DESIGNING SUSTAINABILITY FOR ALL

Edited by Marcelo Ambrosio and Carlo Vezzoli

Proceedings of the

3rd LeNS world distributed conference

VOL. 4


With the support of the Erasmus+ Programme of the European Union
Designing sustainability for all

Proceedings of the 3rd LeNS World Distributed Conference, Milano, Mexico City, Beijing, Bangalore, Curitiba, Cape Town, 3-5 April 2019

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LeNS - the Learning Network on Sustainability - is a project funded by LeNSin Erasmus+ Programme of the European Union
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ABSTRACT
The paper presents a didactic experience aimed at increasing the design skills and the sensitivity of bachelor students on environmental issues. Future designers, who will be able to modify spaces and products we use, must have both a sound disciplinary competence and a sensibility that modifies their daily behavior and adds value to their professional competence. With these goals, the topic of the Design Studio that will lead to thesis work about 55 students, concerns the design of a temporary retail space, able to communicate the environmental culture of a multinational Company. The brief was built in strict collaboration with a famous brand (Company) of apparel and shoes, that since many years has been paying attention to sustainability both in the productive processes as well as concerning the impact of their products at different levels. The project brief deals with the communication of the culture of sustainability, devoted to spreading awareness in the consumers and also in our students.

Key Words: Brand communication, Retail, Sustainability, Water.
1. INTRODUCTION: PROJECT BRIEF

We proposed to our students to design a retail space for sport apparel, shoes and accessories. This space has to express at the highest level the Company philosophy concerning sustainability. The structures must be temporary, with the possibility of being transported, dismantled, reused, disposed or recovered. Moreover, they must be built using low impact materials and have low energy consumption. In short, they must respect the indications of research in terms of environmental compatibility. The students worked on the integration of environmently conscious design solutions and technical principles. Thus, they have given great importance and consideration to understand how such structures can communicate a positive environmental message in order to induce higher levels of virtuous behaviors or modify harmful attitudes towards the environment (Vezzoli, et al., 2018). The theme of sustainability is seen as a positive value, linked to the joy of living, moving and doing sports in a healthy, beautiful and clean environment, as, of course, without a clean environment it is impossible to play sports. The main target is the generation Z, a generation of digital natives, attentive to technologies and environmental issues (Howe & Strauss, 1991), and the same to which our students belong.

Aim of this paper is to present the results of the aforementioned Design Studio, and its innovative didactic approach deriving from a didactic collaboration with a Company.

2. METHODOLOGY

During the first part of the Design Studio the students attended a cycle of lectures on circular economy, from the most general level, up to the planning and constructive themes. A series of testimonies have been brought on the topic of retail design and micro-architectures. Particular attention was paid to the issue of preventing the dispersion of plastics in the oceans, cleaning the seas and reusing plastics as a second raw material. To give a real location to the projects, and to underline the need for lightness, we asked that the structures could float on the waters of the Milanese Navigli. The brief was given by the Company, which for years has been working on reducing the impacts of producing and recycling certain materials, also in cooperation with NGOs dedicated to recovering plastic waste from the ocean. We consider the proposed topic extremely stimulating, because it is real and controversial at the same time: the students have to confront themselves with a Company that produces thousands of products, which manages factories in different countries, transporting and selling worldwide, which is putting in place a series of actions to reduce impacts, from the study of raw materials, till the end of the lifecycle of the products. An extremely complex system which still presents different unresolved knots, some of them very difficult to solve. In the first phases of the Studio we pushed the students to work through key words, inviting them to aggregate ideas with maximum freedom. Later on we have logically arranged the words resulting from the general discussion into general clusters.

