

Open-air Generations

Designing social sustainable environments

Loredana Di Lucchio

*Researcher Professor, Dept. 'Planning, Design, Technology', Sapienza Università di Roma
loredana.dilucchio@uniroma1.it*

On dictionary 'public' is 1) 'done for' a population or a community as a whole, 2) opened to everybody. In the Design matter, what is a 'community'? What is a 'person'? What means develop 'open' something? These concepts involve connected to three crucial features of contemporary society. a) Role of the metropolitan areas – where the digital communication opportunities totally deconstructed the dichotomy public/private. b) The constant growing of a multigenerational population – which refuse any standardization of services and products. c) The need to develop a more sustainable way of life – especially considering the relationship between human behaviors and 'environmental rhythms'. The paper reports a research and didactic project focused on these topics in order to identified and investigated a new meaning of 'public'. The research elected he 'outdoor' space as consumption context, where re-discovering a different public dimension thanks to products and services developed according to three key-words: sociality, wellbeing and energy. Energy, in the outdoor context, refers to nature as a resource in terms of sustainability and conservation. Wellbeing refers as mental factor connected with the concept of awareness. Finally, the research investigated the concept of sociality, as a spontaneous human action, for its possible critical points, especially the safety of living among other people.

Key words: *Social Innovation, Useful products, Ageing Population, User-Experience, Design for wellbeing*

1. Introduction: a reverse process

According to the scientific practice, a classic triad of hypothesis, theory and demonstration structures the correct mental (and methodological) process that guides the experimentation activities. Where the statement to be proved is the thesis and the hypotheses, is the conditions where to work in order to develop the demonstration.

Adopting this model in the design practice, it is possible to compare the hypothesis to brief, the thesis to the concept and the demonstration to the development of the product (or service).

A paper, to reports a scientifically correct experience of a design process, must be organized starting from the literature review, which usually precedes the research proposal and the results section.

The present paper, reflecting the effective evolution of the research activities reported, inverts the order. It starts from the research proposal and passes to the results section, which were the feedbacks for a theoretical reflection about the topic addressed.

The research and didactic project here presented has been a research proposal within the activity of the Final Product Design Studio of the Bachelor in Design [1]. This research proposal started by the convergence of two initiatives. The first has been the invitation to present the design results in one of the sections of the SUN - the

International Exhibition of Outdoor Products, which be hold annually years in Rimini (Italy). The other has been the call to participate at the second edition of 'European Design Award for Sustainable Present' – a competition sponsored by the European Economic and Social Committee – with the aim to investigate solutions for the 'Intergenerational solidarity in times of an ageing population'.

These two topics - 'design for outdoor living' and 'design for ageing people' - are very distant because the first is more connected with the product development (in particular about furniture) and the second is one of the main topic addressed by the service design.

From a didactic point of view, the aim of the Final Product Design Studio is to train students in a generative design processes of real innovations.

This training is normally organized as an analysis journey which documents and brings up some 'possible worlds' - through the definition of scenarios linked to the narrative mechanism of 'what if?' - in order to develop new product concepts and / or services.

Applying this training activity starting from two topics could generate confusion especially in the validation of results. Therefore, it has required a previous critical reading in order to converge in a single Research Proposal able to give the right input to the design experimentation.

2. The construction of the thesis: two convergent topics

This meant to construct the thesis proposal before to describe the hypothesis; in particular the effort has been to find a common ground between the 'design for outdoor living' and the 'design for ageing people'.

Basically, 'design for outdoor-living' can be considered one of the new trends of furniture design sector. Instead, it offers a wide and articulate production that meets a significant and rapid evolution of the life-style especially in mature countries.

In fact, this design activity tries to respond at the desire to regain a contact with the open spaces dedicated to free time.

Within a progressively decreasing of the separation between outdoor and indoor, the design for outdoor-living seems to reply to demand versatility and wider functions according to a new behavior. In this way, it rediscovers the values of open-air life in connection with nature.

Especially within public venues, the open spaces have become a fundamental place, not only as service spaces (as the 'smokers' limbo'), but a showcase in the open where to see and be seen, a dynamic diaphragm with the city and the neighborhood, where to live experiences, find atmospheres, build innovative aesthetic identities [2].

Places which have become flexible and able to answer to the growing desires of people to conviviality.

Therefore, it is possible to connect the topic of 'design for outdoor' with another contemporary issue: the search of new balance between sociality and subjectivity.

