KEY WORDS: Liminal, Liminality, Impact Design, Malawi, Africa, India, Architecture

The Liminal Shift towards Impact Design: Case of Malawi

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Tekton: Volume 9, Issue 2, December 2022, pp. 26-33

ABSTRACT

Malawi is a small country located in the southeast part of the African continent. This essay attempts to express Liminality in Malawi, through an analysis of the ongoing social, cultural, and architectural developments in the country. Being a small country with wide diversity, it acts as a testbed to understand various issues and use them as a baseline for several other developing nations. These analyses can be further utilized to create various formal categories, which fall under the realm of Impact Design.



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Introduction

Limen is a Latin term, which means threshold. In psychology; a limen is a threshold of a physiological or psychological response. It is the boundary of perception. Liminality¹, which is derived from 'limen', means the state of change one goes through before a transformation.

Lately, as nations have been undergoing rapid transformations, many of them have fallen prey to severe downturns. This has led to rampant poverty, homelessness, starvation, abandonment, and economic crisis among other issues. As these nations look to rebuild themselves to emerge from difficult times, various factors such as economic, social, cultural, and political need to be considered. Even though all of these aspects are closely related, we are going to solely focus our discussion on the cultural and architectural perspective. This immediately leads to the question about the role of architecture in the process of nation-building. Be it Louis Kahn's National assembly building in Bangladesh (Figure 1) or Frances Kere's built work in Burkina Faso **(Figure 2)**, architecture has historically played a significant role in putting an emerging nation on the map.

This essay attempts to understand liminality, through the current developments happening in Malawi, Africa. Through this analysis, it further talks about how Impact Design² can be leveraged as a medium to strengthen the positioning of Architecture in today's world, especially in the countries going through a liminal shift.

The current architecture scenario is facing several challenges like the shoddy state of practice, unethical and unprofessional architects, inferior pay scales etc. A worrying development is unemployability of graduates who are often found to be disinterested or disengaged and possessing mediocre skillset. These challenges highlight the gap between academia and practice and raise questions about the quality of architectural education. This essay is an effort to look into the current challenges of higher education in India and especially the state of architectural education. It traces the evolution of architectural education in the country and throws some light on issues that the institutes face in today's era. It focuses on the quest of achieving desired quality in architectural Excellence'.



Figure 1: Assembly Building in Dhaka by Louis Kahn. Image Credit: Wikipedia.org



Figure 2: School Library in Burkina Faso by Frances Kere Image credit: kerearchitecture.com



Figure 3: Installation and Painting inside a government building in Malawi

Malawi through the Lens of Liminality

Malawi is a southeast African country bordered by Zambia, the United Republic of Tanzania, and Mozambique. It is narrow and landlocked but has a 750-kilometer-long border with Lake Malawi (also called Lake Nyasa). The country has an estimated population of 18.6 million (2019), which is expected to double by 2038. Malawi is currently identified as one of the poorest countries in the world. It is based upon the economic factors and the large dependence of the country on foreign aid. The economy is heavily dependent on agriculture, employing nearly 80% of the population, and it is vulnerable to external shocks, particularly climatic shocks.

Poverty is endemic but how does one measure factors such as happiness and contentment that exist in a community? How does one account for its cultural richness and diversity?

Let's break down these questions and evaluate the issue in three parts, to better analyze and comprehend Liminality in Malawi.

- 1. Pre-liminal Malawi, where pre-liminal means below the threshold of sensation or consciousness.
- 2. Liminal Malawi, where liminal means relating to a transitional or initial stage of a process.
- 3. Post-liminal Malawi, where it marks the end of liminal phase.



