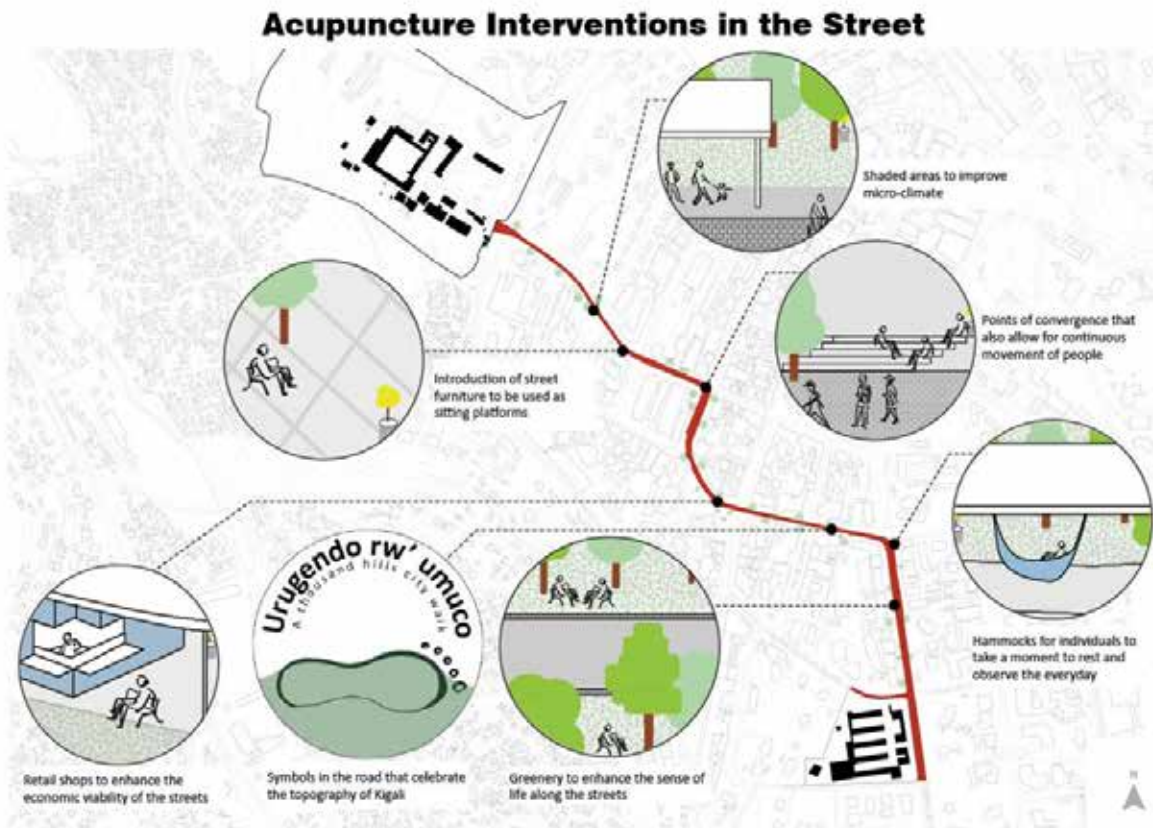


Fig 13: The project “Connecting with Urban Acupuncture” sets out to create a cultural route between different artistic and cultural sites in the city. Small urban interventions aim to raise awareness among the public on the meaning of heritage through everyday practice. © Daniel Rutalindwa Gakwavu, Afsana Karigirwa, Justicia Kiconco, Lwazi Ncanana, Tadeo Nedala and Anna Stelzner.



Fig 14: The project “Inclusivity through Disrupting Order” investigates the disruption of the rigid spatial order of the *Ecole Belge* by linking it back into the fabric of the city through improved permeability. This proposal activates the existing classrooms, passages and courtyards to expose the public to cultural activities and events. © Louisa Anyingo, Danny Gireeza Maniraho, Zach Hendrix, Iréné Isingizwa, Jonathan Kateega, Thelishia Moodley and Julian Nagadya.



Fig 15: The project “Re-imagining the courtyard” proposes the inclusion of lighting features inside the existing courtyard and a large public park outside. It uses light and projection to draw the public into what was previously a dark space with negative connotations, thereby changing its meaning. © Prosper Byamungu, Azza Dushime Kagina, Katya Krat, Brenda Kirabo, Andries Mathee, Ann Murungi and Oliver Hirwa.

