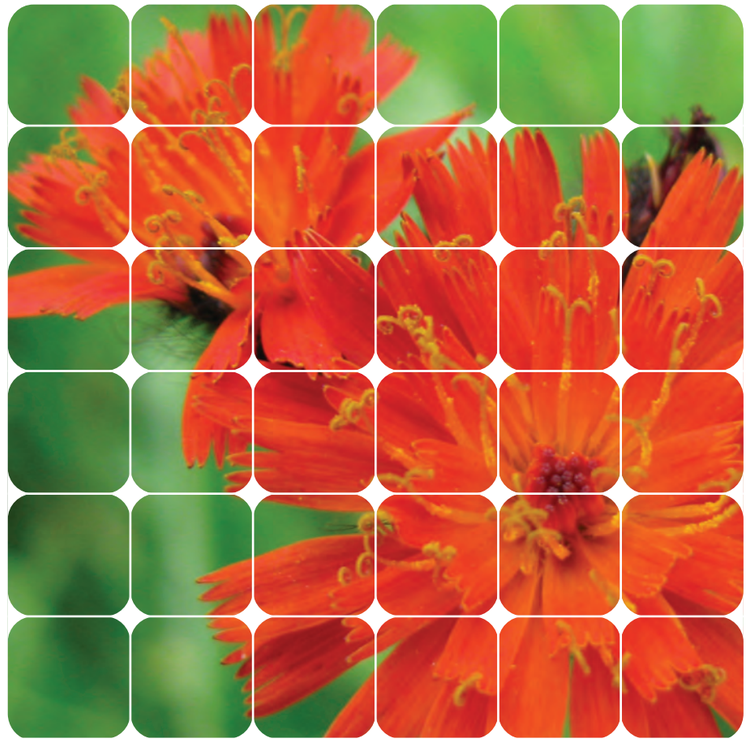
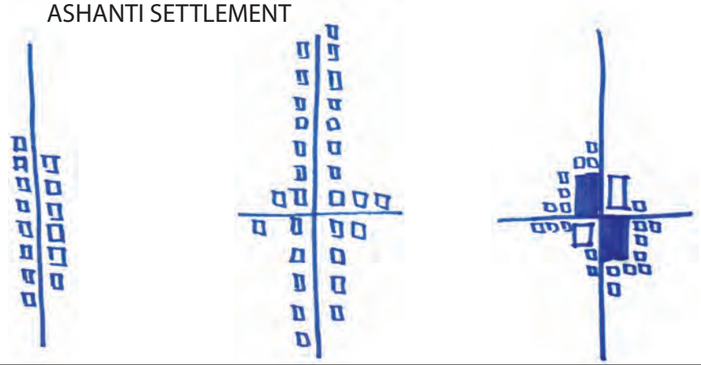


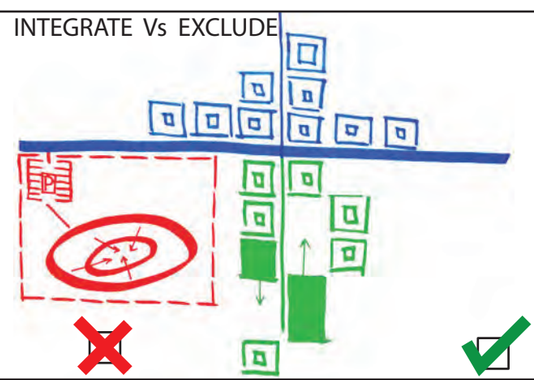
When creating a piece of art every thing is **uncertain at the begining**. The author has got only a **general idea** - basic rules to stick to. Then they start by a bit of this and a bit of that and **step by step** the image is getting distict - like when developing photographs. This is how **beautiful art**, and **living architecture** are created. It is just **amazing** how those first hesitant lines united into the beautiful result.

ASHANTI SETTLEMENT

ASHANTI SETTLEMENT



INTEGRATE Vs EXCLUDE



Ghanian settlements emerge **little by little** in a common urban raster in Ghana - 25m x 30m road axis
- 20m x 25m house outlines

1 - **along** main road with abonten space
2 - second axis
3 - main **spaces** at the **crossing** by skipping one or more raster fields.

