# POLITECNICO DI TORINO FIRST SCHOOL OF ARCHITECTURE Master of Science in Architecture (Construction) Honors theses

# LODGE – MUSEUM IN CHICHEN ITZA, YUCATAN. Architecture and context, the Maya House

by Nadia Battaglio and Francesco Stassi

Tutor: Pierre Alain Croset

Co-tutors: Gianfranco Cavaglià, Alejandro Cabeza Perez e Pablo Chico Ponce de

León

#### BEGINNING OF THE THESIS

The project began as a response to a "contest of ideas" announced by Arquitectum corporation, related to the development of a lodge-museum nearby the archaeological site of Chichèn Itza. The requests of the contest regarded not only the comparison with the historical buildings, but also the care towards the environmental impact of the new structure, the typological innovation, and the sensitization towards the preservation of the cultural domain.

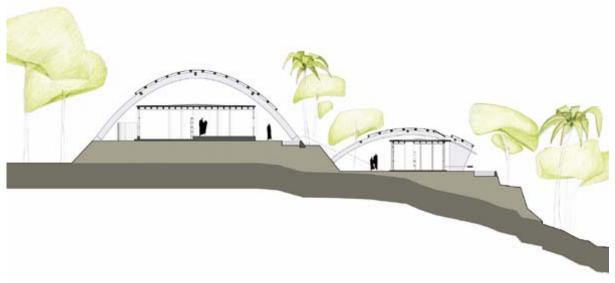
## DEVELOPMENT OF THE THESIS. THE EXPERIENCE IN MEXICO

The study of the context was one of the central themes approached during the development of the thesis: extending its knowledge beyond the maya's buildings, including the environmental, social, economical and cultural aspects, has supplied the essential tools to deal with the requests of the project. The knowledge of the local architecture (the maya home) and of the natural characteristics of the area (vegetation and morphology of the territory) has had a decisive impact on the choices made during the project.

# THE PROJECT. LOCATION AND DISTRIBUTION

The hotel "rests" under mantle of the forest, west of the archaeological area, halfway between the two major settlings of the site, Chichèn Viejo and Chichèn Puuc. The plan distribution is developed around a natural depression, and takes shape in two staggered concentric curved platforms. The highest one is destined to host the lodge and museum, while the lowest one, more private, host the hotel chambers. The spaces are covered by an arched structure. Underneath it, and above the platforms, rise buildings destined to different uses. This layout allows to eliminate this buildings in the future, destining the roofed space to a different purpose.





#### THE TECNOLOGY

The technological choices began from the knowledge of the local building technique, result from the observation of the maya houses in the surrounding villages. The use of "sensitive" technology was restricted, preferring solutions inspired by the Mexican traditional architecture, particularly the techniques used in Yucatan.

The fact that a considerable quantity of waste is abandoned at the side of the roads, and that many citizens decide to burn it in their own garden, represents a major environmental problem that we decided to face deciding to recycle or reuse some of these materials in the building of the lodge. The walls, made out of plastic bottles and crushed stone, represent both the statement of this problem and the attempt to sensitize and educate the local population.





muro realizzato in bottiglie di plastica riempite di piestrisco

casa realizzata con tecnologie moderne, casa tradizionale maya



#### SUSTAINABILITY

The project of the lodge-museum responds to "eco-sustainability" criteria, intended as a low cost sustainability that does not use sophisticated technology, but economical and functional solutions inspired by the principles of rural architecture.

### THE RESEARCH

Where contemporary architecture shows its most aggressive side in inappropriate and inadequate buildings, poorer than any hut, but emblem of the contemporary political-economical system, where the cultural roots are not strong enough to contrast this wild invasion of cement, iron and glass, where people still know how to build their houses and be happy with what they have...That is where there is still space enough for an developmental inversion of direction, more focused towards the local characteristics, the people, the community, the place, the culture. Our anthropological research on the "maya house" and its comparison with modernity, has brought us to think about tradition, local, and the cultural impoverishment due to globalization, as well as a tool that has been essential to direct the project towards an attentive architecture, an architecture that does not ignore the community and the environment, but focuses on their enrichment.

#### **Bibliography**

Armando Deffis Caso, *Arquitectura Ecologica Tropical*, ARBOL EDITORIAL, 1994, Ciudad de Mexico;

Bernard Rudofsky, Le meraviglie dell'architettura spontanea: note per una storia naturale dell'architettura con speciale riferimento a quelle specie che vengono tradizionalmente neglette o del tutto ignorate, EDITORI LATERZA, 1979, Roma, Bari;

Victor Papanek, *The green Imperative, Ecology and Ethics, Design and Architecture,* THAMES AND HUDSON, 1995, Singapore;

Paul Oliver, Cobijo y Sociedad, (tit originale Shelter and Society) H. BLUME EDICIONES, 1978, Madrid;

Hassan Fathy, *Architecture for the Poor, An experiment in Rural Egypt*, THE UNIVERSITY OF CHICAGO PRESS, 1973, Chicago, London;

AA. VV., Barragán Luis, 1902-1988, the complete works, PRINCETON ARCHITECTURAL, New York, 2003;

Carlos Gonzalez Lobo, Vivienda y Ciudad Posibles, ESCALA COLECCION, Bogotà;

For further information, e-mail:

Nadia Battaglio: battaglionadia@libero.it Francesco Stassi: francescostassi@virgilio.it

Maintained by:

CISDA - HypArc, e-mail: hyparc@polito.it