This not new, but it is the result of a deep paradigmatic shift which started within the post-modern debate which now seems to be arrive at a new dimension.

Despite during the last years, the growth of the dimension of subjectivity in all area of daily life, has witnessed the several theories about the death of 'collectivity' as an expression of the lost of big ideologies of the 20th century, what is happening is a change of the collective behaviors [3].

In fact, nowadays different meanings are enriching the idea of ‘collectivity’, especially due to the development of information technologies that now connect in real-time everyone in each part of the world.

‘Collectivity’ is not more connected with the condition of ‘to be part of a defined group’ (ethnic or cultural or social or political group). It regards, now, the need for sharing relationships; a need to be linked with others without any particular distinction but only in order to share a specific experience.

A growing conviviality of the everyday life experiences, substituting the sharing of significant ideologies, is resolving the apparent dichotomy between the contemporary social individuality and the ancestral human need of sociality. The principal frame of reference of this different concept of ‘collectivity’ is the contemporary city: which is a fluid container where relationships are based, at the same time, on the specificities and the diversities.

The big deal is now giving meaning at the several signs which mark the city using, at the same time, an instinct of individuality and an instinct of aggregation.

This is the reason of growth, in the contemporary urban dimension, of new spaces for collective aggregation often driven by new information technologies.

In fact, it is the concept of ‘smart cities’ that well express the paradigm of contemporary urban environments. W. J. Mitchell explained this concept in its book titled ‘Me++: The Cyborg Self and the Networked City’ [4] according to which technology becomes so imbedded in people’s lives to enable “discontinuous, asynchronous global agora”. Mitchell, in this way, describes the growth of those methods for human assembly and cultural organization, now realized thanks to the ‘social networks’.

Of course, the current meaning of ‘smart cities’ is plural – from an economic point of view, about new ICT industry, to the information structure, for logistic and mobility, and to the level of information technological capability of people and institution – but we can consider them cities built on the ‘smart’ combination of endowments and activities of self-decisive, independent and aware citizens. [5]

The concept to aware citizens brings the discussion towards the second topic: ‘design for ageing people’.

In fact, from the Design point of view ‘aware citizens’ means, overall, aware consumption: therefore a shift from the focus on products (or services) as suppliers of functions to focus on products (or services) as enablers of behaviors.

In particular, there is a strong connection between an aware consumption and the big contemporary issue of the sustainable development.

Of course, the sustainable development is another wide topic which involves economic, social and ecological issues. The implication between aware consumption and sustainability is referred to the need of developing a network of different stakeholders (whether they are producers or consumers). In this network, the actions of each person must be useful to the needs of others. The needs of people must become a stimulus to improve the capabilities of the system. The capabilities of the system must enable everybody to improve his/her conditions.

In particular, it is possible to connect the three key elements of sustainability - social, environmental, and economic – as people, planet, and profit and to consider them as the fundamental components of product innovation [6].

Within the recent critical reading, it is correct to point the accent on the social sustainability because it creates opportunities to meet social and equity requirements.

In particular to meet the ageing people requirements means to consider not simply need of different functions but a desire to maintain a high quality of life.

This is even true within the urban environment. In fact, in the cities of the developed countries, the proportion of older adult is about 80% of population. Therefore, a request of the age-friendly city is growing in order to encourage active ageing by optimizing opportunities for health, participation and security in order to enhance the quality of life as people age [7].

In Design terms, an age-friendly city means to adapt urban products and services to be accessible to and inclusive of older people with varying needs and capacities.

The re-discovered desire of a more sustainable style of life and the urgent need to re-define spaces, services, products for an increasingly older population are those two key aspects directly connected to the aware consumption.

From one hand, this means to change the behaviors of a mature society, where the anthropisation process is totalizing, in order to have the possibility to preserve, as more as possible, the regenerative capabilities of environment.

From the other hand, this means to overpass the idea to consider society according to preconceived standards. Within the mere aspiration to reply to everyone's needs, the standards are not able to be suitable for nobody. In particular, considering the generational difference, not as an obstacle to the integration but richness to exploit.

3. Demonstration through Design

Therefore, the key-words of the thesis proposal 'open-air generations' were been: outdoor living, desire of conviviality, urban smart spaces, aware consumption, social sustainability, generational integration.

They have represented the common ground between the two initial topics. A ground where Design has been able to develop new product and service solutions triggering more conscious consumption processes.

