

## Introduction

Vernacular architecture, "architecture born from place," is created without the involvement of professional architects. It naturally adapts to its environment and community, utilizing solutions proven over generations. It serves as a significant source of knowledge on how to coexist harmoniously with nature. This type of architecture is present worldwide, **but quickly disappearing forever, without being well documented.** 

The aim of this project is its detailed documentation. Due to the global dispersion of such architecture and the desire to limit long-distance flights, the research scope will be limited to one continent for this competition. Africa has been chosen due to its immense diversity of vernacular architecture examples. I have also travelled there a lot in the past. The project is extensive enough that initially, I will focus on this continent, planning to expand the research to other regions of the world in the future.









### Research

The artistry of vernacular architecture is diminishing as traditional techniques are overshadowed by widely-used modern materials. The decline in intergenerational craftsmanship is concerning, as the construction methods, which encapsulate immense wisdom developed over centuries, are increasingly being forgotten. These methods are replaced by simpler, lower-quality building techniques that often overlook crucial aspects, including local climate conditions. While modern societies frequently turn to new technologies to address sustainability challenges, many of these could be effectively tackled by drawing on the knowledge inherent in vernacular architecture.

During my travels, I witnessed this myself...



Research on vernacular architecture - Vanishing Architecture

watch:

https://youtu.be/vS-wSeRBNKQ

## Phase I - Trip

Due to the erosion of traditional architecture globally, my fascination with the remarkable clay and other sustainable structures intensifies. Enthralled by their unique forms and the expertise behind their construction, I aspire to immerse myself in the intricacies of this craft and document its nuances before they vanish.

The endeavor aims to document (through **photos and videos**) the rapidly vanishing traditional buildings, crafts, and skills across 13 countries in West Africa, covering approximately 12,000 kilometers—or potentially more, depending on funding. **High-quality cameras are essential to capture every detail of each example.** This journey navigates through diverse climatic zones, showcasing a wide variety of endangered architectural types.

Given my involvement in several architectural projects focused on rammed earth and sustainable design, this topic resonates deeply with me both as an architect and a traveller.



### Project description - Vanishing Architecture

watch:

https://www.youtube.com/watch?v=KUzuz-gY5hI

### Phase I route

From the snow-capped peaks of the Atlas Mountains to the extreme aridity and scorching temperatures of the Sahel region, from the coastal savannah climates to the sweltering tropics. These contrasting climatic conditions influence the vast diversity of architecture in West Africa.

The length and route will be adjusted according to the available funds. The basic route leads from Morocco to Nigeria, although it can be extended to end in South Africa.



### Phase I Photos + 3D Scans



watch 3D-model online:

 $\underline{https://sketchfab.com/3d-models/ethiopia-banna-storage-1032b9f6713b4dc28265b7950a466278}$ 











 $\underline{https://sketchfab.com/3d-models/ethiopia-lalibela-orthodox-church-8d1665ed78194f208bae1477248c2de6}$ 

## Phase II - Atlas

To immortalize the essence of vernacular architectural heritage, the documentation will be shared on an open-source online atlas and will consist of:

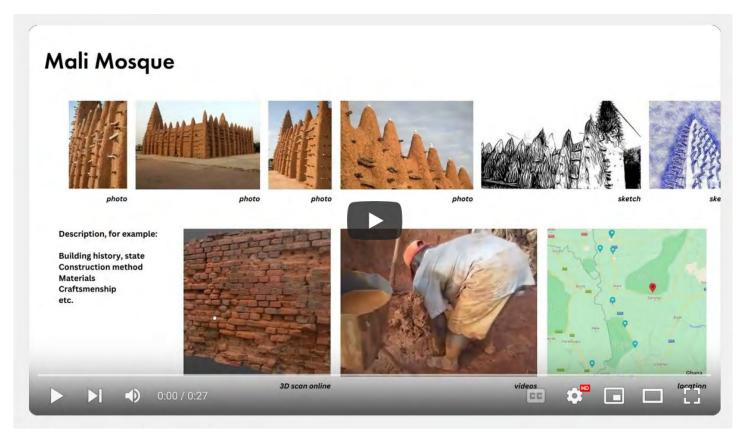
- **Photographs**
- Videos of the architecture and building process
- 3D Scans of intricate details, captured using a 3D scanning smartphone app.
- **Descriptions** of the construction process, skills, craftsmanship, tools, materials and everything else encapsulating the artistry of construction.
- Sketches.

The progress will be communicated to the public by sharing on Youtube, Instagram and X.









