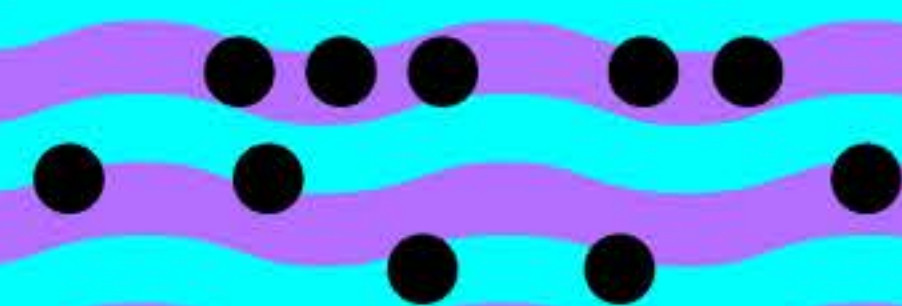


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PRAD

**design
for
territories**



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Editorial #13

Which Design for which Territories?

by Marina Parente and Carla Sedini



Photo © Carla Sedini

Design's interest in the territories is nothing new which has been made especially clear in recent years at the Design Department of the Politecnico di Milano. According to this complex and comprehensive body of work, we realized it was necessary to create a dedicated research network, called D4T- Design for Territories. The principal goal of this research network is to amass a collection of expert opinions to develop a collaborative dialogue through connection with other experts, disciplines and professionals both internally and externally from the Department.

One of the activities that D4T has launched was this call for paper for PAD Journal, which came after several internal meetings and the listening of several voices among professors, researchers and PhD students of the Design Department.

This preliminary networking' work allowed the comprehensive identification of principle lens of observation of the matter. This was the foundation for the three tracks we've proposed to use in requesting papers for inclusion in the PAD Journal. We want to stress the fact that these tracks were not meant to be mutually exclusive. The papers, received and selected, were able to give a general overview of the different roles that the designer could have in the process of working on a territory. The designer can focus on any of the following: the initial discovery and envisioning phase; the activation of empowerment processes; the identification of more efficient ways of communicating the identity of a place; or even can be the director to reinvent a specific place according to its needs. The designer could perform all those duties according to different breadth of knowledge and depth of expertise.

In addition to understand about the different roles of designers, defining “what is a territory” is important for our research and our understanding of the matter. We received a number of useful contributions focus on small neighborhoods, cities and even entire regions. The interested territories are both urban and rural, real and perceived.

The first track, *Theories and Practices*, is intended to consolidate the research into a (new) theoretical baseline, which resonates across varied research and teaching experiences. The selected papers dealt in different ways with the issues mentioned above.

The contribution of Marina Parente, “Design for Territories as reflective practice”, presents an overview of the state of the art of Design for Territories. The author highlights how the experimentation phases were fundamental for the validation and consolidation of the discipline’s theoretical assumptions.

The contribution of Carla Sadini and Luca Fois, about *Zona Tortona* case study (Milan), represents the post theoretical work. From practice to implementation, the authors use specific theoretical concepts borrowed by other disciplines for the analysis of place-branding activities.

The paper “Design Networking. Local systems of collaborative economies” by Maria Antonietta Sbordone focuses on the theoretical and methodological approach particularly of the Social Economy Network Model which is at the core of a specific research-action for the empowerment and regeneration of confiscated lands in Caserta province.

Then, we go deeper on the social role of design with the contribution of Marco Borsotti and Sonia Pistidda about the experimentation of a methodology (in particular participatory design) to approach design for built heritage, dealing

with the reuse of the Magazzini Raccordati (Milano Central Station).

The second track, *Tangible and Intangible*, addresses the existing resources of a territory, represented by its customs and artifacts. Resources and strategies can be both tangible and intangible.

The paper “Envision the nocturnal territory. Urban lighting as design strategy for the recovery of places” by Helena Gentili and Daria Casciani, perfectly represents the potentially ambivalent interpretation of the overarching topic. The authors identify both the physical and abstract aspects of public space light design and the various methodologies for implementation according to whichever diverse role that the designers can play.

The paper proposed by Anna Calvera, Debora Giorgi, Yasser Halloul, Insaf Khaled, and Rosa Povedano interprets the topic looking at the balance between tradition and innovation of typical local products in Tunisia. Through the experience of the Master 3D, they highlight the designers’ multidisciplinary approach to establish strategies for the reinterpretation of local products to propose them to new users and new markets.

“Territory and Aesthetic as tools for product design”, the contribution proposed by José Luis Gonzalez Cabrero and Ana Margarita Àvila Ochoa, does not approach the research through existing objects but the experience of the territory (in this case Real de Catorce - Mexico), which is analyzed according to an aesthetic-oriented perspective. The final goal is the materialization of the territorial resources, both tangible and intangible, in jewelry products.

In Letizia Bollini’ paper, “The social representation of the territory”, the discussion is developed at the cross-sections

of various disciplines of study. The author proposes the use of approaches and methodologies from environmental and cognitive psychology. The goal is that of applying these methodologies in the user-centered design approach in order to study the perception of citizens and users of Bicocca area in Milan.

With Reham Mohsen and Andreas Sicklinger contribution, we get an up-close look at a more specialized approach, oriented toward visual communication. In particular, the authors review some Egyptian case studies where a tangible need for the renovation of the wayfinding and street sign system forced them to consider several intangible elements directly connected with the local history and culture.

The third track, *Competition and Collaboration*, was meant to go beyond a marketing oriented approach addressed to the competitive positioning of territories. Additionally, this track highlights the most interesting ongoing phenomena, which are mainly looking for socially innovation goals. All the selected papers were incepted from collaboration strategies (such as co-design processes) in order to use them as levers both for the territorial enhancement and, as a consequence, for the success of these places in the territorial competition.

Raffaella Fagnoni and Silvia Pericu present the *Reagente* case study, a quality label which was co-designed by Genova citizens. This project is based on the political role of design as an enabler of sustainable behaviors. In this case, the label, commonly seen only as an element to competition, is intended as a promoter for specific values regarding recycling and abandoned spaces.

Rossana Gaddi focuses her paper on the territory of Como where the *Artificio* project was developed. The author presents the preliminary cultural mapping, completed in conjunction

with the local citizens, who participated in the entire process. The project established an innovative cultural center where several activities and functions were co-designed.

The project presented by Davide Fassi, Laura Galluzzo and Annalinda De Rosa, called *camp-US*, was located in a Milan neighborhood, where the Design Department is also located (Bovisa). In their contribution they stress the important role of participatory design processes as generators or re-generators of social capital. They specifically work with a local nursery and some middle schools to co-design and co-manage urban gardens.

Miriam Bicocca paper, based on her PhD research, is focused on the Mexican region known as Guerrero. The author worked according to the Systemic Design Approach to empower local farmers. Thanks to the use of participatory design approaches a cooperative of farmers was started and an SDA for the rural development was tested.

The end result of all received contributions, displays a plethora of evidence and inspirations for the territories studies.

One goal of this issue is to initiate more chances for new reflections, questions and in-depth analysis. As we mentioned before, these three tracks are not meant to box our contributors into any single methodology; rather to change the readers' perception. These contributions can be re-organized, giving way to new connections and reflections. Together we are looking through a vibrant kaleidoscope of many moving pieces.

THEORIES AND PRACTICES

Design for Territories as reflective practice

by Marina Parente

METADESCRIPTION

Design for Territories is a relatively recent field of study and project, based on situated learning methods and reflective practice.

KEYWORDS

Design for Territories, reflective practice, learning by doing.

ABSTRACT

Design for Territories is a relatively recent field of study and project, based on situated learning methods and reflective practice. As meta-discipline, in order to be applied to fields other than products, it has to confront and dialogue with other discipline. The paper begins with a quick overview of the evolution of Design for Territories, compares it with other disciplines, and then describes the current framework of European planning and defines the methodological approach. Finally, it introduces the new "D4T - Design for the Territories" Research Network of the Design Department, Politecnico di Milano.

1. Introduction

Design for Territories is a field of study and project that was born in the late '90s, at a time of fervent cultural debate, prompted by the economic, productive and social transformation of big cities, that had begun to manifest itself in the previous decade. For the first time urban progress manifested itself as a decrease, with the abandonment of industrial spaces and activities and with the loss of identity and economies.

The concept of development, the role of urban spaces, and the relationship between town and country, between center and periphery were changing. It was a time when a paradigm shift was needed with testing of new methods and creative solutions, in which all disciplines engaged in the development of the territories began to question their levels of involvement, their methods and potential solutions.

But even before the consolidation of new inter and intra-disciplinary approaches, action and field-testing sought reflection on new practices to be applied in the meantime. The case of the urban renewal of Barcelona during the Winter Olympics in 1992 is still considered as a best practice. The big event becomes an opportunity to rethink the city, here transforming Barcelona from an industrial city of the nineteenth century to a modern metropolis.

The goal was well defined in the urban planning document: "Consolidating Barcelona as an entrepreneurial European metropolis, affecting the macro-region where it is located, with a quality of socially balanced modern life and highly situated in the Mediterranean culture." At the foundation of the strategic objectives there was a reflection on the idea of the city as a large, shared vision, which also considered the intangible factors. This vision can be summed up well

- as JM Serra, the municipal administration consultant for Barcelona '92 and Barcelona Regional, described at a seminar in Milan in 2011 – in the poster designed by Javier Mariscal in 1979, which already glimpsed the potential of the city through effective hyphenation of its name:

BAR: the space of sociability, openness to young people and creative classes.

CEL: the reclamation of the sky, in terms of public property and open space, which had been progressively obstructed by the increasing density of construction in the Plan Cerdà for private rental purposes.

ONA: the recovery of the waterfront and the visual link of the city with the sea, through new spaces and new forms of public use.



Javier Mariscal, Barcelona poster, 1979

The success of the Barcelona case lies in the long-term strategic vision, in the synergies between the various public and private actors, in integrating interventions at the “hard” scale (the architectural, urban planning and infrastructure) and the “soft” scale (communication, lifestyle, the new image, attractiveness for new users). Barcelona managed to become a place of reference for new creative generations before the success of the famous book by Richard Florida (2002). Still considered today as one of the finest examples of city marketing, Barcelona has become a paradigmatic case for ex-post disciplinary reflections: it is considered by city planning as an example of a “reticular strategic plan”, an integrated form between the top-down models and bottom-up planning, where a wide network of actors is now involved in the decision-making, and policy and management processes to enable a prior agreement with respect to the city’s “operational” project (Perulli, 2004, p.75), anticipating the current indications of European planning.

This large parenthesis is to reiterate that large and complex territorial changes during this time resulted in “acting” being the first priority, and then, as a consequence, theorizing and consolidation of new disciplinary approaches.

It is no coincidence that around the year 2000 there was considerable consolidation among disciplinary studies including: territorial marketing (Caroli, 1999, 2006; Valdani, Ancarani, 2000); cultural marketing (Colbert, 1994; Micozzi, 2006; Croci, 2010); and the economy of experiences and big events (Pine & Gilmore, 1999; Cercola & others, 2010; Gallucci & Poponessi, 2010).

Within the urban planning and the social sciences fields, there also emerged an integrated and multidisciplinary approach of the Territorialist School (Magnaghi, 2000) and a

new concept of local development that was not only related to economic factors but also social (Bonomi & De Rita, 1998), cultural and creative ones (Rullani, 2004; Landry, 2006).

2. Territory and design

Design also approaches these issues through direct experimentation - the so-called “action research” derived from the social sciences (Swann, 2002) - and comparison with other disciplines.

The interest in the relationship between design and territory has always been there, as for all the planning disciplines in which the contextual situation plays an important role, but at that time, the perspective of observation began to change: it moved from observing the territory as the *design context* to considering the territory as a *design object*.

Two main factors influenced this shift in focus.

On the one hand, there was the evolution of design as a discipline, gradually expanding the concept of product to a systemic dimension and interfacing directly with the cultural transformation phenomena of society. This emphasized its claim of being “multiverse” (Bertola & Manzini, 2004) and able to deal with emerging issues and areas. Strategic design, design services and subsequently design for territories are just some of the disciplinary forms, where the observation focus is expanded towards increasingly complex and relational product-systems.

On the other hand, the change of economic scenarios and the appearance of the territories on the competitive scene, also evidenced by the growing interest in marketing, led to the placement of “goods” within a perspective of sustainable

development no longer centered only on production, but oriented towards service sector processes.

However, in contrast to marketing, design's interest is not only economic but is strongly oriented to the relationship with end-users and therefore to the dimensions of social, environmental and cultural sustainability.

In terms of academic design research, the path toward the territorial issues began in 1998 with the Sistema Design Italia¹ research (Italian Design System) coordinated by prof. Ezio Manzini. The research highlighted not only the territorial dimension of Italian design, based on a successful combination of local conditions (productive, organizational, cultural) and creative intuition and sensitivity, but also its territorial variations, revealing strengths, specificities and the most innovative signals for each area of the country. It could be defined as “design in the territory”, in line with the theme of the Italian industrial and then cultural districts, highlighted in studies by Becattini (1998, 2000), Santagata (2000) and Valentino (2001).

That research was also successful in finding (especially in less well-known areas of “design-oriented” production systems) new ways of applying design aimed at enhancing local cultural products, or resources related to environmental, historical and cultural heritage or to the collective imagination linked to the idea of place². These design forms were often spontaneous rather than generated by a structured sys-

1. National research "Italian Design System. The role of industrial design for product innovation. Development of project resources of the Italy-System between local resources and global markets", co-financed by the Ministry of University in 1998-2000 and coordinated by prof. Ezio Manzini of the Politecnico di Milano, with the participation of 17 universities, rebuilding a very detailed picture of the state of Italian design, of the specific nature and trends.

2. For more detailed information on the mentioned examples, see: Cristallo V., Guida E., Morone A., Parente M., *Design e sistema territoriale. Cinque casi studio di successo in Campania*,

tem and created by actors actually recognized as designers. The forms then initiated a dialogue with the places of origin, by renewing and inventing a different reading of them and indirectly re-planning the same territory: a kind of “design of the territory”, in other words products, communication systems and services related not only to businesses but to all types of local organizations.

These considerations have led the way in subsequent research, highlighting the interest in the discipline of design to consider territory as the object of the design action. In the national research project, Me.design³ (2002-2004), attention was paid specifically to the exploitation of resources through design in the Mediterranean area.

The research is aligned to what is established at the community level in terms of territorial development, i.e. an *integrated, ascending* and *territorial* methodological approach: *integrated*, as it evaluates territorial resources as a whole and not in a sectoral manner; *ascending*, as it incorporates bottom-up and participatory activation processes; and *territorial*, by reiterating the concept of the local system and the value generated between natural resources, social structure and culture of the place (Villari, 2012).

The Me.design project integrated also the interpretation of Magnaghi, who defined the concept of self-sustainability of the territories: “A rebirth through new fertilizing acts, which produce new territory or new fertile relations between the urban settlement and environment, is needed. In these terri-

Libria, Melfi, 2002.

3. The research “Me.design. Strategies, tools and operation of industrial design to enhance and strengthen the resources of the Mediterranean between local and global”, co-financed by the Ministry of University in 2002-2004, coordinated by prof. Giuliano Simonelli of the Politecnico di Milano, was conducted with the universities of Milan, Genoa, Naples Federico II, Naples SUN, Chieti, Reggio Calabria and Palermo.

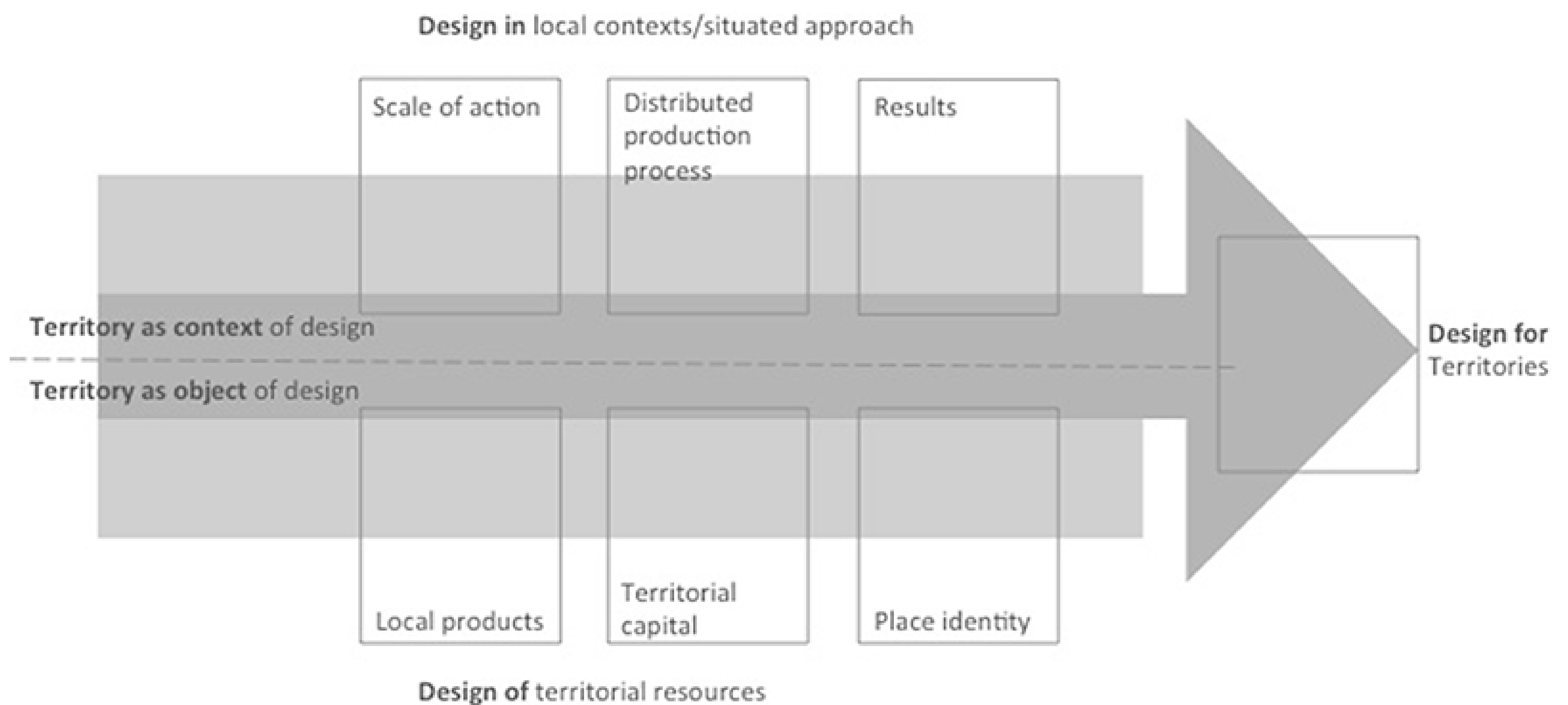
torializing acts there is the germ of a genuine and lasting sustainability of development (which we call ‘self-sustainable development’) as a new search of virtuous relationships, new alliances between nature and culture, between culture and history” (Translation from Magnaghi, 2000, p.18).

The Me.design research also takes as a paradigm the concept of “territorial capital”, an articulated and complex set of tangible and intangible resources, which are the system of values, constraints and opportunities of a territory, derived from LEADER programming European projects for the development of rural areas, thus placing it at the basis of the process of “design for territories”. The methodological foundations for a design-oriented approach dedicated to the enhancement of the territories were established through design experiments conducted in specific contexts with the Me.design research. This is characterized by the centrality of the local community as an active player in the decision making and implementation processes and by the visionary ability of the design director in envisaging multi-sectoral and multi-actor strategic scenarios.

In this discussion of “design in / of / for the territory” there are three approaches that gradually expand the observation from the territory as a *context of design*, to an *object of intervention* and then to a *relational system*.

Taking up the concept of re-production of places connected to the theme of self-sustainability of the territories, it can be analysed, in a design driven view, according to two metaphors (Parente, Lupo, Sadini, 2016).

The *biological metaphor* refers to an idea of territorial *regeneration*, which goes from its development to its growth and up to its *renovation*, as happens in the biological processes of living beings.



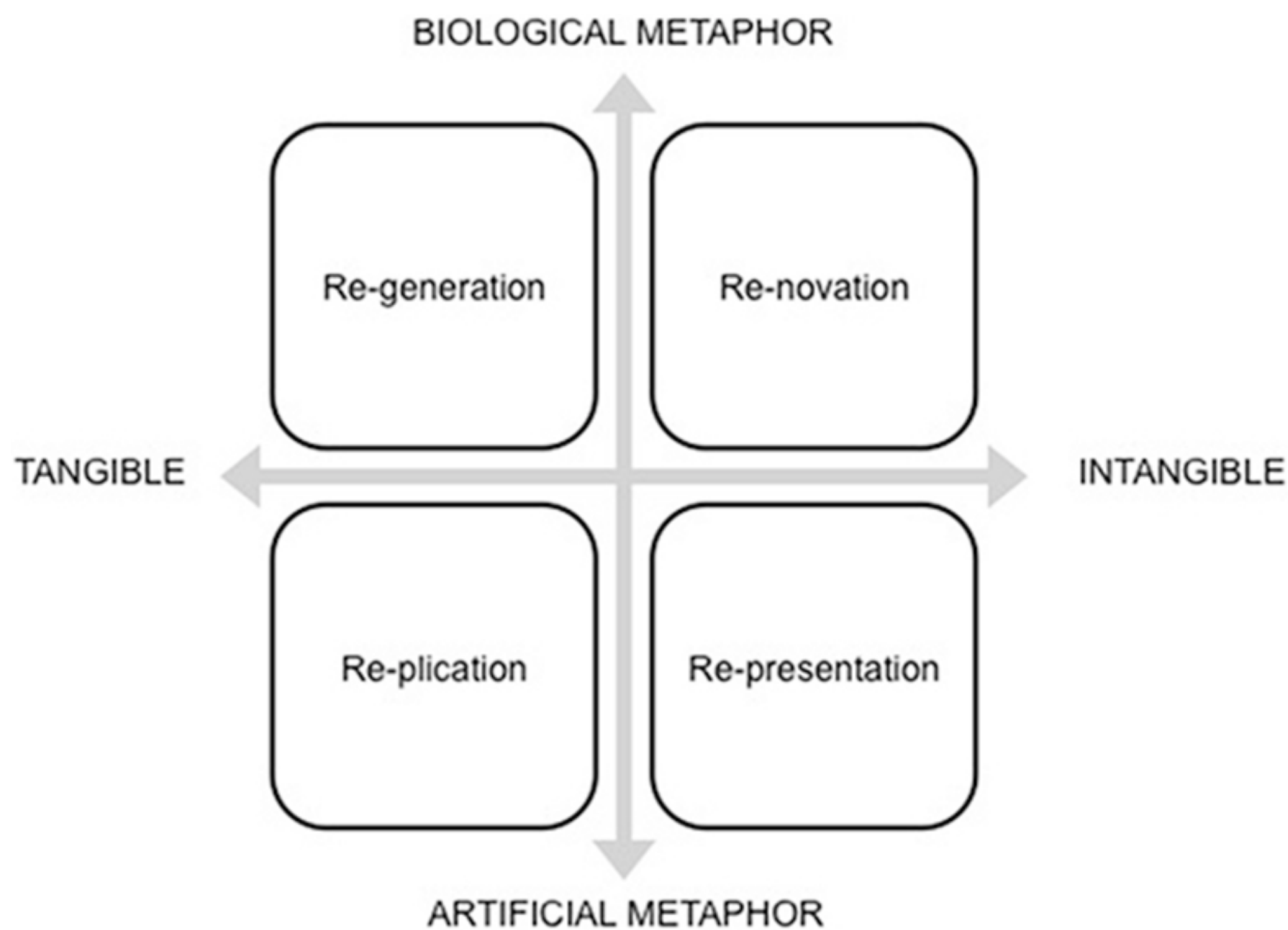
Design in /of / for the Territories (Parente, Lupo, Sedini, 2016)

The *artificial metaphor* refers to the production and multiplication concepts, which are characteristic of industrial and creative processes and goes from *representation* (*mise en scene* or narration) to *replication*.

Both metaphors can be interconnected with the tangible and intangible elements of the territory, resulting in four approaches: *re-generation*, *re-novation*, *re-plication* and *re-presentation*.

More specifically, within the biological metaphor the biological concepts of growth, development and diversification apply to the design of the territory through the re-generation of its tangible elements (resources, products, etc.) and the re-novation of the intangible ones (traditions, identity etc.). The power of this metaphor lies in the close attention paid to the intrinsic qualities of the territory as an organism capable of self-regeneration, repair, imitation, and virtuous specialization.

Instead, in the artificial metaphor, the dimension of the "production of the new", starting from exogenous factors, is the most valuable among the dynamics of development and di-



Different strategies for the Re-Production of Places (Parente, Lupo, Sedini, 2016)

versification of territories. The power of this metaphor should be read in the ability to switch from the exploitation of existing capital (enabled by design) to the exploration of new possibilities (March, 1991) through a deliberate design action that introduces and negotiates disruptive “artificial” elements.

The metaphor of the artificial applies to the processes of re-production of the territory through the *re-plication* of tangible elements (shapes and materials) and *re-presentation* of the intangible ones (images and imaginary), able to create new ways of fruition of the territories.

However, we know that in the territorial contexts the boundaries between tangible and intangible resources can be blurred and therefore the different strategies can be, in some cases, overlapping and integrated.

3. The current European framework

In recent years, the European program for territorial development has taken into consideration and implemented specific actions of financing and support, suggested by academic research in a variety of disciplines; this is apparent from the European Commission's (2010, pp. 74-76):

“This literature – especially the evaluation reports and CEC communications – provides evidence that local development approaches bring significant added value in the following five fields:

- *Understanding new patterns of development*, for example the diversity of local factors that determine competitiveness and development potential of an area or the key role of factors such as the business environment providing ‘local collective competition goods’ or human capital stock available in local labour markets. (...) These have inspired approaches followed by EU initiatives such as LEADER and URBAN.
- *Addressing sub regional development problems*
(...) Local development strategies have helped areas to optimize their productive potential, and less-developed regions to diversify their production, promote tourism and specialise in niche products with higher added value (LDEI Local Development and Employment Initiatives).
- *Improving governance*
Involvement of local actors and partnerships in development projects and strategies is a more visible outcome of this approach and it can be seen as a concrete and active form of subsidiarity, Local development has strongly promoted the establishment of area-based public private partnership (...).
- *Contributing to EU cohesion policy, territorial integration and improving financial mechanisms.*

This literature – and most recently the Barca report on place-based policy - suggests that local development should increase the efficiency of EU finance by promoting greater concentration of structural finance at the local level and through better management of local projects (...).

- *Promoting inter-territorial cooperation.*

Networking of projects of local dimension such as the Community Initiatives did and INTERREG and LEADER Programmes currently do, made a contribution to territorial cohesion and, at least symbolically, contributed to the removal of borders inherited for centuries.

This achievement shows that European integration and Europeanisation has more to do with the way in which actors are interconnected than in the definitive preponderance of a level of government”.

The document also contains guidelines for EU support to local development for 2020, to increase territorial cohesion. Local development represents one of the major operational tools in the hands of the EU cohesion policy to offer new opportunities for the most remote areas and communities. The economic and financial crisis, along with the recovery plan and ‘Europe 2020’, create strong pressure to reinvest in the local development approach, and to offer new opportunities for those most remote areas and groups (p. 29).

In addition to territorial cohesion, the EU also aims to invest in knowledge and creativity, one of the objectives of Europe 2020, the European Union’s ten-year strategy for growth and jobs, launched in 2010 to create conditions conducive to smart, sustainable and inclusive growth.

The EU agreed on five quantitative targets to be achieved by the end of 2020: employment; research and development; climate and energy; education; social integration and pov-

erty reduction. It identifies design-driven innovation as a response to the urgent need for growth and jobs in Europe, embedding design in Europe's innovation system for the benefit of society, enterprise and the public sector⁴.

In addition to territorial balance and support for the weak areas of the European community, social innovation and people-centred design approaches are also recognized as strategic goals and methods for territorial growth. As Ezio Manzini (2010) says, “a SLOC scenario, where SLOC stands for *small, local, open and connected* (...) and the global is a *network of locals*”.

These lines have been added to the action for culture and creativity of the Creative Europe 2020 program, in which we also find support for the European Capitals of Culture and the European Heritage Label.

4. Design methodology for the territories: situativity, learning by doing, reflective practice

As mentioned previously, design, by its very nature, is rooted in doing, focusing on the practical consolidation of theoretical and methodological thought (Friedman and Stolterman, 2015) and, in order to be applied to fields other than products, as a meta-discipline, design has to confront and dialogue with other disciplines.

In the case of territorial development, this feature becomes even more evident, since the object to be observed - the territory - is complex, dynamic, multi-actored and intersectoral,

4. Challenge 2 in *Design for Growth & Prosperity*, Report and Recommendations of the European Design Leadership Board (2012) p.24

made of material intangible and human evidence, and each time, different and unique. To quote Magnaghi, “The territory is an artwork: perhaps the highest, the choir that humanity has expressed. (...) the territory is produced through a dialogue, a relationship between living things, man himself and nature, in time throughout history. It is a choral work, co-evolutionary, that grows over time. (...) The territory comes from fertilization of nature by culture (...) has character, personality, identity, perceptible in the signs of the landscape.” (2000, p.17).

One of the most important actions of design for the territories is the precise understanding of the context, the ability to “see” and recognize the resources and values of a territory, revealing even those that are dormant or potential. In order to transform the resources of a territory from “potential” to “effective”, a special level of attention is required to recognize them, through a reading of the territory that allows an interpretation of the intimate sense of place, an observation that, as Giuliana Bruno affirms in his “Atlas of emotion” (2002), involves a theoretical shift from *optic* to *haptic*, from *sightseeing* to *siteseeing*, from *motion* to *e-motion*.