In fact, the word 'open-air' describes all those behaviors, which enable different social dimensions. Behaviors able to connect the multigenerational people, and all their requirements, with new and more sustainable urban environments. It means to have several opportunities, specific knowledge, different needs, which can be merged into a new relationship and a new social form.

At this point, it was possible to pass at the demonstration of this thesis proposal applying the didactic method developed within the Final Design Studio.

In order to improve a generative design processes, this method starts from a de-construction of the relationship between the user and product s or services in order to understand the users experiences; it passes into a re-definition of new and more socially and culturally sustainable human interactions; it arrives to the generation of new concepts, described more as consumption strategies rather than functional solution.

Final Design Studio used de-constructing, re-defining, generating as three work-steps.

As said, the aim of the first work-step has been about the re-construction of the Research Context and it based on the user-experience approach.

The Research Context is not exactly defined, but it be explained by behaviors (what people do) or by perceptions (what people feel) or by features (what people are). The result of this work-step has been a map (specifically an Experiences Map). This Map describes the people's behaviors, perceptions, features, during the interaction with specific categories of objects. According to the user-experience approach, direct interviews to some selected target of people (in particular elderly people, teenagers and young parents with kids) and indirect

data (from selected articles, studies and essays) analyzed by the method of 'Personas' were been the tools to build the Experiences Map.

At the end of this step, the Experience Map described three different kind of Personas, which live, each of them, in a specific context. These contexts represented a different expression of the brief 'open air': a) Energy, b) Wellbeing, c) Sociality. They hired as Research Contexts for the following work-step.

a) The Research Context of 'Energy' means thinking about the nature as a resource in terms of exploitation and conservation. Far from waiving to the possibilities offered by contemporary technologies, the Persona who lives in this context, desires products and services that change or integrate technologies within environmentally friendly processes. Therefore, the objective of this Research Context has been the theme of connection, both as a necessity and as qualifying element of the open space, in order to reply at every need of energy in a more sustainable way.

b) It is normal to connect the Research Context of 'Wellbeing' to the open-air life, but the 'Persona' related to 'Wellbeing' is in search of a new concept of wellbeing in the contemporary cities and, in particular, during the time spent in the outdoor spaces. The key has been to consider Wellbeing, not as a standard concept related to the physical needs, which could be the same for everyone, but as a mental factor, a state of the mind, which is very different for each of us. The attention has been to reply to some requests of wellbeing: wellbeing as safety, wellbeing as awareness, wellbeing as an opportunity, wellbeing as a choice. In particular the request of safety to live the public spaces, to improve physical shape and performance, choose the quality of people experiences, with an attention to the different needs expressed by different generations.

c) Of course, the Research Context of Sociality finds in public spaces rather than in private spaces its logically expression. Therefore, re-thinking the concept of 'outdoor life' should consider sociability as one of the areas to be investigated. The issue has been whether sociability, considered as a spontaneous action of mankind, may have any critical points in contemporary society. Considering the multi-generational society, the key was to re-discover rituals and habits of life in open-air under two main qualities: the safety of living among other people with confidence and the easiness of equipping and benefitting of every open space, to make it a meeting place.

The second work-step has been about the defining of the Meta-Concept, and it based on the design for social innovation approach [8].

Meta-Concept could be described as possible sequences of problematic knots organized according to the highlights of the Research Contexts. Each of these knots is a design input organized according to a hierarchy of their consumption features: some of them represent Fullness (the prevailing conditions of the consumption), some of them an Emptiness (the missing conditions of consumption) and others represent Contrasts (expression of the consumption idiosyncrasies). This specific operative action has been described as an iconographic matching: a comparison of 'symbolic' information to obtain a conceptual synthesis.

Therefore, at the end of this second work-step, each design team has developed a 'Cognitive Map' of a sustainable consumption behaviors referred to multigenerational people in an outdoor urban context.

These Cognitive Maps were described as storyboard. In the storyboard, each Persona lives a new 'open air' experiences thanks to the new service and/or product designed according to the inputs extrapolated from the Research Context.

Before to start the third step, these Meta-Concepts were submitted as storyboard to a group of possible users in order to obtain both a feedback about the previous work and inputs for the following design activities.

In fact, the final step focused on a design proposal, called Consumption Plan, which is able to link technological opportunities with cultural and social requirements [9].

In this work-step, each design team worked in a more classical design activity.