Fig 16: The project “Izuka” investigated the inversion of power relations of the former buildings, proposing to plant a forest in the courtyard of the former Prison as a symbol of rebirth. This draws on the Rwandan cultural practice of commemorating life through the planting of trees. © Christine de Guzman, Andrew Lutwama, Treven Moodley, Robert Nishimwe, Stephani Perold and Aime Boris Shema.



The students presented their projects at the International Forum *Cultural Spaces for Kigali*, to an audience of government officials, international experts, academics from across Africa and beyond, architects, artists, fellow students and interested members of the public. It was recorded and streamed live to a wider audience.

The response from students was overwhelmingly positive.

I have gained a lot from the student workshop. The group work was rewarding, it was fascinating to see the different dynamics between the students from Uganda, Rwanda and South Africa. The process was rapid, with quick thinking and quick decision-making. We all contributed equally, dividing the workload, and soon discovered what everyone’s strengths were. It was a great exercise in the process of idea making.
- Anna Stelzner

Being part of the Forum and engaging with different professionals and delegates emphasises the potential we all have, irrespective of our position as students. I believe many constructive ideas were imagined, and I hope that at least one of them can be put into practice.
- Lwazi Ncanana

[This] was my first attempt at an adaptive reuse project, made all the more complex and interesting by the embedded interrogation of cultural and historic values of the selected sites in Kigali, Rwanda ... Overall very enriching, the interactions were eye-opening and the experience worthwhile.
-UMU student



Fig 17: After presenting their projects at the International Forum, the students were invited to the platform to answer questions about their design proposals and their experiences during the workshop. In this way, the Forum validated the students' contributions. © Michael Louw

Remote completion at UCT and UMU

The students from UCT and UMU continued to work on the projects for the remainder of their semester back home, with their lecturers Michael Louw and Stella Papanicolaou at UCT and Mark Olweny and Achilles Ahimbisibwe at UMU. The individual proposals were finalised to an appropriate level of resolution for presentation and examination. In both cases, students could either build on the group proposals developed in Kigali or pursue a different direction. Students were able to discuss their proposals with professionals with an interest in adaptive reuse and the historic context of architecture.

During this stage of the work, students at UCT struggled with the historic weight of the sites and their negative memories, exacerbated by the loss of cooperation with local contributors that they enjoyed in Kigali.

Important questions emerged from these explorations, related to memory and meaning in architecture. For the students, the week spent in Kigali was an eye opener, an

opportunity not only to engage in an exploration of an unfamiliar context, but also to appreciate how these two aspects are critical in developing an architecture that resonates with people and places. It was also an opportunity to engage in collaborative discourse as an essential part of problem solving.

A selection of the final projects is presented here.