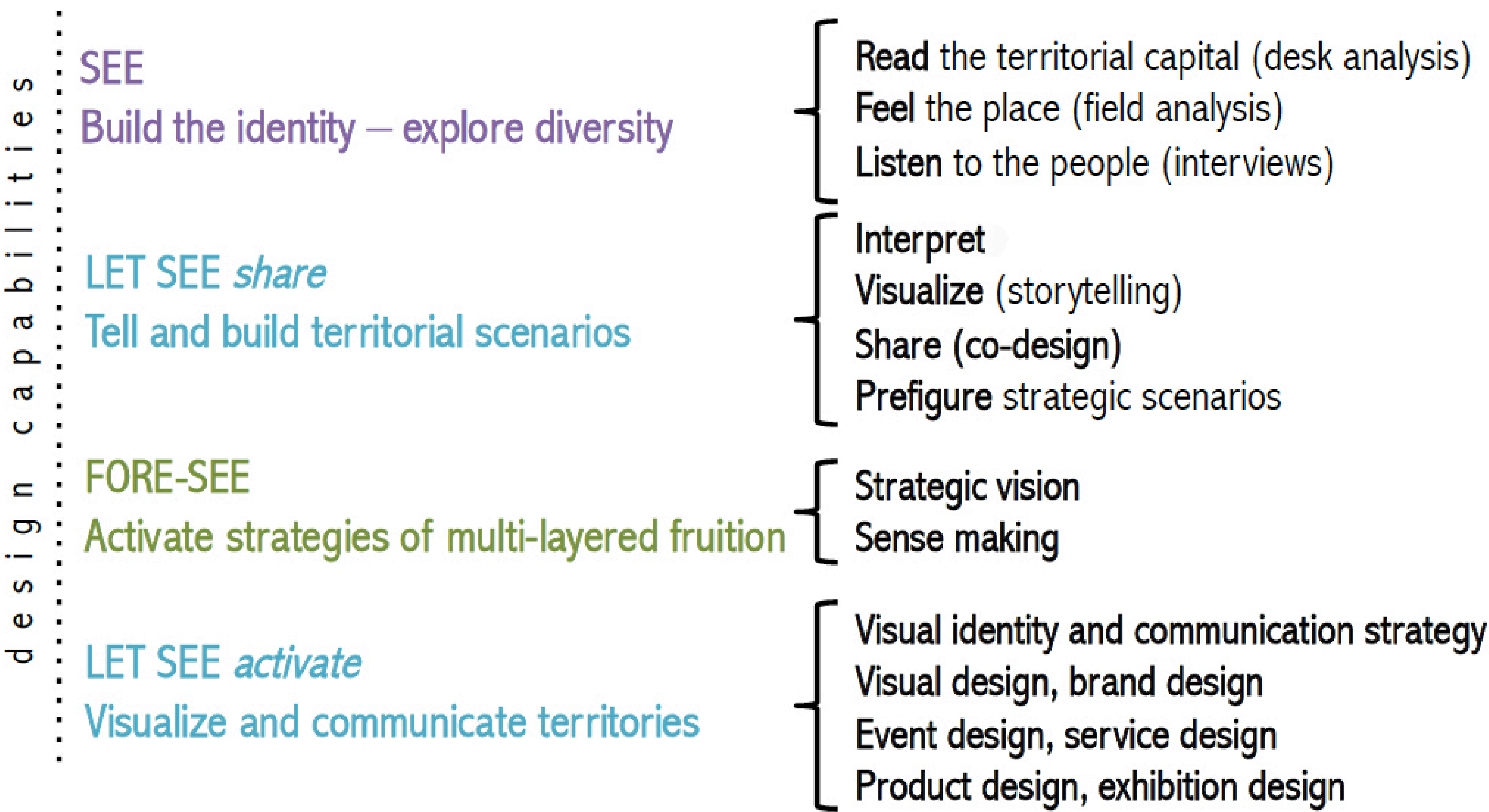
The centrality of the theme of “seeing”, in this enhanced form, has been effectively articulated by Francesco Zurlo (2012) to describe the process of strategic design. Applied to the design for the territories, as can be seen in the attached diagram, it identifies the project phases which correspond to specific competencies and application fields of design: *see*, *let see* and *fore-see* become the method and purpose of design actions for the territories.

The main activities that characterize a design-led approach to the territory are: read the territory, interpret it, display it; build meaningful areas and shared visions; promote forms

of participatory planning and empowerment of communities; transform visions into actions and practical initiatives; design systems-product and service interfaces derived from them; promote and implement an effective communication of the entire process.

Another aspect that characterizes the approach of design for the territory is found in its “situated learning” (Lave & Wenger, 1990) and “reflective practice” (Schön, 1993).

As a tailor-made approach compared to a specific contextual situation, it: comes from a concentrated listening to the ter-



Phases, purposes and capabilities of Design for Territories

ritory (design audit); identifies possible keys to the introduction of disruptive phenomena of established routines (trigger event); advances theory and learning by observing the results (learning by doing); builds collaborative relational networks through participatory planning (communities of practice); introduces concepts of value that serve as focal point to guide the various initiatives (ethical value of the project).

We could also call it a problem-solving informed by the problem-finding and problem-setting, an approach more “problematic” to reality, which considers each situation in its complexity and in its uniqueness: in the words of Schön (1993), a “knowledge in action” and a “reflection in action”. These considerations gradually feed a strengthening and an integration of the method through a set of tools that can be customized for different contextual situations.

5. Conclusions

In recent years through action research in the territories the discipline of Design has developed approaches and expertise via educational experiments and applied research projects oriented to the themes of: territorial identity; local development; enhancement of cultural heritage; the design of services and for social innovation; the narrative of the territory (from mapping to storytelling); strategic communication and brand design of the territories; and game design and other forms of experiential design.

This wealth of approaches, now present in the Design Department of Politecnico di Milano, is at the centre of the “D4T - *Design for Territories*” research network (www.d4t.polimi.it), funded by departmental Farb funds, with the aim of stimulating continuous updating of reflection in this disciplinary field, and to renew comparisons with other disciplines and with the international scene.

So today, we cannot draw conclusions except to pay attention to the ongoing debate and consider constantly evolving scenarios. This paper, therefore, is seen as an initial contribution to a systematization of what reflective practice has produced to date in terms of methodologies and interdisciplinary exchange.

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Milano, Zona Tortona.

Understanding a place branding strategy built upon history, visions and design.

by Carla Sadini and Luca Fois

METADESCRIPTION

The present paper talks about the place-branding project of Zona Tortona (Milan) which is going to be analyzed according to specific theoretical concepts.

KEYWORDS

Place branding, Territorial Capital, Creative Industries

ABSTRACT

In this paper we are going to tell the story of Zona Tortona, a project a whole area of Milan was named after. This area is commonly known as “the” place for design. The project Zona Tortona has had a very strong influence on the development and recognition of this territory’s identity.

To answer the question of how the area developed this identity, first, we are going to interpret its story according to specific concepts that will help explain the success of this pioneering bottom-up renovation process. Then, we are going to look specifically at the role of design and events as triggers of innovation, renovation and consolidation of the identity of places.

This territory has always been in a state of development – from economic, social and cultural points of view – being able to maintain a strong relationship with the present and the future. In 2000, the project Zona Tortona was developed in a context composed of knowledge and skill, with physical resources also being revisioned and potentially transformed.

1. Introduction

In recent years, the rhetoric of creativity has been used as a driver for territorial development and competition from the neighborhood to national scales, with creativity and culture becoming both object and subject of the governance processes (Pratt, Jones, Lorenzen, & Sapsed, 2014). On one side, strategies able to favour the innovation and development of economic sectors, which are not defined as creative, are put in place, while on the other, the so-called creative sectors are incentivized and the territories are increasingly defined as places for creativity or are themselves creative. This interest in the creative and knowledge economy is not recent; in 1944, Adorno and Horkheimer were among the first scholars to talk in a critical way about the “culture industry” (Adorno & Horkheimer, 1997). However, it is the image of cities that has received more attention because of globalization, which makes places similar to each other, and for this reason the game they play is based on very small and intangible differences (Harvey, 2009; Richards & Wilson, 2004). Cities lost their identities as places for production and became places for leisure and consumption.

Territorial marketing and city branding played a fundamental role both in the success and in the strategies put in place to support cities and regions in the passage to new models of activities, residences and inhabitants. In many cases, these transformations were necessary, where, for example, whole quarters (or even cities) became empty due to the loss of their manufacturing and production processes. This left not only physical empty spaces, but also a lack of meaning.

In this paper we are going to present the Milanese case of *Zona Tortona*. This case study is particularly interesting because it happened at a time when the creativity rhetoric, as

we name it, wasn't yet a rhetoric. As we will see, the design strategy of the *Zona Tortona* branding project had very solid foundations in a socio-economic past that was in line with the evolution of this neighborhood framed by Navigli and the railways.

2. Zona Tortona: evolution, resilience and identity

The Milanese area now known as *Zona Tortona* is a rich and complex case history of urban regeneration because of its multiple transformations, which have been of interest to a variety of groups over the years.

Its size and well-defined position allow an interesting interpretation of the relationship between the choices taken by the institutional, economic, cultural and social actors and the consequences that followed. Some changes, which happened over time, were determined by specific choices, others as consequences of those choices, and yet others were completely unexpected.

Even if it's not possible to say that a unique meta-design for the territory was put in place, single projects and strategic visions considerably influenced the coherent evolution of the area.

It is, however, possible to say that the history of the neighborhood has always been strongly characterized by the innovative production of services and goods in an economic frame, which was not only local. The area never suffered due to its transformations but has always been characterized by subjects that tried to manage them in a sort of wide forward-looking vision.

The identity of this area is very complex and it tells of the

resilience of a territory made by goods, people and relationships that have always been in a dynamic harmony with the evolution of difficult situations.

Therefore, we are going to analyze the case of the *Zona Tortona* area in light of three concepts, which we find particularly important for the activation of a coherent and successful design strategy. First, we will look at the evolution of the area using the topic of *Path-Dependence*; second, we are going to analyze the topic of *Resilience* in light of strategies and activities put in place to consider social and economic change; and third, we are going to deal with the identification of the *Territorial Capital* of the area defined by its historic, geographic and socio-economic characteristics and resources.

The last section of the paper will focus on the *Zona Tortona* branding project, which will be analyzed according to specific key concepts of the design strategy.

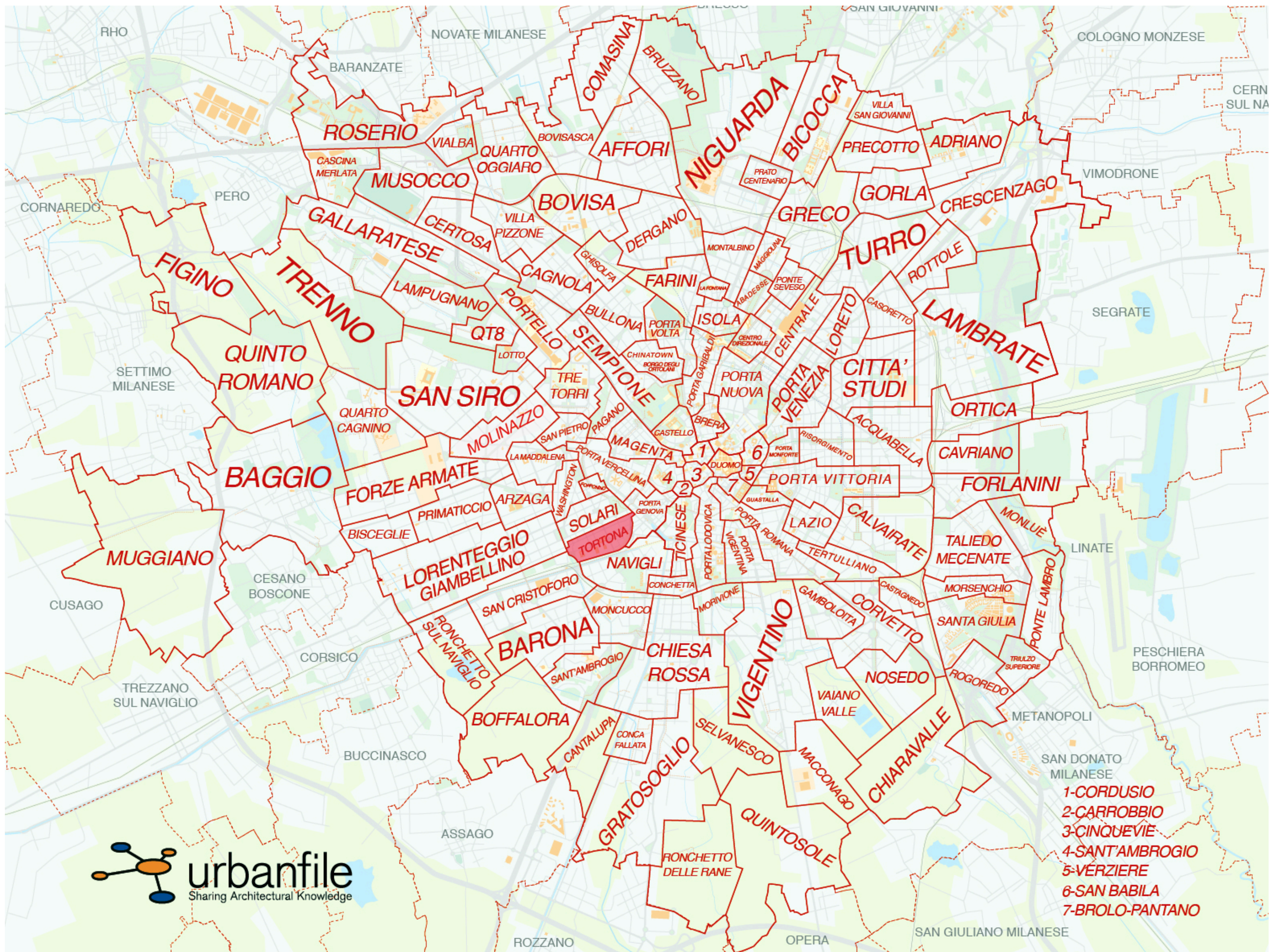
Evolution. The Path-Dependence of Zona Tortona

“History matters”. This phrase should be at the foundation of every kind of territorial branding strategy. Indeed, several scholars have identified a possible explanation for the socio-economic evolution of places in the economic theory of *Path-Dependence* (Liebowitz & Margolis, 1995).

For example, Musterd and Gritsai (2010) stressed the importance of *Pathways*, which include structural, historical and contemporary territorial factors, in favoring the localization of creative and knowledge clusters and in attracting workers to these sectors.

It is clear that *Zona Tortona* has always been a very reactive place, with change and innovation at the core of its identity. The area often preceded trends that later spread through the rest of the city and beyond. Its isolation was not

a disadvantage but actually made the quarter a sort of laboratory for innovation. The mixed composition of its population (both inhabitants and *city users*) was probably one of the most important elements of the area's innovativeness.



The location of Zona Tortona. Source: <http://blog.urbanfile.org>

Zona Tortona is located in the southern part of Milan, close to the city center, and its image is characterized by the Navigli canal system. It has always been an important place for commerce, because it connected Milan with the port of Liguria and other towns in the south-west. Several major city routes radiated from *Zona Tortona*: Corso Genova, Savona street, Tortona street, and Voghera street. All these names indicate places, directions and pathways: elements of a

modern *wayfinding* project and historical and cultural reference for the birth of the *Zona Tortona* brand, as we will see later.

Thus, it is a meeting point of water routes, roads and railroads (Porta Genova railway station was constructed in 1873), a connection between the “real” city and the “real” countryside. Indeed, before the Industrial Revolution, *Zona Tortona* was an agricultural and farming landscape with productive economic activities, connected to one another, such as farming, wagons and carriage building, blacksmith and carpenter shops, etc.

The territory was composed of inhabitants and those we today call *city users* (Martinotti, 1993). This diverse composition, which continues today, characterized the area and made it very various.

In the second half of the 1800s, the Milanese south-west railway network was improved to support the creation of a dense industrial area.

The construction of the Milano-Mortara railway divided the Tortona and Savona streets from Navigli and from the city center. This created a sort of *enclave* of about 5km², which was named *Zona Tortona*. Very important and cutting-edge manufacturing enterprises were located within the area and close to it, including Riva Calzoni (production of agricultural machinery, and later turbines), Zanoletti foundry, Richard Ginori ceramics factory, and Bordoni glassmaker. Several foreign enterprises were also located in the area that bought out the Italian ones, such as Züst, AEG, Ansaldo, General Electric, etc.

This industrial concentration on a relatively small area resulted in it being recognized as a center of manufacturing and labour, and in 1906 a quarter with workers’ housing was



Porta Genova Railway Station (vintage photo). Source: www.milanodavedere.it

built by the Società Umanitaria.

Therefore, it is clear how innovation – when the rhetoric of creativity of 3Ts (Technology, Talent and Tolerance) (Florida, 2002) was yet to come – was already part of what would become a unique characteristic for an always-changing neighborhood. This innovation wasn't only represented by the technological and industrial capacities in the area, but also by the possibilities offered by its physical and cultural connections.

In the 1970s and '80s several industries closed and the remnants of the industrial past became both a problem and an opportunity. Therefore, that innovative spirit changed again, but not the identity of this Milanese area, which was, first of all, agricultural, then industrial and later dedicated to services activities.

Resilience. Zona Tortona as pioneer

Resilience practices (planned or not) are established in very different places, but in the area we are talking about it is particularly clear how the presence of forward-looking people with design skills and executive resources allowed social and economic transformation to be recognized and addressed, and this is still ongoing.

Resilience is identified as the capacity of communities and institutions to manage environmental and socio-economic problems, activating innovative practices (Colucci, 2012; Graziano, 2013; Pinto, 2015; Rodin, 2014; Walker, Holling, Carpenter, & Kinzig, 2004). Surely then, design can be identified as an activator of the right conditions and practices that fit with the territory they are focusing on (Fassi and Sedini). In addition, it must be said that after the recent economic recession, cultural and creative industries showed a strong capacity for reaction and high levels of resilience (Sabatino, 2016).

Therefore, it is clear how, even when creativity wasn't "fashionable", it could be identified as a trigger for resilience and development.

After the closure of parts of the industrial complex, property developers were – as often happens – the first to see the possibilities for improvement of the area. They bought several properties to renovate and resell, foreseeing what was to later become a territorial strategy. They identified the so-called Creative Class as a target, theorized 20 years later by Richard Florida (2002).

Also the re-definition of the neighborhood followed a forward-looking process, going from *education* to *business*, and *leisure*, passing by – as we saw – the permanent and continuous (sometimes unnecessary) creation of new residences. One of the first steps was the installation of the Domus

Academy (1982) and then of other initiatives oriented to the fashion, communication and design fields.

The process was already ongoing and was based on the economic dynamics of that time. After the growth of importance of Milan as “the” place for fashion and the rise of the so-called creative professions (in particular advertising, photography and publishing), the increasing costs of the more central spaces forced businesses and service industries to look for new locations.

The ex-industrial spaces, conveniently renovated, offered the opportunity for the installation of activities that needed both large spaces and specialized environments along with accessible costs.

Photography studios were one of the main activities hosted by Superstudio, which in 1987 was installed inside former General Electric spaces.

During the same period, the architect Citterio re-designed a building used for the production of barley and malt, to house the designer Ermenegildo Zegna. The Scala Theatre workshops were located in a wing of the ex-Ansaldo building. And, regarding fashion Armani (the former Nestlé buildings), Diesel, Della Valle, Fendi and others were established in the area, bringing value to the vast area of the Riva Calzoni.

In more recent years, there have been public interventions: in 1990 the Municipality of Milan acquired the ex-Ansaldo area to create a big cultural center. Indeed, a large part of the area has recently been redeveloped, with the Museo delle Culture (Museum of Cultures - MUDEC), designed by Chipperfield, and other spaces being given to a group of associations and enterprises, BASE, for socio-cultural activities. The Municipality of Milan is also interested in the former Osram

and Loro Parisini areas for residential and business purposes; these reclaiming activities were part of the Piano Integrato di Intervento (Integrated Plan of Intervention).

These are some of the most important activities which, together with others focused on creativity, design, fashion, arts and communication, can illustrate the transformation of the neighborhood.

The success of this renovation, which raised the value of the territory both from the real estate and economic points of view, cannot be assessed merely according to numbers but also to the several factors and opportunities developed inside and in the immediate vicinity of the area.

In the following paragraph we will talk about the elements of consolidation of the identity of this quarter, which today is commonly considered as the place for innovation and creativity.

Identity. Zona Tortona's Territorial Capital

Previously, we started to outline what can be called *Zona Tortona's Territorial Capital*, that is the tangible and intangible resources that characterize this area.

The concept of Territorial Capital has its foundations in four capitals identified by Bourdieu (Bourdieu, 1994):

1. Economic Capital (money, means of production)
2. Social Capital (social networks)
3. Cultural Capital (languages, tastes, ways of living, etc.)
4. Symbolic Capital (validation symbols).

The availability, in different measure, and the different combinations of all these capitals influence the identity of a territory. We have already seen the evolution and transformation of *Zona Tortona*, and we will now describe its most

recent history and the critical moments when these capitals were combined and exploited in a way that defined the area and its identity as we know it today.

The isolation of this part of the territory, surrounded by the railway and residential quarters, and its post-industrial characterization as the place for creative and design activities, ensured a strong, easily recognizable identity for the neighborhood.

Three main factors represent the basic reasons for the success, even if they might not guarantee it: consistency (availability of spaces), spatial flexibility (variable dimensions of the spaces), central position (initially the area was attractive for its low prices).

The enlightened and entrepreneurial vision of the private sector was essential for the type of urban transformation that was oriented to attract those with talents, and made possible by a mix of *hard* and *soft* factors of attraction (Musterd et al., 2007; Sassen, 1991; Scott, 2000).

However, this does not fully explain the success of this area and it is necessary to mention the general context of the whole city and of the role of two economic sectors: design and fashion, we are going to focus on the first.

The relationship between Milan and Design, in particular Furniture Design, had its origins after World War II, when some well-known artisans from Brianza wanted to modernize production styles and processes from “bespoke design” to “mass-produced design”. The relationship between artisans and architects, and between design and manufacturing influenced the beginning of a process that made Italy, and especially Milan, as *the* place for design.

The positive values of the territory were represented by the *genius loci* on which entrepreneurs and professionals were

able to build a contemporary path, first of all for Italian, then European and finally, global users. This was an evolutionary process which is not simply the sum of individual innovations but has to be looked at as a long-term progressive strategy.

It occurred by systemic logic which started with product design, which spontaneously generated innovation in the process, the production, and retail and communication sectors.

In a short period of time Milan became host to: the Fair (1920); the first magazines for the design sector (Casabella and Domus in 1928); Triennale (1933), which in 1954 focused for the first time on Industrial Design; Federlegno (1940), which in 1961 founded Cosmit, the society that in the same year organized the first *Salone del Mobile*.

In 2016 the *Salone* hosted 1,300 national and international exhibitors and it drew 300,000 visitors, mainly from abroad. In this context of continuous growth since 1961, Milan is now internationally recognized as the Capital of Design. Similarly, the *Milano Design Week* is the most important worldwide event for buyers, retailers, entrepreneurs, CEOs, media, designers, architects, landscapers, marketing managers, professors, students and also *design lovers*, who, in a single place in a short time, want to see state of the art design and know what the current design trends are.

Even more relevant are the events of *Fuori Salone* (literally “outside” the *Salone*), which, since 1990 have been listed in the well-known *Guida d’Interni* (a guide made by *Interni* magazine). *Fuori Salone* events were (and are) particularly relevant to the consolidation of the identity of Milan as capital of Design and of *Zona Tortona* as a neighborhood with a strong creative disposition. There were many, diverse consequences of *Fuori Salone* events taking place in this area: higher numbers of tourists (not only during the *Milano Design*

Week); an increase of satellite activities in the whole area; and reinforcement of the identity of the quarter.

As far as the image of the area Tortona/Savona is concerned, the creation of the brand *Zona Tortona* formalized and strengthened the identity of the area. The next paragraph will be devoted to the process which led to the ideation of the brand and what it represents. Before describing the branding project of *Zona Tortona*, it is necessary to explain the role and capacity of design, on one side, and events, on the other, in creating the accurate values, networks and *buzz* (Sedini, 2011) able to give shape to, and consolidate, the image and the identity of places.

3. Design and events as catalysts. *Zona Tortona* branding project.

Design can be identified as the sector of the creative economy, which, more than others, has gained a central role in debates about the economic development of metropolitan areas. Design is an economic sector, which intercepts arts, business and technology.

Saskia Sassen defines design a kind of “value-adding creative work” that also has the effect of repositioning so-called ‘creative work’ in circuits, which are central to the global economy (2005, p. 257). Tara Vinodrai stressed (Vinodrai, 2009) that designers contribute to economic development at a regional and local level both directly and indirectly. As we have already said, this includes: creating new working opportunities in the same sector and then in others; increasing the quality of places and improving their aesthetic aspects; favoring the development of a local identity thanks to the

involvement of local communities and identities.

It is evident that festivals and fairs are essential in defining a city as specializing in a certain economic sector. Design fairs and events constitute a distinct example of a *Field-Configuring Event* (FCE) (Lampel & Meyer, 2008). An FCE is identified as a temporary network where individuals, groups, and organizations congregate. Initially, an FCE can be sporadic, but can become more periodic and structured. The importance of FCEs is linked to the possibilities fairs, conferences and contests have in favoring both competition and collaboration in a particular economic sector. In addition, events are able to strengthen the self-identification process of a certain place and its features.

Having clarified the specificities and capabilities of design and events, we are now going to present the birth of the *Zona Tortona* brand.

Zona Tortona: the first international design district

In the previous paragraphs we outlined the landscape in which, in 2000, the *Zona Tortona* branding project was initiated. After organizing several small events in the 90's in their location in Savona street, the *Recapito Milanese* association was invited by Superstudio to manage its launch and then its consolidation as a new super-location. As mentioned above, Superstudio was located in the former spaces of General Electric, about 10,000 m² in the middle of Tortona street (the location was then named Superstudio-più).

Thus, the initial project begun. The *Recapito Milanese* group was composed of architects, designers, and people with experience in communication, design management and entrepreneurial, media and professional fields.

The detailed elements of the project are:

- *Scenario*: an industrial engineering space that wanted to “open” in April, during Design Week, with the launch of an initial, important, and highly significant event.
- *Short-term goal*: introduce and promote Superstudio-più as an innovative and appealing post-industrial location, suitable for hosting events in the design and fashion fields, outside the institutional environments located mainly in the usual Fair spaces.
- *Mid-long-term goal*: communicate and establish the area as a point of reference for the city and for the rest of the world during and after *Fuori Salone*, stressing its innovativeness, quality, consistency, attractiveness and ‘fit’ for a variety of fields (design, fashion, arts, food, etc.).
- *Constraints*: zero budget, short timeline (three months), the dimension and typology of the space (still to be emptied and renovated), a not very well-known area.
- *Opportunities*: big spaces, intriguing atmosphere, loft design, freedom of use, novelties to discover, presence of *Fuori Salone* inside *Guida d’Interni*, connection with the *Salone del Mobile*.
- *Concept*: temporary events, organized initially with all the local stakeholders, characterized by their highly recognized international standing in design, with the objective of renovating a district, and reinventing its DNA in tune with contemporary movements.
- *Launch project*: an international, alternative, very attractive event able to generate *buzz* and word-of-mouth publicity not only about the event itself, but also about the location and the area. For this reason, a strong leader was needed. Analyzing the context and using data, together with the property owners, it was decided to involve Giulio Capellini, who was already located “outside” the traditional

exhibition spaces. In summary: major international visibility of the brand as an icon of the best Italian design, great international reputation as talent scouts, quality and innovation of goods, new communication, and point of reference for *Fuori Salone* events.

- *First operative project*: the project envisaged the works of other exhibitors around the Giulio Cappellini exhibition space – in particular high quality, small productions of great Italian and foreign design. This choice offered a wider panorama of design along with the concept and the strategy. The event was a big success both for the contents and the public (there were more than 20,000 people at the opening) and it was an important starting point of a relationship with the international media. This model was replicated in 2001 with an initial important extension of the event locations being spread around the quarter and not just inside Superstudio-più.
- *Development of the project*: analysis of feedback from visitors, exhibitors, designers, journalists and – most importantly – local stakeholders, provided the team with important ideas and directions to improve the contents and services of the *Zona Tortona* area. In this way it was possible to start thinking extensively about the identity and the image of the area. First, it was clear that the project would be a shared project in particular with local stakeholders, the owners of former industrial spaces that were becoming more available, and which were offering different possibilities of dimension, composition, position and type of renovation of the spaces. The increasing availability of these locations was in line with the demand for alternative spaces that were particularly suitable for specific scenography, site-specific installation and settings.

The experience of *Zona Tortona* was therefore born from a single specific location, with a specific goal and a temporary event, and was then disseminated around the whole quarter, which in a short period of time became one of the most important and recognized design districts of the world. We are going now to closely look at the design brand project.

The branding project

The design strategy of the *Zona Tortona* brand was the “secret” of its success. It was actually designed by thinking about the area it had to represent: an almost unknown urban area.

Two words were chosen: *Zona* which is also easily understandable in English (“zone”) and *Tortona*, which is the name of the principle street of the quarter. The brief was therefore based on the selection of a “topographic” name that indicated a precise area, was easy to pronounce and was understandable in many languages.

The red dot, in which the two words were written in white and with a sans character, was chosen in answer to a specific



Left: Zona Tortona brand in 2002 Source: www.indesignlive.com

Right: Zona Tortona brand in 2009/2010

problem: how to clearly and simply point out to visitors the existence of dozens of events spread around the area? Indeed, these events took place in several locations and were “lost” in a neighborhood of factories, workshops, shops and residences, which created a difficult route to follow.

A map would have been the most obvious tool, but it was decided this wasn’t sufficient because of the physical characteristics of the place and its availability in a pre-smartphone era.

In addition, there was the need to communicate in a clear way with the media about the ever increasing number of events being held.

Fairytales were very inspiring, specifically *Hansel and Gretel* by the Grimm brothers. Thus, the red dots were used to indicate the path: 3,600, 12 cm diameter red dots, made from thin pvc, were stuck (and then removed) every 2 meters along the sidewalks starting from the subway station of Porta Genova, going up to the famous iron bridge and through the streets of the area, into the courtyards and the event locations.

The red dot became famous because it was useful, simple, effective and free to use. With its white writing, the *Zona Tortona* logo went viral: everyone used it to ask for information, to make appointments, as invitations, and as a way of celebrating their presence (“We are in *Zona Tortona*”).

However, the complex and well-structured project of “hospitality”, created by services and communications, and defined differently for the needs of different local stakeholders, was one of the most important parts of the strategy.

A very important tool for the involvement of the stakeholders, together with co-design, was the foundation of the *Zona Tortona Association*, wanted by *Recapito Milanese*, owner of

the *Zona Tortona* logo and general representative of the project. For several years *Recapito Milanese* had played a very important role in managing the project. However, after some years the owners of the locations chose to coordinate with common interventions and investments made in the area. In 2010 some other corporative issues contributed to the fragmentation of the common purpose and collaboration that was at the root of the success of *Zona Tortona*, which, in our opinion, today needs some additional integrated projects (in some ways this is what BASE is doing). In addition, the social situation is no longer sustainable in terms of the effects that the whole operation (over time) has had on the territory: rental and sale prices are very high for business and private properties. So for this reason, other areas of the city, such as Ventura-Lambrate, Porta Romana, are attracting creative workers and other residents.

However, the life-cycle of “attraction-clustering-expulsion” is very hard to deal with and the balance between private interests and the common good is very delicate.

4. Conclusions

As Maurizio Carta states, creativity and innovation shouldn't be associated only with the attraction of population and activities, but they should be used in order to generate new economies, improving the quality of life, and to promote civic virtue (Carta, 2014).

We cannot claim that the project *Zona Tortona* was able to deal with all these matters and, as we have said, there have been some civic and social issues connected with (if not provoked by) the renovated identity of the area. However, we

can definitely state that this project was successful and forward-looking for the multiple reasons mentioned above and it can also be studied as a pioneer project of its kind.

We can identify four main values that were integrated under the *Zona Tortona* project umbrella: visibility, attractiveness, hospitality, and fulfillment. These values also became part of every single integrated project and of specific events, before, during and after Design Week; everything was planned according to these values.

The Design Week model is actually an international model (Lacroix, 2005) with more than fifty-five cities hosting their own Design Week. The *Zona Tortona* model and its method have also been used by several other areas of Milan, such as *Brera Design District*, *Ventura Design District*; while other areas focusing on future development of a design district area are Porta Venezia (with *Porta Venezia in Design* project), Porta Romana, Porta Nuova, etc.