Figure 4: Houses along the highways of Malawi



Figure 5: Brickmould in Mzuzu University



Figure 6: Building and tree inside the Mzuzu University campus

1. Pre-Liminal Malawi

Known as the warm heart of Africa, Malawi lives up to its reputation by the sheer warmth and hospitality shown by its people. People in Malawi take immense pride in their food, culture, and values. Malawians invite people over to their place for various celebrations, which usually happen in the form of feasts. Maize being a local produce is consumed strongly in the region and is used to prepare a lot of delicacies. Cultural elements such as dancing, arts, and craft are also very well rooted within the communities.

Construction in Malawi is utilitarian and pragmatic, where the use of indigenous materials contributes to the larger good. Materials such as stabilized bricks, rammed earth, bamboo, thatched roofs, and mud plaster are not only ideal for climatic conditions in Malawi but also create indigenous architecture, which engages the community in what they build. Despite the absence of strong architectural history, one cannot miss the sight of crude vernacular architecture that defines most of the country. **(Figure 4)**.

How can these pre-liminal conditions come together as a force that would start scripting the path of progress for Malawi as a nation? The attached photographs highlight the current pre-liminal situation in Malawi through the study of its activities, events, and culture (Figure 5, 6).

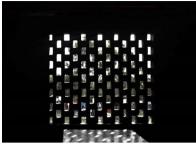




Figure 7: Brick Jali inside the Maternity waiting village

Figure 8: A Shaded courtyard between two buildings



Figure 9: Illustration of all the indigenous characteristics found in Malawi

2. Liminal Malawi

Currently, if one moves around in Malawi, it's difficult to miss the amount of development happening in and around the city. Right from new bank headquarters to institutional buildings, there are plenty of ongoing projects. Many contemporary architecture, design, and construction firms from around the world are doing projects in Malawi, to contribute to this change. Various traditional arts, crafts, and construction methods are being attempted to revive and incorporate into these new methods, which is a very positive sight (Figure 7, 8). We have studied and noted a wide range of activities in Malawi and they also vary in scale. The figure 9 showcases an explicit illustration of these items. These characteristics are very native to Malawi and root the projects strongly in the context.

Since all these efforts are happening at a very micro level, it would take tremendous efforts from all the stakeholders to make a larger impact. This suggests that Malawi is currently going through a transition, where early / initial stages of transformation have started to happen – the liminal phase. In order for this spark to translate into a fire, it is necessary for local bodies to join hands with the government and bring about systemic changes to set the tone for what the city could be.



Figure 10: Shaded waiting area in the Maternity waiting village in Kasungu

3. Post-Liminal Malawi

Few of the recently completed contemporary construction & architectural projects have set good precedents in Malawi. It includes the Maternity waiting village in Kasungu, Malawi completed by MASS Design Group **(Figure 10)**. Through the use of regional materials and ideas, the project has been designed and built successfully. Materials such as Compressed stabilized earth block (CSEB),³ locally sourced wood, regional limestone floor, and concepts such as shaded gathering spaces, sloping roofs, surface water trenches for water collection, optimized daylighting, infection control have been used in this project.

As Malawi is a challenging context to work with, it's important to study these projects and note down the key characteristics about them, that might or might not have worked for them. All the ideas illustrated above (Figure 9) are the reasons these projects have been recognized by the local as well as the global audience.

Incorporating Impact Design

Looking at our studies through the lens of quantitative assessment, Impact design according to the website 'Urbannext' is defined as, "Impact design is rooted in the core belief that design can be used to create positive social, environmental and economic change, and focuses on actively measuring impact to inform and direct the design process.

Impact Designers span a wide range of design disciplines but are tied together by a common goal to design and create a better world through innovative, scalable and measurable solutions."

If one carefully reads the above definition, it mentions the word "measuring" and that is the most crucial part. As we are going through the much-required Liminal shift across various countries, including Malawi, we need to find ways in which we can "Measure" the impact of Architecture and Design. Certain tools exist from an engineering perspective such as calculating the energy consumption, energy modeling, life cycle analysis, water consumption, and so on. But we need to develop tools that can also measure and quantify characteristics by the end users and third parties. These include but are not limited to postoccupancy analysis, done to ensure the promised quality of the building has been delivered. These surveys can be fed into digital systems and create algorithmic values to make a benchmark for every region. These could include categories such as spatial quality satisfaction, material usage satisfaction, happiness index, cultural appropriateness, and many more. Committees could be made for individual projects, which could represent these projects and work on behalf of the larger audiences.