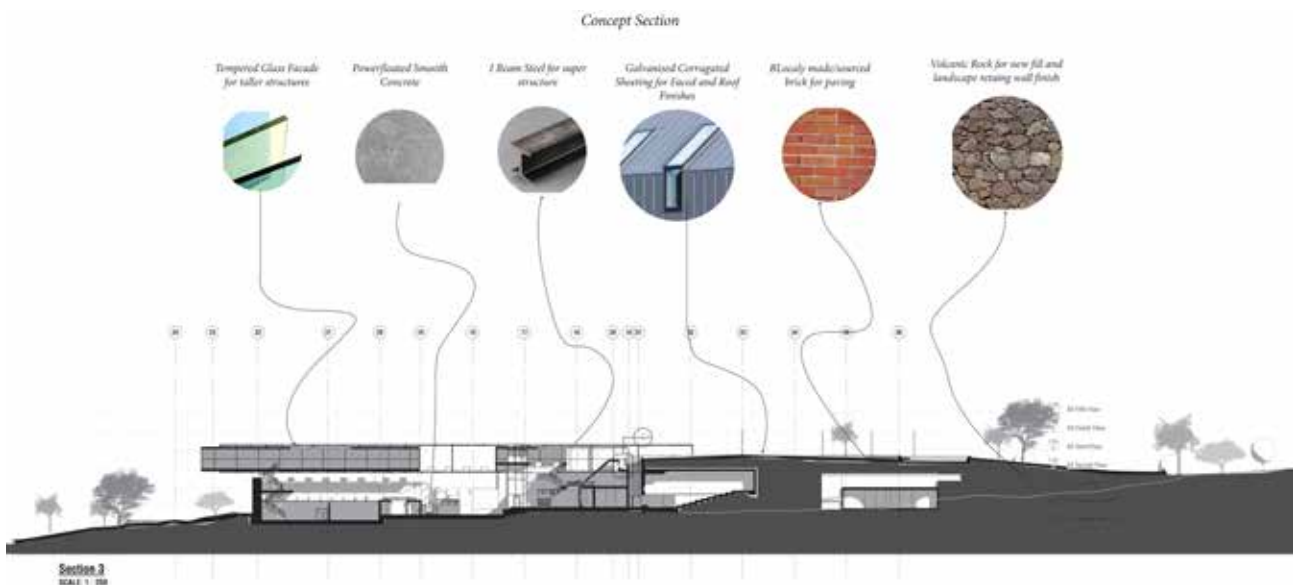


Fig 18a & 18b: *Havuka umusozi rishya* (meaning "A new mountain is born" in Kinyarwanda). The Prison is partly buried to democratise its access from the city, while an oversailing wing on the opposite side subverts the power of the existing perimeter walls. This project uses symbolism to subvert the negative meanings and overbearing power of the Prison building. © Lwazi Ncanana, University of Cape Town.

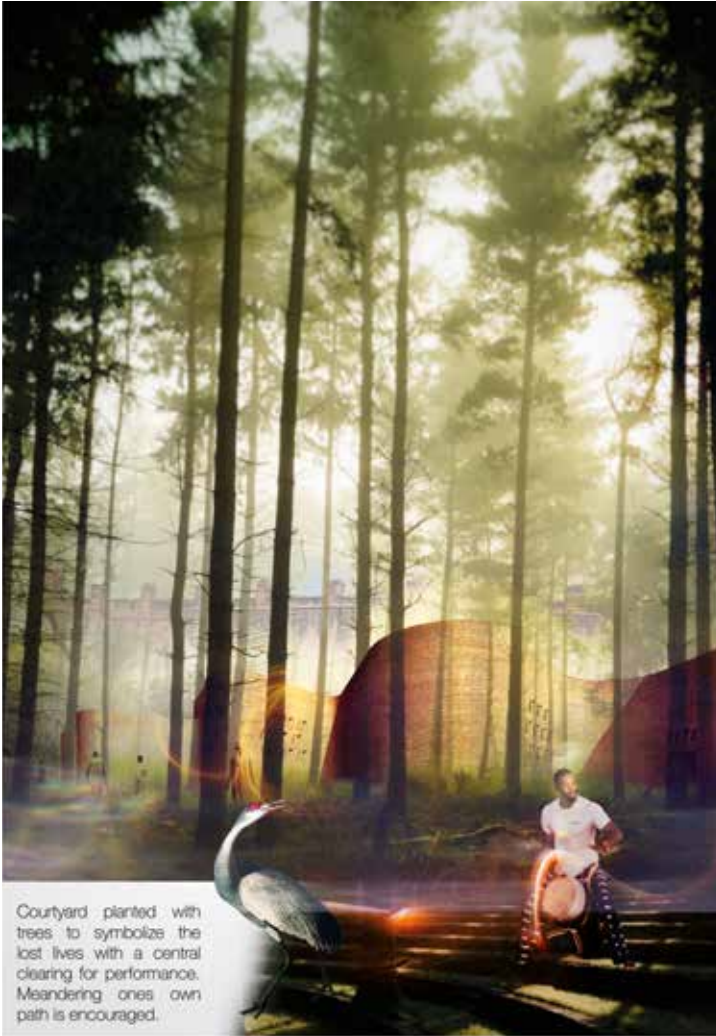


Fig 19: *Izuka* (meaning “Resurrection” in Kinyarwanda). This project builds on the concept developed cooperatively in Rwanda, where a forest is planted in the prison courtyard. The rigid enclosing prison walls are juxtaposed with a meandering cultural pathway that, through geometry, represents the desire for freedom of movement. © Treven Moodley, University of Cape Town.

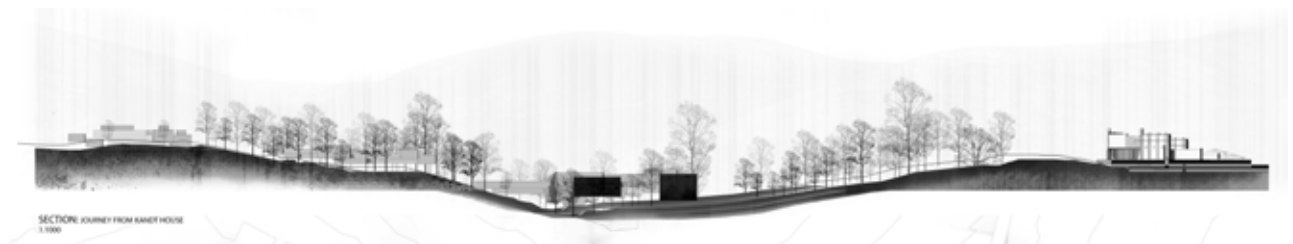
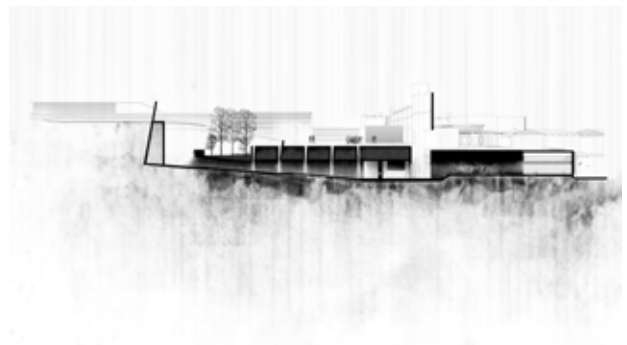