![Fig.1] Students working on keywords and their classification in clusters

The keywords have been elaborated in different ways by each working group. As a consequence, this initial analysis and elaboration has brought the projects in different directions. Keywords are, for example: sports, water, lightness, temporariness, mobility, energy, movement, community and others. Professors and tutors followed 19 projects, drawn up by groups of two, three or four students. Some projects are more focused on triggering virtuous behaviors in the costumers others are more interested in developing new exhibition solutions: in any case, both of them are present and closely connected in each project. The main target users of the projects, generation Z, are very interested in the creation of communities based on the sharing of values. Values related to sustainability are conveyed through actions and emotions (Morin, 2015). The students declined the theme of sustainability in many different ways: the messages that are proposed are relative for instance to the fact that one small gesture can change the world, that taking care of things is a sustainable act, that the energy of the body teaches us to love the environment, that running alone is beautiful, but it is better together, that using digital and augmented reality (AR) lightens our footprint on the earth, that it’s important to remove material, to lighten, to refine quality. Below some examples of the projects developed in the Design Studio.
3. PROJECTS

*We are nature.* The project has as its primary objective in the rediscovery of the potentiality of the binomial nature-body as a primary source of energy, in favour of the physical and mental well-being of the person. The concept of this project has raised from the idea of minimizing the environmental impact: reusing a container lost from a ship and recovered in the ocean. The recovered container becomes the testimony of an approach to reuse existing elements, contributing to the process of cleaning the sea. Inside it is set up an immersive space in different natural contexts: the ocean, the forest, the sunset. The container can be transported and reused in different places. Sustainability is generated by the symbiosis between individuals and the natural environment, which embodies the values of respect and care for oneself and for the planet.

Students: Cristina Pirovano, Martina Carozza, Nicole Bottazzini

![Fig.2] We are nature project: concept and visualizations

*Immerse in future.* The project consists of a light setting with reusable fabric and aluminum elements used for exhibition stands. It contains screens with immersive reality on environmental themes. The strong innovation of this project is the use of augmented reality in the shopping process. This choice arises from the need to address new generations in a simple and instant way, being at the same time sustainable since in a virtual world nothing can be created nor destroyed physically. Inside, the environment is initially dark and evocative and illuminated almost only by large panels that surmount circular structures, such as micro capsules, and in which suggestive images of the water world are projected. By framing the user’s foot with the shoe worn, the various colors and textures can be chosen, given that in this shop all shoes are white solely as prototypes to be tried. Thus, the space from dark becomes full of light and coloured. Even in the purchase phase, users are involved: they can customizetheir product by choosing a certain date, so that the delivered product will be made with plastics collected on that specific day. Then, through the App, it will be possible to see how many people have chosen the same prod-uct and date, the idea is to connect people from all parts of the world with a common goal.

Students: Michele Corna, Veronika Merlin, Baoshan Xue

![Fig.3] Immerse in future project: concept and visualizations

*Laundry.* The project deepens the theme of sustainability through a real ‘shoe clinic’ that sensitzes the consumers to the topic and offers an innovative service. The pop up space is set up during the Design Week and remains there for the following three months. The entrance welcomes the user in the sales area, where it is possible to see the shoe and apparel collection and buy it online. At the same time it is possible to enjoy the view of the whole environment. The “laundry” is located in the heart of the structure and becomes the pulsating center of the space. Through the transparent walls it is fully visible from every corner of the whole environment. This space offers a laundry service and small repairs. Every costumer can directly follow the process of washing their shoes, as the whole mechanism is visible. In the end a the conveyor belts make the shoes float on the ceiling. A gradient allows the descent to a softer and clearer space, in connection with the water; in fact it is possible to access it only by removing the shoes. Students: Marika Caputo, Chiara Di Fonzo, Alessandra Vigani
**Synopsis.** The name Synapsis refers to the sinapsis of the brain and also means “connection” in Greek. In the project the sinapsis take the form of containers that are the central contact spots of the community. Inside the structure the user finds himself in an immersive space, surrounded by screens and sounds showing several montages of videos from different places. Each video is dedicated to a different sport and shows a representative athlete of the specific discipline sharing his/her sport experience and how environmental issues influence it. They act as brand ambassadors to spread the sustainability that the Company aims to give. Furthermore, a window is opened on the floor to walk on and create a visible contact with the undergoing water. The outer walls of the containers are covered with a special fabric that contains dimming lights creating the effect of a neural net that has the purpose of visualizing the connections with lights and colors. The main layout is constituted by three shipping containers, that can be individually disassembled and moved to different locations. It presents one container with the immersive experience, one container with all the technical parts and a storage area.

