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● Experimentation: Morphogenesis appearing in workshop scale structures

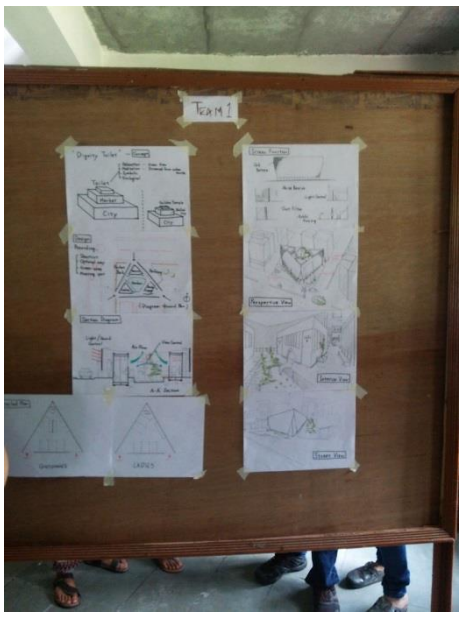
Through performing design-build processes like workshops and exhibitions, we can learn how to develop morphogenetic design based on *geometry*, *materials*, *dynamics*, *craftsmanship*, *site matters* and the *spirit of engineering*. It is also necessary to develop a way of running a workshop in a matter of a few days.

Community Week 2014: Dhillon Marty Foundation international workshop in Punjab, India
Materials and tools were bought in the local market. We researched the most appropriate shape for the materials at hand, and for two days the team worked on building a stable structure that takes into account present social issues.

Schools : The University of Tokyo, Stanford University, The University of Oregon,
Rhode Island School of Design, Guru Nanak Dev University
Students from: Japan, U.S.A., India, China, Greece, Columbia, Indonesia

Public Toilet Design Competition in 3 days
5 clusters of students proposed the public toilet design.
Public toilet represents the social problems in India as follows:
Sanitation on water, food, streets
Gender problem such as safety against crimes for ladies
Gap between rich and poor



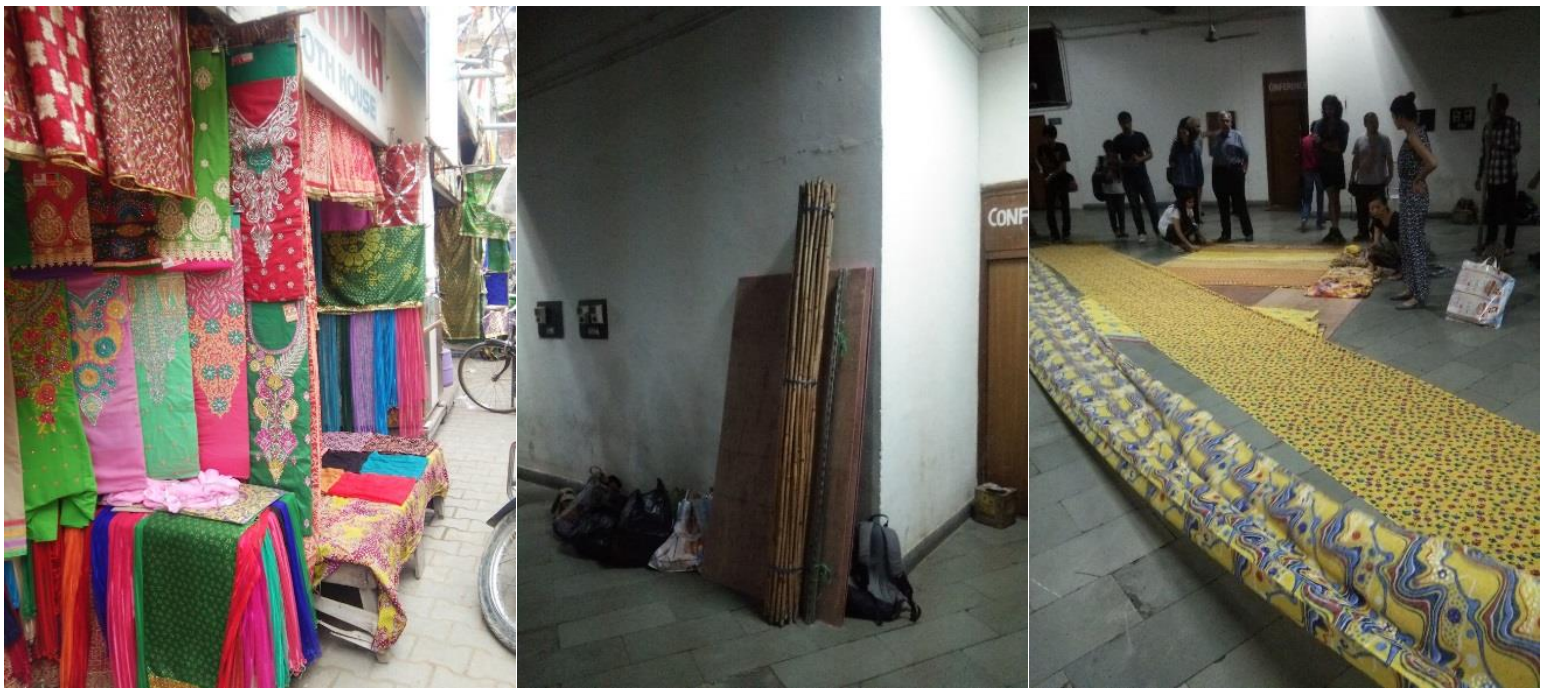


Design Build Workshop in 2.5 days

Design build team was composed with 2 or 3 *"Spies"* from each 5 clusters of students.
A kind of private space, also imagining the public toilet, was designed with some elements extracted from those design proposals of 5 clusters. The spies had to bring that information from each cluster.
We can design structural elements which also work as environmental elements by designing *"Filter"* for light, heat, air, water, sight, insects, and persons.

Keywords Delivered: Water filtering
Air ventilation
Use waste for fertilizing
Natural material
Lift up the floor

These are not actual solutions yet, but indicate what we should think.



Day 1st: Shopping for materials and tools.
Materials: local fabrics, bamboo, metal wire, strings, metal bars, plywood, screws
Tools: saws, pliers, hand drills, hammers, needles, screwdrivers

Day 2nd: Studies on bamboo frames, branching membrane structure,
brick and board for lifted platform.

Day 3rd: Unstable frames stabilized by fabrics,
mesh structure with semi-transparent fabrics for filtering light and sight,
cellular spaces by branching membrane.

Final shape with 15m length, indicating a gate, lifted private room covered with layered filters,
resting space, air ventilator.