Fig 20 a, b, c: This proposal establishes a journey from the Kandt House Museum to the Prison, undermining the Prison’s existing perimeter walls. Light and dark are used in contrast to accentuate the human condition. © Katya Krat, University of Cape Town.



Fig 21: To link the école site back to the city, this proposal adapts the building edges to describe an internal street that draws people into the spaces between the existing buildings of the school complex, now re-thought as a cultural hub. © Thelishia Moodley, University of Cape Town.



Fig 22 a & b: This proposal sets up a journey through time, from the relative openness of an external heritage park, through the perimeter wall, to a centrally located lookout tower, a beacon of hope within the prison walls. © Tadeo Nedala, Uganda Martyrs University.



Fig 23: This project makes reference to the traditional architecture of Rwanda, setting out to reuse the old prison as part of the continuity of the socio-cultural narrative of Kigali. © Christine E. T. Z. De Guzman, Uganda Martyrs University

REMOTE ADAPTIVE REUSE WORKSHOP: MAJESTIC CINEMA ZANZIBAR

A second workshop also involved the UMU and UCT. Facilitated by AAMatters, it focused on the Majestic Cinema in Zanzibar as the site of intervention. The workshop was organised remotely, due to the travel restrictions imposed by the COVID pandemic.

The Majestic Cinema is an Art Deco gem, designed by a local architect of Indian descent, Dayaliji Pitamber Sachana. It is currently in a state of ruin and at risk of structural collapse. Hifadhi Zanzibar, a for-profit company with the public purpose of sustainable investment in historic buildings, teamed up with Busara Promotions, Reclaim Women Space and Zanzibar International Film Festival, to redevelop the cinema building as a cultural hub for film and music festivals and to provide a meeting place for women. Partial support for this came from the Culture at Work Africa Grant (EC funded project).



Fig 24a: The New Majestic Cinema shortly after its opening in 1955.
© Ranchhod T. Oza



Fig 24b: The Majestic Cinema, c. 2011: in need of TLC. © Jean Marc

The objective was to cooperatively develop scenarios for the adaptive reuse of the building and its precinct, focusing on the significance of its heritage and its material and social sustainability as a way of approaching the design process.

One pertinent issue was how to initiate processes that could trigger the students' ability to work jointly but remotely with the student teams from the University of Cape Town (UCT), School of Architecture and Design (SADE), Ardhi University (AU) and the team of experts from AAMatters. Proficient audio/video platforms were used, and the volume of reference information and CAD files provided by the cooperating teams offered a fantastic virtual tour for the project. Students remarked how this offered the opportunity to see the projects produced by their peers.

UCT AND UMU PROPOSALS

Thirteen UCT students of *Studio Adapt!* were given several exercises as part of the workshop. These included a warm-up exercise, in which they worked in groups to adapt found objects to new uses. This exercise highlighted the material and structural challenges that demand design inputs when imposing a new use on an object. Precedents were analysed using diagrams to identify the underpinning values that design moves, studying the history of the film industry in Zanzibar and its social and economic implications.



Fig 25a: A metal toolbox becomes a pinball machine. The students literally cut the toolbox to discover its potential as a playful and dynamic element, revealed in its cross-section. (Tiego Monareng, Nathan Eisen and Garryn Stephens) © **Stella Papanicolaou.**



Fig 25b: A reinforced bicycle tube and vinyl records are turned into a coffee table. This highlights the limitations of materials when transformed for new use. © **students Lyla Hoon, Harnish Patel and Treasa McMillan.**

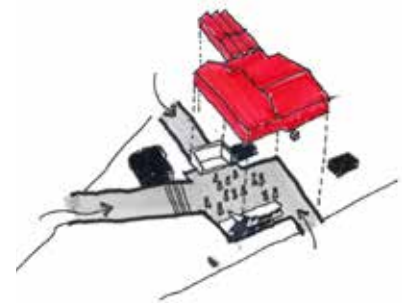


Fig 25c: Diagram of a adaptive reuse precedent that enhances the ground plane for community gatherings. © **Keerathi Patel and Omid Pournajati**

A tour of Zanzibar was simulated using SketchUp models built of the Majestic Cinema and its precinct, piecing them together from plans and photographs.

