POLYTECHNIC OF TORINO FACULTY OF ARCHITECTURE 2 Degree in Architecture Honors theses

Open industrialization, self-construction with industrialized components and sale through internet

di Maurizio Maggi

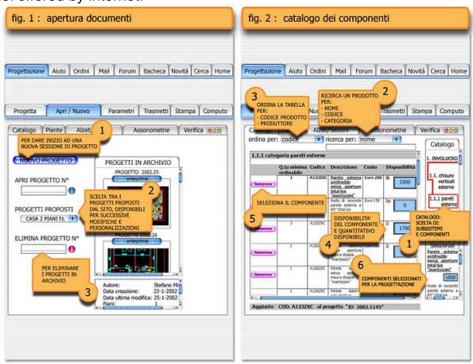
Relatore: Massimo Foti

In these years, we are watching at the great revolution, both epochal and massmediatic of internet; but in which way the great net, the World Wide Web, can refer to building industrialization? Which is the nexus between "open industrialization" and WWW?

The shifting of the main activity from production to organization and management of components through internet, can be the completion of a speech (building industrialization) broken off some years ago.

Leaving from such introduction, the thesis is divided in 4 major parts:

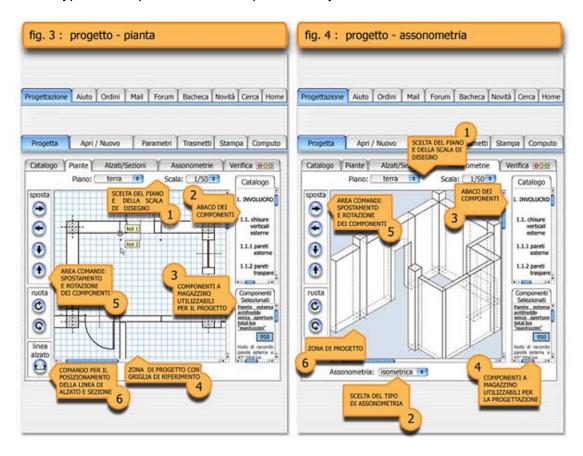
- FIRST chapt.: is a research on building industrialization;
- SECOND chapt.: is dedicated to weigh what internet is offering by now and what will be offered in the near future;
- THIRD chapt.: in this chapter some of the major internet sites (European, Australian, American and Italian) devoted to building materials, are weighed in the pros and cons;
- FOURTH chapt.: the conclusion, has been therefore the study of a prototype of an "internet site" in which anyone can compose a building with industrialized components and, after the planning process, buy them online, through the sale channel offered by internet.



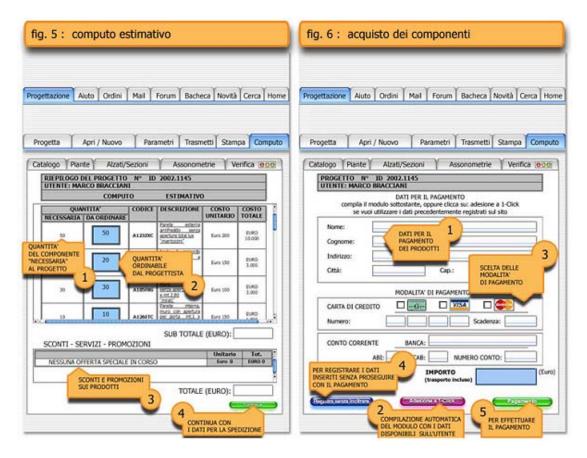
This internet site, which has at the base the idea of the "open industrialization" described in the first part of this thesis, would concentrate the interest of manufacturers of building materials and components, and, thanks to internet and the technologies available today and in the near future, described in the second part of the thesis, would amplify the weight of the "self-construction and do-it-yourself way" in the building arena.

Thinking in a such scene I propose to reflect and to consider the building construction process, like a simple action of assemblage (in a <u>do-it-yourself</u> way) of building components, the simple conclusion of a natural and opportune planning, assisted through a system based on the WEB.

Such hypothetical process, is not a pure fantasy exercise.



A small effort is demanded for being able to imagine, like real, such apparatus: industrial technologies not really new but "corrected" would be used in order to produce the necessary components and, an aided-web-planning-system would simplify the plan of a components-based-building, than subsequently sent in the place demanded from the planner, would finally be assembled like a meccano game.



Watching at the "tomorrow of internet", I don't want to prefigure today a possible future utilization of an internet building site, based only on calculations and critical deductive reasoning, but "to imagine" (thanks also to the new and next technologies like the ADSL and FIBER-OPTIC cables, both able to offer high speed data transmissions), this internet site for the aided-planning and commercialization of components-based-buildings.

The imagination, the "fiction", as Lorenzo Matteoli writes on his interesting site (http://members.iinet.net.au/~matteoli/), is different from a vision of the future: vision is an inductive process based on perception, on cultural contingencies, personal will, background and information; fiction is an intuitive poetic description of non existing things and events. Fiction may be informed by knowledge: the more consistent with objective elements the closer it is to reality, the less consistent, the closer it is to legend or fable. Of specific interest is the association of science and fiction which often has in fact described situations that, later, were to come true. (See. Jules Verne, Asimow, etc.). The ability to describe fictitious but plausible futures is a feature of design.

Without thinking with this thesis to announce new and curious future scenes, I would want to consider an use, between the many possible ones, of internet.

The building industrialization does not represent an innovation, however one new different approach to that philosophy, whose intention is the "search of a different solution", regarding those sights and studied until now, that can answer to the necessities of a world-wide society in fast development, could offer new visions on the future.

This research, propose at last to imagine a new building industry, with new characteristics, more evolved, and standardized at the most; a building industry that, with "self-construction", allows people to obtain a flexible habitation, able to give comfort and dignity to the own inhabitants with limited costs.
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