

# Changing the change

Design Visions, Proposals and Tools

An international conference on the role and potential of design research in the transition towards sustainability

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Torino, 10th - 11th - 12th July 2008

Organised by Co-ordination of Italian Design Research Doctorates with  
Conference of Italian Design Faculty Deans and Programme Heads.

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## “PARASITIC” DESIGN STRATEGIES FOR ENVIRONMENTAL AND SOCIAL SUSTAINABILITY

### Vision of a diffuse universe of parasitic products and services

#### Abstract

In the field of sustainability the design discipline has, in the last decades, extended its action range. From the definition of material qualities of products, contemporary designers have extended their intervention also to the construction of new conceptual and behavioural scenarios oriented to condition people. In this new dimension the communication of ethical principles, like the attention to save resources, represents an important responsibility.

This paper proposes a vision of a novel scenario founded on products and services that are defined "parasitic" because able to nourish themselves by draining energetic and material resources from surplus, wastes or from the "operation" of other systems. Devices based on battery charger fed by biomechanical energy dispersed by human body during walking and running; or a temporary shelter fed by warm air streaming from the exterior ventilation systems of an air conditioning plan, are only two simple example of existing parasitic systems.

Often these systems are symbiotically integrated with highly dissipative systems, like malls or big industrial and office buildings to recover their heat losses, water drainages or material wastes. Beside their functional efficiency parasitic systems have a very important conceptual value. Indeed, simple systems like an umbrella pot or a dish drainer that reuse strained water collecting it into a plant help to stimulate the customers consciousness of importance to save a precious resource like water. Translated into a diffused and daily scale the concept of parasitism acquires, indeed, a communicative aim oriented to persuade people to adopt new behavioural and consumption models compatible with environmental and social equity needs.

The design for sustainability has provided, in the last decades, precious methodologies and instruments. These models, now well consolidated, need to be applied and verified on a larger population, extending an involvement process limited, in the past, to a very narrow and specialized target. Only through great numbers it will be possible to translate principles and politics into concrete and radical changes.

The parasitic scenario can be imagined like a diffused nebula of smart and strongly communicating products that populate daily life, in domestic or public spaces, and are capable to be visible by a great number and variety of people.

The paper will illustrate a design experimentation, verified in particular into the Campania region territory, where the decrease of consumption and dispersion of material and energetic resources is more than ever an urgent need that demands resolving strategies and actions capable to induce a diffuse environmental consciousness. An urgency to which the design discipline cannot avoid to answer with proposals clear, simple to apply, and capable to re-interpret cultural qualities and local identities into new products and finally sustainable behavioural models.

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The design of parasitic products and systems, can take advantage by using a bio-mimetic approach inspired to processes and logical regulating parasitic living systems in nature. The vision shows a bio-hybrid universe of artefacts similar to organisms transportable, light, mutable and capable to transform and self-adapting themselves in function of the varying of contexts and conditions. A re-visitation of existing products in a “parasitic” way, capable to solve local and specific problems taking advantage from locally available conditions.



Fig. 1: visualization of parasitic scenario

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