Exclusive “exotic hotel-like” complex turned to its inside?

open to its neighborhood to be able to become living, **welcomming** settlement ready to charm you no matter where you come from or how rich you are

stay **COOL**

- grid orientation towards the **preveiling winds** direction (SW)
  - main buildings easy **cross ventilation**
- enchanced **stack effect**
  - wind courant under the roof sucks the cool air from under the building into the interior
  - **high roofs** ease the hot air vertical mou vement
- **low** solar **thermal gains**
  - **shading** roof overhangs, louvres and vegetation
  - great **thermal mass** walls - good thermal inertia

catch the **RAIN**

- rain water **collection** on large roofs
- water **storage** under the main buildings in cylindral corrucated iron cisterns

- **usage** - toilet flushing
  - clothes washing
  - small agriculture and domestic use

- pumping: powered by wind (optional energy storage in car batteries)

POWERED by nature

- **solar** - water heating
- **wind** - water pumping
  - building ventilation

of **WASTE** and **REASON**

Sanitation waste water (gray and black)

-1- mechanic filtering in the **septic tank**

-2- what rests is cleaned in the **root zone pools** (no smell, no contamination)

-3- the overfallen water can be **reused** for example for plant watering

- pools deliberatly placed in the main **public space** to improove its **microclima** and favorise the "the living space"

build on **YOUR OWN**

Materials
- **local earth**
- local **wood** (ev. **bamboo**)
- **on site** made roof tiles

Effective structures
- inspired by vernacular architecture
- modular, repetitive
- easy **manual building** process
- variable + **adjustable** disposition