Critique sessions were held on Zoom with local architects, providing a constant reminder of the local relevance and translation of the needs of the Majestic Cinema stakeholders in order to allow the models to be corrected. Through various online group works, the staff, guests, local partners and students were able to make the Majestic Cinema and its precinct come alive in various contemporary scenarios, as shown below.

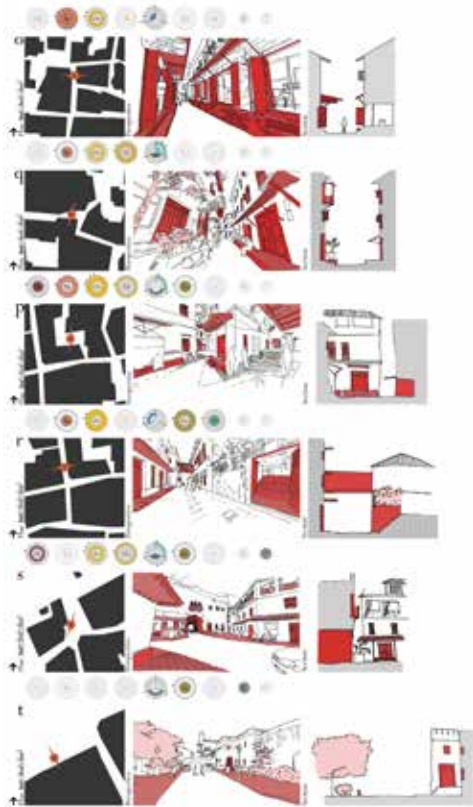


Fig 26a: Streetscape thresholds in Stone Town explored through virtual tours. © Nicola Hardie, Keerathi Patel, Samke Kunene and Cornelus van der Nest.



Fig 26b: "Watching movies under the night sky" is a collage exploring the spatial character of the cinema, inspired by photographs of the ruins. © Bongzi Sithole.

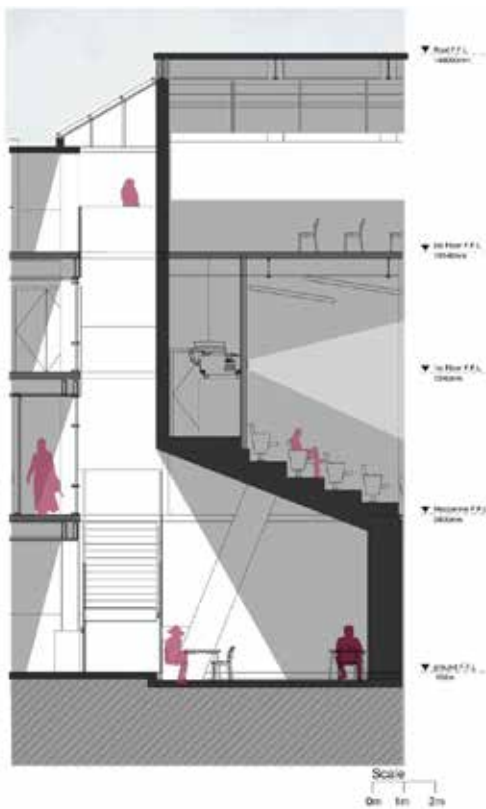


Fig 27a & 27b: This design describes circulation through narrow strips of light from overhead skylights, inspired by the narrow alleys of Stone Town. © Samke Kunene.

