1. introduction

Earthquake in Haiti, tsunami in Japan, hurricane in New Orleans, floodings in central Europe...
We have seen in TV many images of natural disasters: human constructions reveals weak against Nature strength. In few seconds, large areas are totally destroyed, many people die, but thousands of them stand in desert cities, once overcrowded, without a roof to protect themselves or a covered place to sleep.

Anytime anywhere, a huge natural disaster can happen, and we are going to design shelters for population!

2. workshop description

object
Designing shelter or dwelling unit for refugees from natural disasters.
Planning ephemeral camps for emergency situations.

method
Workshop with short lectures and briefings, supervised work at class, and individual work at home.
Students must develop their own project of low-tech emergency shelter, with details for construction.
They should create hand-sketches everyday, and small models and/or computer render files at the end.

schedule
25 February - 1 March / 2013
Teamwork supervised sessions will start at 9:00 am.
Each session contains a short briefing, illustrated by slides, about 30 minutes.
There will be short presentation of students’ sketches on March 1st, Friday.
3. objectives

This workshop is based on a well-known exercise, developed by Frank Lloyd Wright and his students in Taliesin. We share some of his objectives, and apply them on an actual location, with a real problem to resolve. Also we want to practice with prefab “dry” technologies, recycled materials and low-tech systems, according to the current world situation of economic austerity.

We believe in the idea of the Workshop as a way of teaching at the same time the concept [IDEA] and building technology [CONSTRUCTION]. That’s what we call the I+CT method, function+shape, what+how, and that’s the central topic we want to practice.

4. daily goals

session 1: what & where
the place and the people: context, environment, needings, way of life, …

session 2: I+CT
shape & materiality: concept - space - plan VS structure - materials - measures

session 3: detail
façade layers: insulation, waterproofing, windstop, privacity, topcoat, …

session 4: story-board
shed prefab-work, transportation, building-site, assembly

session 5: presentation of the results
5. **design limitations**

We want to practice with light prefab structures and recycled low-cost materials, so that we are going to put some design limitations to make it possible:

- the shelter should be erected in few hours, with a non-qualificated workhand (local people). Students must investigate carefully the process of setting up the building.

- It’s important to note that we are working on destroyed areas: there’s no water or electricity, that means that shelters should be self-supplied. Students are encouraged to experiment with materials, creative construction methods.

- we are going to build shelters to this people, but we are NOT going to tell them how they should live. We have to learn how they live, what they need, and how can we improve their lifes, in order to design useful buildings for them.

- we have to know that each material involve an unilateral architectural shape, and not all shapes can be resolved with any material. So, it’s important to think at the same time:
  - what we want to design
  - which is the best system and material for this architectonical idea
  - how it would be the construction process with this elected materials for this concrete idea

Anyway, we must think not only in a single piece, but in whole refugees’ camps scale, by adding single shelters. That means, how to build a new micro-city, as a result of addition.
6. some examples of another “emergency shelter” workshops

↑ workshop: SAHARA EMERGENCY SHELTERS ........................................... [Krakow, Poland, may-2010]

↑ workshop: FLOODING EMERGENCY HOUSING ........................................ [Alicante, Spain, mar-2011]

↑ workshop: EPHEMERAL CAMPS FOR EMERGENCY ................................. [Brno, Czech Rep., jun-2011]
emergency shelters for natural disasters

International Architecture Workshop
Ljubljana (Slovenia), 25Feb-1mar 2013

prof. arch. Daniel Sirvent
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LOW-TECH PREFAB SYSTEMS

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A workshop in 2012 Daniel Gruntz, architect, professor, described his work at this workshop in Ljubljana. The workshop was organized in collaboration with the University of Ljubljana. The workshop was held at the School of Architecture and Urbanism of Ljubljana. The event was attended by approximately 100 participants. The workshop was sponsored by the University of Ljubljana and the School of Architecture and Urbanism.

- workshop: MOUNTAIN EMERGENCY SHELTER [Alicante, Spain, jun-2012]
- workshop: CUBA EMERGENCY SHELTER [Alicante, Spain, may-2007]
- workshop: SAHARA EMERGENCY SHELTER [Alicante, Spain, apr-2010]