It must be said that public institutions did not take part to the *Zona Tortona* process. Only in the last few years, especially with Expo 2015, did public institutions begin to appreciate the strategic value of (well-planned and designed) temporary events. The branding of *Zona Tortona* and the general clustering of the neighborhood happened without any institutional intervention and outside urban planning policies.

Therefore, can the process that made Zona Tortona “the” place for design be considered a project of Design for Territories?

If we think about the traditional design process, which starts with a commission and a defined brief, then the answer is “no”.

If, however, we think about the common vision, which was at the root of the different initiatives; the creation of a

community of stakeholders, who were all different but similar in their intentions, then the answer is a resounding “yes”.

As we have said, the identity of this area has to be re-imagined again, since places and – as a consequence – their identities are not fixed but change through time. Seeds of this re-generation of *Zona Tortona* identity have been planted by initiatives such as BASE and MUDEC, with the participation of the Municipality. Any new vision should go beyond business and open up to experimentation and innovation for the quality of life of all citizens and city users. Today we cannot talk about innovation without being aware that every innovation should – first and foremost – be social.

Milan is the perfect city to experiment with change, because of its size, its history, and its community, all of which constitute its Territorial Capital. And being able to deal with change, innovation and evolution is precisely the province of design.

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Design Networking. Local systems of collaborative economies

by Maria Antonietta Sbordone

METADESCRIPTION

The present paper introduces the experimentation of the Social Economy Network Model, "La RES" in the lands of Don Peppe Diana, promoted and supported by "Fondazione con il Sud".

KEYWORDS

Networking, social economy, social production, human social networking

ABSTRACT

The "La Res - Social Economy Network" project on confiscated mafia assets in the lands of Don Peppe Diana – a vast area in the province of Caserta – has re-thought local development in the agribusiness, social and communication tourism supply chains, thanks to the commitment and hard work of people who have been working to define new rules to set up a local network of economic and social relationships. The social practice of collaboration including both for- and not-for-profit production sectors rests on solidarity and on good practices, and is documented through projects closely related to the places where they have been carried out. The present paper presents the state of the art, is based on an intense past and goes through the phases of the design networking process, encloses the ideas and future perspectives inspired by a bottom-up development model that helps communicate the territory through a collective tale.

1. Human design networking and contextual knowledge

The places represented as they are in their present state result from an uninterrupted process that has transformed the physical and immaterial features of the living settings. The distinctive features of these places are the outcome of a transformation process which summarises an ever-evolving phenomenology, reflecting its cultural and social dynamics.

The actual nature of the territories can be interpreted as the expression of the complex morphological geography of the places, production areas and systems of social aggregation; it reveals the relationship existing between Man, the environment and organisational systems, that is exemplified by the manifestations of the various languages of material culture. The functional intersections created by the different spheres of interest generate specific local economies which transform territorial areas into districts of specialised productive activities and related services. The network of local relations based on shared capital, or on family and friendly relations which characterizes social, cultural and productive activities, represents the specialization which every territory deploys.

Becattini (2004) mentions “contextual knowledge, the set of uncoded knowledge which grows in different enterprises and their local relations”.

The challenge today lies in the hybridization with innovative and collaborative processes that may revitalize the system of values and of contextual knowledge. The aim is to prefigure districts of cultural integration and of economic collaboration; a landscape of relations, characterized by productive and educational activities, by exchanges of productions and ideas. An example of the success of innovative practices in the transformation processes of the context,

which is based on a kind of multi-sector integrated supply.

Relational economy, social quality, responsible coexistence

The contribution of the collectivity to the construction of the visual identity of the territories which today are generally referred to as “Terra dei Fuochi” - an area including the farming lands around Aversa, in the province of Caserta – has long been frustrated by choices and decisions of various kinds.

The pressure of the Mafias with their system of widespread and pervasive complicity has resulted into the disintegration of social bonds based on reciprocity and trust, that is the bonds that grow in a healthy society where mutual trust is a “visible fabric” (Genovesi, 1754) founded on solid civil principles whose application is for the benefit of everyone. Belonging to a common, original fabric imposes constraints, the joining and sharing of people strengthen structural bonds.

The sense of community is reflected on all the relationships existing at the basis of aggregation phenomena in a given territory. It is the identity of the places expressing their distinctive characteristics that acts differently on people’s sense of belonging to a place.

The characters which do not determine immediately the aggregation processes of an area, are the ones which, to realize themselves, need the acquisition of a sense of community, which describes “the strength of bond with a place explaining emotional and cognitive dimensions related to the places in consideration of the possibility of mutual relations that go beyond mutual indifference; in fact it opens up mutual trust, the meeting of needs and the possibility of access to available resources” (Arcidiacono, 2013, p.15) The sense of

community activates the setting up of connections between people, in networks of trust-based relationships entailing involvement and active participation in the development of the community: “a sense of *ourselves*, the social responsibility, the possession of abilities / skills and the perception / awareness of one’s own power are the qualifying characteristics of the building. Without them there is no development of the community (...) there can be no promotion of wellbeing in the global sense of the term if there is no sense of social responsibility, power and skill” (Martini and Sequi, 1995, pp.23-24). According to McMillan and Chavis (1986) some elements help the construction of the sense of community in a place: belonging, which expresses the very sense of existing and that of being part of a real community; power, meant as the ability of a community to exercise its influence; the power of self-determination and decision-making in choices; the meeting of needs and exchanges that have rewarding consequences and increase people’s satisfaction with belonging to a successful community; emotional connections and the subsequent sharing of symbols create easy bonds in the presence of community life events, as well as the ability to face difficulties and overcome them. Communities meant as territories, which are built on a strong aggregative understanding between people, will predispose to the challenges of global networks. The structure of community networks based on family networks as well as on extended groups reaching out to the whole community, takes on a fundamental role in contributing to the shares capital of the territories: “They are the basic space in which the identity processes can find support and expression. In this sense, associations, self-help and social lobbying groups, as well as those working to protect fundamental rights and promote citizenship values,

environmental rights, etc., have the function to act on the environment, making it more responsive to the needs of the community and of its members” (Arcidiacono, 2015, p.16).

2. Boundaries of vital economies: network nodes, “the freed assets”

The “La Res - Network of Social Economy” project has been the driver for the creation of an entrepreneurial network, thanks to the legal instrument of the Network Agreement (L. 04.09.09, n. 33) which allowed the aggregation of enterprises on the basis of an organized and lasting partnership, while preserving their independence and individuality. The network of businesses for local development was created, with the aim of contributing to the fight against organized crime, promoting an alternative development to the criminal one, giving it evidence through the establishment of a social economy. The adoption of strategies and joint actions aimed at undermining the so-called mafia share capital, acts in their own social context, where the network of relationships, fuelled by members of criminal organizations, is strongly rooted. Therefore, the constraints of a dense network of complicity become real opportunities that are developing through collaborative practices opened to new forms of entrepreneurship built in the social arena. The need for a substantial change, a shift in land management, started from a process of re-appropriation of living spaces; public spaces, areas of productive activities, spaces for civic activities that are given a new life with the aim of re-establishing their meaning and role. This required an action of re-appropriation of the assets seized from criminal organizations, the

so-called freed assets, which become crucial nodes in the network, around which development opportunities are concentrated. Confiscated assets constitute the nodes of a social and economic network, a land poster that makes itself affordable again and takes the opportunity of renewing its mission, founding development in social terms, guided by respect for the environment and for the rules of decency and legality.

Freed assets from constraint to opportunity

The model of sustainable development in the domain of the mafia territories is a central theme for the regions of southern Italy, and calls for a response that was given by *Fondazione con il Sud* in 2010 with a “Call for Local Development 2010, Fondazione con il Sud”, addressed to eight territorial areas of regions including Calabria, Campania and Sicily. The answer from the territory of Caserta, known by the nickname Gomorra, was clearly formulated by a few third sector organizations working in social activities on the territory. The intent of the Foundation’s call was to come to a mobilization of all local healthy forces to create opportunities for development from discovery and accessibility, through the enhancement of existing resources. The intervention model identified is based on the idea of multi-sectoral territorial development, where local third sector organizations have planned a series of actions that bring together social and economic dimensions. The rediscovery of the cultural dimension of the places by optimising human capital and interpersonal relationships is at the core of the new development model. The designed actions, which have received a substantial support in the implementation phase, were examined in the draft stage and then submitted for

selection. The path included a first stage of design ideation, by a Local Core Promoter, including at least five subjects, of which at least three belonging to the not-for-profit sector, followed by a planning phase reserved to the design ideas shortlisted by the Foundation. The executive projects which obtained a positive evaluation received a grant, covering 80% of the total costs. The establishment of the Local Core Promoter, consisting of 16 subjects mainly from the not-for-profit sector, after an initial phase of ideation, has realized the detailed engineering subsidiary, expanding the partnership to other parties, with the participation of public institutions, universities, employers, organizations and private “for profit” subjects. The La RES - Network of Social Economy project, then, was born by a process of sharing and active participation of local development actors, identifying as the responsible entity for the partnership, the Committee Association Don Peppe Diana.

Complex geographies

The territorial context in which the project La RES operates, is a part of the province of Caserta, a vast area of the Agro Aversano and of the Domitia coast - an area suffering dynamics of social exclusion and environmental and urban decay. The local economy is mainly based on farming, with some outstanding productions (buffalo mozzarella, fruit and vegetables ...); as far as seaside tourism is concerned, due to the high level of waters pollution and following the 1980 earthquake, it has almost disappeared, causing the abandonment of the property, which is now mostly occupied by non-EU immigrants. Over the last decades, the construction sector has also grown, fuelled by forms of building speculation and by state and local government spending, largely affected

by organized crime. The local economy and many public administrations are under the yoke of the mafia and criminal economies. The proceeds arising from the Camorra's illegal business (trafficking of drugs, of toxic and hazardous waste, human trafficking, usury, racketeering, etc.), have created a sort of circular economy, affecting the entrepreneurial and political dynamics of the land and free competition, jeopardising healthy enterprises, quality productions and civil coexistence. A territorial context where the lack of infrastructure and services, in which the rights of free citizens are "privileges" granted to few of them and are controlled by camorra-related economic structures. The most problematic evidence of this gangster plot is in the conditions of environmental decay which is reflected in the health of the population, with the highest levels of mortality, morbidity and bad quality of life in the region and the country. The fight to organized crime by the state has recorded a considerable increase in recent years mainly on the repressive side, through an attack on the financial part called "white collar's", with the confiscation of vast fortunes accumulated illegally and improperly. The territory includes more than 60% of the total assets confiscated from the mafia in the province and, in the same geographical area, there are the most significant and symbolic experiences of social use of property recovered from the mafia, linked to an innovative socio-health integration system, ("individual therapeutic rehabilitation projects" supported by the Budget of Health) and of production activities in the agrifood industry.

3. Design networking

Development of social production

Local development represents a real opportunity to respond to the competition between cities, regions and states in the attraction of investments and in the inclusion in international economic and cultural virtuous circles. In parallel, it becomes a driving mechanism to rethink the management of the territory in a way that respects identities and vocations of the local systems, paying attention to the satisfaction of needs and to the enhancement of the potential of people. The paradigm on which the evolutionary scenario of local development is based proposes a multi-sectoral strategic model that includes and appropriately intervenes in the complex system of existing relationships. It is based on a model of exchanges and relationships that involve the interaction network, in which it is possible to underline characters such as searching or scouting in terms of knowledge of local resources to bring out and nurture individual talent; the use of widespread and cross-cutting technological innovation with the building of collaborative networks; the ability to welcome as well as tolerance which substantiates any inclusive society; a different conception of time, in a scenario in which development is increasingly linked to the capacity to construct a positive institutional climate and economic exchanges, founded on long-term, trust-based relationships.

Multifunctional networks

Social cooperation aimed at local development expresses its action on the territory through a network of tangible and intangible relations between people with different skills, degrees of knowledge, and places delegated as centres of

production and cultural activities. The relational system of social cooperation can be considered as a network of actors whose actions are closely linked and interdependent. The different systems of production of goods, tangible, intangible and digital alike, are characterized by the following factors: work in the supply chain; taking resources from the land and turn them into knowledge and relationships (social capital, imitation, skilled work, services); mobilizing people extending the family and interpersonal relationships to community service; converging in the construction of the components of a network. This means managing the network structure with a consequent loss of boundaries, whose dominant features are the influence of the external environment and the actual communication with it. The interactions that take place from time to time between the various components of the system emerge, so as to be able to talk to each other and create opportunities through the integration of skills, to create new added value. The emergence of a knowledge-based society, which, moreover, splits internally wide areas of traditional production which are only briefly affected by innovations, transmits the values of the new Network-based Information Economy to all levels of the network. The peculiarity of the cultural system of social cooperation ensures that it will become a privileged field of study for the production and spreading of different degrees of innovation. The innovation process takes place within a network of organizations that are involved in the filtering of ideas and in the creation of new cultural and social processes first, then production; the innovation introduced, must pass, at each step, assessments and comparisons, i.e. it must, be assessed as it was conceived, produced and managed previously. Thus the need is evident for processes capable of generating

production and distribution systems legitimized by a group, by a system of actors, whose specific skills are predisposed to collaboration and cooperation, within the innovation process. The resources of social cooperation produce knowledge, and through the horizontal distribution structure the role of those who create it can be devised, supported by figures who translate it, and still others who apply it, by coming up with innovative procedures and implementation tools. The so-called “Capitalism of networks” (Rullani, 2011) triggers an opportunity to spread knowledge, propagating from node to node of the network and growing horizontally, subverting the rules of vertical propagation, typical of orthodox capitalist processes. However, local networks alone are not enough: they will have to face the challenge of extending in a trans-territorial and multi-sectoral sense; looking for new partners and increasing the space of interactions, converting fluid intelligence, an intangible asset, capable of mediating between enterprises, knowledge workers, users, funders and the territory.

4. Contextual Design

Relevant collaborations

The spatial development strategies on a local scale refer to the third-generation development strategies in which the “visioning” is geared to the building of long-term scenarios, for this “visionary” approach that can support the development strategies reconfigurable over time and capable of creating consensus. The dynamics that are used to achieve these objectives have the following characteristics: bottom-up processes that arise from local contexts and from listening to the

voices of the people, and on the other side of the future users (through user-centred approach paths); negotiation processes that include the complexity of the social and business entities involved in the development process, able to increase the forms of participatory democracy; development processes for the resources that require cooperation between the actors of local development.

After defining the priorities, the network approach shared the “City” program, the ecosystem of the actors involved, converging on the projects to make investments and to support the social and economic fabric together with enterprises. The first step, therefore, refers to the definition and configuration of a network of actors promoting the issues of local development. The network will work with a view to the consultation and negotiation between the various actors, promoting an appropriate development focused on the priorities and the transformation of these into financially sustainable and viable projects and actions. In this way the heterogeneity of the actors of the network will focus their attention on the territory, central element, from where starts the process to check the coherence of the projects submitted, compared to the development strategy shared. The verification of vocations and investments compared to projects which are planned in the area, will see the coordinated activity of the network’s actors, who will focus on the following issues: the validity of planned investments and their effect on the obstacles to development; the ability to formulate offers that could reach internal and external beneficiaries of the intervention; the coherence between the intervention strategy and real territorial dynamics.

Design Tools

After having defined the characteristics and the relative criticality of their range, it is possible to identify some general guidelines that characterize the intervention at the local level. Then if we consider the territorial system of interest for the design, the design action will take on different natures:

1. A social one: being a negotiated process. The intervention on the territory, meant in a sustainable development sense, cannot be qualified as the result of a decision imposed from the top but it stems from a process of negotiation between parties that represent different interests.
2. A heterogeneous one: design activities can be compared with the economic and technical-productive dimension, extending the field of activity to the practices in the social, cultural and environmental dimensions.
3. A negotiating one: the design action is part of a wide process that connects the public and private sectors and involves different levels of skills and of institutional and economic actors, such as the individuals themselves, the representatives of the social partners, etc.
4. A connective one: the design activity can itself be the tool to enable and facilitate the creative processes and, therefore, the sharing of knowledge between different communities, focused to the territory in its complexity and in its trajectory of change.

Therefore, designing a service element or a system of products with a view to territorial development implies a comparison with activities of an organizational, negotiation and management nature that become an integral part of the design action. The hypothesis that motivates the design

approach is that the territory is considered in its participatory dimension, which characterizes its actions, being an activity of a collective nature. The premises, so that we can realize the changes, are based on processes that have a strong relational and social component.



Social Couture Castelvoturno "Casa di Alice"



Social Production by "Nuova cucina organizzata NCO"



Productive chain "Facciamo un pacco alla camorra"

Design of contextual knowledge

The project was born and developed in contexts where co-operation and collaboration are an essential part because of the complex system of interests and realities, which make up and identify the territorial system. The local systems express a contextual knowledge and it is that knowledge that is established within a community whose participants agree on a set of experiences, language, common culture that they share. The significance of the places is conferred by the direct experience of the social actor who elaborates that context. Recovering this type of knowledge, obtained by living the places depending on the context of relationship, makes the design an interpreter of a tacit, uncoded knowledge. The design as skills organization is able to effectively intervene

in such mechanisms, carrying a contribution which is evident on one side in the size of 'how to do things' in terms of concrete solutions, on the other hand, by acting on the mechanisms of prospects for action that can favour wider processes of local development. Therefore, design can also serve as a strategic visioning, meant as the ability to imagine development trajectories and to anticipate new relational networks. Innovative ways to experience in the perspective of action, for example in scouting skills useful to the territorial system. Design outlines specific operational solutions derived from forms of contextual nature, clarifies extended participation, seen as a form of co-shaping of the development project through cooperation among proponents and beneficiaries subjects. If we also consider the design tools available to designers, we can identify different categories:

1. a methodological / organizational one with design tools that support the analysis of territorial resources (of local context, of human activities, of users...);
2. one of information and communication and dissemination of information;
3. one of facilitation and involvement in the creative process;
4. a display of the design solutions and of the activities within the entire process.

The aim is, therefore, to introduce an innovation, which spreads at a territorial scale, encouraging the connection between places and people, lifelong learning, enhancement of the material elements such as contextual knowledge, culture, and traditions. Finally, it is necessary to adopt an approach that promotes a communitarian form of project that can act simultaneously and in an integrated manner on strategic, organizational and design levels.

Contextual design: Methodology

Contextual design is a methodology that aims at developing creative innovation processes, that establishes design practices of the contexts by experimenting with an open model through specific tools.

The main aim of the methodology is to define a shared vision that can guide people who do business and who engage in the social arena to formulate the demand for innovation, in the creation and testing of innovative concepts through co-design practices. Designers, researchers, companies, users and contexts of life are the resources that are part of the creative ecosystem where the method can develop. Practices and contextual design tools include ‘collective’ and ‘connective’ intelligence in all the stages of the process to ensure a rich and complex interaction. It starts from the “Thinking” design approach, which identifies a series of actions to implement open practices of analysis of the identity elements of life contexts, with a critical approach to the resources and contextual knowledge. This process provides the conditions to seize the creative, productive and economic opportunities offered by local ecosystems. The methodological approach configures a system in a dynamic balance, based on the principle of continuous transformation, in relation to changes in environmental conditions; the model is the network, in which relations based on skills come together in the nodes to develop connections, generating answers to specific needs. In the economy of the network a key role is played by the ‘interference’ between nodes that represent a random figure, source of information that carries out an action of implementation and is able to radically change the network configuration, and thus the project.

Phases of the methodology

The contextual design methodology is structured in different phases: Context, Fiction, Open visioning. Opening the Contexts is the phase of reception of the environment, of the life contexts with specific actions and instruments, and is the central element of the methodology. Involving different types of actors who collaborate (researcher, designer and companies) dynamically (users), the relationships between the parties are defined and will distribute information, which is essential to identify the demand for innovation. The Context practices adopt methodologies which take shape in the actions of looking, of listening, of speaking, of touching, of coming in contact with the family ties and neighbourhood networks, etc., actions that are able to identify data and sensible information.

This data forms the narrative of the life contexts, therefore data collected during the meetings is shared with all the stakeholders that will be involved in the development of the projects. The exchange between the parties involved will then be transferred to the communication, which helps define the Narrative Stage, whose goal is to produce concept maps of the conversations, the stories of local knowledge, with the implementation of a narrative content database for every design focus. The results of the Narrative phase merge into the next stage of analysis - Sharing and Stabilization, which selects, mixes, reworks and reinterprets the data in an open forum of Coordination. The Coordination Forum aims to promote mutual learning with the widest possible participation of actors, to input new energy according to a network approach oriented to the sharing of common challenges. The activities focus on networking skills, which establish a horizontal coordination through group meetings

for an open integration and open sharing. The objectives of the meetings are the following: to promote the 'functional interplay between actors, equality between the sectors and specific skills and equal opportunities through accessible, adaptable and efficient systems, which are able to involve in the creative process. The analysis of the Narrative through multimedia (audiovisual, etc.) creates additional information which responds to the specific needs of the research group: for example, the production of detailed information to analyse the evolution of the conversations and to monitor their effects in terms of greater or lesser interest in the issues discussed within the research group; processing the parameters to calculate the incidence of a certain action and to evaluate its degree of innovation; processing the concepts creatively if they are not clearly expressed in the exchange or if they require interpretation. After being shared with all the members of the network, these results contribute to the production of Contextual Narrative models in the form of documents, maps, drawings and any 3D prototypes that are made available for the network to discuss changes and additions. The next stage of the creative process - Open visioning - generates advanced visions of the nodes, where the contexts, in which projects will develop, are defined. The disciplines involved, such as design, technology marketing and sociology, are fundamental to build the reference scenario. Other disciplines converge, according to the type of development project. The contributions generated in this phase are collected in a document called Vision prototypes, which has to be shared with the entire network so that everyone is informed about the scenario in which the innovation contexts are generated. The last phase, which aims at developing product-service concepts, is based on the principles of co-design with users.

After defining a number of concepts, the network of actors decides to draw up a summary of the proposals to define a common strategy in which all the resources of the local ecosystem can be invested. All the steps of the method can be continuously adapted to the changes generated by the 'factor of interference' meant as an unexpected element that is able to influence the development of the project



Casal di Principe Exposition
on loan from Uffizi Gallery



Casal di Principe youth forum

Confiscated good nowadays
Don Diana house





Left: Agriculture demarcation landscape
Above: Social agriculture



5. Conclusions

Design in the experience described worked as a system of actions put together to give a concrete turn to reality into another one preferable and desirable, characterizing, in fact, the projects that were realized. In this sense, design has helped to develop a light metaphor in opposition to the traditional cultures that tend to immobilize the life of the countries and consequently the life of people, consolidating the existing balances increasingly managed by strong powers. The design experiences developed in the Land of Don Peppe Diana have revolutionized the structure of thought first, then the economic one of a whole territory and as a result they have changed the social and cultural structures of those specific realities, where social ties have been disintegrated. The design process has continued and provided a group of people, who felt a need to change and wanted to find a different way for the development of the community, with a contemporary approach, imagining and creating a new vision of the territory. “Design, the task of designing, is a fundamental characteristic of human nature and an essential critical factor for the quality of life. The activities of the networks put in action by small enterprises related to La RES - Network of Social Economy, are a design activity that does not concern only the material aspects of production, the production processes, the products of the land, but also works on the social structure of the territory, showing how a different way of living, of working, of relating to the economy is possible and preferable. It is a design of social relations and cultures, a very complex task, which addresses problems that Rittel and Webber (1973) would define as “wicked problems”, i.e. problems not easily definable, that cannot be solved with linear logic and are, therefore, “difficult

to resolve” (Morelli in Arcidiacono et al., 2016, pp. 9-11). So, alongside the designers there are people who voluntarily put themselves on the line and with their ability and sensitivity, after years of pressure, imagined to become once again a “real community.” The tools that were given to recreate the basis to regain the lost power have set up a micro-economy that is gradually expanding and consolidating. “All these constitute a strong expression of a larger emerging phenomenon, according to which individuals and groups, noting the inability of existing institutional structures to solve complex problems, look for solutions from the bottom, rediscovering the possibilities of coming together, to do things together, to exploit the capacity, which is also inherent in human nature, to associate, to live and work together” (Morelli in Arcidiacono et al., 2016, pp. 9-11). The experience case-study of La Res provides a narrative account given by people who, in the first place, have risen quietly proposing themselves to redefine the rules of the game, in opposition to local logics. The motivation to make the environment liveable is the result of the cooperation between the people who have organized themselves into a solid and extensive network. The contents that hold together people, projects as well as public and private institutions in the network, have a significance that goes beyond the specific experience. The network with its lightweight construction is based on the principle of belonging to a place where it developed its own identity through personal acquaintances, family members, mutual trust and the building of a common mindset. The spread of this territorial network model is desirable and its replicability will surely lead to a greater awareness of the choices and mechanisms to prepare for its full implementation.

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Social oriented design for disused buildings. The case study of *MR*

by Marco Borsotti and Sonia Pistidda

METADESCRIPTION

The Magazzini Raccordati of Central Station in Milan. Experimenting methodological/operational platforms to define social innovation strategies to reactivate disused buildings.

KEYWORDS

reuse, interior, social innovation, place identity, Milan

ABSTRACT

The MR (Magazzini Raccordati) complex of Milan Central station represents one of the most impressive landmarks in Milan: it is extended for over one kilometre along two sides facing the street, rhythmmed by more than one hundred of storages. Such system, left in a persisting state of abandonment, has a negative influence over the contextual urban fabric. An intense design studio activity has been carried on at Politecnico di Milano over the presented case study, taking it as an opportunity to develop a methodology to approach design for built heritage with innovative architectural and socio-economic models through participated processes and social aggregation mix.

1. Introduction

The research investigates the possibility to develop a theoretical basis that, by joining teaching and multidisciplinary research experiences, could define methodological and operative platform. It aims to define new applicative architectural models, able to regenerate abandoned buildings set in urban and extra-urban areas, together with alternative socio-economic models for the reactivation of services supply through participated processes and social aggregation mix.

This is the assumption set at the basis of the theoretical-design-systemic approach adopted by the authors as coordinators of the *Interior Design and Preservation of existing built Studio* and the Graduation Studio *RMR/ Redesign Magazzini Raccordati*, part of the Master of Science in Architecture of Politecnico di Milano, (School of Architecture, Urban Planning, Construction Engineering, former School of Civil Architecture).

A theoretical framework: designing for the existing built

The huge unused heritage in our city represents nowadays a *potential* resource: specific reactivation strategies can act as a trigger for new relational systems.

The model of *design for built heritage* is a tool able to revitalize and make newly available an urban built complex, by respecting its origins and the potentialities offered through its renewed placement in the daily-use circuit, through the creation of innovative use-models.

Within a systemic design, the abovementioned strategical points set in the territorial reality have to be interpreted in the issues related to their present role in social and urban dynamics. Thus, from this analysis, resources and potentialities

useful to trigger regeneration processes have to be extracted (Trocchianesi, 2014).

A design idea as *possibility* that rises from the shaping identity deriving from the past, recognizing places and appropriating them again in order to develop innovative interpretations codes and to communicate them. This kind of project vision wants to reveal the elements of the urban context to transform them in topic for the design.

In this way the design can represent the link between the project culture and the practice of intervention, trying to develop scenarios through on field research.

Some of the teaching activities were carried out *on site* also, leading students in very closely contact with the tangible realities and different stakeholders.

Working with complexity: a multidisciplinary approach

The urban context is the result of a complex stratification process where the different ways of living have left permanent signs on the territory: every sign points to a multitude of meanings (Thackara, 2005).

Starting from the assumption that the city is at the same time *past*, *present* and *future*, it follows that the project for the existing city is contained in the city itself. Permanence and change, preservation and transformation are components related and essential. According to this reading, the first approach to the complexity is the recognition of tracks of the transformation processes. This interpretation allows us to transform the recognition process in a respectful project of the natural vocation of the city (Morin, 2007).

Once recognized the marks, the second step consists of the establishment of a *care process* of the diversified aspects contained in the city. This also involves the promotion of a *cul-*

ture of care, that directly involves the users in the preservation process (Emery, 2008).

Specifically, multidisciplinary and participated design experiences have been developed, aimed to re-admit one of the most relevant architectural elements of Milan –from the historical and territorial point of view – in the urban vital cycle: the embankment railway complex of the Central station, of which the *MR*, set along Ferrante Aporti and Sammartini streets, are the characterizing element (Finazzar Flory, 2005).

The *Magazzini* form a system of over 100 storage areas spread along over a kilometre on each side of the massive embankment. Organized in two rectangular-plan typologies, vaulted and with a unique entrance facing the streets, the storerooms have approximately 300 square meters in area each, and are since decades almost totally abandoned (Angeleri, & Columba, 1985).

That being so, the entire complex is facing a progressive deterioration, which condition has consequences over its contextual area (few months ago was completed a superficial cleaning of facades).

The abandonment of *MR*, once location of commercial activities, returns in the perception of the massive railway embankment as urban limit, an unsurmountable barrier set as caesura of the urban areas facing its two sides. Furthermore, the *MR* represent a daily proof of a paradoxical situation: the storages are the demonstration of an exceptional surface availability already built, but unused. Thus, they are a neglected resource to the community.

MR are property of Ferrovie dello Stato, who gave the rights of use to Grandi Stazioni SPA. They represent an exceptional opportunity to experiment alternative methods of governance, where the interaction between public and pri-

vate stakeholders based on wide and *bottom up* practices could lead to the development of proactive models of reuse of existing buildings, sustainable on the economic and social sides.

Thus, such approach could develop a design path that would have a significant involving impact in the territory, enhancing *place identity*, as an alternative to the plans prospected until nowadays by the ownership. The tenure has recently presented a program of interventions focussed on a general masterplan, which bolt divides the area in six destination of use (*food & market, media & service, entertainment & clubs, fitness & sport, retail & fashion, art & design, culture & education*), giving the management and investments to private capitals. That being so, the presented project seems not to have vocational correlations to the historical situation of the area.

The examination of case studies abroad has allowed to build a basis of experiences, in order to define a really sustainable proposal. We are referring to project such as *London Bridge Station* in London (Team London Bridge, 2017-2018); the *High Line* in New York (James Corner Field Operations, Diller Scofidio + Renfro, 2002-2011) (David, & Hammond, 2016) the *Viaduct in Zurich* (EM2NO, Architekten AG, 2004-2010); the *Viaduc des Arts* in Paris (Jacques Vergely, Philippe Mathieux, 1988-1995); the *Stadtbahnbogen* in Berlin (Jean-Michel Wilmotte, 2014-2016); the *Stadtbahnbogen Viennat* in Vienna (Silja Tillner, 1997-2000); *Keikyu Railway* in Yokohama (Contemporaries, Studio 2A, Workstation, Koizumi Atelier and Nishikura Architectural Design Office, 2010-2011) (De Poli, & Incerti, 2014).