GREEN

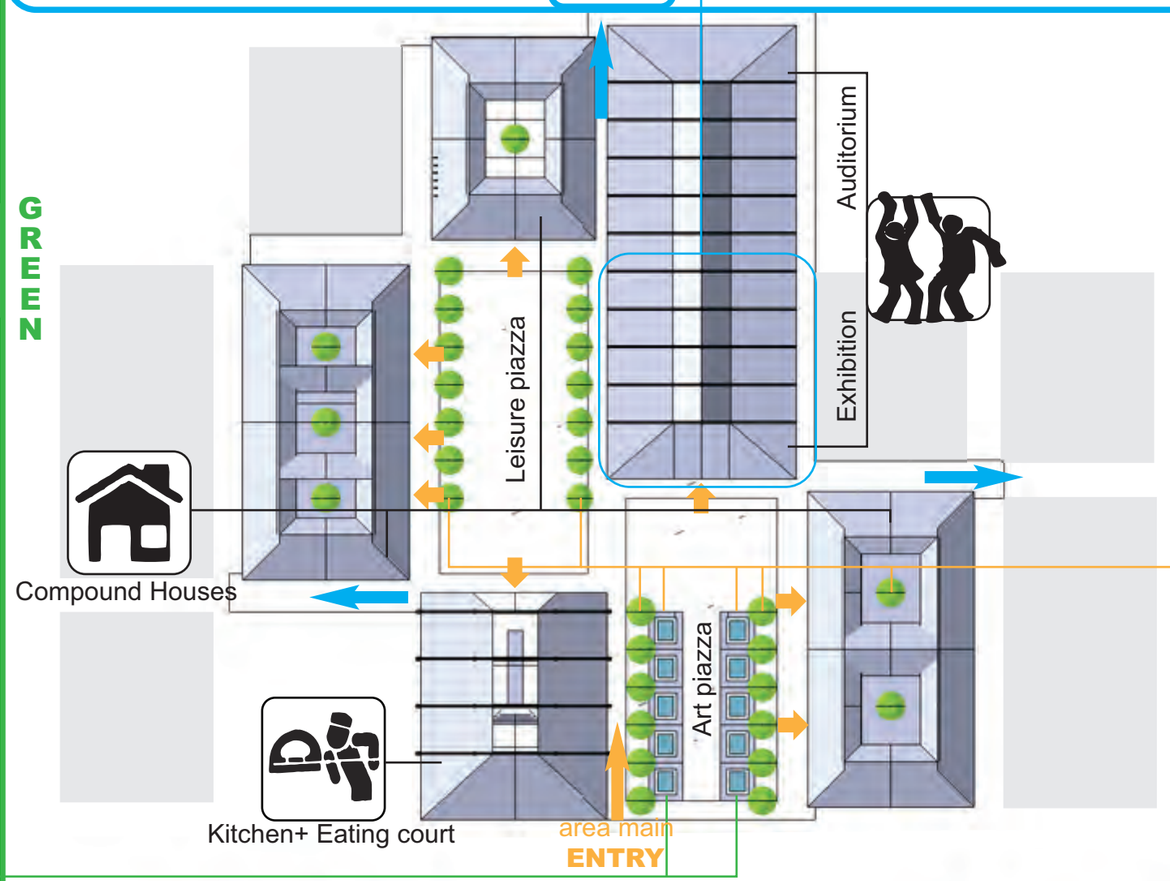
ADAPTABLE

divisible house courts

phasable ArtCenter
1. stage - Offices + Exhibition
(performances can be held in the eating court)

