## POLITECNICO DI TORINO FIRST SCHOOL OF ARCHITECTURE Master of Science in Eco-efficient Product Design <u>Honors theses</u>

Household electrical appliances: an integrated system. Changing of rules by Veronica Berardi, Cinzia Lazzaro, Manuela Mancuso, Valeria Montrucchio, Alessandra Tarantino and Adriana Uccelli Tutor: Luigi Bistagnino

The decision to turn our attention to electrical appliances find reason in what is the crisis that the industry is facing. The analysis of this area was in fact a fertile ground for the application of Design for Components in the system design. For years, the Bachelor of Science in Ecodesign, with the help of ANIE and CECED Italy, investigates the issue on the household, with attention to the environment, making an innovative contribution to areas that remained almost unchanged over the years, mostly as a research directed towards the sector.

These reasons, together with the publication of the book "II guscio esterno visto dall'interno" of prof. Arch L. Bistagnino are behind the desire to create an event to promote the vision of Industrial Design project, which is considered a valid solution to improve the fate of the household electrical appliances.

The joint work between the various players has made possible the realization of the "Changing the rules" (13 May 2008, Castello del Valentino):big companies producing household appliances and components took part at this event.

At the end of it was addressed to the management of relapse, the implementation of product and material development of the themes that emerged, working on different roads: the deepening of the concept of system applied to the household, and the creation of a instrument that was suitable for dialogue and confrontation between different actors: a website.

In order to outline in detail the system of household it was considered necessary to acquire all the information to develop a complete picture of the current situation. Therefore, it was decided to study the individual involved equipment (washing machine, dishwasher, oven, etc..), Defining characteristics and mutual relations and analysis of the issue from a sociological point of view, and of purchasing of consumer.

These insights have formed the basis for the definition of the home environment from a systemic point of view: abstracting concepts from reality, not speaking more than a single device, but considering the activities to which they refer, it was possible to provide a more complete and objective vision.

Within our theory we are not speaking about appliances, but of systems: Washing, cooking / consumption of food, preservation of food.

These concepts are communicated with a dynamic interactive pattern. The user can create his own path choosing his direction.



System of washing crockery

As outlined was subsequently integrated with the analysis on the input and output involved, and their possible use within the "house system", as well as the study of proxemics generated by the actions made by housewife.



Analysis of wastes (output) arising from systems of washing; cooking / eating and keeping food at home

All material is the starting point for subsequent depth design, a tool to define different courses of action.

As for the design of the website (www.eldomsystem.polito.it), the need was to define the interface that was required for the facility; this identifies the will to act "out of the box "and want to be a meeting point and comparison for different realities.

The analysis of existing and the definition of special needs, have helped to shape the model of the site point to its future implementation.



Opening screen site www.eldomsystem.polito.it

As a result of the many positive feedback found, you can show that the pathway is to enrich the experience of our course of Bachelor, inserted into the autopoietic process and allows him to remain active through the creation of new pathways research, and collaboration with companies.

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