This would create a regional benchmark for development and also be very contextspecific. This would also reduce the need/desire to refer to unsustainable ways of development, especially in the upcoming countries, and also align with the need of the times; to be local with the least carbon footprint and Embodied Carbon.⁴

The Liminal Shift

The reason we based our studies on Malawi is due to its small geographical extent and vast cultural diversity. Similar to Malawi, many countries are in the Liminal phase. One such country, with a massive population and roughly in a similar phase in India. Although India is economically a lot stronger and prosperous than Malawi, the ideas discussed above need to be systemically incorporated into its growth. This is to avoid a haphazard pattern of development in India and also provide it with a track, to be able to measure the impact. Several projects in India blindly ape the western model of development but are completely unsustainable and irrelevant in the context.

This will ensure that the buildings we inhabit won't just become enclosures encompassing pragmatic engineering numbers, but also allow room for creativity and cultural significance.

As more people focus on becoming Impact Designers, this implementation and shift can start at the architecture school level. Students, faculties, and professionals need to look into ways in which they can measure the impact of their design. This will be one of the ways where Architecture as a profession will find ways to become more relevant in today's time and Architects won't be easily replaceable anymore, the way it has been happening in the past few decades. If people become aware of these methods, only then will we be able to bring about a transformation towards Impact Design pave the way forward.

Acknowledgements: This essay is based upon the studies carried out by the author along with other students and faculty from the Virginia Tech College of Architecture & Urban Studies in 2017. All photographs are by the author, unless otherwise mentioned.

References

Overview. (2021, November 23). World Bank. Retrieved December 14, 2021, from https://www.worldbank.org/en/country/malawi/overview#1

Definition of limen | Dictionary.com. (1991). Www.Dictionary.Com. Retrieved August 22, 2017, from https://www.dictionary.com/browse/limen

Impact Design Hub. (2016, September 15). *Impact Design Hub*. Impact Design Hub | Just Another UrbanNext Site. Retrieved December 18, 2021, from https://urbannext.net/impactdesignhub/

Hussman, R. (2021, March 29). *What is Embodied Carbon?* CarbonCure Technologies Inc. Retrieved October 14, 2021, from https://www.carboncure.com/concrete-corner/what-isembodied-carbon

Wikipedia contributors. (2019, October 5). *Liminality*. Wikipedia. Retrieved January 7, 2022, from https://en.wikipedia.org/wiki/Liminality#cite_note-:0–2

Jain, D. (2018, July 10). *The Liminal Shift*. Vt.Edu. Retrieved August 27, 2019, from https://vtechworks.lib.vt.edu/handle/10919/83892?show=full

Notes:

¹ In anthropology, liminality is the quality of ambiguity or disorientation that occurs in the middle stage of a rite of passage, when participants no longer hold their pre-ritual status but have not yet begun the transition to the status they will hold when the rite is complete.

² Impact design is rooted in the core belief that design can be used to create positive social, environmental, and economic change, and focuses on actively measuring impact to inform and direct the design process.

³ Compressed stabilized earth blocks (CSEBs) are comparatively new earth-based materials similar to rammed earth, adobe, and bricks. Additionally, CSEBs can overcome the problems of fired bricks. The most common stabilizers used for CSEB production are cement and lime. Lime is environmentally friendlier than cement.

⁴ Embodied carbon is the carbon dioxide (CO_2) emissions associated with materials and construction processes throughout the whole lifecycle of a building or infrastructure. It includes any CO_2 created during the manufacturing of building materials (material extraction, transport to manufacturer, manufacturing), the transport of those materials to the job site, and the construction practices used.