According to a consequential dynamic, the design teams designed a concept of a new product and/or service. The features of these products or services were described according to the Persona's experiences expressed within one of the previous Research Contexts.

In this way, the results are not only a defined design concept (product or service), but a sort of strategy adopted by design which may change according to changes in the social, economic and technical contexts.

A strategy which is a synthesis between different variables of interaction between contexts and users: new product typologies which express behaviors, new product performances which express objects, and new product values which express markets.

From a didactic point of view, despite the different skills of students had strictly conditioned the quality of the design proposals, the effort to develop not a 'concept' but a 'consumption behavior' has improved the critical capability of students to recognize a real innovation compared to a simple novelty.

For example, for the Research Context of 'Energy', the project 'Ricarica' (recharge) has finalized to the energy saving without give up to the quality and the complexities of nowadays functions.

In fact, 'Ricarica' is an urban system which generates clean energy to recharge all digital devices that accompany us in daily life (from lap-top to smart phones to pads). It merges two or more benches with the 'solar umbrellas' offering, at the same time, a space of traditional 'physical' conviviality with a web-space for sharing of social network: all this, using clean energy.

For the Research Context of Wellbeing, the Consumption Proposals puts the focus on the quality of experiences, therefore, more on the psychological wellbeing rather than physical one. In particular, the idea of 'wellbeing', in the different ages, has been is not considered as a standardizing experience as well as it is not important to reply at specific needs (of youngsters, of adults, of elders) but to find those needs which be expressed at the same way by all generations.

For example, the project 'BP-pole' (where BP stands for 'blood pressure') is an interactive totem which allows a self-measurement of blood pressure to control the biological response of people's body during physical outdoor activity (like during jogging). In fact, more and more people (of each ages) consider the open air sports a sustainable reply to maintain a high quality of life, but often there is not a real aware about the physical possibilities and the risk of cardiac problems is frequent.

Finally, for the Research Context of Sociality, the Consumption Proposals focused on the need to re-discover some 'rituals' and 'habits' of open-air life now forgotten due to some typical dangers of the urban environments, as the fear of elderly to be robbed or the fear of children to getting lost or, in general, the fear to have a bad experience.

For example, the project 'Wireless Family' is a simple system of wearable devices, connected by Bluetooth, which allows parents to control their children, however, leaving them free to play outside. When children move too much away from their parents, the devices communicate between them, and the receiver of parents launches an alarm signal.

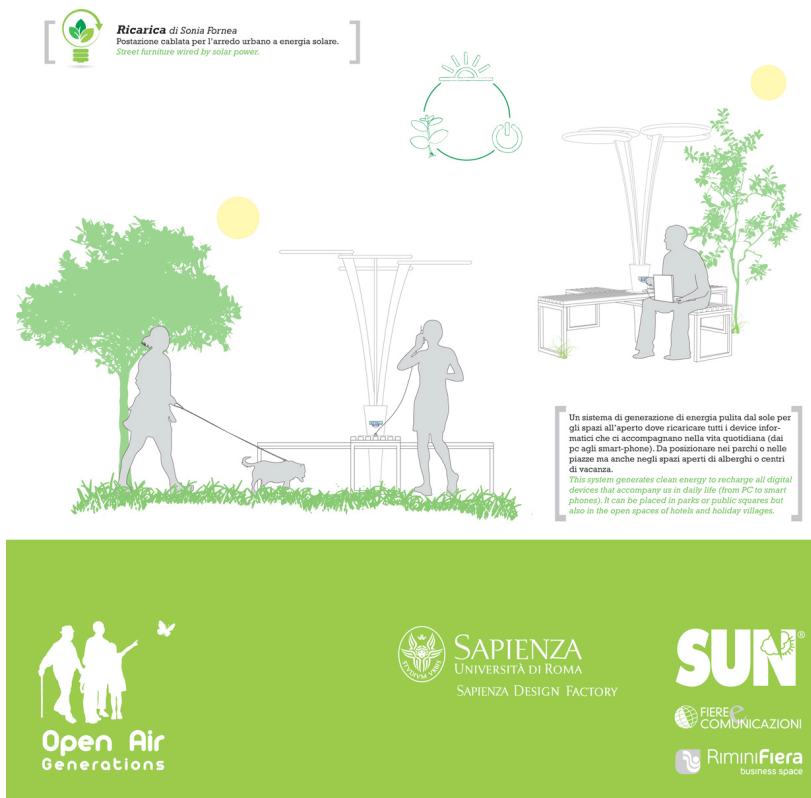


Figure 1. Ricarica (recharge), an urban bench-stand which generates clean energy for recharge electronic devices, student Sonia Fornea.