2. Action/research approach

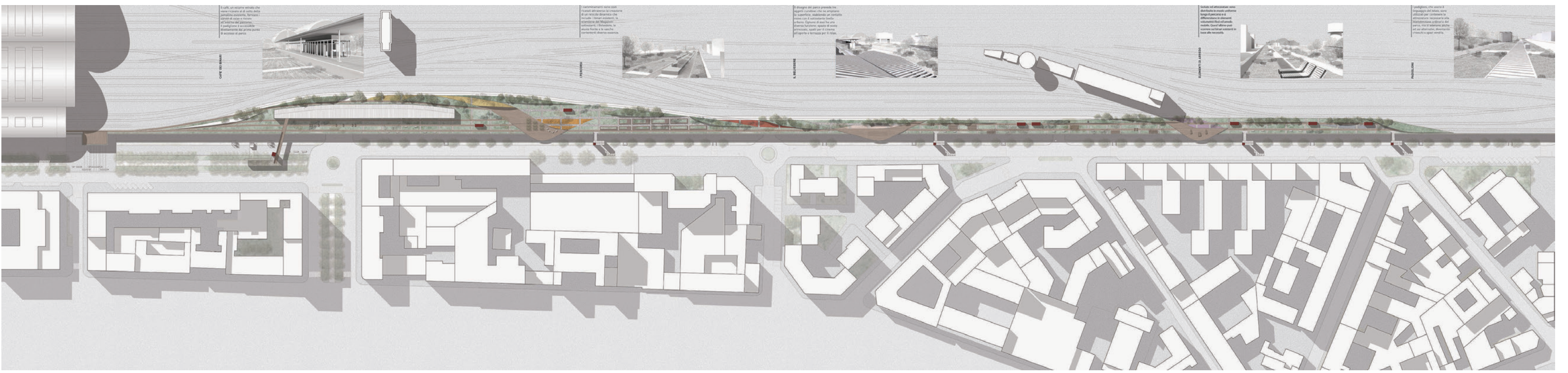
The research conducted at Politecnico di Milano was developed by establishing a multidisciplinary integrated network (apart from the disciplines of Interior Design and Conservation, contributes from Urban Design, Museology and Exhibition Design, Structures, Plant Design and Energy Recovery, etc.) open to the contribution of operators external from the academic world and involving the local social realities, association and administrations set over the territory (supported by sociologists, psychologists, educators, public administrators etc.).

The activity was organized since the beginning having the objective to develop in a coordinated and simultaneous way hypothesis of intervention aimed to the resolution of three primary design aspects:

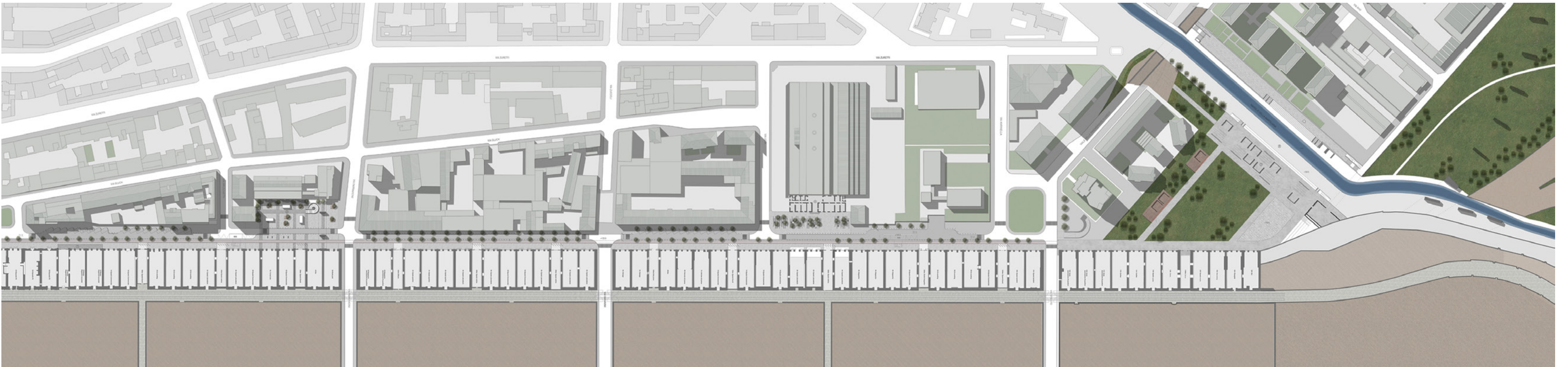
- The configuration of social and architectural models for the use of existing spaces: established through the constitution of a functional mix able to develop collaboration synergies between local different stakeholders, in order to create new activities in a framework of social and economic sustainability;
- Architectural requalification: developed starting from the examination of the decay state, the structure of guidelines for restoration that can be applied also in terms of self-financing, together with the design of ex-novo elements for the strengthening of existing heritage and creation of new services;
- The integration of technology of use of *smart energy*, able to generate the growth of an *energy awareness* system (Manzini, 2015).

From the diverse projects developed by groups of students, three of them have become Master thesis. The final objective of these experiences was the configuration of ways to reactivate existing spaces, aiming to identify as beneficiaries the numerous socially weak users present in the area. In fact, it is an urban area in which welfare-related associations are already existent to support immigrants, elderly people. Another target includes economically less protected people (youth productive activities with little access to income and disadvantaged classes supported by associations) together with the residents for which foresee collective functions based on *social innovation* and *green economy*.

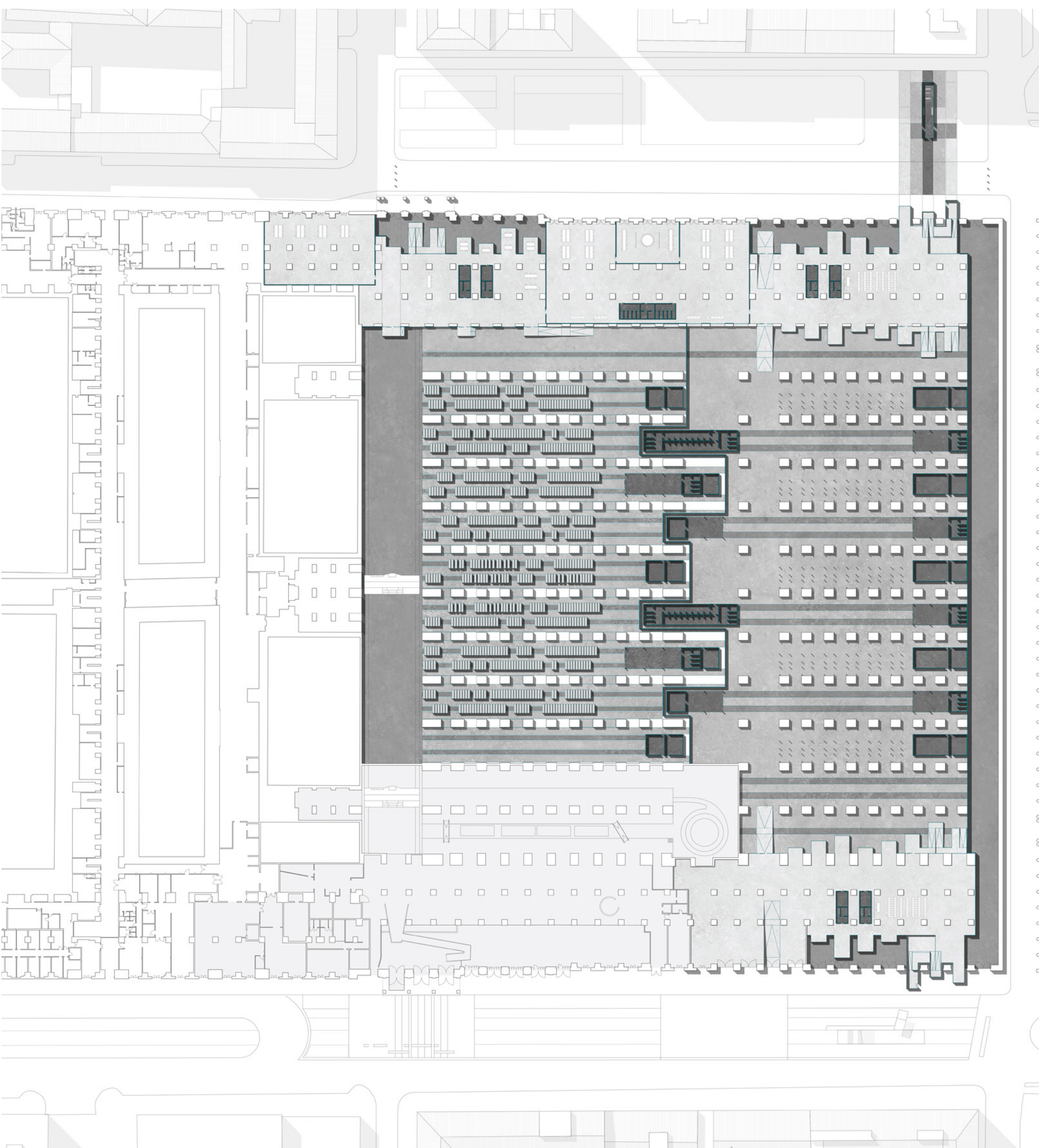
The finalizing of economic ways of self-financing is the founding element of these projects, able to sustain itself without relevant intervention of public funds and capable to trigger widespread phenomena in the area, which can strengthen its role in the urban environment (Murray, Caulier-Grice, & Mulgan, 2010).



Federica Ruggi, Elena Rizzico, thesis *La città nascosta: paesaggi inaspettati lungo il km Aporti* (The hidden city: unexpected landscapes along the km Aporti). Project masterplan.



Leonardo Battistini, Fabrizio Uzzi, thesis *Il km Sammartini. Progetto di riqualificazione e riuso dei Magazzini Raccordati di Milano* (The Sammartini km. Regeneration and reuse project of Magazzini Raccordati in Milan). Project masterplan.



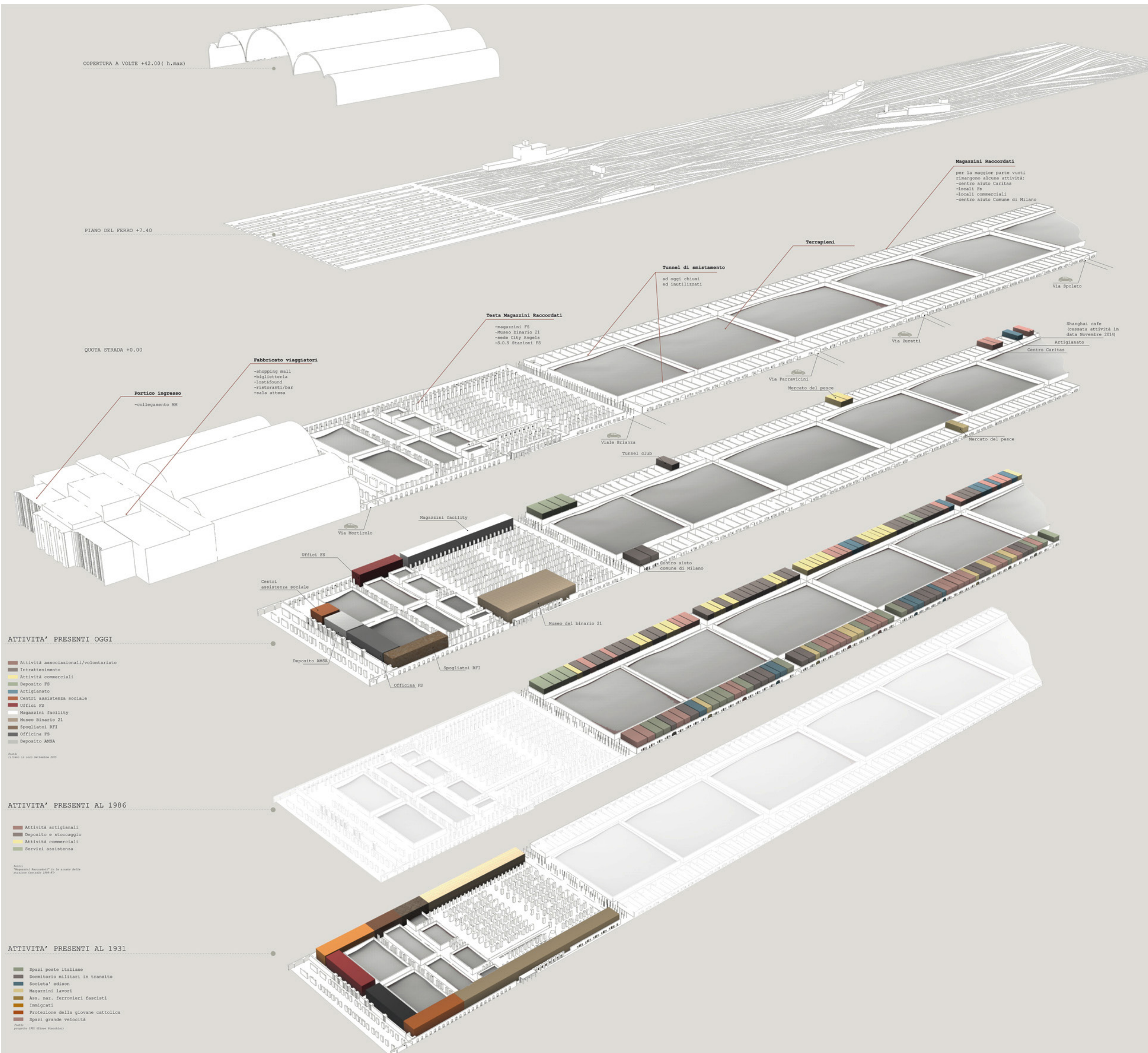
Alessandra Cancian, Tania Ruzzoli, thesis *La Stazione dei Dimenticati. Archiviare, Accogliere, Ospitare. Dall'emergenza alla quotidianità* (The Station of Forgotten. To archive, to receive, to host. From emergency to everyday life). Project masterplan.

3. State of the art and problem analysis

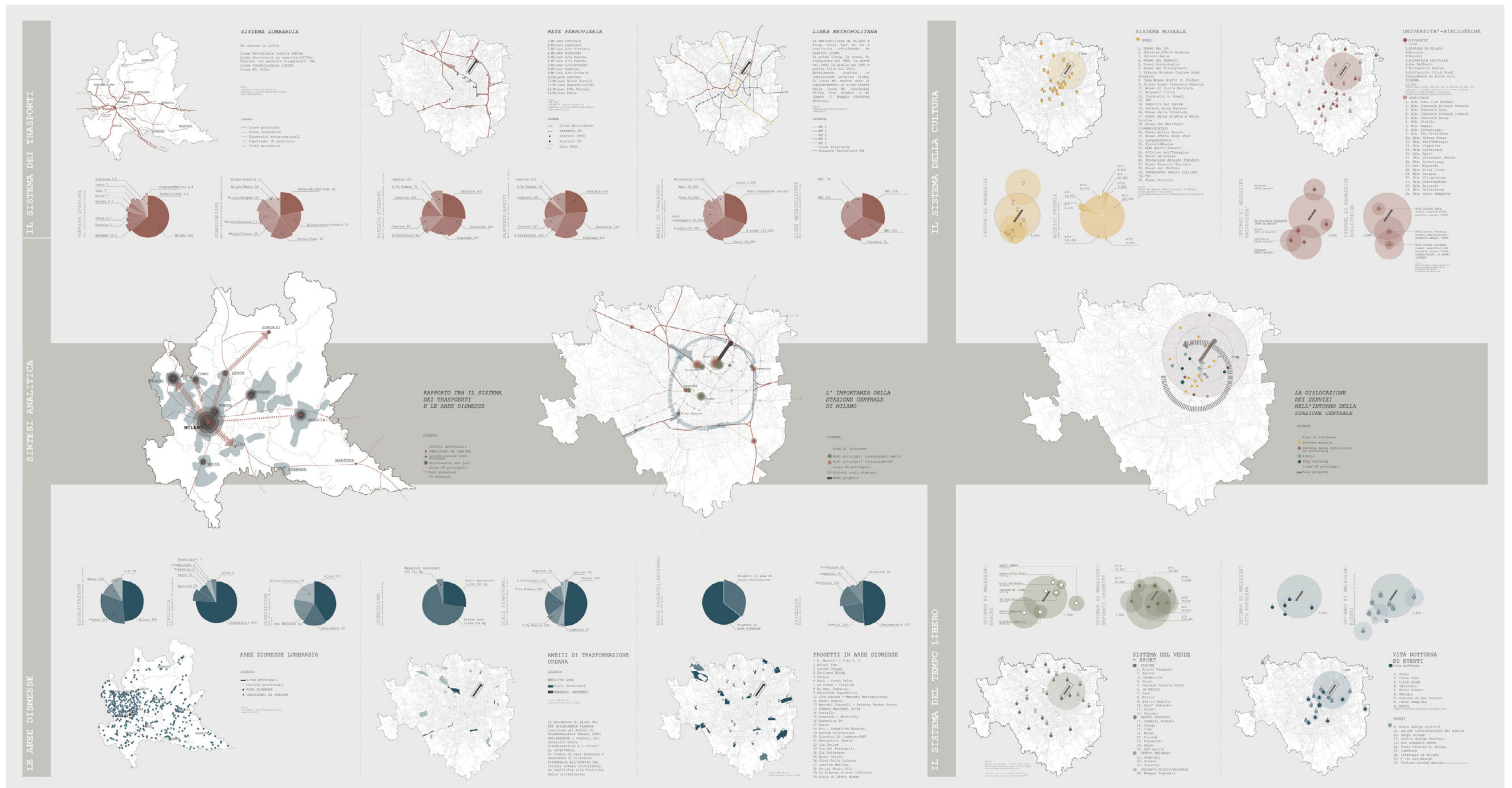
The urban area set at north east of Milan – established around the railway embankment – is since decades in an advanced decay situation. This condition is mainly caused by the progressive abandonment of *MR*: commercial and storage places set along the two fronts of the embankment.

Whereas the head of Central Station has been redesigned few years ago, changing its destination of use in a vast shopping centre, there were no recovery actions for the very commercial axis: the *Magazzini*, originally characterized by a high presence of artisanal and commercial activities.

Nowadays the embankment is not more the reference point of its contextual urban fabric. Currently, the perception is that this architectural element is a limit, which *out of scale* dimensions generate unintelligibility. Being an architectural heritage not producing incomes but having a negative impact over the economic and social aspects of the contextual area, its presence is in open contrast with the high potentialities, proved by important case studies abroad that have solved positively similar issues (De Poli, & Incerti, 2014).



Graduation Studio RMR/
Redesign Magazzini Raccordati:
 preliminary analysis layout, state
 of the art of the architectural
 system of the railway
 embankment of Central Station.
 Coordinators of the studio: Marco
 Borsotti, Sonia Pistidda (Master
 of Science in Architecture of
 Politecnico di Milano).



Graduation Studio *RMR/ Redesign Magazzini Raccordati*: preliminary analysis layout, railway urban transport system, system of brownfield area, qualitative and quantitative data synthesis. Coordinators of the studio: Marco Borsotti, Sonia Pistidda (Master of Science in Architecture of Politecnico di Milano).

4. General and specific objectives of the action/research

Objective of the research was to investigate sustainable solutions for the reconversion of *MR* and their relocation in the dynamics of the area, in order to define alternative strategies for the use of the spaces nowadays set in abandonment.

The aforementioned result could be obtained through the proposal of strategic and innovative systems for the governance of coordinated commercial, productive, social and cultural activities.

The critical parameters observed, from which the design processes have started, are listed synthetically as follows:

- Architectural decay of the building structure;
- Economic depression, caused by the abandonment of the spaces;

- Social problems derived by the union of the aforementioned issues, which arise in lack of services and safety, perceived and real both;
- The diffused intolerance regarding the persistent stillness, determined by the lack of concrete intervention plans by the ownership.

The team work has sided its theoretical-design activities to a constant attention and participation towards the numerous initiatives related to sensitization campaigns aimed to the recovery of *MR*, leaded by citizens from the area. Such consideration was needed in order to develop possible participatory design paths for the individuation of implementing models of reuse.

User led design methodologies have been used, in which the role of the designer is to work as *facilitator* of synergy processes between users and producers. Such methods were used in particular for the development of *open innovation* systems oriented to collaboration, sharing and multiplicity of the participants, together with the proposal of applicative models based on mixed public-private interventions.

Starting from the cognitive analysis of the urban area around *MR*, direct contacts with all the stakeholders began (e.g. local public administration, local associations, community activism). With the progression of these meetings the role of the designers has been identified as the mediators between *city users* – framed in different typologies – and their opinions/suggestions over an actualized and concrete use of *MR*.

In particular, were organized:

- Open days dedicated to the citizens, in presence of designers/students, during events organized by local associations;

- Data gathering sessions through interviews and specific questionnaires submitted to significant examples of citizens;
- Limited seminars with the participation of citizens' representatives, public administrators and experts in various sectors;
- *Think thank* facing experts in different sectors, finalized to systematization and implementation of data gathered and to test the work in progress (architectural design and socio-economical models).

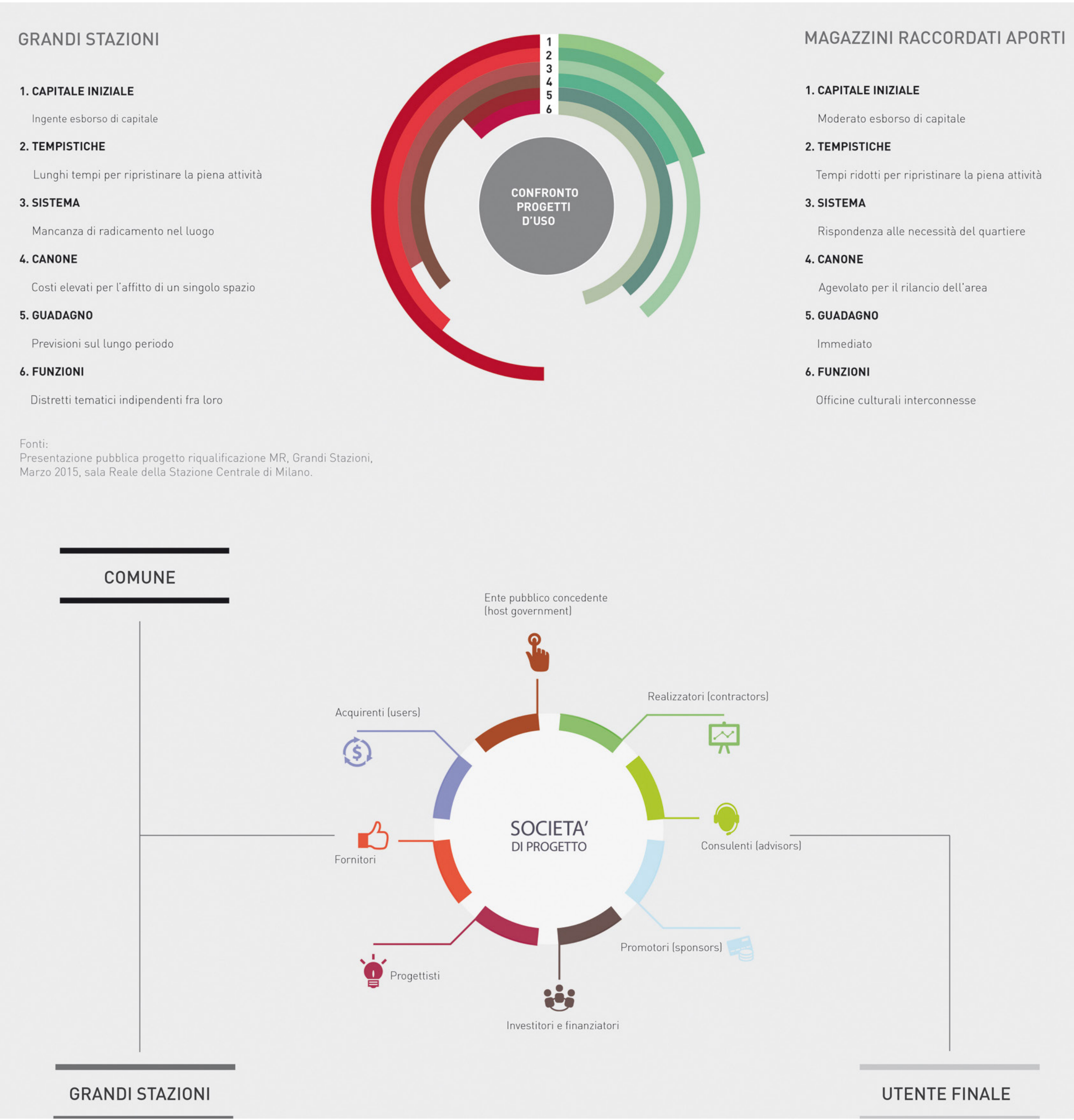
The purpose of this articulated platform is the implementation of a collective appropriation process of the abandoned spaces, defining a system open to the local community.

5. Development of action/research

The first step was the investigation of a *Desk and Field Research* for the mapping of national / international reference case studies, of the local conditions (architectural, social and economic characters of the urban context) and of architectural decay level.

In particular, the organization of collective work sessions allowed to acquire and implement useful information to outline the history of *MR*, their positioning in the social evolution of the area, as well as the current ethnic, social, productive and cultural nature, also achieved with interviews and targeted questionnaires.

The collected results formed the basis to develop *social oriented* patterns of use, identifying possible types of future users, able to ensure the activation of mutual synergistic partnerships, open to the social and productive stratifications of the urban system (Manzini, 2015).



6. Outcomes of the action/research

The design values

The project focuses on three interventions involving the head of Central Station below the floor of arrival and departure of the trains and the two sides of the railway embankment, on the Ferrante Aporti and Sammartini streets.

The three projects, despite the different formal results related to the various approaches of the designers, represent a coordinated intervention system, demonstrating the flexibility of a systematic approach with the aim to define common methodological tools.

The design has focused not only on the historical and social aspects of the actual urban fabric but also on the architectural material of the buildings, carried out through a geometrical survey of the existing structures with mapping of materials and decay conditions and instructions for their conservation.

This kind of approach provides a first level of action consisting in the *recognition* of the territorial system resources, by highlighting constraints and opportunities (open spaces, natural resources, cultural elements, space use etc.).

A second level of action searches the necessary balance between conservation and transformation, inquiring about the natural tension of these two ways, apparently antithetical, to relate to the existing built. These elements, if properly stimulated, are able to generate a renewed harmony of the overall system, especially with the inclusion of *ex novo* elements as mediator.

A last level of action starts a process of intervention on the materials, acting as a strictly *relational* operation because it represents the first test and implementation of the innovative models of use (cultural, social, economic) finding here a concrete compound.

Social-economic model

The interventions over *MR* have foreseen the definition of a mixed economic-social operative model based on the hypothesis of the creation of an intermediary association. This association would have administrative and management functions between the property and final users (lessors / users of each space): contracts, coordination, control and development (Murray, Caulier Grice, & Mulgan, 2010).

Besides the association, the ownership is in charge for the maintenance of the complex in its urban point of view. Furthermore, agencies of territorial governance have the responsibility of primary infrastructure works on the context, which include the integration of technologies for the use of *smart energies*, as foreseen by project.

The use of *MR* expects low-fare rents for determined periods. Furthermore, the contracts will have a *programmed-exit agreement* that would assure a continuous availability of the spaces and a change in *occupational energies*. Such system would allow economic weak classes (e.g. young professional, artisanal and commercial activities; activities with scarce access to bank credit or without an immediate profit) to have the availability of adequate spaces to start and consolidate entrepreneurial activity. All the aforementioned actions are set in a framework of users configured and programmed over the basis of the territorial analysis.

The economic model expects that all the tenants would be committed, by signing a contract, to the *restitution* in terms of working hours, of the market value not collected. The users will make available to the community their cultural and operative know-how, through artisanal and professional activities, learning programs, cultural spreading etc.

The aforesaid actions could take place in the singular space

and in shared areas or *stations* both, which represent the backbone of the available spaces. These spaces would be available to host activities self-produced by the local community, so as to ones from the nearby territory (residents meeting, photographic set, events, etc.).

In this strongly self-sustained system, maintenance and refurbishment interventions of interiors are charged over the tenants: such activities must be carried out following the guidelines resulting from the diagnostic, material and decay project of the building.

The new functional and architectural layout

In the head of Central Station (corresponding to the above floor of the trains), the parts facing the street are drastically reduced, in relation to the change of architectural shape: here in fact there are not the serial types of stores.

The entire depth of the building, occupied by MR for a limited portion, is completely free and it is defined by an enormous hypostyle hall, characterized by a dense grid of structural pillars that support the rail level.

Recent history has turned this railway depot in a kind of *city of forgotten*, not official but tolerated, with a large population of homeless and indigents, today reinforced by continuous migratory flows that involve our country. This particular condition suggested the development of a double use system.

The inner part of the building, (without the possibility of adequate facilities for the exchange of air and light) is converted into a mechanized archive with the aim to centralize and rationalize the numerous stores actually scattered throughout the city belonging to different public bodies (including Politecnico di Milano). Municipality of Milan will be

in charge of the management of the archive, receiving a rental income for the service.

The large remaining space becomes a first *Immigrant Reception Center*, able to adapt itself in relation to incoming migration flows, often very diversified and with moments of peak.

Flexible spaces for temporary stay, food service, hygiene, cultural and prayer activities are designed thanks to the arrangement of living space equipment. The system is formed by prefab box-shaped volumes, decomposable and combinable that can be configured differently according to a wide abacus of equipment, with specific supplies such as machinery system, sanitary facilities, kitchens, dressing room.

In moderate flow period, the space can be reconfigured as a great covered *square of cultures*, destined to events related to the multiethnic realities hosted in the urban area, in order to develop, disseminate and comprehend their cultural and traditional identity.

The management of the space is entrusted to the creation in network of different welfare and multi-cultural non-profit associations, already active in the territory, recognized as sensitive references, able to ensure the appropriate relationship policies.

Modular furnishing systems were designed also for *MR*. These ensure flexibility in use and low management costs, with modular independent systems, combinable and transportable. It comes to the concept of *box in a box* derived from the model of container or as structural grid that can be equipped according to the principles of the three-dimensional snap-fit frame. All equipment can be manufactured in self-construction by the same users.

The project along Sammartini street includes a small museum, the MUMAR, with the task of describe the story of *MR*,

to testify the historical and cultural value in the development of the city, having the aim to become a cultural system of territorial reference (Karp & Lavine, 1995).

The same project extends to the intersection of the railway with the nearby Naviglio della Martesana (Martesana Canal), redesigning a part of the area and waterfront to host a square with infrastructure for an open air municipal market and for recreational and sports activities.

Along Ferrante Aporti street, a linear park is designed on the railway embankment in the rail portion facing the street. This part is currently intended for maintenance activities and the project wants to define a green area to be returned to the surrounding urban fabric, very lacking from this point of view.

The park reconnects two different levels (the city and the railway) strongly divided until today. It is organized into thematic and botanical areas, equipped with facilities for leisure and entertainment, such as urban gardens, solarium, open air cinema, bar.

Some parabolic platforms cantilever beyond the limit of the front of *MR* underline the park, becoming an additional urban landmark, reinforced by pedestrian and mechanized lift elements that mark the road below in harmony with the serial nature of *MR* (Borsotti & Sartori, 2009).

7. Conclusions

Each intervention could be configured as a tool able to promote interest and social participation, by involving the main final users of this places: the inhabitants.

The proposed projects, verified by the citizens, present hy-



Pastoral community Giovanni Paolo II – Ambrosiano Refectory, Community hall, Greco square, Milan, 25 October 2015. *RMR OPEN LAB - Redesign Magazzini Raccordati*. An experience of participatory planning: an open graduation Studio/ work in progress exhibition: design tests for MR. Presentation of material and decay survey.

pothesis that activate development perspectives in the entire area through an innovative *place branding*. Thus, this action structures two kilometres of entrepreneurial activities related to cultural workshops and social aggregation spaces, in accordance with the welfare vocation already present in the area. The activities might be as follows: workshops, professional studios, artisanal and cultural ateliers, multimedia and cinematographic activities, art workshops, sport facilities, commercial activities, restaurants, markets, co-working areas, museums, rotating basis exhibition spaces aimed to the promotion of products, bike-sharing, associations spaces.

