

# REFLECTION

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## I. RESULTS OF THE RESEARCH AND DESIGN

The main results of the research are the model of Contemporary Vernacular Architecture (CVA), which combines principles found in local Vernacular Architecture with contemporary building techniques and the innovative use of local resources (Contemporary Vernacular Architecture, Figure 1), and the Assessment Guide as a tool to achieve more awareness and mindfulness about the context (assessment Guide, Figure 2). The Assessment Guide as a tool to analyse the context is the most important result of this research because it breaches the gap between the theoretical model of CVA and the knowledge needed to apply it.

Assam in Northeast India served as the initial context of creation for CVA as a model and the Assessment Guide as a tool. However, the result is a universal method that finds possible applications in any context. The goal is to create a building practice that can balance nature, resilience, comfort, and user needs.

As the focus lies on creating awareness and mindfulness, the design focuses on further developing the Akshar School Campus in Guwahati, Assam. The project serves as a testing ground for the model of CVA but also creates a better learning environment that aims to inspire the next generation to rethink the way to build. The design combines the needs of the school with the agenda of CVA, which leads to new student housing and workshop space that facilitates current arts and crafts classes but also classes that educate the student in new ways of building on a theoretical and practical level.

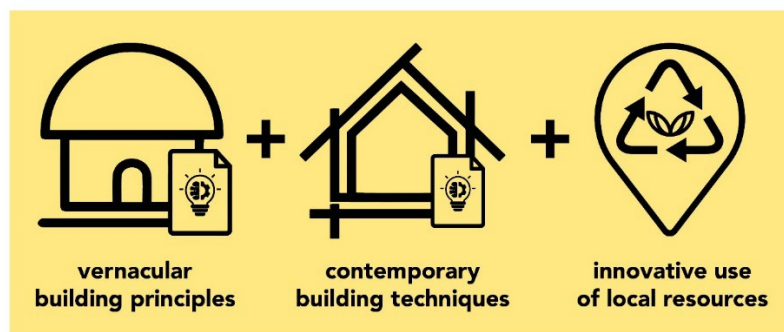


Figure 1. Contemporary Vernacular Architecture

**CVA Assessment & Implementation Guide**  
I want to build a \_\_\_\_\_

**C.1. Look at your local climate and landscape characteristics**  
What climate zone are you in? \_\_\_\_\_  
What landscape features are you in? \_\_\_\_\_

Season	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Temperature (°C)												
Humidity (%)												
Wind direction												
Wind speed (km/h)												
Soil type												
Water table depth (m)												
Vegetation												
Topography												
Proximity to water												
Proximity to roads												
Proximity to buildings												

**C.2. Look at the needs, wants and desires of whom you are building for**  
Who are you building for? \_\_\_\_\_  
What are their needs, wants and desires? \_\_\_\_\_

**Needs:** \_\_\_\_\_  
**Wants:** \_\_\_\_\_  
**Desires:** \_\_\_\_\_

**C.3. Look at the strengths, weaknesses and what potential each resource holds**  
What resources do you have? \_\_\_\_\_  
What are their strengths and weaknesses? \_\_\_\_\_  
What potential do they hold? \_\_\_\_\_

**C.4. Look at the benefits of your project to the community and the environment**  
What benefits will your project bring? \_\_\_\_\_  
How will it benefit the community and the environment? \_\_\_\_\_

**C.5. Look at the benefits of your project to the community and the environment**  
What benefits will your project bring? \_\_\_\_\_  
How will it benefit the community and the environment? \_\_\_\_\_

**C.6. Look at the benefits of your project to the community and the environment**  
What benefits will your project bring? \_\_\_\_\_  
How will it benefit the community and the environment? \_\_\_\_\_

Figure 2. Assessment Guide

## II. REFLECTION

Approaching the research as a hands-on experience gave me the insides I needed later to develop an academic and objective view of the problems at hand in Assam. Together with the guidance of my supervisors, I managed to keep an objective distance and ultimately gain the maturity that led to the development of the model of Contemporary Vernacular Architecture (CVA) and an Assessment Guide.

I look back to these results with pride as I believe the model of CVA and the Assessment Guide is a valuable result for the initial quest to find a more sustainable building model. Moreover, the approach of a model allowed me to find a solution that applies beyond the context of Assam.

I believe that only because of my initial first-hand experience of the Assamese context for two months I gained the experiences and insights needed to reach my research goals. Without this experience, the research would have never reached this level of sophistication. Another crucial part of the research was when I came back to the Netherlands, taking a more distant and objective view on the research.

Only this distance allowed me to sort out my experiences and get a clearer view that finally allowed me to bring everything together in the model of CVA. Another big step was sharing my ideas with my supervisors, which taught me the lesson of not taking things for granted. The experiences you make shape your decision-making, but other people have not had the same experiences, so you have to take them along the journey and make them understand why you make decisions in a certain way. This lesson led to the development of an Assessment Guide as a tool to breach the gap between the theoretical model of CVA and the knowledge needed to apply it.

The Feedback I received from my mentors was always subtle but targeted at the problem I faced. It was never a direct correction or suggestion to change something specific but more of a hint to stay aware of other possibilities. I also noticed that mentors try to stimulate your reflection process with targeted questions or simply through the act of having to explain yourself to them or a group of peers. This stimulation activates a process of reflection and change from within yourself.