future developement axis

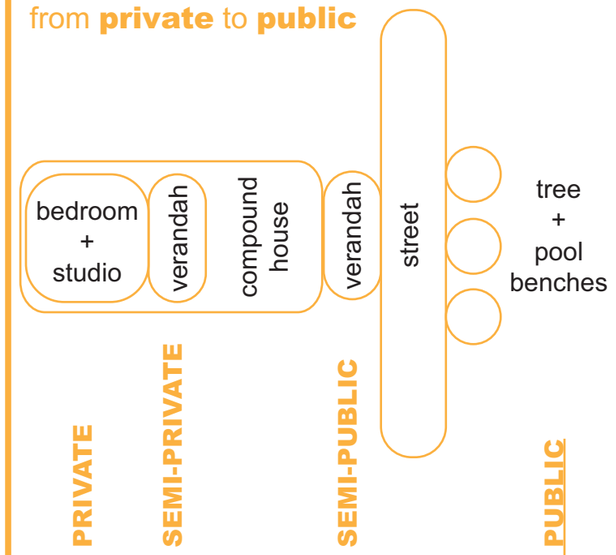
future houses



a full **CIRCLE**

- all functions stand **around** the two main **public spaces**

from **private** to **public**



SOCIAL

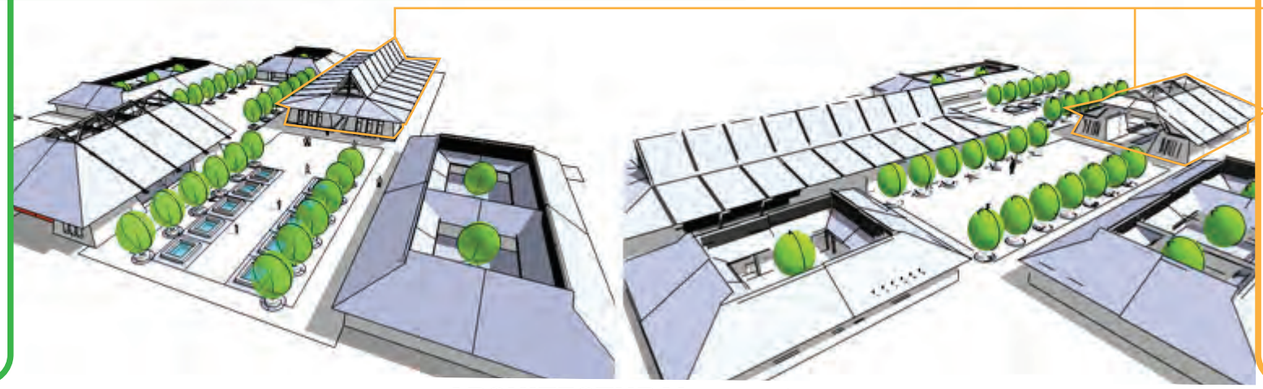
building **entries**

public **DOMINANTS**

- dominants by **posision** and **scale**

income **INTEGRATED**

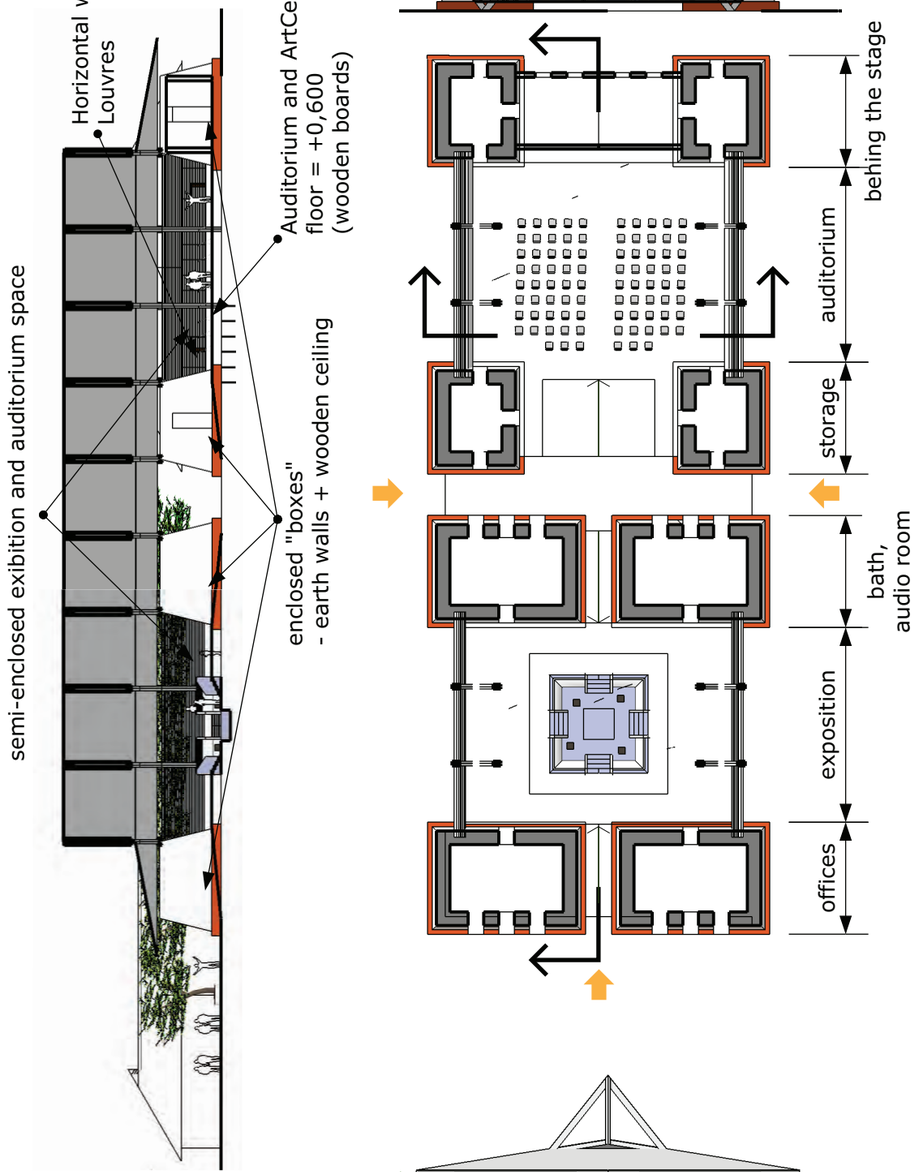
- source of income - **tourist** accomodation is **integrated** in the coumpound houses