The total synergy between new economic, social and architectural scenarios in the projects actualizes the chance to obtain intense consequences in terms of renewed urban identity, by minimizing relative costs.

Acknowledgment

The text refers to the following thesis, Supervisor Marco Borsotti, Co-Supervisor Sonia Pistidda, Master of Science in Architectural Design, Politecnico di Milano, School of Architecture, Urban Planning, Construction Engineering, former School of Civil Architecture.

- Federica Ruggi, Elena Rizzico, *La città nascosta: paesaggi inaspettati lungo il km Aporti* (The hidden city: unexpected landscapes along the km Aporti).
- Alessandra Cancian, Tania Ruzzoli, *La Stazione dei Dimenticati. Archiviare, Accogliere, Ospitare. Dall'emergenza alla quotidianità* (The Station of Forgotten. To archive, to receive, to host. From emergency to everyday life).
- Leonardo Battistini, Fabrizio Uzzi, *Il km Sammartini. Progetto di riqualificazione e riuso dei Magazzini Raccordati di Milano*, (The Sammartini km. Regeneration and reuse project of Magazzini Raccordati in Milan).
- Although the paper is a result of the joint work of all the authors. Marco Borsotti is in particular author of paragraphs 3, 5, 6 and Sonia Pistidda is author of paragraphs 1,2,4

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TANGIBLE AND INTANGIBLE

Envision the nocturnal territory: Urban lighting as a design strategy for the recovery of places

by Helena Gentili and Daria Casciani

METADESCRIPTION

The paper aims to picture the nocturnal territory as an important design lever for cities and address artificial lighting as an urban design strategy for recovering urban territories.

KEYWORDS

Artificial lighting, nocturnal territory, lighting design, urban strategy, design toolkit

ABSTRACT

This paper aims to address artificial lighting as an urban design material and to picture the nocturnal dimension of cities as an important design lever for the recovery of a territory. This research has focused in the exploration of tangible and intangible aspects of urban lighting in order to propose a design toolkit based on multidisciplinary backgrounds to rethink the social urbanity from the street level perspective at night. Thus, to picture the strategic use of artificial lights to reinvent public spaces at night without the dominance of technology over environmental and aesthetics quality.

1. Introduction

Correspondences between space and society have been transformed, so as the perception and functions of day and night in contemporary cities, so why not considering the nocturnal dimension of cities as part of the design process? Grounded on the authors' previous works and research experiences (Casciani, 2014; Gentili, 2015) in the lighting design discipline, this paper would like to describe public spaces and urban lighting as a common design resource with the potential to stimulate local economies and reinvent the nocturnal territory.

Nowadays the expansion of human activities after sunset is claiming for a strong design involvement in the discovering, envisioning and empowering of the urban spaces at night as an important design lever for a sustainable development of territories. This shift needs an understanding of the problems and limitations of the nocturnal dimension of cities but also of the opportunities offered by using an intangible and flexible material such as artificial lighting as a design tool to recover a sense for places both in terms of identity and in terms of social urbanity.

The paper will highlight intangible and tangible aspects of lighting in order to understand and characterize the nocturnal territory, by analysing the relationship between the architectonic shapes, people's experience and the nocturnal urban interpretations by taking a street-level perspective. More than this, the paper aims to emphasize the strategic use of artificial lighting in urban design by presenting a set of tools which are useful for communicating and designing with a multidisciplinary background.

2. Stating the limits and the opportunities of nocturnal territories

The problematic of loss of territorial reference, due to several and disperse hybridization of functions, is much accentuated today, in a condition that has been defined as “*understanding space-time*” (Harvey, 1990) due to the processes of acceleration of production cycles and therefore of trade and consumption, until the abatement of spatial barriers. Besides, the most important issue for this paper is the overlapping of day and night conditions. In that sense, the valorisation of the territory either day and night features should be implemented especially when designing with lighting because local culture means local light.

Even though lighting is critical to our perception of the urban environment, yet its consideration remains peripheral to professional discourse and its role ‘invisible’ to the community. Frequently, the lighting design is viewed as a step afterwards the architectonic or urban design process. Consequently, cities have been deformed by the play of uncontrolled and misguided lighting schemes, derived by a unilateral design that takes into account only the technical-scientific needs, underestimating the aesthetics, social and symbolic aspects of lighting in the urban territory (Lambertucci, 2001).

The increasing permanence in public spaces, in other words, the nightlife of a territory, is strictly related to the development of artificial lighting systems since the industrial revolution (Schivelbusch, 1995). This relationship has already altered the physiognomy and the meaning of life in the dark, sheltered and far from the diurnal rhythms. Thus, the nocturnal territory could be considered as a “*different identity builder*” because it is conditioned by the artifi-

cial lights properties and the dimensionless character of the spaces since the darkness has the ability to cancel shapes transforming the territory at night as an immaterial background, a black canvas whose identity can be reinvented each night differently. (See fig.1)



Fig. 1. Day and night pictures of the Natural History Museum in Rotterdam. Relationship between external and internal lighting and positive/negative effects due to an immaterial background (2014). Picture by Helena Gentili

Nevertheless, the contemporary urban nightlife plays a significant role in place-making strategies. More than simply a means of amusement, the night-time entertainment industry has contributed to widen the urban economy with its potential to attract investments, creative people, tourism and boosting the night-time economy by creating job opportunities under different luminous conditions. In terms of artificial lighting, this phenomenon has challenged the nocturnal territories not in a standardized way. From a positive/attractive approach, there are the Festivals of Light offering creative non-standard lighting techniques communicating a different message about the nocturnal territory. On the other hand, negative/repulsive results are represented by the use of massive and bright commercial signs defining stereotyped readings of the city, which can create more confusion in defining the urban image at night. (See fig.2)



Fig. 2 Right: Flying Carpet installation by Daniel Buren in Torino on the occasion of the Light Festival Luce D'Artista, (2009). Left: Time Square bright lights and luminous billboards in New York, USA (2010). Pictures by Helena Gentili

Urban lighting is more than energy and costs statistics related to savings: by guaranteeing visibility, accessibility and safety at night, it can influence social and cultural life of the nocturnal city and, as a consequence, the improvement of the economy and the environment as well. Lighting is primarily intended for people's experience and perception of the urban space and it should be considered for the beautification of public spaces, the social engagement and well-being of its inhabitants (Narboni, 2004; Brandi & Geissmar, 2007; Raynham & Gardner, 2001; Raynham, 2007).

3. Nocturnal territory of the city described between tangible and intangible aspects of lighting

The relationship between lighting and the urban territory at night can be perceived by human beings through many different physiological, cognitive, psychological and interpretative mechanisms. In this complex perceptual phenomena, some aspects can be objectively measured and experi-

mentally evaluated (tangible aspects of lighting) otherwise others can be relatively interpreted or subjectively considered (intangible aspects of lighting). Therefore, the relationship between lighting intercepting tangible and intangible elements of the city and its inhabitants have been selected as following:

Tangible aspects of lighting in the public realm

- *Urban Accessibility:* The accessibility of a place can be measured by looking at the physical and visual connections to its surroundings fundamental characteristic to discover the nocturnal city. Hillier and Hanson provided an entire methodology to measure this relation through the concept of integration, connectivity and accessibility, which construct social and cultural understanding of urban places (Hillier & Hanson, 1984). Those principles and methods have been only applied for the daytime of the city but result to be useful for understanding the urban integration at night.
- *Urban Form:* The day and night views of the same territory allow us to make parallels and to establish a common language to interpret the nocturnal image of a territory: by using the same point of view, it is possible to compare the positive or negative impacts that lighting might act upon building structures and on public spaces. Observation principles, such as complexity, selectivity, subjectivity, experience and contrast have a key role in the nocturnal visual perception of the urban form. The luminous surrounding will determine the required luminance contrast in order to perceive the hierarchy and establish an orientation route in the space related to the urban form. (See fig.3)
- *Colour and Surface Materials:* The interactions between col-

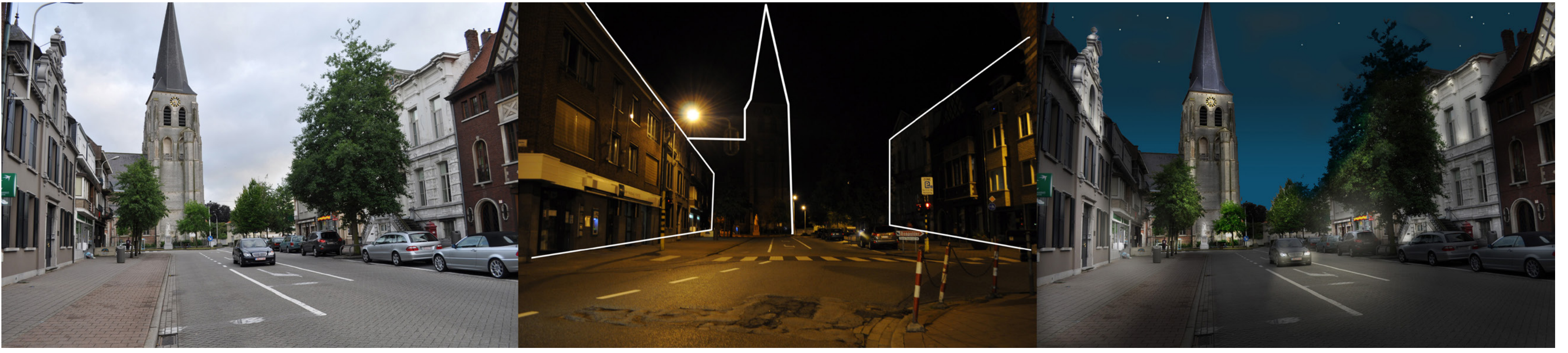


Fig. 3 Day and night view in order to select the most representative aspects of the urban form to propose a lighting scheme illustrated by the render image. Urban form survey for the Lighting Masterplan of Antwerp, (2011). Author: Studio Susanna Antico Lighting Design

our and lighting in the city determine the nocturnal appearance and works as a visual communicative tool. It requires an accurate study of the city components in order to establish a directive for this multifaceted and subjective relationship between intrinsic colours from the urban space, the luminous information from the environment and coloured lights. The binomial light-colour has more than ever become a tool for reading the nocturnal urban realm or a method to communicate importance to an element of the design or from the context.

- *Light Pollution:* Concerning the issue of sustainability, light pollution is an unwanted consequence of outdoor lighting and includes such effects as glare, sky glow, light trespass, light clutter, light profligacy and absence of darkness. It is necessary to avoid light pollution in order to better design, taking in consideration the territory as reference and to control lighting effects when and where it is needed.
- *Energy Consumption and Costs:* Energetic sustainability is conceived as achieving the desired illuminance levels and lighting quality in a given application with the lowest practicable energy input. The efficiency of urban lighting is determined by the selection of the most suitable lighting source in combination with the appropriate lighting

fixtures accompanied also by intelligent lighting management systems and maintenance procedures. All these elements contribute to the longer lasting life span of urban lighting ensuring the performance of the entire system.

Intangible aspects of lighting in the public realm

- *Human Perception:* Visual perception is defined by the relationship between light and space, which is perceived by the eyes and interpreted by the brain based on background experiences. David Canter (Canter, 1977) describes the space as a unit of “*environmental experience*”, where the knowledge about physical attributes, emotional cognitions and human activities is useful to completely understand the perceptual relationship between places with people: this underlines the implications of cognitive and psychological lighting factors of the inhabitants towards the environment in the design activity.
- *Perception in Motion:* the urban environment at night is generally perceived in movement, walking or driving, which involves the necessity to consider the nocturnal territory as made of a sequence of events that can be used as references to decide how lighting will contribute to the comprehension of the space for both safety and interpretative reasons. The nocturnal landscape from an in moto point of view can be described in a serial vision (Cullen, 1971) which is related to the physical movement, to the idea of temporal continuity and to the necessity of wayfinding and navigation of the space. (See fig.4)
- *Perceived Safety and Security:* Many studies (Bilotta, Bonaiuto & Bonnes, 2010; Welsh & Farrington, 2008; Pease, 1999) have explored the issue of the relationship between lighting and safety, concluding that safety perception is dependent on a series of factors other than solely outdoor



Fig. 4 Nocturnal serial vision survey following a determined route to understand the surrounding lighting conditions near the area of Atjehstraat in Rotterdam (2014). Author: Helena Gentili.

lighting. The issue of the correlation between safety and lighting is highly debated: if on one hand, there were certain studies reviewing that improved lighting results in less outdoor criminal behaviour in homogeneous communities, other studies do not support this results but conclude the opposite or controversial outcomes (Farrington & Welsh, 2002). In addition to this, the research shifted gradually from the measured safety (evaluated in terms of decreasing number of illegal and criminal acts) to the perception of safety (that is a more subtle and subjective impression).

- *Atmosphere Experience*: Atmosphere is not defined as an affective status, but as an affective evaluation: it means that the perception of the atmosphere of the environment is expected to be independent of people's emotions (Vogels, 2008) of the environment and it is fundamental to the interpretation of the lighting conditions of the urban realm.

“Urban atmospheres are most often created by specific materiality, scale, rhythm, colour [...]. Materials, colour, rhythm and illumination are strongly atmospheric” (Pallasmaa, 2014).

These elements can influence the physiological, cognitive, affective, interpretative and evaluative perception of human beings (Bell, Greene, Fisher & Baum, 2001).

- *Urban Rhythms*: temporal understanding of territories (Lefebvre, 2004) which is derived by considering the urban playground in a dynamic perspective where the flows of people, routine performances or nightly rituals lead to the idea that places are in constant processes of transformation. The sequence of these informal moments of spontaneity, lucidity and flexibility is related to the urban rhythms in order to better design with lights in the nocturnal city. This provides different interpretations of the urban territories and different experiences either during the day or during night that could be integrated in the design process of the nocturnal territory. (See fig.5)

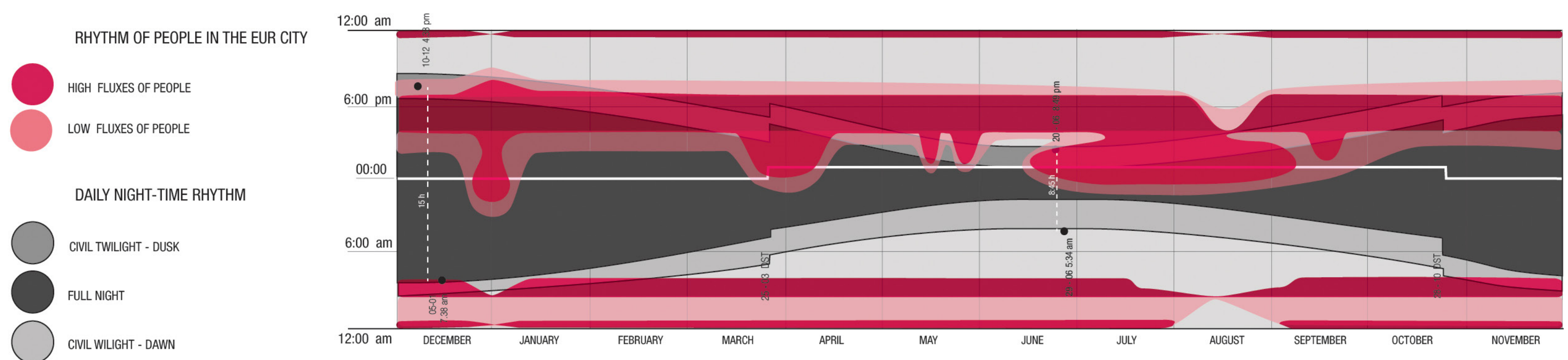


Fig. 5 Urban rhythms analysis of EUR Rome developed for the International competition Urban lightscape, Genius Luci (2015) Authors: Daria Casciani, Helena Gentili and Studio D'Alesio e Santoro

4. Toolkit for discovering and envisioning the intangible aspects of urban territories of the night

In comparison to the tangible aspects, the human and social value of lighting (intangibles) is more difficult to estimate: theories, methods and models from social studies, behavioural sciences and environmental psychology can be used to assess the intangible aspects that link the nocturnal territory of the city with people and lighting (Tillet, 2006; Tillet, 2011; Bordonaro & Aghemo, 2006; Amendola, 2009). The connection between artificial lighting and the human scale is one of the key aspects, since artificial lighting has a strong influence on the behaviour and activities in the space. The measure of man is not a metric and objective measurement but a complex and relative one; perception is not only individual but it is also cultural (Abbagnano & Fornero, 1999). The following paragraphs presents a list of tools, which enable the designer to better investigate and envision the intangible aspects of urban territories after dark.

The designer as detective of the real life of the nocturnal territory

A way to interpret the nocturnal landscape is the *Flaneur approach* conceived as a real-life experience, which is a not so common but a highly recommended approach in urban lighting for analysing the nocturnal human and social experience of the territory (Bordonaro & Aghemo, 2007) The *flâneur* approach works by taking the pedestrians point a view to experience and understand the nocturnal territory. Several different tools can be used such as the *Nightly Walking Methodology* (Jenks, 1995; Gehl, 1991; Whyte, 1980) and the *Nocturnal Serial Views* that represents the visual experience that people have of the nocturnal territory.

From on-site to on-line, the *digital Flaneur* can use the *Video-Monitoring Tools* for observations of real activities and night-rhythms, which can be done also remotely by sensing the city with video cameras, that are able to acquire real-time data about the pattern of use of the territory of the city after dark (Köhler & Sieber, 2011). The *Time-Lapse Techniques*, in between on-site and on-line tool, will reveal inhabitant's paths and habits along the hours of observations and from this, the lighting strategy can be elaborated in a more flexible and mutable way in order to address lighting where and when it is useful, depending on different uses and necessities.

The *digital Flaneur* can also navigate social forum, virtual discussions and social software applications in search of information and content freely and openly generated by the community. Its practice is based on a virtual ethnography, called *Net-nography* (Kozinets, 2010). An applied example in the urban lighting design has been the *Atlas of Urban Lighting Experiences 2.0* (Atlas of Urban Lighting Experiences 2.0, 2012), an attempt to map the different perceptions of the nocturnal image of the city from all around the world, using user-generated content available freely on social networks (See fig.6).

The designer as educator and storyteller in exploring the nocturnal territories

People can be involved in exploratory walks and talks at night, aimed at discovering and taking care of the urban night-time image. *Lighting Walks* are conceived as an educative and storytelling tool aimed at increasing the critical reflection about lighting at night. The *NightSeeing™* (NightSeeing, 2016), which is a walking tour of the city lead by a lighting designer and *Light Ride Milano* (Light Ride Milano, 2015),

PREFERENCE OF WARM LIGHTING

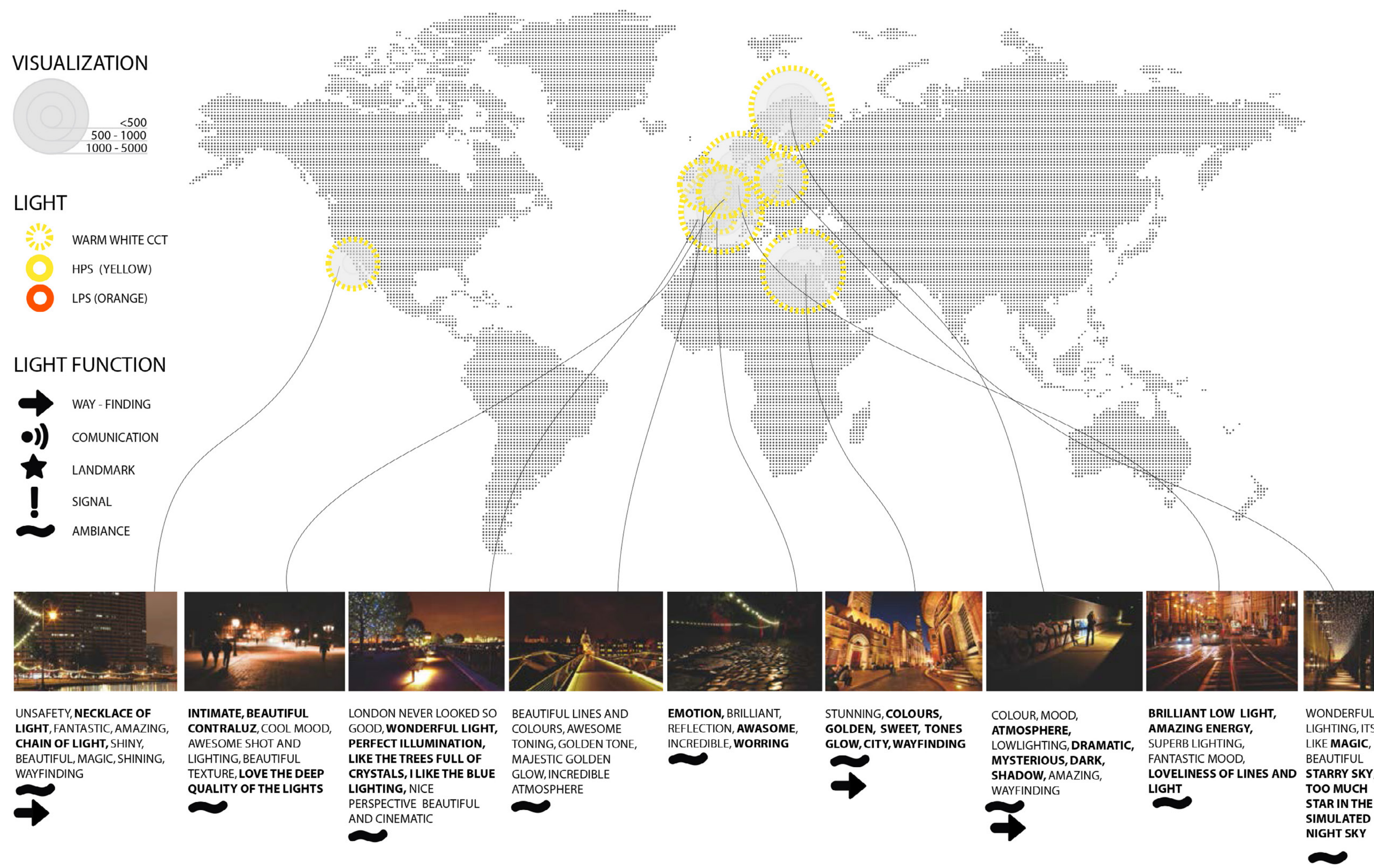


Fig. 6 Example of Nocturnal virtual ethnography about different perception of the nocturnal image. Atlas of Urban Lighting Experiences 2.0 (2012). Author: Daria Casciani

which is a night bicycle ride through the centre of Milan in order to experience and analyse the urban space and architecture under artificial lights, are both examples where the local inhabitants and tourists are incentivized to discover the



Fig. 7 Light Ride moment of discussion about the relative lighting condition in front of the Duomo di Milano (2015). Authors: Helena Gentili and Giacomo Rossi. Picture by Bernardo Petrucci

city after dark. (See fig.7)

The advantages of storytelling rely in the fact that the impressions and experiences of the participants can be collected and exchanged in an informal way. The proposed night walks wish to raise awareness in the profession of lighting design and demonstrate the importance of artificial lights when discussing the nocturnal character.

The designer involving directly people as advisors

The practice of *Nightly Public Outreach*, employing evaluation techniques developed by the social sciences, is very important for both gathering information about people's perception of the lit environment but also for motivating people to reflect in a more critical and active way about their surrounding environment. *Evaluative questionnaires* (Deleuil, 2009) about the perception of urban lighting can be distributed in order to define a shared, polyphonic and social based lighting project for their city.

Public involvement of the urban community in the dialog

about urban lighting can be wider, through the use of *On-line Public Platforms*, providing the direct possibility to citizens to participate and give their opinion about the urban lighting of their neighbourhood or of their city: examples like *LED Your City* (LED Your City, 2011) and *SEETY Milano* (Seety Milano, 2016; Casciani, 2014) show that participants can vote, select or refuse a project or declare their point of view, give direct opinions, ideas, solutions and possible al-



Fig. 8 Results of the on-going research SEETY Milano, on-line public platform for nighttime identity assessment of the city of Milan. Author: Daria Casciani

ternatives. (See fig.8)

The general requirement for these surveys is that the participation would be effectively active and extended and that the platform is reachable, open, understandable and used in a correct way. Even though, these platforms of public outreach are rarely used in real critical decisional projects., on the other hand, they are a useful tool for gathering insights

and impression about the nocturnal territories and for engaging people in a discussion about its renewal through lighting.

The designer help people transforming and renewing actively their nocturnal territory

In limited and temporary occasions, *Urban Lighting Co-creation* occurs when people are directly involved in the practical renewal of their nocturnal territory and become active in the preparation of lighting performance, lighting fixtures and settings (selecting, donating, preparing, creating, and repairing) with the help of lighting designers as in the example of Synoikia Pittaki (Pittaki, 2013). Driven by the experience of professionals, people are involved in expressing their belongings, imagination and memory in relation to a space, which is generally a neglected and abandoned territory and, with lighting is renewed and valorised.

Lighting Workshop is another method used to understand people perception and experience of the night-time of the city and, at the same time, make people understand their urban environment. Generally organized by the Social Light Movement, *Guerrilla Lighting* (Guerrilla Lighting, 2016) are conceived as workshop where students and local residents are involved together in temporarily changing the lighting atmosphere of the space by turning and handling portable lighting systems such as torches, lanterns, lamps, etc. for one night. (See fig. 9)

In addition to this, digital technologies today enable the possibility of having changeable nocturnal territories that can be manipulated directly by users, which are able to select (between a range of lighting atmospheres what they want). *Urban Living Labs methodologies* (Living Lab, 2012) conceived as catalyser for innovation and co-creation in cit-



Fig. 9 Before/after Guerrilla Lighting at Castelfield, Manchester UK (2007-2008) Author: BDP Lighting - Photograph © David Barbour/BDP Lighting

ies, can be used for allowing people and industries to test the best innovations, in a process that involves citizens, businesses and public authorities to gather more user-oriented design of nocturnal territories. About this tool, an example is the *Valotarina (Light Stories) Project* (Pihlajaniemi, Österlund, Luusua, & Tanska, 2012) which enable city dwellers to decide the atmosphere of the streets at night by writing its digital storytelling, posting online digital recordings or sharing stories, messages or greeting.

5. Conclusions

Lighting has been the medium and the message (Mcluhan, 2008) to build the nocturnal city, but unfortunately this instrument has not been deeply studied yet and its potentials and limits need a more critical approach in order to avoid misinterpretations when it comes to the design of urban spaces. The problems to be solved, when it comes to the urban nocturnal territory, is that of its definition through the identification of its components and relative tangible and intangible lighting aspects which this study has highlighted

and described.

Lighting designers play an important role in discovering and envisioning scenarios that push and disrupt the limits of new technologies in order to answer both users and city needs. Many different competences are converging and an emerging hybrid fields are springing from the integration and cross-fertilization of different disciplines such as interaction design, environmental and perceptual psychology, environmental, product, graphic, service design, sociology, ethnography, computer engineering, ICT system engineering, architecture and landscape planning.

The lighting experience as a whole process and project is connecting those areas in a new trans-discipline interested in exploring and designing actively the way in which lighting impacts human experience and transforms the urban space and vice-versa. The rescue of the value of the design process might be the only solution if we, once more, would like to see our cities as real places and establish a strict dialect between lighting and territory, becoming once again dependent of each other, all perceived and lived under natural and artificial conditions.

The research about the nocturnal territory condition and artificial lighting as a contemporary tool for the recovery of public spaces encounters the idea that lighting has its own language still to be further developed in association with the research for new references in design, if we want to reinterpret the actual crisis of the public space as a moment to open up a field of new possibilities.

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À propos du Master 3D, Tunis 2013–17.

Artisanat, design et territoire. La civilisation matérielle au pluriel

by Anna Calvera, Debora Giorgi, Yosser Halloul, Insaf Khaled
and Rosa Povedano

KEYWORDS

Tangible, Intangible Heritage, Strategic Design, Territory, Crafts, Tunisia, Hammam/Baths

ABSTRACT

Design and craft are at present closer than before, during modern times. A closer relationship between them, either conceptual or practical, is in the threshold of a fruitful and necessary collaboration in the context of sustainable development, both economical and ecological. Last decades, many proposals emerged across the world favouring that designers and craftsmen meet and seek how to work together. Moreover, several Mediterranean countries share with Tunisia a tangible and intangible heritage culturally important. It is filled of knowledge already well organized that could be cleverly and skilfully exploited to preserve territories and local cultures.

Jointly written by professors who formed the teaching crew in charge of the courses on HSSCC at a Master programme established in Tunisia for the period 2013–2017, this article reports the experiment carried out studying Tunisian local traditional products to disclose ancient techniques and knowledge embedded and then create a documentary collection organised in terms of current and strategic design. The exercise has been therefore a process of “transfer” of knowledge from HSSCC to professional activity. The article also includes a study of the Hammam where it appears as the place where an ancestral ritual takes place. Being still at work, the ritual still requires the making and use of several specific and particular utensils.

1. Territoire et civilisation matérielle, plusieurs points de départ [AC, YH, IK]

Au temps de la Mondialisation, quand on utilise le mot «territoire» on fait immédiatement référence à ce qu'on désigne comme «l'économie de proximité» et la culture «slow»: ce sont des discours qui se veulent «alternatifs» par rapport à la société industrielle, moderne et à ses valeurs. Ils visent à changer les mœurs actuelles encore «modernes», ce qui renvoie inmanquablement aux usages et coutumes de la période de la vieille modernité industrielle et contribue ainsi à la durabilité écologique de la nature environnante plus proche. Culture Slow et économie de proximité sont des sujets qui forment un seul discours à la fois économique, culturel et social, capable de conditionner la consommation et l'utilisation de produits ordinaires, ainsi que les règles de politesse qui régissent les rapports de convivialité entre les individus. Ils agissent donc imperceptiblement, sur tout ce qui dévoile une culture matérielle spécifique et facilement identifiable. Ainsi, en parlant de «territoire» on met directement l'accent sur ces anciens rapports entre producteurs, commerçants et consommateurs qui constituent une chaîne interactive tant sur le plan économique que sur le plan des relations sociales. Cependant, depuis la fin du XX^{ème}, autrement dit, actuellement au XXI^{ème} siècle mondialisé, cette vieille chaîne interactive doit concurrencer avec de nouvelles tendances esthétiques, de nouvelles modes, de nouveaux modes de production et surtout des produits compétitifs qui viennent de l'autre bout du monde. La compétitivité s'exerce aujourd'hui sur plusieurs aspects à la fois, tels que les prix, la mode, les goûts, les nouvelles mœurs, des nouvelles mentalités et les différentes valeurs.

Le contexte historique est par conséquent clair et bien

défini à l'échelle du monde. À l'instar de la situation du Mexique et qu'un designer mexicain a récemment expliqué, la société tunisienne a subi également, au cours des dernières décennies, d'importants changements qui ont amené la majorité des classes sociales à «aspérer à vivre dans la nouvelle culture de la consommation globale» (Salinas 2016). Mais comme la plupart des sociétés actuelles, la société tunisienne veut aussi rester tunisienne: elle est attachée à sa particularité locale et tient à la préserver. Ici se pose la question de l'identité qui, tout en étant liée au politique, au culturel et à l'économique, elle s'impose sur deux, voire trois niveaux: le régional, le national et le local, à travers trois échelles de perception.