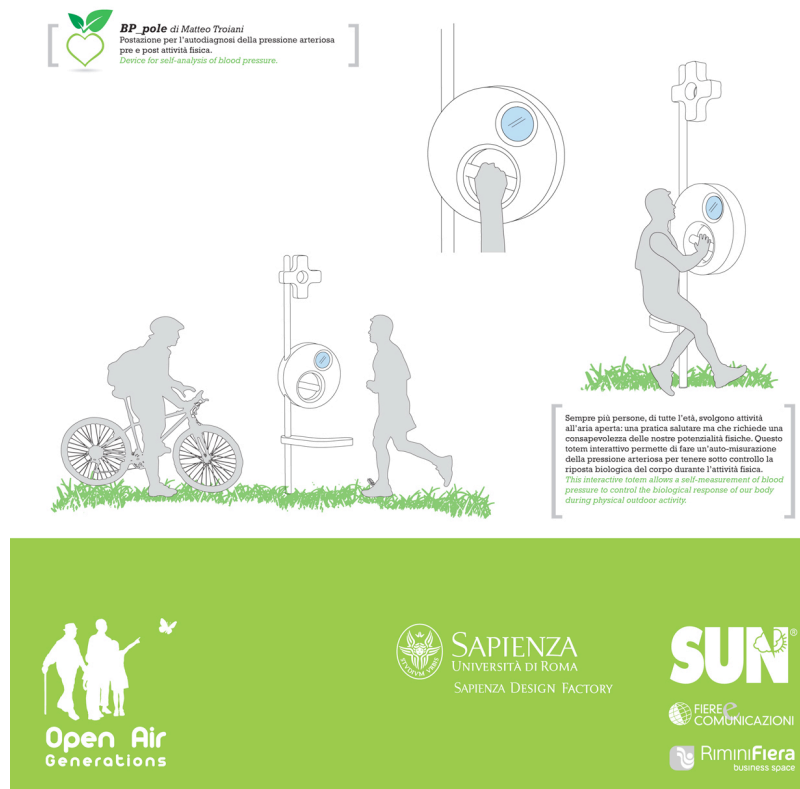


Figure 2. BP-pole, an interactive totem which allows a self-measurement of blood pressure during sport activities, student Matteo Troiani.

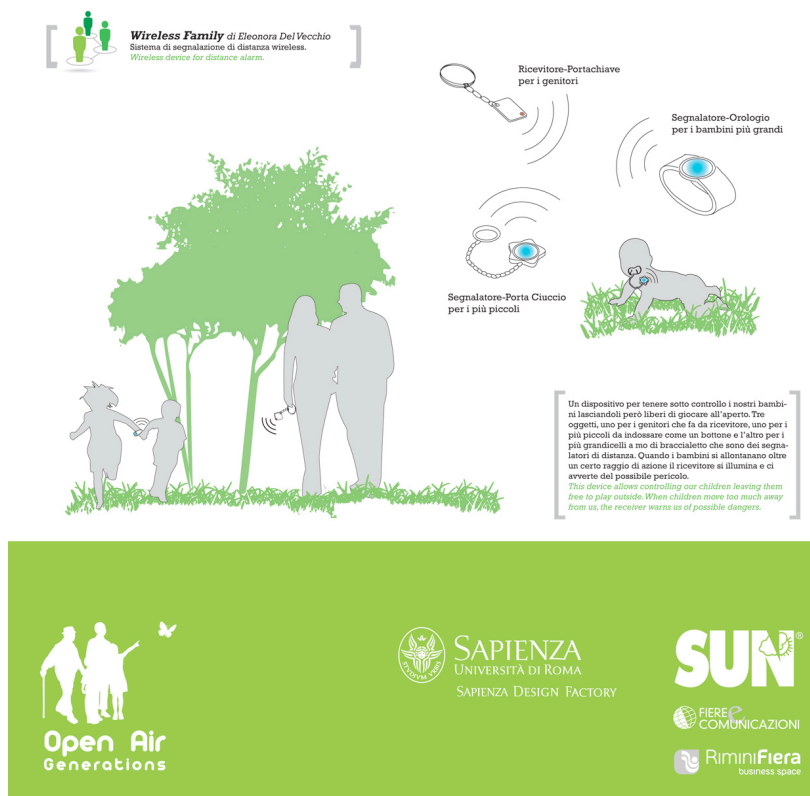


Figure 3. Wireless Family, a kit of wearable devices to monitored the distance between children and parents, student Eleonora Del Vecchio.