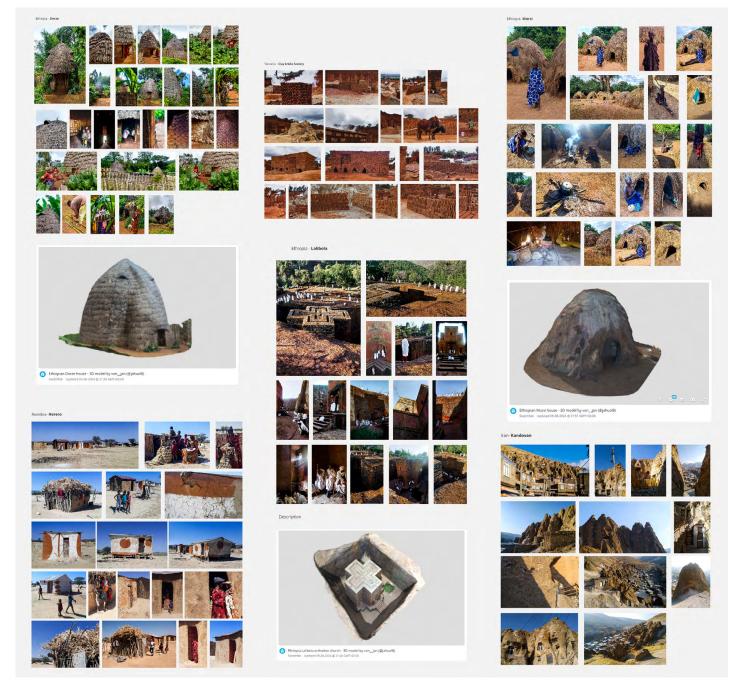
### Online atlas - visualisation - Vanishing Architecture

watch:

https://www.youtube.com/watch?v=4TKhZH5f2Mw

### **Phase II**Draft Atlas Website

I have begun drafting an online atlas, drawing from my travels around the world, where I gathered materials on disappearing architectural styles. This draft serves as a test to explore how an atlas of sustainable, fading building techniques might take shape.



### Draft website of the atlas

watch online exhibition:

https://bit.ly/vanishingarchitecture

# Phase III - Construct

The gathered database of photos and information about vernacular buildings will be used to train neural networks to create new architectural forms generated by AI. Based on this, new types of architecture will be designed and constructed by me in cooperation with local builders in various locations worldwide, next to the original buildings. The constructed buildings will serve the local communities. Images presented in the video below are examples of AI algorithms trained to generate new architectural forms based on vernacular examples. The architecture will be built using local materials and techniques.

The construction process and the documentation of the original buildings will be documented (through **photos and videos**) broadcast on social media, presenting all the research, knowledge, and progress from each construction site. The number of realized buildings will depend on the funds obtained.

Before I start the aforementioned construction supporting local communities (for which I am also seeking grants), I first need to successfully test the devised method of vernacular building techniques, inspired by the results of the AI algorithm.

For this purpose, my acquaintance, the owner of Roberts Farm located near Otjiwarongo, has offered to provide land on the farm to build a settlement for workers. This will allow us to test this method in practice, although these actions will not be covered by the current funding scope.



### Architectural visions - Vanishing Architecture

watch:

https://youtu.be/JF0Jl8ejzd4







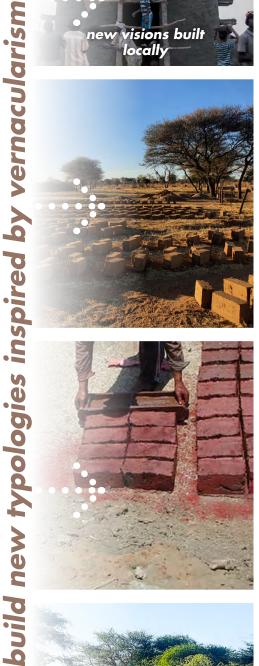












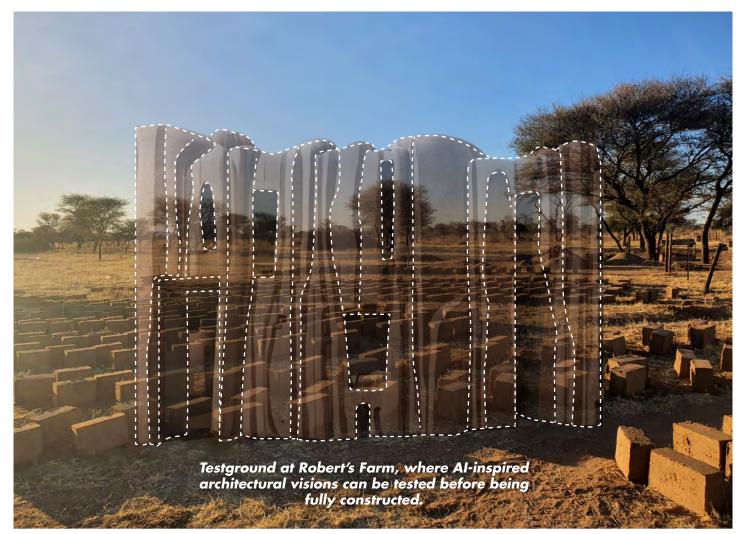






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# Recommendation

The idea was previously recognized by the Pritzker laureate Sir Norman Foster but never received funding. Motivated by the near miss in a prestigious competition, where it came close to securing financial support, my commitment to continue this project has only strengthened. Since that time, the project has further developed and improved, better addressing the challenges it aims to tackle.