Le cas de l'industrie touristique explique bien cette différence d'appréciation des identités. En effet, l'identité régionale maghrébine-berbère l'emporte sur une simple identité nationale, car plus concrète et plus attrayante pour les visiteurs étrangers. En revanche, pour le citoyen Tunisien qui se conçoit moderne, l'identité nationale est plus importante que son appartenance maghrébine qu'il ne nie pas, mais qui reste secondaire et accessoire. Par ailleurs, au sein même de la société tunisienne, l'appartenance à un territoire local (le Sud, le Sahel, le Nord-Ouest, etc.) peut ressurgir grâce aux spécificités culinaires, vestimentaires, ou autres dialectes et attitudes. Ce sont trois pôles intéressants.

L'identité régionale-maghrébine permet d'établir immédiatement et aisément des liens historiques, culturels et culturels du territoire.¹ L'histoire, en fait, remonte bien avant la nais-

1. Le terme « Maghreb » est une dénomination apportée par les sociologues orientalistes, pour désigner les Arabes Occidentaux par rapport aux Arabes Orientaux. Ainsi, le Maghreb arabe est le pendant du Machrek arabe. Ces appellations étaient révélatrices des différences sociologiques et culturelles entre les Arabes occidentaux et orientaux.

sance des États-nation actuels créés selon le schéma du romantisme politique. Petit pays largement ouvert sur la Méditerranée,² et par conséquent très réceptif aux invasions et migrations des populations, l'identité tunisienne s'est forgée depuis des temps bien antérieurs à l'État actuel et elle s'identifie à ses ancêtres Berbères et Carthaginois avec leurs pléiades de dieux, sans oublier les Romains, les Espagnols, les Ottomans, les Français et toutes ces communautés, andalouse, italienne et maltaise qui ont marqué de leurs sceaux, tout le patrimoine matériel et immatériel des Tunisiens modernes.

Imprégnés par le patrimoine légué par leurs ancêtres Carthaginois, les Tunisiens perpétuent des techniques agricoles,³ des rituels⁴ et des motifs ornementaux qui apparaissent comme de simples graphismes abstraits, mais qui représentent en vérité la symbolique des vieilles valeurs et des hommages ou des implorations à des divinités antiques.⁵ Ces motifs récurrents sont appliqués sur des kilims anciens et modernes, des pièces de céramique, des bijoux, d'anciens vêtements tunisiens et des objets en bois pour décorer les maisons.

Par ailleurs, l'empreinte berbère est persistante, car du point de vue de la civilisation matérielle, le territoire de la Tunisie appartient à la région Maghrébine à forte connotation berbère et dont le couscous est le catalyseur.⁶ De ce fait,

2. 1300 km de côtes

3. Faire des cultures en «baâli» signifie faire des cultures en sec et être à la merci du bon vouloir du dieu de la pluie, le Dieu Carthaginois Baâl.

4. Le cérémonial du «harkous» (tatouage éphémère) pour la mariée

5. Déesse Carthaginoise Tanit

6. Répondant à l'historien Français, Charles-André Julien qui lui demandait de définir les limites du Maghreb, Habib Bourguiba (premier Président de la République tunisienne 1957-1987) avait dit: «le Maghreb s'arrête là où s'arrête le couscous».

la gastronomie du couscous a généré des outils particuliers pour ses préparatifs, sa cuisson et son service.

Finalement, comme dans beaucoup de pays touristiques, où les gens sont si souvent confrontés à l'affluence des touristes, des voyageurs, des visiteurs et des investisseurs étrangers, les Tunisiens sont très soucieux de leur propre identité et ont incité les autorités politiques à favoriser la conservation de leur patrimoine et de leurs techniques locales. Cependant, la question cruciale et complexe de l'identité resurgit, ne serait-ce du point de vue théorique: Qu'en est-il de l'authenticité identitaire?

Du point de vue tunisien, on va tenter de proposer une réponse: théoriquement, l'identité c'est ce qui permet de cerner et de définir une société (une communauté) par rapport à une autre ($A=A$; $A \neq B$). Comme l'identité n'est pas un état ou une situation statique et fermée, force est de constater que la question est d'autant plus compliquée, que les cultures bougent, évoluent, se mélangent les unes aux autres et finissent par entraîner des changements culturels et techniques, ainsi que de nouvelles habitudes et attitudes. Ces influences impactent sans cesse les mœurs, les désirs et les manières d'utiliser les objets et les outils.

La question serait de savoir par rapport à quoi peut-on établir ce qui est réellement authentique et à quoi (ou à qui) sert cette authenticité ?

Par ailleurs, et sur le plan international, l'identité régionale pourrait être un facteur économique important quand il s'agit d'exporter et d'internationaliser les produits, les services et la production industrielle où industrielle d'un pays. Dans cette optique, il faudrait définir une identité qui, tout en étant locale et apte à s'exprimer à travers la forme des choses, elle doit pouvoir se positionner sur un marché

international en fournissant des valeurs communes et universelles, liées à la modernité. Il s'agit par conséquent, de mettre à la disposition du marché international, un produit inédit, original et singulier, lucratif et rentable qui n'altère ni l'empreinte ethnographique et ethnique, ni le souvenir des traditions profondément localisées, pour en permettre l'évocation si l'usager le souhaite. En revanche, en s'adressant aux touristes et aux visiteurs, les produits doivent accentuer les identités culturelles très locales, par leurs diversités et par l'intérêt que peut susciter la découverte de formes de vie différentes, sans nécessairement, verser dans l'exotisme. C'est l'envie de découvrir et de reconnaître le monde d'autrui, qui doit animer la curiosité. Ainsi, l'identité culturelle sert, non seulement à dévoiler ce type d'identité utile pour l'exportation, mais aussi l'interprétation du cosmopolitisme qui est en jeu.

N'est-ce pas là, le propre du design et son objectif ? L'histoire du design démontre que la plupart des pays ont découvert le design quand ils ont commencé à penser sérieusement à se positionner sur le marché international. Le Deutsches Werkbund, par exemple, a commencé à chercher la forme allemande vers 1907; la qualité du design et la fidélité à une forme scandinave en train de se former expliquent le succès mondiale eu par les meubles et objets «organiques» créés au Nord de l'Europe avant et après la Seconde Guerre Mondiale. Peu après cette guerre, le *Bel Disegno* apparut à Milan en regardant au public cosmopolite plus cultivé. À son tour, le Gouvernement espagnol a commencé à parler sérieusement –c'est à dire, avec un loi pour le soutenir— quand le pays a été acceptés à la Communauté Européenne, aux marché commun. Ça c'est passé le 1986. L'Angleterre pour sa part avait découvert le design et impo-

sé ce mot vers 1851 quand ils ont organisé la première exposition internationale de produits industriels. Dans tous ces exemples, le design était proposé comme un facteur de qualité esthétique et culturelle à la fois, quelque fois fonctionnelle aussi, qui pouvait aider à vendre des produits innovateurs et nouveaux tout en reconnaissant des identités nationales. Ces dernières années du vingtième siècle, adoptant la même stratégie qu'une entreprise, ou une personnalité professionnelle qui produit avec une vision internationaliste, les pays se sont mis à établir leurs propres marques et offrir un parapluie aux industries et producteurs locaux: c'est la technique du «*country or town branding*». En ce cas, quand même, il faut toujours décider tactiquement quel est le territoire à être représenté puisque ça peut changer selon les objectifs de chaque politique. Maintenant, plus de cent années plus tard, la perspective de l'exportation reste à l'horizon des différentes cultures nationales du design et de la conceptualisation du design lui même par tout dans le monde, aux moins pour tous ces qui veulent agir dans le monde présent sans perdre leur identité. Là, le design offre un très bel espoir et une grande opportunité.

En adoptant un raisonnement stratégique dans la gestion et la commercialisation des produits artisanaux, le design peut contribuer à aider tout aussi bien les producteurs artisans que les usagers dans leurs appréhensions des objets d'utilité quotidienne et devenir par là même, un mode de penser qui se préoccupe de détecter les nouveaux besoins que la modernisation des comportements exige des produits traditionnels et proposer ainsi des conversions des anciennes typologies. C'est en cela que le design est une reformulation conceptuelle des objets du monde, en se proposant comme une méthode que les artisans peuvent adopter lors du processus

de fabrication pour répondre aux différentes contingences et lors du cycle de commercialisation par l'autopromotion, agissant comme «autoproduction», ou «personal factory» (Denis Santachiara), pour acquérir une notoriété intra et extramuros.

Le design s'occupe ainsi de proposer des configurations formellement nouvelles et travaille sur le langage visuel. De ce fait, culturellement et par conséquent esthétiquement et éthiquement parlant, le design s'est proposé aussi bien comme un langage universel, que l'expression des processus de modernisation technique et culturelle. Il a donc aidé à rapprocher les mœurs et les comportements des usagers, de toutes les classes sociales et partout dans le monde. Au même titre que la globalisation des produits, des échanges économiques et des économies mondiales, on parle également de globalisation des habitudes que le design a largement contribué à installer. Comme disait récemment un designer Turque : «*The question whether design is an expression of national identity and local traditions has been debated at least since the days of modern movement with its purportedly universal formal language*» (Balcioglu 2016). Voilà un beau paradoxe!

Le défi serait que, tout en étant l'expression de la tradition et de la modernité à la fois, le design puisse s'exporter aisément. Sans doute faut-il reconnaître, dans cette entreprise de sauvegarde de son identité linguistique, technique et formelle, une réponse aux processus d'uniformisation de la mondialisation. Il va sans dire que le dilemme des artisans-designers est préoccupant. Comment puiser avec pertinence dans le patrimoine traditionnel, tout en intéressant d'une part, un public local qui rejette l'aspect folklorique de l'artisanat et aspire à s'inscrire dans la consommation globale moderne, et d'autre part en se positionnant sur le

marché international par l'offre d'un produit qui l'identifie comme l'expression d'une région du monde en étant actuelle à la fois. L'artisan peut aussi redevenir un artiste et chercher un moyen de renouer avec la singularité de l'inspiration personnelle dans un contexte dominé par la monotonie et l'indifférenciation. Cela implique l'installation d'entreprises ou d'industries d'art, dédiées à un marché local plutôt riche et inclusif. Mais celle là c'est la tactique la plus simple. Il reste à voir s'il y a des alternatives viables sans sortir du domaine du design et la quotidienneté la plus ordinaire.

2. Patrimoine matériel, patrimoine immatériel et Design [DG]

Les œuvres d'art et les objets rituels du quotidien, à l'instar de l'organisation de l'espace construit, reflètent et matérialisent les multiples aspects historiques, économiques, relationnels, culturels, ainsi que les pratiques et les échanges qui définissent, en réalité, un patrimoine identitaire beaucoup plus prégnant et résilient physiquement, car immatériel. La valeur immatérielle est par définition intangible, mais arrive à s'exprimer par des formes analogiques à la pensée, grâce à des signes et des symboles en relation avec un langage qui doit être interprété et qui requiert nécessairement un approfondissement, une immersion, une volonté de le comprendre et de l'utiliser dans un discours caractéristique et particulier.

La valeur immatérielle est intimement liée à la communication, sur plusieurs niveaux et plus particulièrement au niveau stratégique. Les experts du marketing l'ont bien compris, surtout les designers qui utilisent également le «*storytelling*» notamment dans la stratégie de communication de l'entreprise, surtout pour mettre l'accent sur le patrimoine des valeurs principalement immatérielles qui sous-tendent

la société, le produit, l'événement ou l'espace.

La valeur immatérielle des techniques, des pratiques, des objets, des espaces construits et des sites archéologiques est l'élément immanent qui sous-tend les choses et leur confère leurs identités, leurs sens et leurs significations. L'immatérialité constitue, en réalité, un point de force indestructible, précisément en vertu de sa non évidence et de l'essence même de sa forme. Par une configuration alchimique, se constitue la dimension spirituelle du matériau qui devient par conséquent, immortel et inaltérable. Pour résister, l'immatérialité s'escamote au sein de formes symboliques et de rituels qui, avec le temps, deviennent toujours plus mystérieux. Ainsi, la charge immatérielle se perçoit dans la pratique et dans le faire, comme dans les petits villages éparpillés dans les zones difficiles et isolées –le cas des oasis ou des habitations montagneuses– où nous rencontrons souvent des ouvrages presque monumentaux des systèmes agraires et hydrauliques qui sont le fruit de systèmes sociaux organisés selon des règles démocratiques diffuses et occultes, fondées sur l'aide mutuelle et la solidarité. Ce genre d'organisation sociale prévoit que chaque membre apporte sa contribution laborieuse à ce qui est considéré comme un bien collectif, qu'il s'agisse de la construction d'un silo, d'un canal souterrain, d'adduction de l'eau, d'un terrassement, ou de la moisson de céréales.

Si le patrimoine immatériel s'exprime et se matérialise en artefacts qui se transforment à leur tour en mesures concrètes de sauvegarde et de conservation, le patrimoine immatériel et les connaissances traditionnelles dont ils font partie ne nécessitent pas une sauvegarde de type conservation. Sauvegarder ce patrimoine vivant, consiste dans le transfert des connaissances, des pratiques, du savoir et du

savoir-faire, par leurs sens et significations. L'innovation et la comparaison dialectique avec la contemporanéité sont à la base de n'importe quelle forme de préservation capable d'accueillir et d'incorporer des éléments d'innovation dans les connaissances traditionnelles et le patrimoine immatériel qui nous parviennent.

Sauvegarder une technique ne signifie pas la reprendre ou s'en servir telle quelle, mais cela consiste à l'employer dans une perspective créative, en l'adaptant à un nouveau contexte et en utilisant des matériaux différents. C'est ce qui permet de favoriser la perpétuation de sa signification profonde tout en ouvrant la voie aux individus, d'être en mesure de proposer de nouvelles dimensions.

Une approche *design driven* est celle qui permet de sauvegarder les techniques traditionnelles grâce à l'innovation, tout en proposant de réaliser des projets qui, pour leur plus grande adéquation avec les communautés productrices qu'avec la contemporanéité, seront durables, sociaux, culturels et environnementaux.

Ainsi, une technique de tissage, comme celle de la *sfifa*—fine bande utilisée pour border les habits traditionnels marocains—, peut être modernisée par l'emploi de nouveaux matériaux comme le fil de cuivre offrant une meilleure résistance et pouvant réaliser des motifs décoratifs innovants. Un autre exemple est celui de la fabrication des nasses de pêche de l'île de Kerkennah, dont les fibres végétales ont été remplacées par des fils de nylon. Cette technique est en train de disparaître: un seul vieux pêcheur détient encore cet ancien savoir-faire. Le designer Nelson Sepulveda a exploité la valeur esthétique ainsi que les caractéristiques de grande résistance et d'élasticité du matériau végétal pour réaliser des lampes, des paniers, ou des fauteuils. Alors le vieux pêcheur a

accepté de transmettre la technique à un ouvrier de bâtiments au chômage et à un ex professeur de mathématique, qui ont réalisé les nouveaux objets. On peut également citer l'exemple de *BlaBla car* qui s'inscrit dans les nouvelles pratiques attribuées au concept d'innovation sociale, mais qui sont en réalité un système traditionnel de transport collectif, largement répandu en Afrique et dans quelques pays avec le concours des nouvelles technologies facilitant la communication.

Quand on parle de patrimoine immatériel, on se réfère à un

Fig. 3: Tissage de la Sfifa (3a); exemple d'utilisation actualisé de la technique avec d'autres matériaux et pour des fonctions différentes, à la fin, des nouveaux objets (3b, 3c Détail). Design d'Illham Antar. Photographies de l'auteure

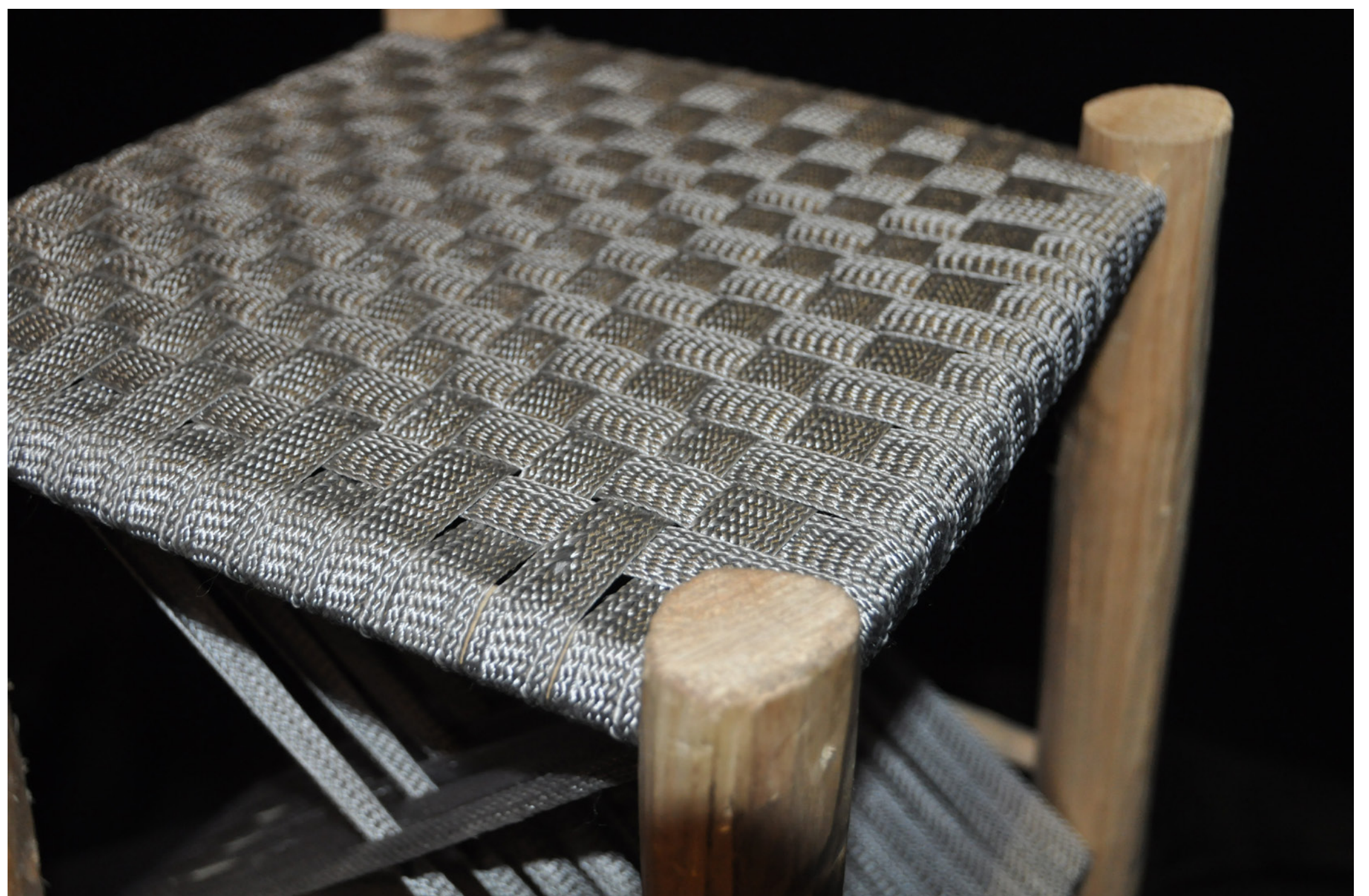




Fig. 4: Monsieur le pêcheur qui sait comment faire ces paniers à pêche (4a); vision des paniers créés par le designer Nelson Sepúlveda pour satisfaire d'autres fonctions à Kerkena, Maroc, (4b)

patrimoine «vivant», inhérent aux communautés et aux individus et qui pour fonctionner, nécessite l'implication de tous les acteurs sociaux et à tous les niveaux. Les communautés locales sont les dépositaires des connaissances traditionnelles et du patrimoine immatériel et reconnaissent qu'elles sont les seules à pouvoir maintenir sa validité. La Convention de l'Unesco définit le «patrimoine culturel immatériel» comme suit:

«Les pratiques, les représentations, les expressions, les connaissances, le know-how —comme pour les moyens, les objets, les travaux manuels et les espaces culturels— sont reconnues par communautés, les groupes et dans quelques cas les individus, parce qu'ils font partie de leur patrimoine culturel. Ce patrimoine culturel immatériel, transmis de génération en génération, est constamment régénéré par les communautés et les groupes, par les réponses adéquates à

leur environnement, par leur interaction avec la nature et par leur histoire, pour engendrer un sens d'identité et de continuité, et démontrer de la sorte, le respect pour la diversité culturelle et la créativité humaine. A la fin de la présente Convention, on tiendra compte d'un tel patrimoine culturel immatériel, uniquement dans la mesure où il est compatible avec les moyens existants, les droits humains et les exigences de respect réciproque entre communautés, groupes et individus, tout en étant conciliable avec le développement durable» (UNESCO 2013).⁷

Le patrimoine culturel immatériel se comporte comme tout organisme vivant qui, dans son cycle de vie, de la naissance à la mort, se débarrasse de quelques éléments qui se sont convertis en d'autres formes d'expression, car la communauté les considère désormais, moins pertinents et peu significatifs.

La convention souligne que seul le patrimoine que la communauté reconnaît comme sien et qui procure un sentiment d'identité et de continuité peut être sauvegardé. Pour cela il est impératif que chaque action ou mesure de sauvegarde soit élaborée, partagée et appliquée avec le consentement et la participation de la communauté locale. Ceci implique le respect de la pratique coutumière, tel le respect de l'accès à quelques aspects spécifiques: le syncrétisme qui engendre des systèmes de connaissances traditionnelles inoculant une vigoureuse composante de sacralité dont le secret est fondamental voire inviolable.

Quel sens aurait la préservation ou la muséification des objets artisanaux, sans l'encouragement des artisans à poursuivre la production et à perpétuer la transmission de leur patrimoine de connaissance, particulièrement au sein de leur

7. Art. 2.1 Convention pour la sauvegarde du patrimoine culturel immatériel UNESCO 2003

propre communauté?

La valeur profonde de l'artisanat traditionnel réside principalement dans la transmission aux générations futures, pas seulement pour sa valeur technique et artistique, mais également pour les significations qu'elle porte en son sein, comme expression d'une créativité et d'une identité culturelle. Plusieurs traditions artisanales possèdent des systèmes séculaires d'enseignement et d'apprentissage. La transmission du savoir, fait partie intégrante de la technique.⁸

Sauvegarder le savoir-faire inscrit dans le métier artisanal est ainsi profondément lié à la qualité de la transmission et surtout à la relation qui se crée entre le designer, l'artisan et les nouveaux disciples auxquels on transmet les connaissances. Cette question est une affaire politique. Valoriser et réussir à aider l'artisan à proposer des produits innovants capables de se positionner sur le marché, trouver des nouvelles formes du marché et de la promotion des produits, réussir à trouver des significations liées au fait-main et pouvoir les communiquer, voilà où peut intervenir la contribution du design stratégique. Il peut s'occuper de la sauvegarde des techniques traditionnelles et de la valorisation du patrimoine matériel et immatériel.

De nos jours (2016), la Tunisie est en train de vivre de gros changements sociaux, économiques et politiques. Comparé à d'autres pays de la rive sud de la Méditerranée, la Tunisie est le pays qui a probablement vécu la confrontation à la modernité d'une manière particulièrement dramatique, pendant ces vingt dernières années. Cette propension à la

8. On sait désormais, que ce système d'apprentissage a longtemps été à l'origine de l'exclusion des femmes du cycle d'apprentissage qui se faisait à l'atelier, strictement réservé aux hommes détenteurs des métiers. Ça vaut aussi pour l'exclusion des hommes, des travaux des ménagers domestiques.

modernité, ajoutée à la continuelle confrontation avec la diversité culturelle, a considérablement mené le pays vers la perte de l'identité locale. Cependant, historiquement ce petit pays a été le théâtre d'invasions et de dominations externes, mais aussi terre d'accueil de réfugiés; il suffit de penser aux différentes périodes où la Tunisie était le refuge de plusieurs sectes chrétiennes apocryphes à l'époque de Saint Augustin, plus tard à l'arrivée des «morisques andalous» provenant de la nouvelle Espagne et encore plus tard de plusieurs immigrants italiens. Fidèle à sa réputation de terre d'accueil et de pays tolérant, elle continue jusqu'à présent à abriter des milliers de libyens fuyant la guerre, avec tout ce que cela comporte comme désagréments et difficultés.

Comparée à ses riches voisins (la Libye et l'Algérie), la Tunisie ne dispose pas de ressources naturelles notables; elle investit intensivement dans le tourisme pour redresser son économie, essentiellement agricole et halieutique. Étroitement dépendant de l'étranger, la faillite du secteur du tourisme, lourdement sinistré suite à la crise économique mondiale et aux événements dramatiques liés au terrorisme, a fragilisé l'économie et par conséquent l'aspect social.

Dans ce contexte, la sauvegarde du patrimoine culturel, matériel et immatériel, ainsi que les connaissances traditionnelles, n'ont pas été une des priorités. La perte de la mémoire patrimoniale comporte inévitablement un aplanissement qui, au-delà de la valeur historique et artistique de nouvelles productions, génère à son tour, un dangereux sens de désorientation et de perte, niant par la même, les besoins primaires de l'être humain, celui de sécurité et d'appartenance. C'est pourquoi il est important de découvrir et de réinventer le mode de conservation de ce patrimoine. Mais la conservation puriste, tenant compte de la complexité et de la

stratification des signifiants et de leurs concordances avec les valeurs dont ce patrimoine est porteur, est insuffisante, voire non révélatrice et non adéquate. Le modèle de connaissance traditionnelle nous enseigne que la force de ces techniques réside dans leur plasticité et dans leur capacité à se rapporter à l'innovation.

Par conséquent, l'intégration de la technique et des connaissances traditionnelles dans les programmes d'enseignement devient primordial surtout pour les nouvelles générations et c'est dans cet esprit que s'inscrit l'expérience du Joint Master 3D-*Design pour le développement Durable des productions artisanales locales* (2014-2017), cofinancé par le programme Tempus de la Commission Européenne en Tunisie.

3. Auprès de la civilisation matérielle tunisienne: l'expérience du Master 3D, une recherche théorique et collective [RP, YH]

En partant de la détection première des valeurs matérielles et immatérielles qui sont à la base de l'identité tunisienne, une recherche approfondie sur les techniques et les artefacts artisanaux locaux est menée dans les cours du Master 3D *Design et Développement Durable*. Le patrimoine culturel matériel et immatériel dont regorge la Méditerranée a toujours été un intarissable pont culturel entre les deux rives. C'est dans ce cadre que l'aventure du master 3D a débuté en 2014 en partenariat avec trois Universités tunisiennes, ESSTED⁹ de l'Université de la Manouba, ISBAS¹⁰ de l'Université de

9. École Supérieure des Sciences et Technologies du Design

10. Institut Supérieur des Beaux-Arts de Sousse

Sousse et ISAM¹¹-Kasserine de l'Université de Kairouan, l'Université de Florence avec son Département d'Architecture, l'Université de Polytechnique de Turin, l'Université de Barcelone avec son section de Design du Département de Design & Visual Arts, l'Escola Superior Galaecia au Portugal et avec le partenariat non universitaire du Centro Sperimentale del Mobile / District de l'architecture d'intérieurs, nautique et camper. La première édition du Master 3D était une expérience enrichissante sur tous les plans et a été conduite en co-enseignement entre professeurs tunisiens et européens. Le démarrage a eu lieu en octobre 2013 à l'ESSTED (Université de la Manouba). L'aventure de la deuxième édition se perpétue en 2015 / 2016 dans les trois universités tunisiennes, à savoir l'ISAM-Kasserine, l'ESSTED-Tunis et l'ISBAS-Sousse.

Pour guider cette recherche et la mener à bien, nous nous sommes retrouvés, au départ, dans un groupe interdisciplinaire et plurinational, composé de chercheurs spécialisés en humanités et en design.¹² Selon le plan d'enseignement, ce petit groupe de professeurs, devait procurer des aspects théoriques et scientifiques pouvant constituer le fondement de l'interprétation qualitative et quantitative du projet de design, en mettant l'accent sur les aspects de durabilité écologique, sociale et culturelle. Pour ce faire, on a mis à contribution des disciplines comme l'anthropologie, la sociologie,

11. Institut des Arts et Métiers

12. Au premier semestre du master l'équipe était formée par les professeurs Tunisiennes: Mmes. Insaf Khaled, sémioticienne et historienne de l'art et du design (ESSTED-Tunis), Yosser Halloul, peintre (ISBAS-Sousse); les professeurs Italiens: l'architecte Mme. Deborah Giorgi et le professeur d'esthétique M. Andrea Mecacci (UFI-Florence); les professeurs espagnoles: Mmes. Rosa Povedano, anthropologue et Industrial Designer, et Anna Calvera, professeure d'esthétique et historienne du design, (UB, Barcelone). Au deuxième semestre, Mme. Imène Kechida, designer, (ESSTED-Tunis) et M. Nabil Gnaoui professeur d'histoire (Kasserine) ont rejoint l'équipe.

l'esthétique, le patrimoine matériel et immatériel et l'histoire avec une approche d'interaction disciplinaire.

La méthodologie d'approche a combiné le travail sur terrain et la complémentarité des approches théoriques principales. Après la visite de divers ateliers d'artisans dans les régions de Tunis, de Sousse et de Kasserine, on a orienté les étudiants vers la recherche d'objets traditionnels fortement significatifs. Ils pouvaient être l'expression de la vie populaire ou la manifestation de richesse. À titre d'exemple, au sein de l'Institut Supérieur des Beaux-Arts de Sousse, les étudiants en Master 3D ont puisé dans le patrimoine culturel matériel et immatériel de la Région du Sahel, afin de contribuer dans le Développement Durable Local via une approche Design. Huit grands projets ont été élaborés avec la collaboration des Délégations régionales de l'Artisanat de Sousse et de Monastir ainsi que celle d'une vingtaine d'artisans. Les objectifs principaux des différents projets visent l'amélioration de la rentabilité, la promotion, la productivité et le perfectionnement de l'ergonomie des métiers artisanaux, principalement ceux en voie de disparition.

A travers des études scrutatrices que les étudiants ont effectuées sur le terrain, on a pu suivre l'avancement de leurs recherches à travers des exemples concrets de métiers artisanaux menacés de disparition. Travaillant en petits groupes et tenus de remplir une fiche ethnographique, les étudiants ont effectué des visites d'ateliers où ils ont rencontré les artisans qu'ils ont interviewés selon l'approche ethnologique, puis sociologique. Les enseignants, tous les partenaires en collaboration, on pu assister à l'élaboration de ces fiches ethnographiques ponctuées de sondages, d'interviews filmées, de statistiques, d'images, de descriptions écrites et aussi des réflexions du point de vue entrepreneurial, quant à la situation économiques

et sociales de ces artisans, ainsi qu'une bibliographie.