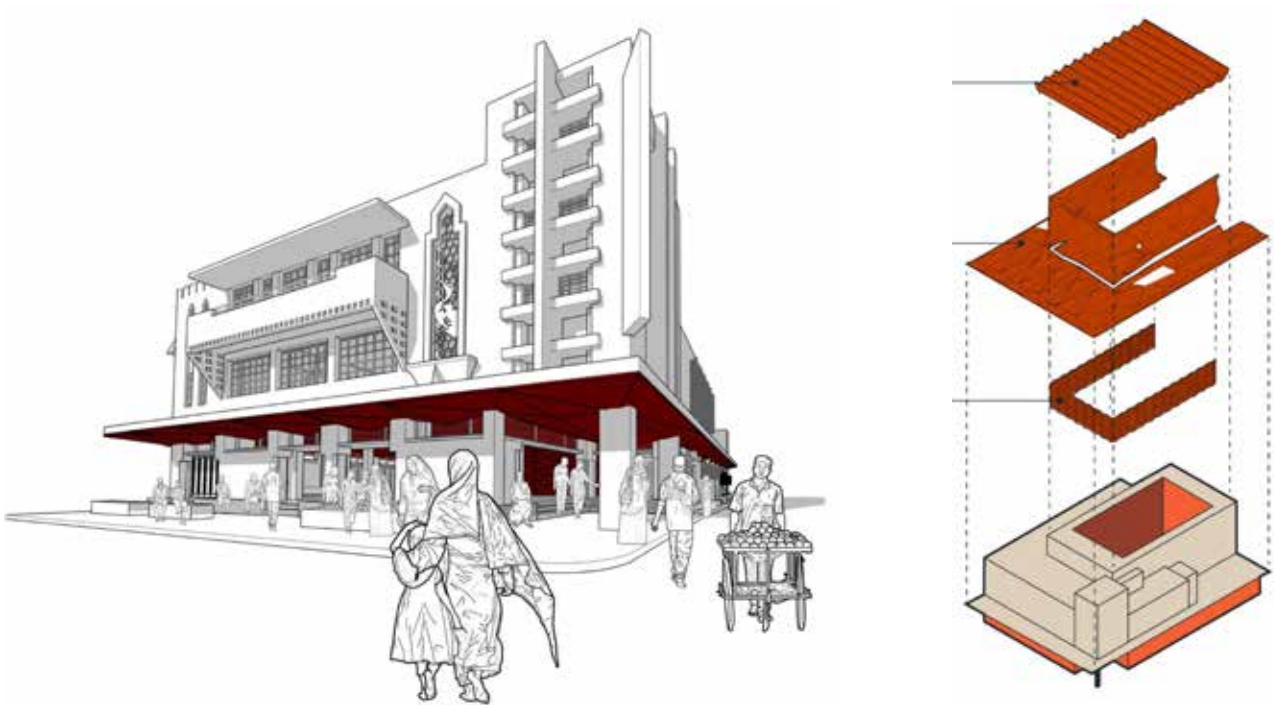


Fig 28a & 28b: The moving red curtain transforms the black box of the cinema, a space embedded in the depth of the existing building, becoming a public gathering space integrated into the life of the city. © Cornelus van der Nest.

However, the students missed the physical embodiment of the spaces of Stone Town and the Cinema building. They also missed the chance for informal conversations with locals to develop their own ideas. Moreover, the lack of a cooperative design process with students from different cultural and University backgrounds was clear, and the students struggled to feel the appropriateness of their proposals. The proposals tended towards very bold ideas that perhaps failed to appreciate the value of the textures and complexity of the spatial potential of the existing building.

Although we didn't get to visit Zanzibar, I still felt that we had a good understanding and sense of the place. The course has ... given me an interest in heritage conservation.

Digging deep into [the] cultural and historical importance of existing buildings, and looking for solutions to revive the memory of these structures rather than just creating new architecture, was an incredibly enjoyable exercise.

At UMU, the Zanzibar Majestic Cinema project engaged third year students to consider the adaptive potential of an iconic building from yesteryear. Cooperative studies with the Master students' team that participated in the Kigali Workshop helped to remove any early project doubts.

The students' projects shown below sought to adopt and support participatory approaches underlying the integration of revitalising heritage values. Design process-engendered activities took on board any conservation doctrines, community needs, sense of historic buildings and their cultural context.



Fig 29: The students' graphic presentation styles improved as they adopted cues from their peers. © Angeline Alimo.



Fig 30: The students' projects sought to adopt and support the participatory approaches underlying the integration of revitalising heritage values. © Cynthia Kabami.

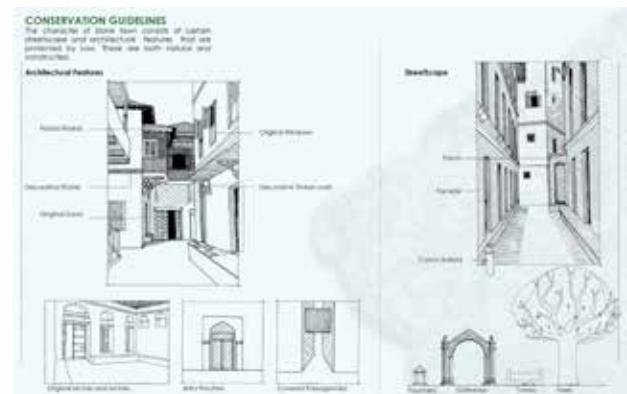


Fig 31: Conservation doctrines, sense of historic buildings and contextual values guided the design process. © Morris Higenyi