**Royal Institute of British Architects** 

To Whom It May Concern

06 June 2024

### RIBA Norman Foster Travelling Scholarship 2023 - Jan Dabrowski

I am writing in my capacity as Head of Education Projects at the Royal Institute of British Architects (RIBA) to confirm that Mr Jan Dabrowski was nominated by ETH Zurich for the 2023 RIBA Norman Foster Travelling Scholarship. The international annual scholarship offers £7,000 to fund research by an architecture student who demonstrates original thinking on issues relating to the sustainable survival of cities.

Mr Dabrowski's project, with the title 'Atlas of Vanishing: Documenting West Africa's Forgotten Architecture' was one of the 60 projects assessed by a group of judges that included Lord Norman Foster of Thames Bank (Foster + Partners; Norman Foster Foundation), Professor Farshid Moussavi OBE RA (Farshid Moussavi Architecture); Simon Allford (AHMM; RIBA President 2021-23), Chitra Marsh (Buttress Architects; RIBA Council member), and Richard Dilworth (Foster + Partners).

Throughout the judging session that took place on Microsoft Teams on 20 July 2013, Mr Dabrowski's project stood out for its intellectual rigour and cultural significance. In spite of its many strengths, the project did not receive the scholarship, which was awarded to another contender. However, the judges agreed that Mr Dabrowski's project should be commended, not only as a way to highlight the merit of his research proposal but also to encourage prospective funding entities to consider supporting Mr Dabrowski in what they considered a very worthwhile project.

Yours sincerely

João Paulo Nunes

John-Paul Nunes Head of Education Projects Royal Institute of British Architects

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Tel: +44 (0)20 7580 5533 Fax: +44 (0)20 7255 1541 info@riba.org www.architecture.com Phases of the project can be conducted alternately, focusing on one goal or region at a time, changing destinations, or being highly adaptive to ensure the project aligns with the progression of the PhD program (such as being present at the university for tasks like teaching or other academic responsibilities). Due to drastic temperature changes and harsh conditions varying by season, it would be optimal

to target specific weather windows, which differ by region. It would be most advantageous to start the **first phase** from the north of Africa during the winter. The **second phase**, involving the creation of the atlas, would occur during the journey but primarily after returning. The **third phase** would happen after second phase and partially involve returning to those locations again.

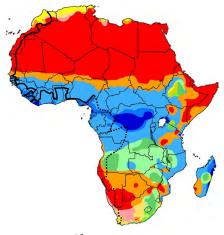
### Preparation

### **Phase I**(winter is the best time for Phase I)

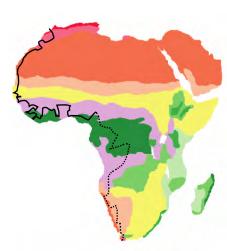
### Phase III Phase III

### • Organise visas, travel arrangements

- Vaccines, medical preparation
- Prepare equipment
- Contact translators and local communities
- Discover places
- Document architecture
- Make local connections
- Get to know local construction and culture
- · Create online atlas
- · Archive all photos and videos
- · Edit all photos and videos
- Share project on social media
- Create AI algorithm aforementioned
- Develop a new architectural typology inspired by AI-generated insights.
- Test the design on a friend's farm as a proving ground.
- Engage with local communities identified during the initial phase.
- Construct the new architectural typology to serve the local communities.



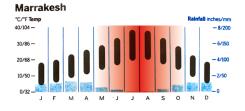
Climate type



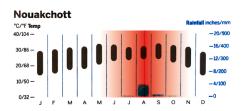
Landscape type

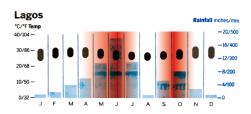


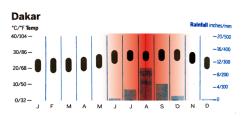
River basins

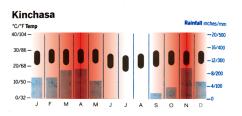


Abidjan
\*C/F Temp Rainfall inches/mm
-40/1000
-32/800
0/32-20/4J F M A M J J A S O N D









### Evaluation and outcome measures: How will you measure the success of your project?

- Achieving comprehensive coverage of vernacular architecture across the targeted countries
- Analyzing the reach and impact of the project through social media analytics and website traffic
- Number of workshops, lectures, and presentations given
- Securing exhibitions and publications for the photographs and videos

### Challenges?

- Since I have traveled extensively in Africa, I know it is full of surprises. In the case of unforeseen extreme situations beyond my control, if the sum exceeds the limit, I will cover the difference from my savings.
- Uncertainty surrounding the existence of traditional architectural examples, as they are often demolished. Fortunately, there are alternative buildings representing a similar style, in case a few buildings no longer exist.
- Communicating with the locals to learn about their craftsmanship might be difficult. From experience, the best solution is to hire a local interpreter and provide compensation, be it in the form of food or money, to engage the community effectively.
- The unstable political situation in many countries, where the most captivating architecture is found, poses an obstacle (like Mali, Burkina Faso, or Nigeria). The only option is to bypass these countries and explore alternative routes.
- Construction challenges include limited access to tools, the remoteness of the locations, and collaboration with locals, which, in my experience, can often be the most challenging aspect.

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