La méthode du travail consistait à fournir des informations sur l'objet, conformément aux différentes approches scientifiques appliquées; ces informations devaient être socio-ethnologiques, historiques, esthétiques et patrimoniales. Dans le cours d'Histoire, les étudiants devaient: 1) chercher des documents historiques (textes, répertoires, photos, etc.); 2) trouver l'époque à laquelle remonte la production de ce type d'objet; 3) repérer s'il y a des variations (formelles, homme / femme, usages, etc.); 4) remarquer s'il y a eu des changements de forme, matériaux, couleur, technique, usage et style, tout au long de l'histoire, en essayant de déterminer le moment et les circonstances du changement. Dans le cours du Patrimoine, les étudiants devaient essayer de répondre aux deux questions suivantes: est-ce que la technique est en train de disparaître? Est-elle en péril? Et comment se transmet cette technique? Durant le cours d'Anthropologie, l'accent est mis sur la filière de production de l'objet, en tenant compte de la composante humaine de l'artisan, comme partie intégrante du processus de fabrication. Les étudiants ont réalisé des enregistrements audiovisuels issus d'une interview ni structurée ni dirigée, où l'artisan à l'ouvrage, relate son rapport au métier et décrit son savoir-faire et les aléas du métier. Basées sur l'observation participative, ces vidéos ethnographiques ont débouché sur des témoignages vivants sur les techniques et le processus de production de l'objet, ainsi que sur l'histoire de vie d'un célèbre artisan. En plus de cette vidéo, chaque fiche ethnographique devait contenir une description du produit, une classification typologique,¹³ l'étymologie du nom commun du produit, en indi-

13. C'est un concept provenant de la culture du design qui assemble à la fois les utilités, les

quant s'il change de nom selon les régions, des spécifications techniques du produit et du processus de fabrication, une carte de la filière de production (le ou les lieux de toutes les phases de fabrication, de la provenance des matériaux et de distribution du produit).

A la fin, chaque fiche informe sur les procédés techniques, les systèmes de travail, les matériaux utilisés, les répertoires de motifs ornementaux traditionnels et leurs significations symboliques. Cependant, il y a des fiches qui comprennent aussi des images sur les conditions d'usage et les rituels sociaux associés: un aspect très important pour comprendre les objets concernés dans le déroulement des cérémonies de mariage, où pour le rituel du bain par exemple. La finalité de ces recherches est de sensibiliser les étudiants à l'importance du legs patrimonial et culturel, en terme de savoir-faire, tout en les outillant pour réfléchir et œuvrer pour la perpétuation et la préservation durable de ces métiers. Les fiches d'analyse comptaient également, des demandes sur la situation au présent des ateliers en tant qu'entreprises, leurs possibilités de croissance et leurs visions du futur. Ce sont des volets qui enrichissent la réflexion stratégique propre au design actuel.

Le résultat est une assez large collection très illustrative qui relève de la forme holistique des nombreux aspects socio-culturels des métiers artisanaux encore actifs en Tunisie. Ces fiches fournissent un matériel de consultation pour les designers ou les chercheurs sur la civilisation matérielle de la région. En somme, on a obtenu une documentation riche, permettant de recenser les différents aspects actuels du secteur artisanal, tout en créant une interaction avec le design social.

À la présentation des résultats on a pu constater que professeurs et étudiants étaient admiratifs face à certains travaux et à la manière dont certaines recherches ont été menées par les étudiants. Bien qu'enthousiastes et excités à l'idée d'acquérir certains objets artisanaux, récemment et autrement découverts, les étudiants peinent à leur trouver un usage pertinent, dans leurs vies quotidiennes modernes. C'est là que le véritable enjeu du master se dévoile à leurs yeux! Bien plus qu'une espérance, le design devient, une alternative intéressante, une vraie possibilité de comprendre et réinterpréter ces vieux et anciens produits, tout aussi bien dans une optique de solvabilité locale, que dans la perspective d'un scénario plus prospère et développé, prospectant la haute couture et l'industrie du luxe, ces domaines confinés et privilégiés auxquels appartenaient les vieux arts décoratifs et les industries d'art. Le vrai enjeu, quand même reste la production ordinaire mais moderne et globalisé adressé à la plupart de la population. Les stratégies se sont donc multipliées et les identités aussi.

4. À propos des objets, exemple édifiant: Le Hammam, lieu d'un rite ancestral [IK]

Comme on l'a vu plus haut, diverses civilisations ont marqué de leurs empreintes la vie des habitants de la Tunisie. L'un des héritages qui nous intéresse ici est celui de la coutume et du rite du lavage, emprunté précisément à deux influences capitales: la Rome Antique qui a longuement régné sur le bassin Méditerranéen et dont l'une des caractéristiques de sa civilisation est le cérémonial du bain, habituellement partagé en communauté. L'autre legs est celui

des ablutions musulmanes, hérité des Andalous et des Ottomans. De l'aryen «hamma», chauffer, ainsi que de l'hébreu «hamam», être chaud, le hammam est un édifice public, destiné au lavage du corps. On l'appelle aussi «bain maure» (en référence aux Andalous) ou «bain turque» (en référence aux Stambouliotes).

Avec leur génie d'organisation et leur goût du luxe, les Romains développèrent à un degré très avancé, non seulement la technique du bain, mais aussi l'architecture de l'établissement balnéaire. Le Romain se déshabillait et abandonnait ses vêtements dans l'*apodytérium*. Ensuite il était enduit d'huile dans l'*éliptérium*, ou *unctorium*, et passait alors dans une pièce où il pouvait se livrer à des exercices physiques assez violents. Après cela, il se rendait dans le *calidarium* (chambre chaude), puis dans le *sudatorium* ou *laconicum* (chambre à vapeur). Le baigneur allait ensuite dans la chambre tiède, ou *tepidarium*, et pour finir dans le *frigidarium* (le bain froid), où se trouvait fréquemment une piscine.

Ainsi à Rome, les grandes «*thermae*» impériales reçurent leur forme architecturale la plus complète qui favorisait le développement des bains en tant que centres sociaux importants, indépendamment de leur destination primitive. Les jardins, un *stadium* et des *exedrae*, où l'on donnait des conférences ou lisait des poèmes, devinrent des parties absolument nécessaires et faisaient partie intégrante des thermes. D'importantes pièces de sculptures, trouvées dans les bains romains, témoignent de la richesse des décorations.

En Tunisie, les bains romains étaient très nombreux. Les villes, même modeste, possédaient un ou plusieurs bains publics, comme à Lebda, Tuburbo-Majus, Bulla-Regia, Gafsa, etc. Les thermes couvraient de vastes surfaces et les chambres de chauffe et autre *frigidarium* étaient richement

dallés de mosaïques et plaqués de marbre, avec des petites piscines, des colonnes de marbres rose et des statues de dieux. Les anciens bains de Carthage, portent encore le nom de «dermech», du latin «therme»; un hammam de Gafsa, s'appelle d'ailleurs «tarmil», de la même origine gréco-romaine.

L'Islam conserva dans ses nombreux établissements de bains chauds la belle tradition ornementale du monde gréco-romain. En Andalousie, les poètes s'inspiraient de la beauté des hammams de l'Alhambra dont les murs étaient ornés de mosaïques multicolores et où la salle de repos comportait une loggia pour musiciens. D'abord privés et princiers, les hammams faisaient partie du palais dont ils reflétaient le confort. Ensuite ils se sont multipliés dans les demeures des riches familles. L'obligation des ablutions avant chaque prière rendit nécessaire la construction de nombreux hammams publics, puisque la propreté est devenue un culte et endosse un caractère sacré qui fait que «la propreté est un acte de foi». Ainsi, le bain public s'impose dans l'empire musulman, «comme une manifestation éclatante de l'art de vivre né de l'Islam. Repris aux Byzantins, par les califes Omeyades qui l'associèrent aux splendeurs de la vie damascène et bagdadienne, le bain est recréé dans son bâti, son rituel, ses valeurs, jusqu'à apparaître, tant il réussit à combiner éthique et esthétique, comme un marqueur de l'excellence citadine et un paradigme de l'universalisme musulman» (CARLIER & DRORY, s/d).

Près d'une mosquée et des commerces (le souk), le hammam tunisien traditionnel arbore des portes peintes en rouge et vert. Le bain maure, puis turc et enfin arabe, est composé de salles de déshabillage, d'une salle froide, d'une salle tiède et d'une salle chaude. Il y a deux catégories de

salles de déshabillage: une catégorie confortable et plus ou moins privative, composée d'une ou deux «*maksouras*» qui sont de toutes petites pièces composées d'une basse banquette en bois, meublée de matelas recouverts de draps et de quelques coussins. Une catégorie moins confortable, mais beaucoup plus vaste, est constituée par une grande salle très ornementée de peinture chatoyantes, de mosaïque et de marbre. Cette salle sert aussi en fait de hall et est surmontée d'une coupole sous laquelle jaillit une fontaine. Dans ce hall, trois côtés sont aménagés en «*doukkanas*» qui sont de larges banquettes en maçonnerie recouvertes de nattes en fibres végétales, appelées «*hacira*», et sur lesquelles les clients modestes se déshabillaient pour entrer se laver et s'y rhabillaient en sortant du bain.



Fig. 6: «Tassa» en cuivre repoussé: sorte de casserole pour puiser l'eau du seau



Fig. 7: «Taffela» en cuivre repoussé: récipient à couvercle servant à contenir l'argile trempée à l'eau de rose et servant au lavage des cheveux et du corps

Les pièces de lavage proprement dites sont: «*bit el bered*» (salle froide) qui est une salle de transition entre le hall froid et les autres salles plus chaudes; «*bit esskhoun*» (salle tiède) où il y a une *doukkana* centrale, pour le gommage et le massage; «*el arraqu*» (salle chaude), c'est-à-dire salle de sudation, comportant un bassin de collecte d'eau chaude, des petits bassins pour les pieds et une saillie dans le mur, servant à recouvrir une partie de la chaudière. Cette salle est une véritable étuve où la vapeur est épaisse et suffocante. Le chemin menant d'une salle à une autre, est configuré en chicane, pour éviter la déperdition de chaleur et maintenir la température et l'ambiance souhaitées dans chacune d'entre elles.¹⁴

Lieu du corps sexué, le hammam organise, symbolise et synthétise le mode de relation et de séparation entre masculin et féminin, inclusion et exclusion, espace public et espace privé qui gère les deux signes du genre humain. Chacun y vient pour délasser son corps, mais pour des raisons différentes. Provisoirement déconnectés du monde et détachés du temps, les hommes y vont chaque vendredi, pour préparer le rite de la prière collective à la mosquée; les femmes pour y densifier la parole et intensifier le groupe.

En effet, lieu privilégié du corps biologique, le hammam est aussi par excellence le lieu du corps social, gouverné par la culture. Ainsi, louer une *maksoura* ou s'installer directement sur les *doukkanas* est déjà le témoignage du rang social de l'utilisateur; ce rang social disparaît automatiquement dès qu'on franchit le seuil des salles de lavage, puisque les signes de l'appartenance sociale s'éclipsent par la nudité et l'emploi généralisé de la «*fouta*», une sorte de pagne en co-

14. Configuration héritée des Romains qui avec leur génie d'organisation et leur goût du luxe, développèrent, à un degré très avancé, non seulement la technique du bain, mais aussi l'architecture de l'établissement balnéaire.

ton artisanalement tissé et porté pudiquement pour couvrir une partie du corps. De ce fait, à l'intérieur du hammam les barrières sociales tombent pour laisser place à l'inclusion et à l'égalité et où seules comptent les valeurs humaines de politesse, de solidarité, de convivialité et de révérence qui régissent les relations. Ces comportements sociaux et ces codifications ne sont pas consignés dans des registres, mais sont le fruit d'un apprentissage oral et sur le tas que les jeunes perpétuent en observant l'attitude de leurs aînés et de leurs parents.



Fig. 10: «Fouta»: paréo servant à se couvrir en entrant dans les salles de lavage

Lieu concret et ordinaire, le hammam cesse d'être uniquement un édifice et se mue en moments rituels. Riche de son intervention, il accompagne tous les stades et tous les rites de la vie: le mariage, l'accouchement, la circoncision, le pèlerinage, la naissance et la mort. Il en devient un lieu magique de transition. Sombre, chaud et humide, il est une véritable métaphore de la matrice (CARLIER, 2000: pp. 1303-1333).

Le hammam associe, pour le jeune garçon tunisien, la découverte de son corps à celle du corps de la femme et com-

bine une procédure de sevrage et un rite de passage assurant la sortie du monde féminin représenté par la mère et l'entrée dans le monde masculin représenté par le père.¹⁵

Le hammam de la mariée (ou du marié) est un moment capital du rite de passage à l'âge adulte, de l'acquisition d'un statut social et de la prise de responsabilités. À cette occasion, le hammam combine l'espace et le temps et devient à la fois un lieu et un moment. C'est un lieu que la maman loue pour l'après-midi entière, afin de le privatiser, et c'est également une cérémonie particulière précédant de quelques jours la cérémonie du mariage. Le hammam est ainsi une occasion festive pour la mariée qui invite ses amies et ses cousines pour partager son bonheur. C'est une sorte d'enterrement de vie de jeune fille, où la maman qui ne participe pas au bain à proprement parler, demeure dans le hall central, pour recevoir les convives et distribuer boissons et gâteaux traditionnels, sous les you-you des invitées et des employées préposées aux massages et aux gommages. Entre-temps, sa fille est confiée à une tante pour la laver et la dorloter par des massages, des bains de «*tfal*», une sorte d'onguent d'argile parfumée à l'eau de rose et de fleurs d'oranger. Dans ce genre de circonstances, le hammam devient une opportunité pour la maman de démontrer son savoir-faire (la préparation soignée du «sar» baluchon, la broderie du tapis de bain, la dentelle des manches de la chemise de la mariée, la broderie sur le *sefsari stacrudha*,¹⁶ la saveur des gâteaux et de l'orgeat, etc.) et son savoir-vivre (sa convivialité envers les convives,

15. Jusqu'à l'âge de six ans, le petit garçon fait encore partie du monde féminin et accompagne sa mère au hammam lors de la plage horaire réservée aux femmes. À partir de six ans il y va avec son père ou son grand frère.

16. Voile en soie naturelle que les femmes portaient pour sortir de la maison. La seconde parole vient de l'italien «*setta cruda*»

le raffinement de la réception par la qualité du service).

Si on a décrit aussi longuement le hammam, c'est parce qu'il est intéressant à plusieurs titres:

- C'est un lieu ancestral hérité de plusieurs civilisations.
- Il est le creuset d'un patrimoine immatériel très diversifié et immensément riche.
- Il est le réceptacle d'une profusion d'objets: la *fouta* (pagne ou paréo en coton), le *stal* (seau), la *tassa* (petite casserole pour puiser l'eau du le stal), le *sar* (baluchon), la *hacira* (natte en fibres végétale), le *kobkab* (mule en bois avec une lanière de cuir), etc.

6. Du design et des *artworks* pour les Hammam actuels: stratégies pour convertir les outils de bain en petites pièces d'art contemporaine [IK]

Ouvert, tolérant et modéré, le peuple tunisien n'a trouvé aucune difficulté à s'inscrire dans la modernité dès son indépendance. Pour y parvenir, la volonté politique a axé ses efforts vers l'usage d'objets d'utilisation quotidienne venus d'Europe et a délibérément dénigré les objets traditionnels qu'il jugeait non conformes à la vie moderne. Cette orientation politique a fait périlcliter la production d'objets de qualité au profit d'une production médiocre, destinée à une clientèle non exigeante que le tourisme de masse a déversée sur le pays. Au fil du temps, le produit artisanal tunisien est devenu un objet folklorique non prisé par le Tunisien. Ça sert aussi pour l'architecture, et les bâtiments stylistiquement «modernes», en réalité style HLM ou banlieue ouvrière européenne, envahissant autrefois petits villages de pêcheurs. C'est d'ailleurs, comme partout au bord de la Méditerranée.

Même s'il est synonyme de traditionnel et de populaire, et malgré l'apparition de la salle de bain dans les habitations modernes, le hammam reste assez fréquenté par un bon nombre de Tunisiens. Réconciliés avec leur Histoire et leur Tunisianité, après la révolution du jasmin, ceux-ci tentent d'autant plus de renouer avec leurs racines et leur patrimoine qu'une pléthore de designers issus de la jeune École de Design de Tunis commencent à proposer une nouvelle vision du patrimoine matériel, engendrant la survivance du patrimoine culturel.

Liée à la genèse de l'objet, cette épaisseur temporelle des vrais produits artisanaux quand ils ont de la valeur artistique n'est jamais perdue pour nous, usagers, dans la mesure où elle s'est déposée en filigrane dans l'objet, le long des gestes, plus ou moins sûrs, mais, assurément, réfléchis, gestes modulant la structure de l'objet patrimonial au cours de son élaboration conceptualisée. Ainsi, la trace de sa genèse est constamment présente sous la surface de l'objet reformulé, car en même temps qu'il déploie une nouvelle lecture de l'objet traditionnel, le designer où l'artisan actualise et contextualise le produit.

A titre d'exemple, un peut de critique. Quand la designer Dora Bellamine revisite le *sar* (baluchon), le *bichmek* (mule en bois et lanière de cuir brodée de fil de soie et d'or), ou la *fouta*,¹⁷ elle s'évertue probablement à traduire les objets dans leurs structures les plus fidèles, simplifiant au maximum leurs apparences pour n'en rendre que les traits nécessaires et suffisants à leur reconnaissance. Elle n'est pas uniquement sous le charme d'un quelconque "traditionalisme" qu'elle imite, ni n'est née traditionnelle; elle le devient à force de tra-

17. Ses *foutas* et ses baluchons ont fait l'objet d'un stand aux Galeries Lafayette, à Paris.

vailier sur la structure de l'objet, structure qui émane d'une vision-pensée décryptant rigoureusement «*les signes donnés dans le corps*» (Merleau-Ponty, 2003). Elle prend là un grand risque, sachant que la simplification formelle a la fâcheuse réputation de raidir et de dénaturer le modèle originel et de l'éloigner de toute la charge immatérielle dont il est investi. C'est donc moins pour leur pouvoir rituel ou anecdotique, les inscrivant dans une époque ou un moment donné, que pour l'énergie de leur ascèse structurelle, que la designer semble accorder de l'importance aux objets patrimoniaux. Serait-ce une manière subtile de dépouiller ses objets, grâce aux nouveaux matériaux et à la réécriture formelle du temps linéaire inscrit dans le temps social d'une activité sujette au temps cosmique, au sempiternel renouvellement des saisons, des rites, des tâches, des manifestations fastes ou néfastes. Vu sous cet angle, la charge immatérielle est ici, saisie pour sa motion créatrice en tant que trace génitrice de nouvelles images fulgurantes qui jetterait des ponts mobiles entre passé et présent, entre matériel et immatériel.

Les origines historiques ne renvoient plus à ce qui est désuet ou dépassé, mais au rythme frétilant et délicat d'une historicité dont «la mise en œuvre répond à une expérience transhistorique et profondément dialectique» (Didi-Huberman, 2000) qui la rend avide d'être reconnue comme une restitution et comme quelque chose qui est par là même inachevé, toujours ouvert. Formellement et plastiquement reformulés, les objets ne ressemblent pas moins au modèle original. Ni tout à fait les mêmes, ni tout à fait différents, ils constituent le lieu d'ancrage d'une transfiguration où s'articulent des manipulations formelles, chromatique et des constantes anthropologiques, pour donner lieu à des «*figures-témoins*» (Deleuze, 2002) qui ne sont autre que le lieu de «*passage*»

d'une époque à une autre, d'un moment historique à un autre qui marquerait toutes les élaborations formelles inédites, porteuses de toutes les promesses, d'une survivance et d'une sauvegarde.

7. L'espoir déposé sur le design aujourd'hui: Qu'est-ce qu'on attend du design, des artisans et des créateurs actuels [YH, DG, RP]

L'expérience des futurs designers tunisiens au cours du Master 3D était féconde sur plusieurs plans. En faisant des études anthropologiques et sociologiques sur les différents objets artisanaux locaux, les étudiants ont pu se rendre compte du riche patrimoine matériel et immatériel tunisien. De cette prise de conscience ils pourront inscrire leur travail de Designer dans une approche responsable. Très étonnés au début de cette recherche, les étudiants ont pu découvrir leurs propres valeurs identitaires. Ils ont été invités à choisir, comme point de départ, le signifiant le plus déterminant, selon eux, pour les objets ou les traditions, provenant de leurs familles respectives et de leurs propres territoires.

Ce n'est qu'en puisant dans l'histoire du pays et dans le legs des anciens qu'ils pourront perpétuer l'essence même de leur identité, tout en instaurant, à leur tour, leurs empreintes créatives. De ce fait, les enseignants partenaires tunisiens et étrangers ont dirigé les étudiants vers une approche qui n'est uniquement centrée sur la conception d'un objet, mais aussi sur le développement durable, économiquement efficace, socialement équitable et écologiquement tolérable. C'est cette prise de conscience qui a donné le coup d'envoi des différents projets mis en forme dans l'atelier en

collaboration avec les artisans locaux qui ont réalisé les prototypes. C'était absolument intéressant de voir comment les jeunes designers du Master, grâce à la conscience acquise, se sont renforcés et ont mûri en réalisant leurs projets avec le concours des artisans qui ont contribué à la mise en valeur de leurs produits.

Le résultat le plus important, c'est sûrement celui de rendre conscients les jeunes futurs designers de l'importance de leur propre patrimoine, matériel et immatériel, de leur fournir une série d'outils qu'ils peuvent s'approprier, les perpétuer et par la même les conserver. S'ancrer dans son territoire local pour pouvoir toucher le global, doit être l'attitude salutaire d'un designer social. Il faut noter ici que depuis la révolution, l'entreprenariat social a beaucoup fleuri en Tunisie, permettant à plusieurs jeunes, dans les différentes régions, de voler de leurs propres ailes. À l'issue de Master 3D, notre souhait est de voir des étudiants enthousiastes et entrepreneurs, capables de poser les jalons d'une génération de designers capables de s'imposer sur le marché local et international par l'implantation d'entreprises sociales florissantes.

Nous sommes conscients que la conservation et la sauvegarde devront nécessairement se confronter à l'innovation —technologique, sociale, économique— et il est vrai que le changement fait partie du monde, qu'au cours des siècles, des paysages entiers, des cités, des systèmes de communication, des modes économiques ont été transformés.

Aujourd'hui le design veut nous confronter aux défis de la contemporanéité, en essayant de redonner sens aux choses, en tentant d'en comprendre le sens caché, d'interroger et de nous interroger sur les valeurs des individus et de la communauté pour laquelle on travaille. Ceci ne signifie pas que le designer doit se perdre, dans le rôle du «médiateur», ou

dans «faire à travers», mais devrait être le catalyseur des suggestions et des valeurs qui proviennent de diverses disciplines, des communautés locales, du marché, tout en injectant une grande part de soi. Le projet qui comporte en son sein une transformation génère le produit qui en devient la synthèse. Synthèse qui n'est pas la somme des parties, mais plutôt une chose de complètement nouveau. En effet, nos futurs designers doivent avoir une nouvelle approche de l'intérêt général visant à assurer la pérennité de nos savoir-faire, notre écosystème, nos sociétés et notre économie. Et c'est surtout une opportunité unique de repenser nos modèles et d'instaurer un levier d'innovation.

Nos étudiants ont dès lors orienté leurs recherches vers des objets et des métiers artisanaux qui émanent surtout de leurs propres territoires. Chaque objet du cœur raconte une histoire, un patrimoine, une culture, etc., bref, une société. Une structure sociale qui fonctionne selon ses propres codes et ses propres repères. Ainsi en s'ouvrant sur les sciences humaines nos étudiants deviendraient des acteurs dans cette approche responsable du développement durable local et ce en pensant au territoire, à la production, au service et à la société. La culture de la Tunisie a été leur principale source d'inspiration: la diversité des influences, la mixité sociale, l'économie de moyens et l'artisanat. De ce fait, et en partant d'exemples concrets des travaux de nos étudiants, nous espérons communiquer l'impact de l'expérience du Master 3D, à travers leurs propres recherches et leurs propres documentations. Les produits choisis auront leurs reflets de l'autre côté de la Méditerranée, puisqu'ils sont nés d'un dialogue ancestral entre les deux rives, engendrant un éventail de savoir-faire bâtis au rythme des siècles passés.

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Territory and Aesthetic as tools for product design

by José Luis González Cabrero and Ana Margarita Ávila Ochoa

METADESCRIPTION

An argumentation and some examples of how experiencing a territory with an aesthetic-oriented analysis can enhance the materialization in the product design process.

KEYWORDS

Territory, Aesthetic, Product Design

ABSTRACT

Starting by understanding aesthetic as a sensorial experience, this paper aims to show the aesthetic explorations through the perception of a given environment, from its comprehension as a territory, to its translation into qualities and characteristics for a design object, in the case study exemplified in jewelry.

Situated in a context of an academic exercise, the paper explores how the project developed a code composed of shapes, colors, textures and materials while materializing the configuration of the jewel. So designers, besides attaching a function and a purpose to the jewels, charge them with meaning that addressed a specific territory, in which the first aesthetic exploration begun. several specific and particular utensils.

1. Introduction

Beyond the possible relativity of the aesthetic value in an object, this aspect along with the function, the use and the technique are the constitutive factors in design. The aesthetic value and aesthetic related themes are often common areas of study in universities with design oriented programs such as architecture, urbanism, design and arts in general.

However it is highly complex to approach a problem such as teaching and learning applied aesthetics, and how the “look” (the aesthetic value) has huge consequences on the expression of objects, rightfully projecting them to the proper market, considering the context where they will be used, matching them accordingly to the technology that will be employed to produce them, tuning them to the message that will be transmitted by the manufacturer, but specially articulating the meaning and the intent of the designer to share his or her own experiences with the final user through the object.

If we understand aesthetic as a sensorial experience and a specific knowledge acquired by a sensitive process (Sanchez Vazquez, 2007, p. 26), then the logical way to actively participate in that process is by perceiving. Which means matching the perception with a mental pre-figuration. So either to understand or produce aesthetic, the starting point is to feel.

With this in mind an exercise was created in order to teach industrial design students the importance of aesthetic in design, this exercise took into account not only the aesthetic value per se but also the environment (natural and cultural) in which it was created, attaching it to a territory.

By territory we understand a bounded place, bounded not only for their physical limits, or geo-political distribution, but also by the appropriation of those who have lived in it.

Whether they have attached time qualities (local history and projections of a future life), and / or space qualities (memorial sites, meeting places, spaces designated for specific activities, etc.) Therefore the territory is loaded with different meanings for those who inhabit it.

Is it possible then, to analyze a territory by the code created of all those meanings? Is it possible to link the territory to an aesthetic grammar in which all those meanings are established? Learning a way to perceive and express what was felt or experienced?

Under these questions and some more, the design exercise was created, linking the study of aesthetics with the perception of a specific territory, understanding how experiences can turn into signs and those sign can be codified into design elements, giving the designer the quality to transport us into a specific territory with an object, in the case study exemplified with contemporary jewelry.

In this paper, we will first discuss the relevance of aesthetic in product design, then the relationship between aesthetics and territory and finally present a didactic approach to aesthetic with some case studies of the exercise and some conclusions of the academic experience.

2. Aesthetic in Product Design

In product design it is well known how function is the answer to a need, ideally the product will solve that need with the function or the purpose, and needs are therefore ranked by importance, starting with our physiological needs. Usually those needs establish the practical functions of the product, but practical functions are not the only ones nor the

most important in some objects, there are also symbolic functions and aesthetic-formal functions (Löbach, 1981, Bürdek, 2002) those who answer to other kind of needs: emotional, cognitive or psychic functions (Fornari, 1989). However in all cases design takes a holistic approach to a man's needs, it observes its physical, intellectual and spiritual demands and desires.

Starting in the seventies, aesthetic was often linked to the direct requirement of enhancing the perception of the object, thus bounding it to just operate within the realm of the shape, on the following decades the new research for expression and communication was articulated by post-modern designers as well as new market opportunities, those factors establish differentiation and customization in products, this added up to new technology and processes propelling aesthetic beyond the shape, associating it to taste and symbolic values. From that change we can establish a change in the design practice where objects had "satisfaction" levels, making them more pleasant and with a higher usability rate, even linked to emotions.

"Aesthetically pleasing objects seem to be more useful for the user just by the level of attraction. That is because the user experience empathy towards an object that could be useful, thanks to that an emotional connection is created between object and user" (Norman 2005, p. 103)

It is a matter of establishing an aesthetic communication with the user so there can be a genuine interest from the user, open to new experiences and add up to the conversation, not only the practical function but also other kind of associations, like emotional attachment, memory and allowing him to add other meanings to the object precisely because of its aesthetic qualities and characteristics.

Therefore in design: the feel, taste or aesthetic judgment (Kant, 2004) is the main door to experience satisfaction, emotion and usefulness of the object. It is not just the perception strictly defined by science, nor is it only appreciation as stated in the artistic field. It is use and contemplation, experiencing the object in all its possibilities.

This last idea justifies the choice of confronting this alleged experience design enhancer with jewelry design. Until this day and age, jewels have been observed as objects that solve a symbolic-aesthetic need, exemplified in an ornamental function.

But extending its functional spectrum means understanding that there are different levels of perception, when it is used, it enhances its perceived function, not only because it is used by two kind of users: the one who wears it and the other one that admires it, but also because it articulates messages in the way it is worn, its weight, dimensions and movement.

BÜRDEK's product functions

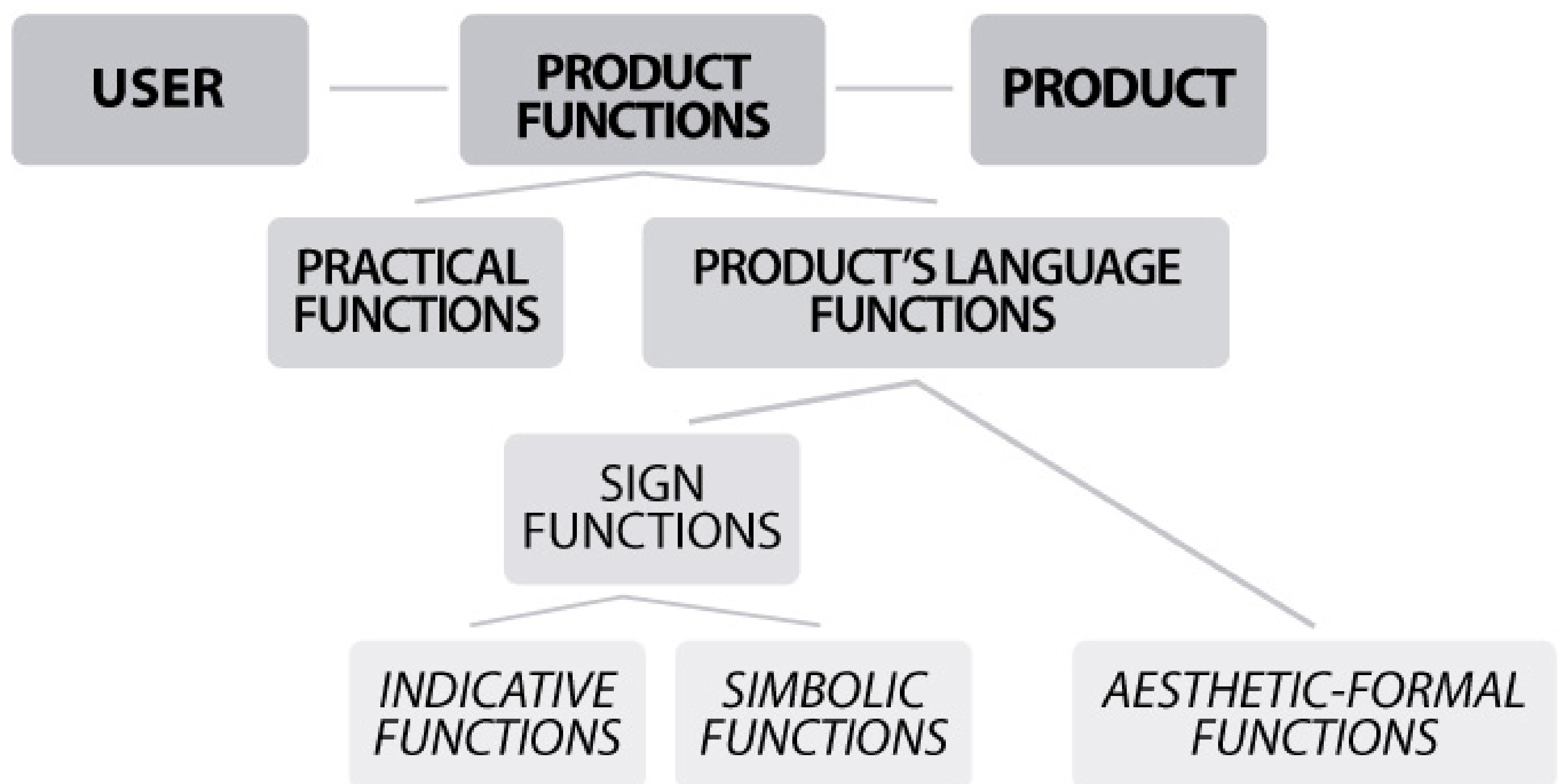


Diagram 1: Bürdek's product functions

Both Norman and Bürdek's positions find a symbiotic relationship in which objects become efficient (useful) when they are aesthetic and vice versa. That means that objects are agents of satisfaction when they comply with the functions that they were created for. But what happens with new object typologies? What reference points could we find in brand new lines of products as the contemporary jewelry, where in the aesthetic expression lies all the function and usefulness to become an ornament? That is to embellish.