Students: Miona Aleksic, Gaganjot Kaur, Libero Padula, Luca Parravicini

**Moven: Floating Cycling Gym moved by green power.** The project structure is self-standing thanks to the use of LSC panels, from which it collects energy. The project comprises two structures: a station shop, placed on the canal border and fixed; a Cycling Gym, with exercise bikes inside. A small group of people can make the Gym move by cycling for a long time; a person alone can produce a certain amount of power, that it is multiplied when produced by a group, which also serves in creating a sense of community. While cycling people can enjoy the view of some of the most beautiful canal cities in Europe. In the station shop costumers can try shoes and apparel, buy them, and wait for the gym to arrive. A bridge allows them to enter the Gym, and start the experience.

Students: Ivanka Yordanova Dicheva, Kate Natalie Rova, Maroussia Lindsay P de Gheldere

**Street Hub.** The Street Hub project is a floating platform in the suggestive Milanese Darsena, aimed at offering the city a unique place to practice Parkour, one of the most prominent sports of recent times, together with a store selling sports shoes and apparel and a space for related events. Overlooking the north side of the Darsena, the space opens up to all the traceurs, sportsmen or simple passersby who are there, providing an open-air gym and a place for meeting and exchange. From an eco-sustainable point of view, only recycled materials were used.
Old scaffolding tubes and chipboard form the gym to practice Parkour, three dismantled containers host the store that is furnished with 100% recycled steel elements; and finally, the external anti-trauma flooring was created with crushed tires, ideal for ensuring greater safety, reducing injuries.

Students: Stefania Caruso, Michele Mortula, Sergio Petrolo

![Street Hub project visualization](Fig.7)

4. CONCLUSIONS

Spreading good practices through the design of retail stores seemed a difficult challenge. Thus, the experience has shown how complex and interesting is this specific topic. Furthermore, communicating the culture of sustainability through the development of retail design projects requires to face different levels of complexity, from the definition of communication strategies, to the ways in which such strategies are transformed into actions and concrete objects. The choices therefore concern:

- a reflection on the target, made up of active, aware and digital born consumers, attentive to the environment and to sociality;
- the range of activities promoted in the space: the so-called shop is no longer the traditional store, but it tends to accommodate different functions and to cross activities not directly related to the actions of selling and buying (Vaudetti, et al., 2014).
- Specific choices related to constructive criteria: the focus is on the temporality of the intervention, taking into consideration reused or reusable structures, dry assembly, the use of certified materials throughout their life cycle (Bengisu & Ferrara, 2018; Thackara, 2015);
- the increasingly intense use of interactive digital technologies, destined to profoundly modify design discipline for the coming years. The relationship between real and virtual affects design projects and emphasizes a possible dematerialization of part of the retail experience, in line with the desire to “touch the earth with lightness” (Piardi, 2004).

The experience described in this paper has also brought about the following results:

- to the mutual enrichment between the university context and the entrepreneurial context: we have learned from each other in a relationship of trust and continuous exchange of skills and experiences; the different points of view has generated interesting tensions;
- to the increased environmental awareness of the students, as they immersed themselves in complex constructive and design themes, their environmental competence grew. This expertise will hopefully affect all their future projects;
- to reinforce the belief that design projects, in order to modify the present, must act in a harmonious way in all its phases, from the concept, to the activation, to the executive development, to the construction and its disposal.

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