4. Conclusion: ‘open generation’, a new hypothesis.

At the end of this research and didactic activity, which can be considerate the demonstration of the thesis proposal, in order to ‘close the circle’ of the scientific methodology and to define the correct hypothesis the research team developed a more theoretical reflection.

In a sort of ‘visual thesaurus’ where the different Consumption Proposals are the connected ‘words’ and the Meta-Concepts and the Research-Contexts are the related knots, it has been possible to find a new start point which describes a different public dimension where products and services allow a multigenerational conviviality.

Therefore, the Hypothesis can start from this question: is it possible, in the Design matter, find a renovate meaning of ‘public’?

If on dictionary (<http://oxforddictionaries.com/>) ‘public’ is 1) ‘pertaining to’ or ‘done for’ a population or a community as a whole, 2) open to everybody, for Design what is a ‘community’? what is a ‘person’? finally, what means develop ‘open’ something?

As analyzed during the definition of the thesis proposal, each of these concepts has directly connected to three crucial features of contemporary society:

- a) role of the metropolitan areas – where the digital communication opportunities totally deconstructed the dichotomy public/private;
- b) the constant growing of a multigenerational population – which refuse any standardization of services and products;

c) the need to develop a more sustainable way of life – especially considering the relationship between human behaviors and environment rhythms.

In order to reply to these requirements, a different movement is gaining momentum in the design debate: a movement to expand the applications of design practices beyond its simple problem-solving base to improve social innovation at different scales [10].

This Design practices would appear to be turning toward a way of making informally, spontaneously, both 'needed' and inspired, especially in the nowadays urban environments which are an amalgam of diversity, complexity, interconnectivity, unevenness. This Design activity wants to improve everyday life.

Therefore, designers are developing projects in underutilized spaces to make contributions even without a client and community groups are taking neighborhood planning into their own hands.

The vision of Social Innovation informed this Design activities but, renewing the idea of co-design, developed solution involving, as more as possible, all stakeholders.

Moreover, thank to the information technologies, it considers users as developers (according to the renewed idea of 'prosumers' theorized by Tofler, which are who uses not closed product but open tools [11].

In this convergence which can be considerate a historical convergence, it is possible recognize a potential of realization of the Lefebvre's 'trialectic of space and society' [12].

Design for 'open-air generations' means to design spaces, which thanks to products and services are at the same time: a) perceived spaces because, they improve the everyday interactions of people; b) conceived spaces because they describe a sharable to sense of urban vision; c) lived spaces because they provide room for creativity and imagination of individuals.

Citations and References

- [1] The Design Studio has been guided by the author of paper in the University where she teaches.
- [2] About Outdoor Design see www.outdoorexperiencedesign.it
- [3] Morace F. (2002) (edit by) *European Asymetries*, IT: Libri Sheiwiller
- [4] Mitchell W. J. (2004) *Me++: The Cyborg Self and the Networked City*, U.S.: MIT Press
- [5] Bruce M., Leonard J. (2004) *Massive change*, U.S.: Phaidon Press
- [6] Crul M.R.M., Diehl, J.C., Ryan C. (2009) (edit by) *Design for Sustainability a Step-by-step approach*, United Nations Environment Programme
- [7] World Health Organization (2007) *Global age-friendly cities: a guide*, WHO Press
- [8] Murray R., Caulier-Grice J., Mulgan G. (2010) *The Open Book of Social Innovation*, UK: Young Foundation
- [9] Di Lucchio, L. (2005) *Il Design delle Strategie*, IT: Gangemi Editore
- [10] Douglas G. (2012), *Do It Yourself Urban Design In The Help Yourself City*, Retrieved August 31, 2012, from 'SpontaneousInterventions: design actions for the common good' - U.S. Pavilion - 13th International Venice Architecture Biennale, Web site: <http://www.spontaneousinterventions.org/statement/a-prologue>
- [11] Toffler A. (1980) *The Third Wave*, U.S.: Bantam Books
- [12] Lefebvre H. (1991) *In The Production of Space*, U.S.: Blackwell