Fig 32: As the project does not exist in a bubble, considerations were included to activate the entire streetscape. © Joanita Aguti



Streetscape proposals to encourage collaboration and engagement

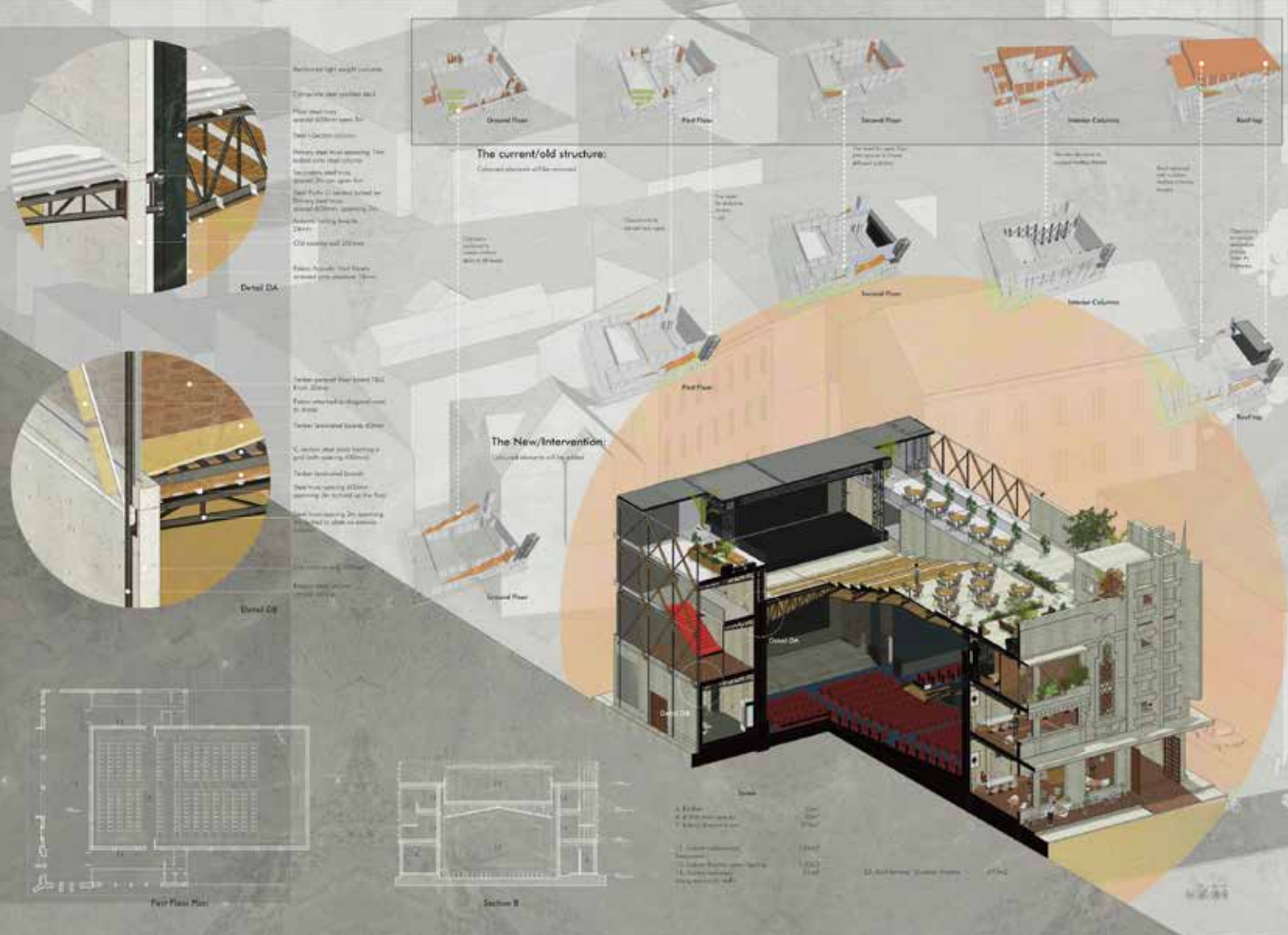


Fig 33: Attention to construction detail, considering the age of the building. © Ronald Busings

LOOKING BACK AT OUR PAST IN ORDER TO IMAGINE THE FUTURE AS ANOTHER MEMORY

These student workshops highlighted the importance of identifying the value in existing buildings, understanding that through transformative design, alternative uses contributing to social transformation can be proposed.