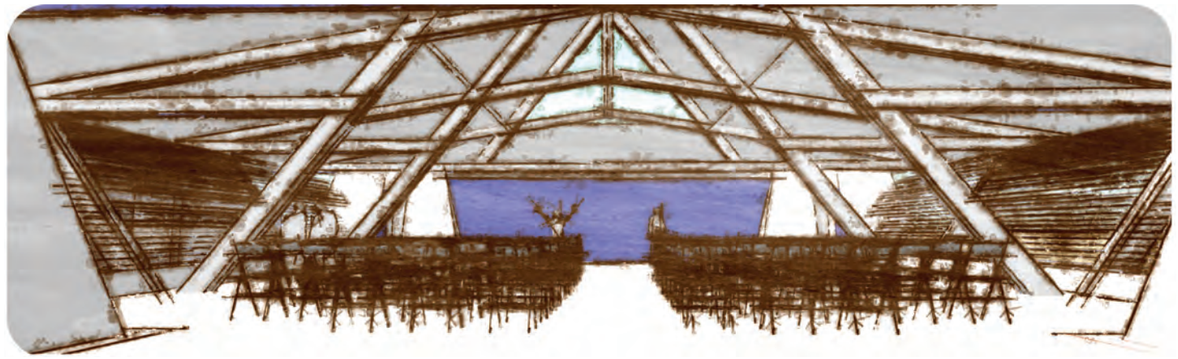


ARCHITECTURAL concept

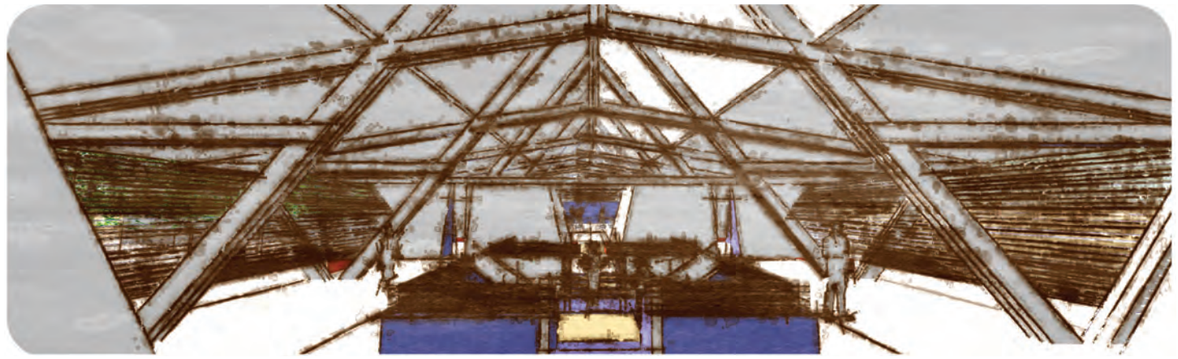
Jakub NOVÁK, Vladislav BUREŠ

GHANA: 2011 OPEN ARchiTecture CHALLENGE





Auditorium



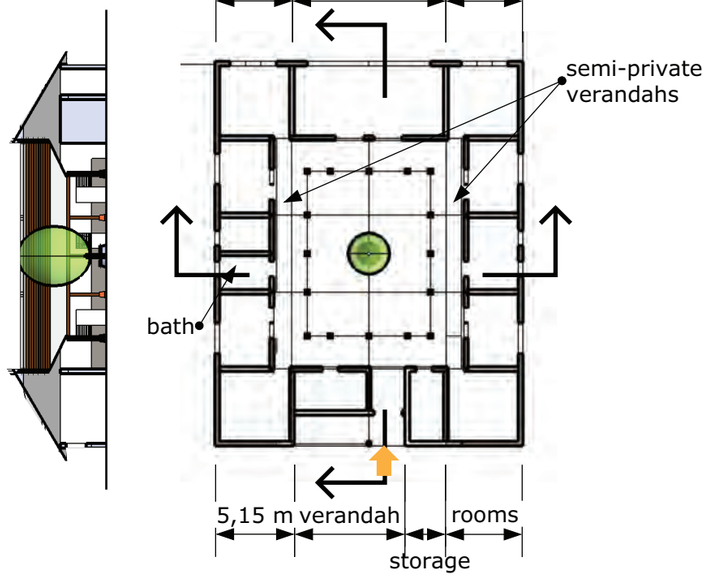
Exposition

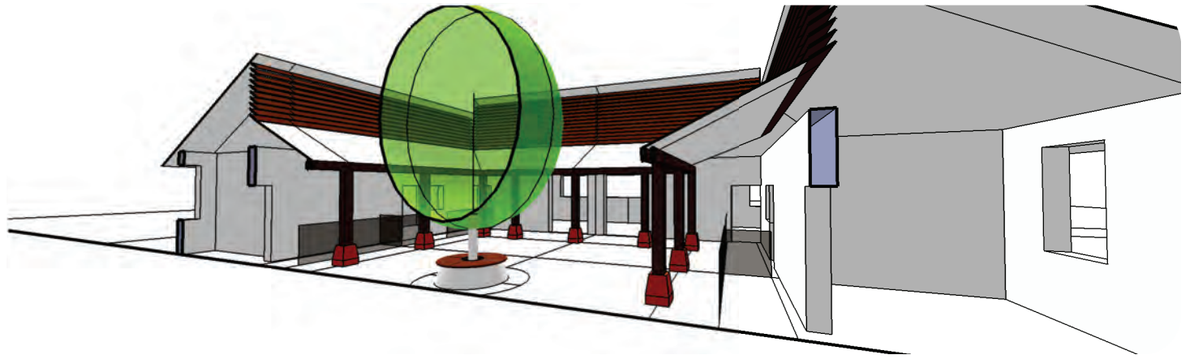
from **Art piazza**

Jakub NOVÁK, Vladislav BUREŠ

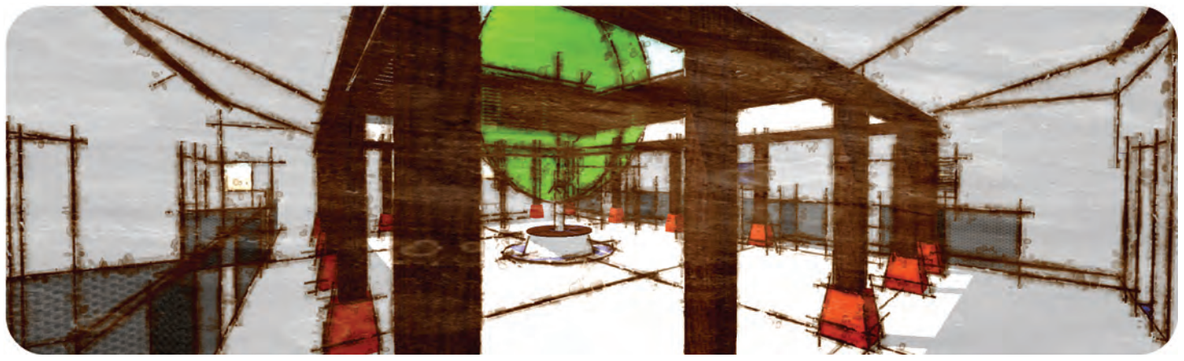
ArtCenter + Auditorium

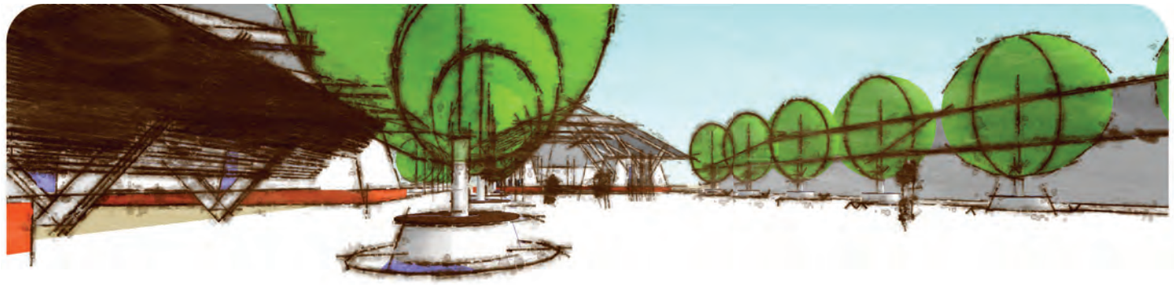
GHANA: 2011 OPEN ARchiTecture CHALLENGE



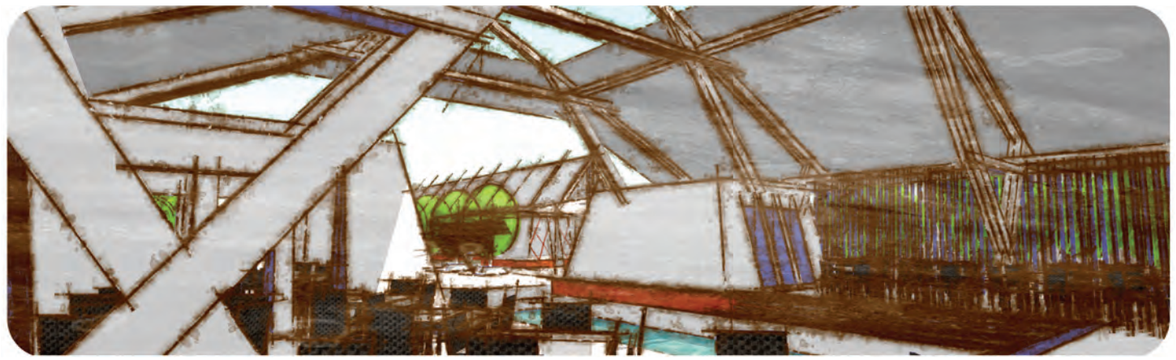


Compound house

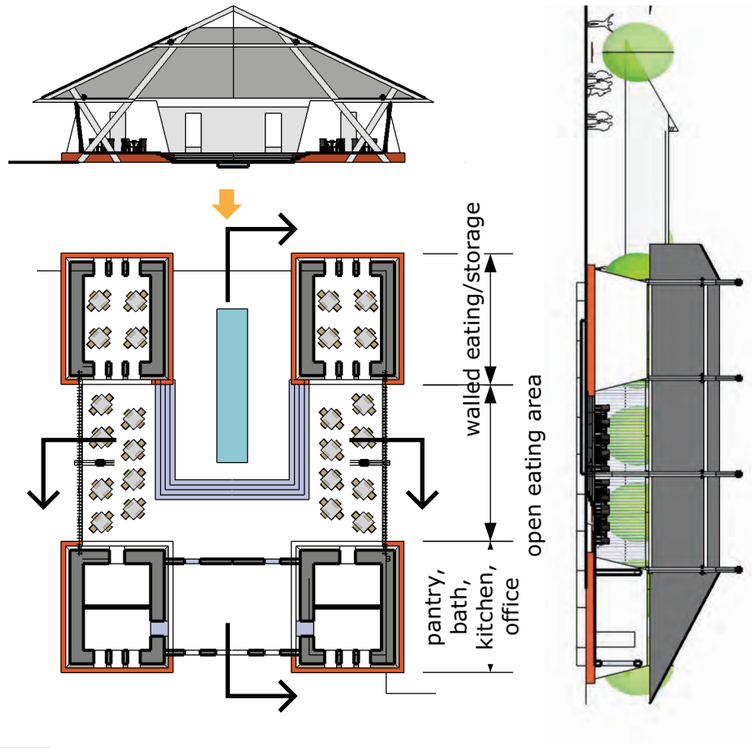




Leisure piazza



Eating hall



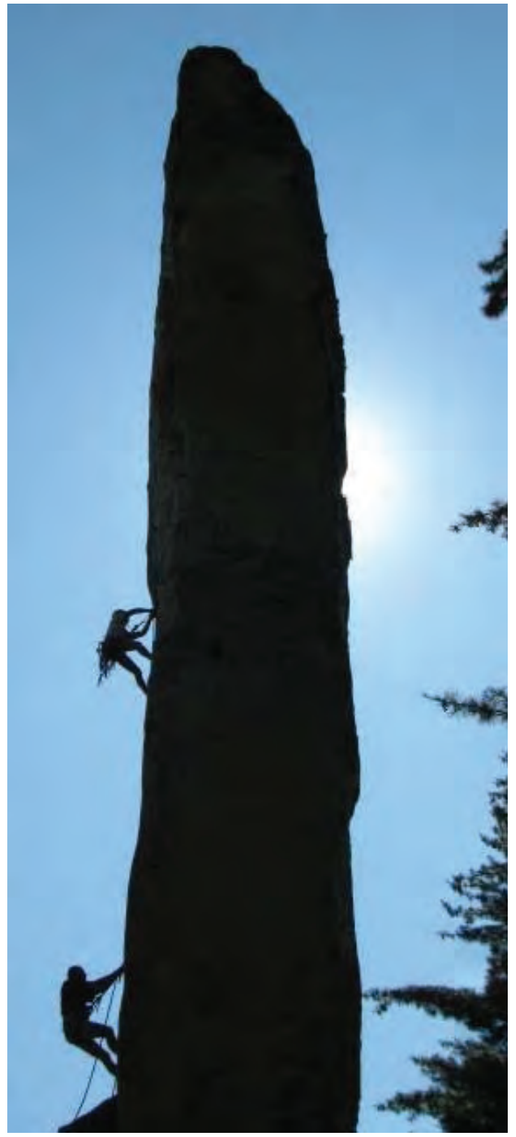
First stage:

Building area in total: 1700 sqm
Building cost in total: $ 40.000-$ 55.000

Art Center	500 sqm	
offices		35 sqm
audio room		35 sqm
storage		35 sqm
bathroom		35 sqm
exibition area		182 sqm
