Kente House Building Workshop was a project conceived in response to the 2014 Mud House Design Competition organised by the NKA Foundation, a nonprofit social arts organisation based in the US. The success of the scheme has led to a subsequent opportunity to construct the prototype dwelling in July 2015 at the Abetemim Arts Village, a 6 acre site of NKA Foundation located 40km Southeast of Kumasi in the Ashanti Region of Ghana. The workshop will be run and lead by Hannah Wood, Katharina Manecke and Angeles Hevia. Hannah and Katharina are final year students on the ‘Political Architecture: Critical Sustainability’ programme at the Kunstakademiet Aarhus, Denmark, and Angeles a Spanish-Chilean architect specialising in environmental building technology who originally initiated the project during 2014.

The Kente House Building Workshop has a total budget of £12,000, which will enable the purchase of construction materials and payment of local labor costs. Currently the intended funding strategies are two: the first one is based on international funding, for which we remain waiting for results and the second one is based on fees from participants attending the workshop. The project will run in two stages: the first one from July 3rd until August 19th, followed by a second starting on August 27th until October 9th.

Kente House is a 120m2 latte-rammed earth single-family prototype dwelling designed for Kente cloth weavers (traditional trade within the Ashanti region in Ghana). It incorporates environmental features such as 400m local latte earth walls, Kente cloth shading devices, ventilated roofs and EW orientation to harness local winds and reduce overheating among others. The premise of the project is to rethink earthen construction in the context of a rapidly urbanising West Africa. Currently 98% of the houses in the Abetemim region in Ashanti are made of earth but remain in disrepair due to poor construction and erosion. In the region many stereotypes continue to persist regarding earthen methods of construction, in part due to the loss of skills in tradesmanship during the past few decades. Kente House Building Workshop’s main objective is to re-establish and promote the use of rammed earth in contemporary Ghanaian construction. We aim to demonstrate that rammed earth can not only provide quality, but also produce an affordable and aesthetic architecture that makes use of available local materials and vernacular, traditional construction techniques which are fast being lost.

KENTE HOUSE BUILDING WORKSHOP
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Our project follows the following issues listed in the Hassel Charter:

- Thermal buffer
- SW winds
- Vertical ventilation
- Thermal mass

Rammed earth houses:
- 40cm thick ground level
- Responds to heavy rainfalls
- Prevents flooding

Kente cloth shading modules:
- Made from local cotton
- Provides comfort and aesthetic
- Reduces solar radiation getting inside the house
- Increases local Kente weavers' production
- Connects rammed earth walls from rain

Ventilated roofs:
- Natural ventilation harnessing SW winds
- Cross ventilation
  - Comfort, natural cooling
  - Health, reduces moisture growth

These design principles aim at promoting their self-sufficiency.

The Kente House Building Workshop collaborates with disadvantaged communities in Ashanti, Ghana, encouraging the use of local, existing resources rather than importing high-embodied-energy expensive materials. It aims to promote self-sufficiency by encouraging the construction of a low energy consumption design prototype, which incorporates a low-budget, bioclimatic architecture through thermally comfortable houses in the African continent along with providing employment, improving local labor skills, encouraging productive and fruitful work and contributing to local growth and development.

It intends to improve Ghanaians' lifestyle by demonstrating an awareness of local responsibility while enhancing people's well-being with regards to housing. Our learning-by-doing project intends to promote human solidarity since it gathers participants from countries such as Egypt, Belgium, Serbia, Austria, Italy, England, Denmark, Germany, Ireland, Spain, and Chile to promote sustainable development within rural Africa.

Kente House Building Workshop is a global instance that promotes reciprocal feedback between architectural professionals from around the world and Ashanti locals to create a prototype, which responds to local and climate becoming a potential solution to be replicated within rural Africa.

The aim of Kente House Building Workshop is to promote local labor and skills, providing a learning-by-doing hands-on experience of contemporary rammed earth construction for local apprentices and international architecture students alike.

Kente House is a collaborative project which works to innovate with rammed earth - one of Ghana's oldest building methods - while aiming to destigmatise its use in domestic construction.
It aims to demonstrate that building with earth can only provide quality and affordable, aesthetic architecture that makes use of available local materials and vernacular construction techniques which are fast being forgotten. The house also incorporates traditional heritage elements such as Kente cloth, known as 'inwennom' in Akan, which is a type of silk and cotton fabric made of interwoven cloth strips and is native to the Akan indigenous group of the Ashanti Kingdom. The house builds on this rich cultural legacy to promote a sense of pride in local making tradition by incorporating it as shading devices. The Kente House Workshop incorporates participants which understand technology seen from a global perspective, willing to introduce the best of it into a local community in rural Africa.

We observe what happens globally to find the available technology, we take the best of what has been done the past few years and we use what we have around us, all of this allows us to create sustainable architecture.

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