The integrated involvement of stakeholders, coupled with immersion into the local context, leads to an improved understanding of place, and a more empathic engagement with difference.

Using a mixed approach to teaching and production, students are able to undertake rapid ideation which, after further reflection and development, can generate thoughtful proposals that embody memory, imagination and innovation.

This design process proved to be beneficial for multiple stakeholders. The students were given the opportunity to test theories in a practical context, practice their communication skills and experience working with different perspectives and approaches to design.

The professionals were exposed to fresh ideas offering new perspectives which can be fruitful in the search for solutions to real design challenges.

For policy makers, these new perspectives, presented through the students' graphic visualisations, made it possible to better understand the challenges, an essential element for developing an approach towards appropriate solutions.

ACKNOWLEDGEMENTS

KIGALI

1. The organisers: Dorcy Rugamba (Rwanda Arts Initiative), Berend van der Lans (African Architecture Matters) and Kathleen Louw (Bozar);
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3. The Rwanda Arts Initiative (RAI) team: Paul Gakumba, Norbert Nzarubara, Hervé Kimenyi, Michael Patrick, Clementine Lyiza, Nelson Niyakere, Remy Ryumusabe and Ganza Moise;
4. Visiting practitioners and critics, Session One: Alice Taska (ASA), Nicki Reckziegel, Gasana Symphorian and Chris Scovel (MASS Design Group), Paul Ssemanda, Miriam Ofwono and Esther Ninshuti (FBW);
5. Visiting critics, Session Two: Joe Osae-Addo (ArchiAfrika), Lesley Lokko (University of Johannesburg) and Tomà Berlanda (University of Cape Town);
6. Workshop facilitators: Michael Louw (University of Cape Town), Laura Nsengiyumva (Ghent University), Mark Olweny (Uganda Martyrs University), Stella Papanicolaou (University of Cape Town), and Berend van der Lans (African Architecture Matters);
7. The students: Eight Honours students from the University of Cape Town's Studio Adapt! (Zach Hendrix, Katya Krat, Andries Mathee, Thelishia Moodley, Treven Moodley, Lwazi Ncanana, Stephani Perold, and Anna Stelzner), ten Masters I and II students from Uganda Martyrs University (Andrew Lutwama, Ann Murungi, Brenda Kirabo, Christine de Guzman, Jonathan S. Kateega, Julian Nagadya, Justicia Kiconco, Louisa Anyingo, Prosper Byamungu, and Tadeo Nedala) and eight 2nd and 3rd year students from the University of Rwanda (Afsana Karigirwa, Aimé Boris Shema, Azza Dushime Kagina, Daniel Rutalindwa Gakwavu, Danny Gireneza Maniraho, Oliver Hirwa, Iréné Isingizwa, and Robert Nishimwe).
8. Donations to assist with travelling expenses for the UCT students were received from the Paragon Group, Trident Steel, Pam Golding, John Leveson, Mike Scurr and various other contributors who donated via the online crowdfunding site Backabuddy;
9. UCT exhibition host: The Cape Institute for Architecture.

ZANZIBAR

1. *Studio Adapt!* UCT was run by Stella Papanicolaou assisted by Mike Scurr. The studio at UMU was run by Achilles Ahimbisibwe with the assistance of Anthony Wako, expert/ consultant on Heritage and conservation issues and Arch. Pamela Akora, expert for city and urban issues [City Planner].
2. Local facilitation: Berend van der Lans and Iga Perzyna (AAMatters);
3. The students: Thirteen Honours students from the University of Cape Town (Doug Bryant, Nicola Hardie, Jessica Huang, Samke Kunene, Treasa McMillan, Masego Mogashoa, Tiego Monareng, Motheo Motlabi, Keerathi Patel, Omid Pournejati, Mpho Sephelane, Bongzi Sithole, Cornelus Van Der Nest), and students from Uganda Martyrs University (Joanita Aguti, Elizabeth Nabagereka, Chelsea Asio, Angeline Alimo, Ronald Businge, Cynthia Kabami, Morris Higenyi).
4. Exhibition material at UCT was collated by Michael Louw and studio assistants Mayankh Ramasar, Sebastian Hitchcock, Darren Berlein and Gabriella Schukor.

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BEREND VAN DER LANS has been working as an Architect in Europe and Africa since 1992. He co-founded ArchiAfrika, which in 2012 became an international organisation based in Accra. Berend started African Architecture Matters with Antoni Folkers, a non-profit consultancy firm working in design, planning, research and education with a specific interest in the role of cultural heritage in the urban context. He has been involved in adaptive reuse projects in Europe and Africa.