COST	$13.000	
Kitchen + Eating area + Auditorium	500 sqm	
kitchen		48 sqm
pantry + storage		24 sqm
eating area (units)		180 sqm
office		12 sqm
COST	$10.000	
Housing	700 sqm	
COST	$30 per sqm - $21.000*	
	$45 per sqm - $31.500**	

* - self made earth and microconcrete tiles construction
**- earth and microconcrete tiles construction with payed artisant
Source: Afram, S.O.. (2007). The traditional Ashanti compound house – a forgotten resource for home ownership of the urban poor. Conference paper. African Architecture Today conference, Ghana, June 2007. [online]. Retrieved on November 10th, 2010 from http://www.mudonline.org/aat/2007_documents/AAT_Afram_paper%20web-based%20publication.pdf

The team



Jakub Novák (climbing)
Vladislav Bureš (belaying)

rock climbing July 2010
Czech paradise, Czech republic

Bc. Jakub Novák is young starting architect from Slovakia. On the field of architecture, he mainly focuses on the use of renewable natural building materials such as earth, straw or wood and on the utilization of the renewable energy sources. From his point of view, the contemporary architecture has to be “clean” and affordable. Africa, where the whole human story had begun, is now in some way becoming a “role model” for the European green architecture, which draws (among others) from the vernacular architecture. Jakub is inspired also by the Slovak and Czech traditional architecture, which has much in common with the African. Natural materials are used, simple and effective solutions are applied, which respect the environment and create spatial and user harmony, even with tight budget. This is why he felt challenged by this competition. Jakub enriches the team with his enthusiasm and fresh, innovative ideas.

Ing. Vladislav Bureš is Czech structural designer with 25 years of work record. He is a structural design lecturer on the Faculty of Architecture on the Technical University of Liberec, Czech republic. After all those years of designing large high-tech buildings (the Prague Ruzyně International Airport as an example), he is turning his attention to the architecture, that tends not only to be functional and impressive, but also sustainable. He travels a lot and as he has always been interested in the way the local people live, he was delighted to cooperate on this design, which aim is to construct a space also for the local artists to live, meet and create. His contribution to the team composes particularly of his wide experience and a more conservative sense for the connection of the traditional past, the present and the sustainable future.