Initially, I wanted to focus on a specific building system solution but through the feedback of my mentors, I came to understand the limitations of a singular solution and the strength of a model, which played a big part in the development of CVA. The exchange with my mentors was also crucial for keeping an objective distance that enabled me to preserve a holistic view. Without it, I am sure that I would have gotten too close and missed certain aspects.

### **III. LOOKING AHEAD**

The final part of my graduation will focus on telling the story of my research, the development of CVA and its translation into the design for the Akshar School. It is crucial to take the people who listen to my presentation on a journey showing not only the design but the entire process that led to the design.

### **IV. REFLECTION QUESTIONS**

1. What is the relation between your graduation project topic, your master track (Ar, Ur, BT, LA, MBE), and your master programme (MSc AUBS)?

As architects, we are encouraged to think out of the box and bring together what other people can't see.

In my project, I encourage this behaviour by bringing together not only design and engineering but also landscape, culture, material research, material production and education. Architects have the potential to be changemakers and this potential should be used to have a real impact on our environment. I believe the master's program AUBS is exactly about that and with my project I am discovering the way I want to make a difference.

2. How did your research influence your design/recommendations and how did the design/recommendations influence your research?

At the base of my design lies the model of Contemporary Vernacular Architecture that has been applied in the context of Assam. This model has led to a System Design that is a pure response to the context of Assam (System Design for Assam, Figure 3). The introduction of the user and function has adapted the System Design to meet the needs of the user and function and finally created my design of the Akshar School.

The initial design goal of creating a more sustainable building model for Assam has set the seed for the research.

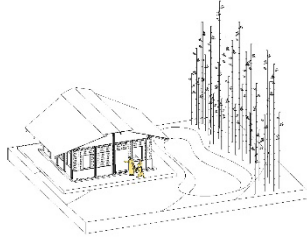
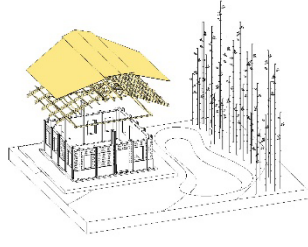
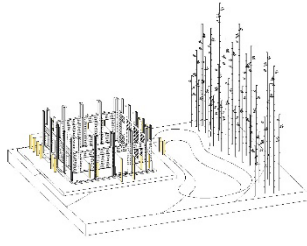
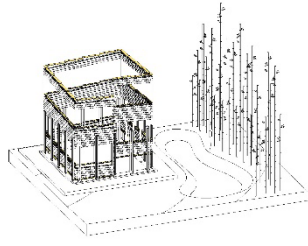
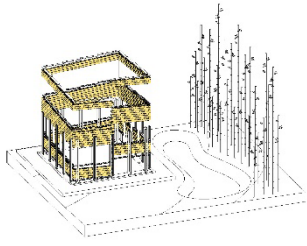
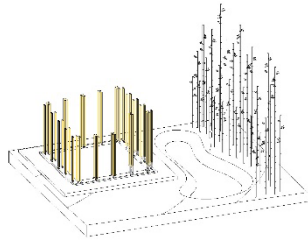
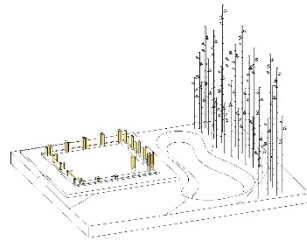
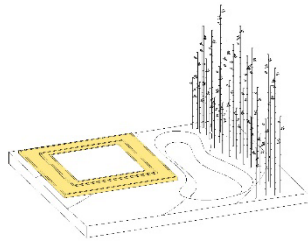


Figure 3. System Design for Assam

3. How do you assess the value of your way of working (your approach, your used methods, used methodology)?

I assess the value by the applicability of the model CVA but also the potential application of the System Design. Starting from a system that responds to a general context creates tremendous value in possible applications.

4. How do you assess the academic and societal value, scope and implication of your graduation project, including ethical aspects?

I assess the academic and social value of the project by the frame CVA creates. This frame merely serves as a guiding tool that leaves enough freedom for any individual to apply it as the context dictates. To breach the gap between the theoretical model of CVA and the knowledge needed to apply it, I also present an Assessment Guide as a tool to achieve a better awareness of the context.

5. How do you assess the value of the transferability of your project results?

Assam served as the initial context of creation for CVA as a model and the Assessment Guide as a tool, which led to a universal method that finds a possible implementation in any context. This flexibility of potential applications in any context sets the value in terms of transferability.

6. How did the user influence your design?

The user is an integral part of the design as the program is defined by the needs of the user. Crucial was also the impact of the user on the structure as the project is built by manual labour. The sizes and weight of components had to be strongly considered.

7. How did the resources influence your design?

As the innovative use of local resources is an elemental part of CVA the availability, workability as well as strengths and weaknesses of resources play an integral part in the design. As bamboo is in high quantity available in Assam it was chosen for the primary structure, but to deal with its weaknesses I introduce a block made from rice husk, lime and clay that serves as protection of the bamboo. Additionally, I utilise plastic waste to protect the bamboo and the blocks from ground moisture.