That is precisely where the aesthetic traits become a statement to provide style in the contemporary jewelry, articulating ornamentation in a different way, coding the message that the user wants to project by using those new typologies. The shapes, colors and materials in this contemporary jewelry are not represented within the archetypical sense of a decorative jewel based on its uniqueness, the high economic value of the material used or the expensive production processes (as often jewels are), they are represented instead only as raw aesthetic perception.

Taking that into account, contemporary jewelry as product, links its expressive behavior and aesthetic production with an artistic approach, dominated by the artist and its ability to articulate a message. It still have product values (as industrial products have) but they will be at the intersection with design, fashion and image, as is established by author Soto Curiel.

“Designers have a fundamental responsibility with consumers. Their products have to have specific functions, an emotional impact and in some level an expressive proficiency that will become palpable via the one who owns or uses the object-product.” (Soto Curiel 2013, p. 139)

And so, contemporary jewelry by its very nature as an ob-

ject-product, responds to different motivations. In this study and exercise, it took that role of materializing platform, since it was very susceptible to aesthetics and to allow the discovery of perception in an empirical manner.

3. From aesthetic to environment perception

The relationship between aesthetics and the environment as territory, meaning its perceived appearance by the senses, represents an interesting field of study. How it affects the aesthetic production of mankind according to the stimuli that subjects are submitted to is, in some level, linked to the creative process. In this case the configuration of a design object, with use, sense and meaning.

All the materialized qualities of the object are closely linked to a sensory perception of the environment, and therefore the richness of an environment to create sensorial experiences will depend on its ability to increase the sensorial receptiveness of the designer. This happens by watching, touching, listening and feeling the physical environment, providing the designer with a basic grammar of materials, colors and shapes channeling those experiences.

This can be understood through time, where object production was often closely related to the environment, and different environments constructed different designs. For example geographical areas where design gets its own “language” but also is understood and appreciated because that association is evident. As a clear example we have the tradition of Scandinavian design on the beginning of the 20th century, where design objects solve needs using materials and processes from the region, there was a contribution with a for-

mal language but also with the traits of a specific territory: Nordic timber and local crafts to work it, giving an early design identity to those object, making them belong to a region or locality.

“An important transition moment on Swedish design for the twentieth century is noticeable on the union between art and industry, contributing to a growing significance of Swedish identity. Even though some Swedish manufacturers had traditional practices, they follow an innovative program encompassing materials and references that establish a common aesthetic in their products.” (Sparke 2010, p. 118)

Taking all the above we can establish that there is some kind of grammatical structure that can take place within the object. That grammar translates some elements of the aesthetic experience (sensorial elements) to the user and thereby establishes a prelude to a place where that experience was lived, in that moment the object becomes the territory, becomes the aesthetic experienced in a certain place.

This relation on how the environment affects processes and inhabitants is way more evident on other fields of study and sciences like biology, where scientist create terminology like *Chronomy* (chromos: place & nomos: law) to label that impact that environment has on its inhabitants and how both territory and the living beings in it are inside complex evolution processes that constraint or allow their existence. Design can be understood in the same way as an “agent” to increase the local value matching an aesthetic production with its environment (Thackara 2006, p. 73).

4. Case Study: Contemporary Jewelry for a territory (Real de Catorce)

In march of 2014 an academic exercise took place, the goal was to try to explain in a practical way how aesthetic can be understood and articulated starting from a territory. The case study was designed and arranged in a design exercise for students enrolled on the 5th semester of the Industrial Design program of the Habitat Faculty for the Autonomous University on San Luis Potosi (UASLP). Habitat Faculty is among the best design and architecture schools in Mexico and San Luis Potosí is a thriving city with around 700, 000 inhabitants in the north-center region of Mexico.

The main objective was to create a controlled scenario in which the students could experience a territory with a sensorial approach and then materialize those experiences in design objects. With this in mind the physical platform to make this materialization should not constraint the aesthetic communication to only a practical function, but instead should be “open” enough to allow all students a wide exploration on the aesthetic, the signs and meanings that they would want to summarize into their products. Contemporary Jewelry appear to be a good compromise because it encompassed more than just plain practical functions and introduced new channels of communication to both designers and users with ornamentation, decoration and interaction with the objects.

It was then deducted that the aesthetic traits will become a great deal in the object. The shapes, colors and materials would be the main tools to articulate and codify a complex message linked to a territory. For the territory the search went into a different context, trying to start fresh with the

perception exercise, and that resulted in a field trip visit to an ancient town located in a dessert zone in the north-center region of México called Real de Catorce.

Real de Catorce is a very small Mexican town located near the Cancer Tropic in rural San Luis Potosí, its population barely passes the thousand inhabitants and is a historic ancient landmark with a mining history reaching relevance on the eighteen century due to the richness of its mines filled with gold and silver and being an important economic source for the Spanish crown, but as years passed and precious metals were exploited it turned into a quiet town that now profits from tourism.

The academic strategy was to use the field visit as stimulus to recognize and decode symbols and meanings, but it became clear how the trip and the experience in the territory itself soaked the dictionary of aesthetic traits of each one of the students, providing them with a context-based grammar, a grammar supported by feelings and affinity to certain shapes, colors and materials from the town and region.

When the trip became a part of the methodology and an incentive, the territory turned out to be an axis for the project. The experience was 8 hours long in-situ and was a personal journey where everybody was free to experience the environment as they wished. They performed some historical research and existing products in contemporary jewelry before the trip but in the place they were only asked to register the experiences via photographs, sketches and some other alternative methods of registration, like scrapbooks and enriched sketchbooks with materials and organic matter (dried flowers and plants).

The final outcome of the exercise was near 60 projects of contemporary jewelry and some of them exemplified different

levels of sensorial analysis by the students. The territory supplied the aesthetic grammar but also experiences and different ways to perceive and live the environment. All those feelings, meanings and experiences were transformed into aesthetic qualities in each one of the contemporary jewelry pieces.



Necklace and Pendant / design by Blanca Ortega

Construction techniques and materials such as *cantera*, a characteristic pink stone of the region, were applied to fences and walls providing orderly landscape patterns generating compositions with order and sequence, students translated this into the history of the town, representing its growth and later decline, evolution and deterioration both materialized in a modular silver necklace who used those se-

Choker / design by Blanca Ortega



quences to denote rhythm, elegance and organic modularity along the neck and body.

Raw materials showing the time passing by, worn out and with signs of erosion showed also its authenticity, its strength over time and a statement of good quality expressed through sight but especially through touch. Those senses were used to both decode the territory and code meanings into the jewelry, filling them with expression. One particular case of that was the use of *mezquite* wood, a very hard and dry timber of the region mostly used on furniture, such as doors and window frames, that used on the jewelry established a territorial reference.

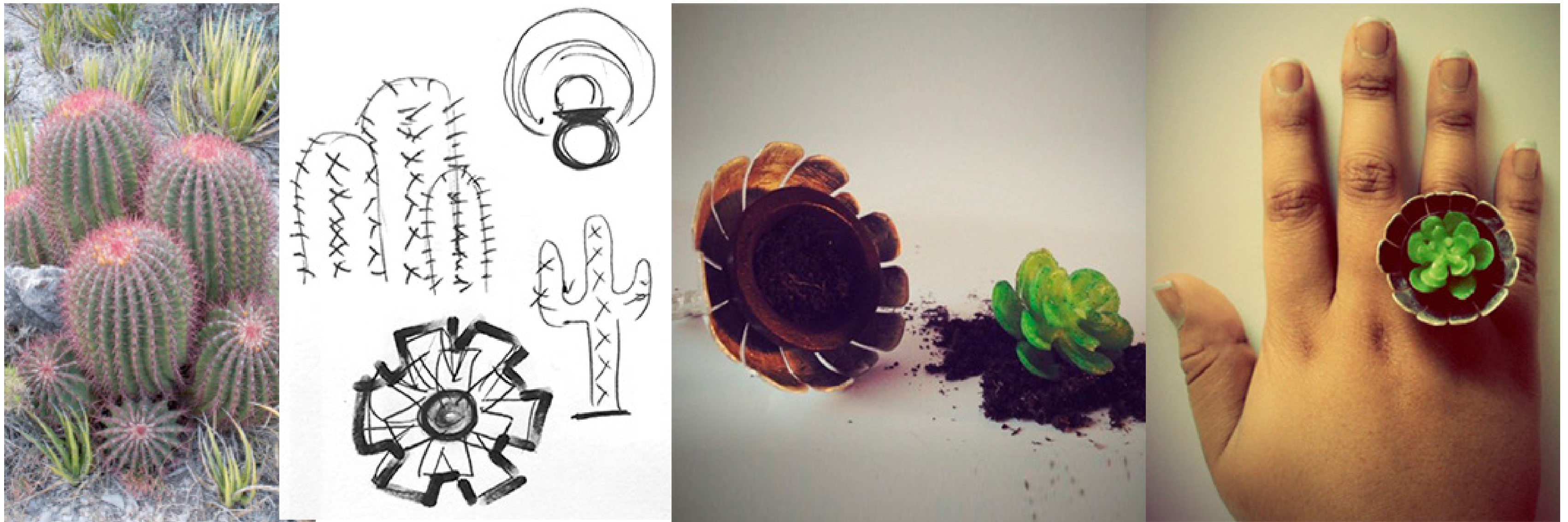


Shoulder Pad / design by Cintia Mendoza

Entering the town was an experience itself, the path to reach the destination has a distinctive paving round stone. While crossing it, the vibration and expectation of what's to come grew higher, creating meaning from an organized chaos and embodied in a new typology of jewel, a shoulder pad that doesn't have a clear edge, it's irregular and asymmetric, just as the road to enter the town.

The cacti and local desert flora with its shapes and characteristic colors were translated into meaningful ornaments, rings with the same shape properties as the flora but also

with the real cactus itself. Generating a conventional jewelry piece, as the ring, but adding a practical function, a small scale vase, leaving all the expression and territory matching to a very easy to understand inhabitant of that environment.



Ring / design by Montserrat Delgado

5. Conclusions

As a result of this exercise and as conclusions certain patterns emerged. First the territory or confined place of experience has an influence in the configuration attributes of the object: proving a sensorial dictionary full of shapes, colors, textures and materials; yet all these attributes were configured and materialized in aesthetic solutions at different levels, and each of them recall a specific environment.

An evident relationship between the visit on the new environments, in this case the ancient town of Real de Catorce, and the openness of the platform object, in this case contemporary jewelry design, can be established. Even more if we take into account that the articulation of the design communicates the territory where it was created.

This type of travel experience, documented in pictures, notebooks, scrapbooks and sketchbooks, allowed the students to have a reliable register that they could use as a can-

was when they charge the project with meanings. And this process of registration became the experimental platform where ideas were tested and the links with the territory were explored, thanks to the curiosity of the students and the validity of their experiences. Using silver as the natural material extracted of a mining town and pairing it up to other non-precious materials like rusted metal, pink stone *cantera* and *mezquite* timber. Using also organic fibers and extreme weather flora to add to the jewelry, taking also the dessert colors as specific regional inspiration.

This exercise built a large glossary of aesthetic traits in each one of the students that live the experience. That provided us with something recognizable that without this process could be hard to enunciate. Aesthetic, as a consequence, became an output, a process of materialization, something that could represent the lived experiences in a meaningful way on a particular environment, and thus a clear relationship between territory and aesthetics.

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The social representation of a territory

by Letizia Bollini

METADESCRIPTION

Designing the user experience of spatial interaction from a user-centered theoretical perspective.

KEYWORDS

Spatial representation, social representation, spatial and social interaction, user experience and interface design

ABSTRACT

The paper is aimed to present research approaches and methods coming from the environmental and cognitive psychology to explore and understand the social interactions and representation that people have of a certain environment.

According to this multidisciplinary perspective on space understanding, conceptualization – based on visual metaphors and digital interaction – are proposed, focused on the territory of Milano-Bicocca district, developed inside the master degree course in Theory and Technology of Communication, as case studies to illustrate meta-projects as follow-up of this in field user-centered design approach.

People have always a strong connection with the space they live in or with unknown places, which need to be explored and discovered. This relationship between people and the environment around them is both physical and psychological.

The people, inhabiting a place create with it a connection that drives its roots in the social and personal dimension of the places' history.

The place, in turn, is modeled by the historical sedimentation of their functional transformations and by the lived experience of peoples reshaping them, beyond of their mere spatial functionality. The places are not just portions of space with a mainly urban function, rather a set of cultural meanings, physical environments that are layered symbolic and social meanings.

The spaces as consequence represent the social or ethnics groups that inhabit them, returning an image of the constructions, of the trends and of the social relations of the groups.

1. Planning vs. inhabiting

Historically this conception of the space – mainly the urban one – as an *anthropomorphous* system was used by different and opposite design and town-planning approaches mainly in modern time. After the fading of the utopia of the Italian Renaissance's ideal towns and after the return to the past of the Neoclassicism, during the XIX century the town becomes place of the contrast between the *planned* and the *lived* experience. The artificial interventions that work out new plans for the large European capitals – like Plan Cerdà

in Barcelona or the Haussmann's boulevard in Paris according to an a priori model that considers the town as a scenographic stage for the self-portrait of the new society, of its power and of its rites – are evolving toward reflections more focused on the relationship between humankind and space.

The new century opens the urban reflection proposing again ideal towns, collective tenement houses as far to the experimental districts of the modern Rationalism – Siedlung as Weißenhof in Stuttgart – a solution is tentatively proposed to give a reply – even if quantitative – to the phenomenon of the industrial urbanization, planning the urban district, planning the services and the individual residential units according to a model of social organization and to architectural top-down approach that risk to transform the town as an alienating place for people that inhabit it, a *machine pour habitier* (Choay, 2006).

Only in the 70's with the so-called participated architecture the attention of architects and city-planners has been focused mainly on people as active subject in defining the space, its physical function and its social meaning in living experience.

The design process seems to give again more centrality to the symbolic, cultural and relational appearance in an attempt – perhaps utopian – to redefine the project according to a bottom-up approach.

This attention for the resident or what we could define – according to the new theories of the user-centered design – the user seems be even more urgent as the urban landscape becomes, as at the present, more a stage for the representation than a place of the daily life.

2. The psychological dimension of spatial relations

Starting from Egon Brunswick's studies (Brunswick, 2002), the connection between people and environment takes again centrality also in psychology. Following a sort of inversion in the "connection between shape and background" the physical context is carried in front and is getting studied and conceptually defined with deeper detail than the individuals and the groups.

The approaches to the subject are very different. Following the psychological perspective different interpretations of the connection environment-individual are proposed: the first one attributes to the environment the role of independent variable that – by means of the actual stimulations – produces effects on the individual behavior; in a second perspective the persons are interpreted of the environment according to the specific peculiarities; finally an hypothesis assumes that people and the environment due to the mutual interactions give rise to reciprocal influences. The first point of view – that finds application in the architectural psychology – proposes to individualize the features of the physical environment that obstruct or facilitate the behavior of the persons taking into account physical and quantitative issues. The second one – applied in the field of research and studies of perception-environmental knowledge, whose main item is the behavioral geography – focuses on the individuals, on its knowledge and its environment evaluations.

The hypothesis that presupposes a context of interactions gives greater attention to the variable of socio-cultural nature following the lines of search proposed by Ittelson (Ittelson, Proshansky, Rivlin & Winkel, 1974) But the point is surely the work of Kevin Lynch (Lynch, 1969): at the end of the 60's *The city image and its elements* has been published. A

revolutionary outlook is proposed, suggesting planning a town starting from the image that residents have of it. The model is widely accepted in the 60's and has further extended by the work of Kaplan & Kaplan (Kaplan, Kaplan & Wendt, 1972) based on the effective variables which influence the emotional evaluations of the places: coherence, complexity, legibility and mystery.

Finally, the geographers have investigated some relation people-territory applying the discipline and the methods of the *behaviorism* and using projective test, completion, verbal association and expressive techniques, representation test – producing maps of different areas from data recollected from memory is the method used extensively in this study – and expressive methodologies.

3. Landscape as social representation

According to Lynch, the public image is the mental framework that shared by the majority of a town population; the occurrence alone that the people live or enjoy of the same physical reality produces the possibility to share the same image of the town. It was supposed that the people that live in the same district and share a common culture have also a common image of the town and this can differ from the public image of other citizens. It seems indeed that “for every town it exists a public image that is the superimposition of a lot of individual images” (Lynch, 1969). These individual images are indispensable to be able to live in the actual environment and to collaborate with the other people. The feature of the urban landscape that produces the identification of these elements is the legibility: how easy is to recognize its

parts and how they can be organized in a consistent system. A representable and readable environment facilitates the motion across the environment and avoids the anguish that the chaotic town produces and – even more important – gives the possibility to the observer to find out and to emphasize the useful and significant elements that operate as a system of reference.

If the territory is representation – this means – social landscape of the daily experience of peoples who lives it, and if this experience is not limited to single individual, but also commonly shared inside the social groups – or paraphrasing Michel Maffesoli (Maffesoli, 1996) – *socio-urban tribes*.

4. Bringing the social representation out

Having a direct insight of the shared mental model of a common space could therefor a good approach to urban and space planning from a user-centered perspective. Bagnara presented in his work focused on *Environmental psychology* (Bagnara & Misiti, 1978) the research approach adopted by Donata Francescato and Minou Ella Mebane in an in-field experience.

The two authors adopted a psychological approach based on qualitative and representative research methods to understand and let people directly express the cognitive model that they have of a space. Starting from the already cited work of Lynch the two authors used visual parameters to identify the social and psychological values of an urban space. Identity, structure and meaning are the key elements to inquiry to understand the cognitive dynamic on which people develop their own *image of the city*. The project

introduced and additional interpretation of a phenomenon: *time*, according to the studies conducted by Parr (Francescato & Mebane, 1973) in the 60s.

The methodology requires users identify the symbolic and significant elements of the space they live in giving a sort of hierarchy in the visual environmental signs. A first research phase uses a narrative interview, a second one a survey to have measurable and comparable results in reading the urban space. A third activity asks people to draw using their memory the map of the place –Roma and Milan in the presented case studies.

The research approach allows many activities using the raw results:

- identifying emerging visualization patterns according to user groups – the *personas* according to Cooper's definition (Cooper, 1999) – if there is a common image also in the sketches produced by people of the same *socio-urban tribes* or – vice versa – if a group of people can be grouped according to its representation of the space
- if the representative test – freely drawing maps by memory – is an effective way to let people visualize and *translate* the conceptual model they have in mind or if the drawing ability could be an expressive bias in rendering ideas and spatial meanings.

According to literature (Downs & Stea, 1973; Beck & Wood, 1976; Wood, 2010) we can, however, argue that sketching the experience that users have of a place is a good way to gain insight of their knowledge and behaviors. On one hand images let express the conceptualization of the psychical shape –sketches, plans and other graphical *representative* methods– on the other hand, schemes are expression of the whole cognitive image and of the conceptual organization including

symbolic meaning, beliefs and social activities.

The representative test is integrated by a qualitative interview eliciting a reflection of the spatial perception: the users were asked to close their eyes and to describe “what they see”; what is “important” in the space of their city; which are the “five things” they would remember leaving the place; how much they like of the place; what they dislike; what they would change; to list the distinctive elements of the city and, finally, to draw a map.

The collected data –both visual and textual– were analyzed trying to identify if there are *focal points* – they could be present or not according to social group as it is visible in figure 2 – how many distinctive points have been drawn, how many of them are recurrent according to the Lynch’s classification – paths, referring points, borders, junctions, neighborhoods– how the maps are *overlapped*.

5. Milano-Bicocca: a case study

According to the described research approach different in field studies have been conducted in the last few years (Bollini, 2001) in particularly using the area of Milano-Bicocca as an experimental and research set (See Figure 1). The research projects were developed with the contributions of the students of *Visual and Interface Design*, a course part of the Master Degree in *Theory e Technology of Communication*, an interdepartmental experience conducted by the Department of Psychology and the Disco-Department of Informatics, Systems and Communication both of the University of Milano-Bicocca.

The university campus was built in a former industrial

area. In the last 10 years the district has been restored with a mixed public-private project based on the master plan designed by architect Vittorio Gregotti. The intervention, on an urban scale, includes several housing estates, the second largest state university of Milan (the seventh University of Milan) and a series of buildings dedicated to research (CNR) and tertiary activities. The district is limited on two sides by physical borders (an overpass on the edge of the area of the cemetery district / municipality of the Milano-Greco and rail) and the other two borders respectively with two common hinterland and is bordered by a road to urban expressway is being built where the fourth metro line. Due to its geographical location, the identity of his architecture out of scale and the failure to connect with the existing urban fabric within the search was called the *island city*. From the analytical phase revealed significant guidelines for the next stage of conceptualization: the various *tribes* – even in the internal variability subjective – identify specific recurring items area of the district by use prevalent.

Within the course of in-field research have been identified

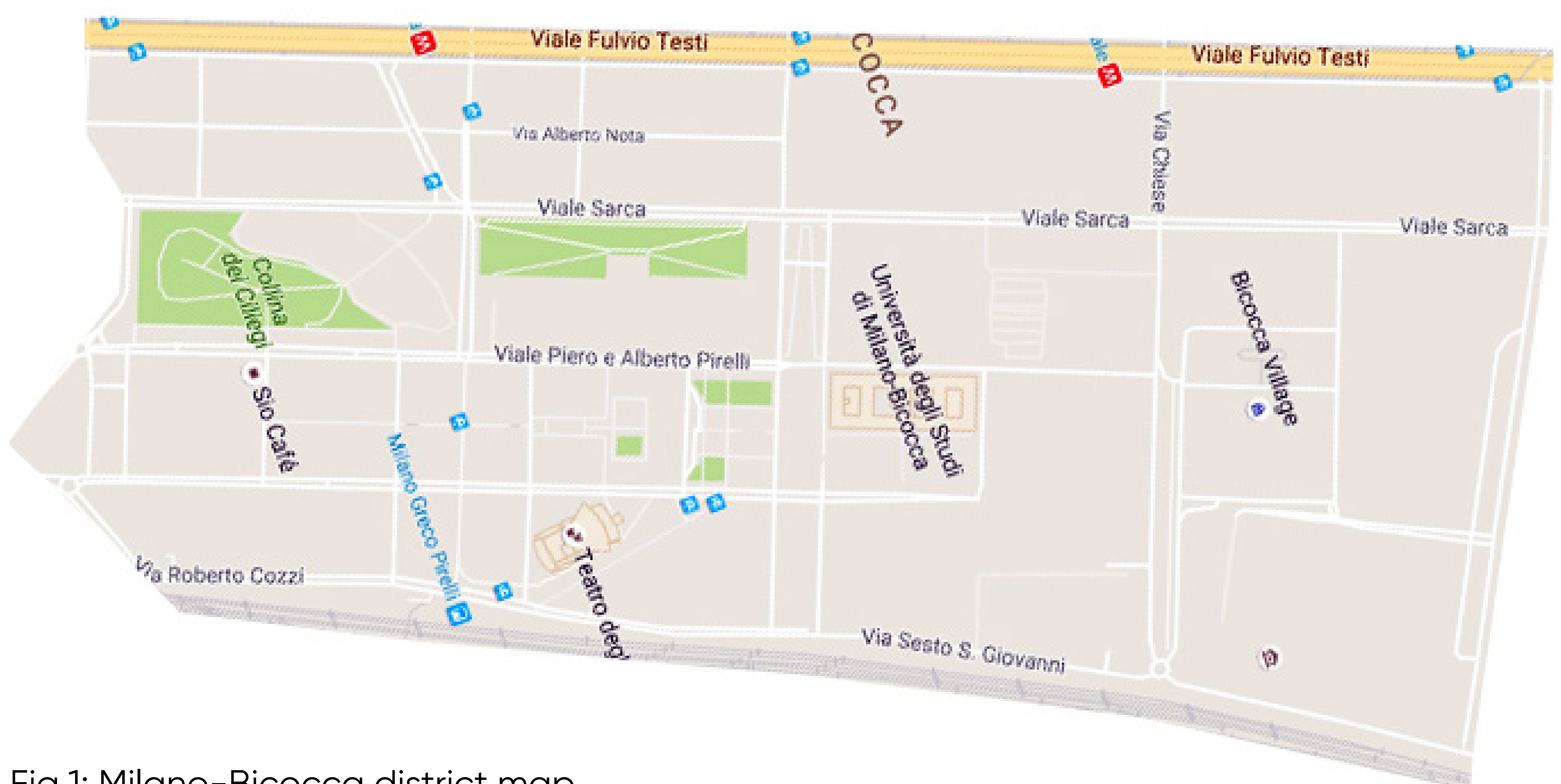


Fig.1: Milano-Bicocca district map

four *social-urban tribes* that use the space according to time of day, routes and perceptions of the environment, different, but applicants within the same social group (see Format & results: <http://goo.gl/FOp5v> and <https://docs.google.com/spreadsheet/ccc?key=0AgBdClgB-ayZdDUwSmxVd-V9PenVMQ3N4Y2VyUksxbEE&authkey=CJ3Dy78E>).

The tribes identified are:

- Residents: usually young couples with children or old residents interested in services, public spaces and social connections.
- University students: who once arrived in the district spend the day in the same building using the university canteen or fast foods concentrated in the central square of the district, the underground Piazza Trivulziana
- Workers: concentrated at the ends of the transit district within the district without creating a vital link with it and everyday
- City- users: who enter the district in the free time to go to the gym, cinema and theatre, the Arcimboldi (which replaced LaScala during the closing period of the restoration) or Hangar Bicocca exhibits.

Fig. 2 (a, b, c and d) shows some of the research results: the division of spaces frequented by the various tribes and the representation that they give some of those interviewed.

From the analytical phase revealed significant guidelines for a possible further conceptualization. The various tribes - even in the internal variability subjective - identify specific

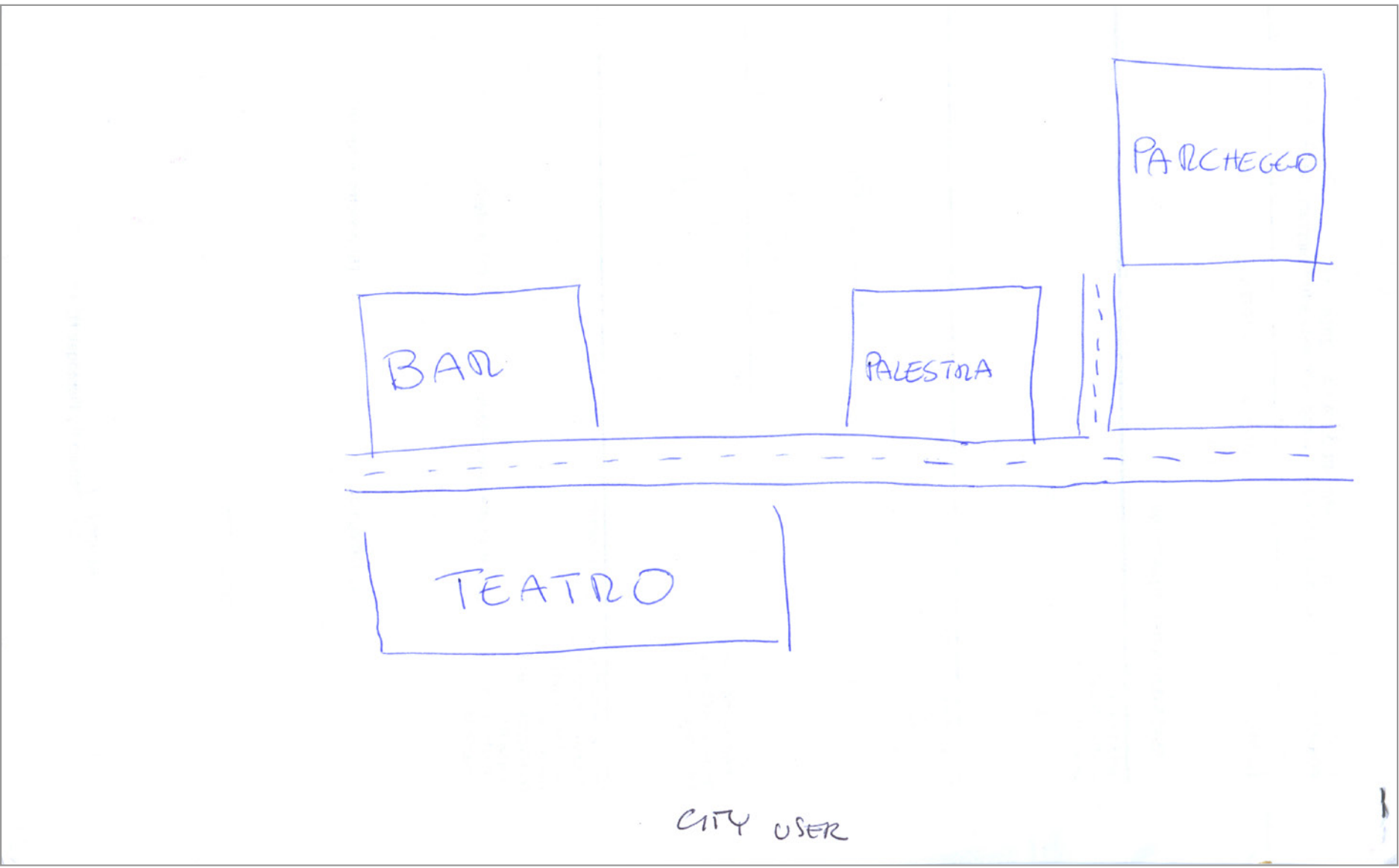


Fig. 2a: Maps sketched by: city-users. The emphasis is on the theatre and parking

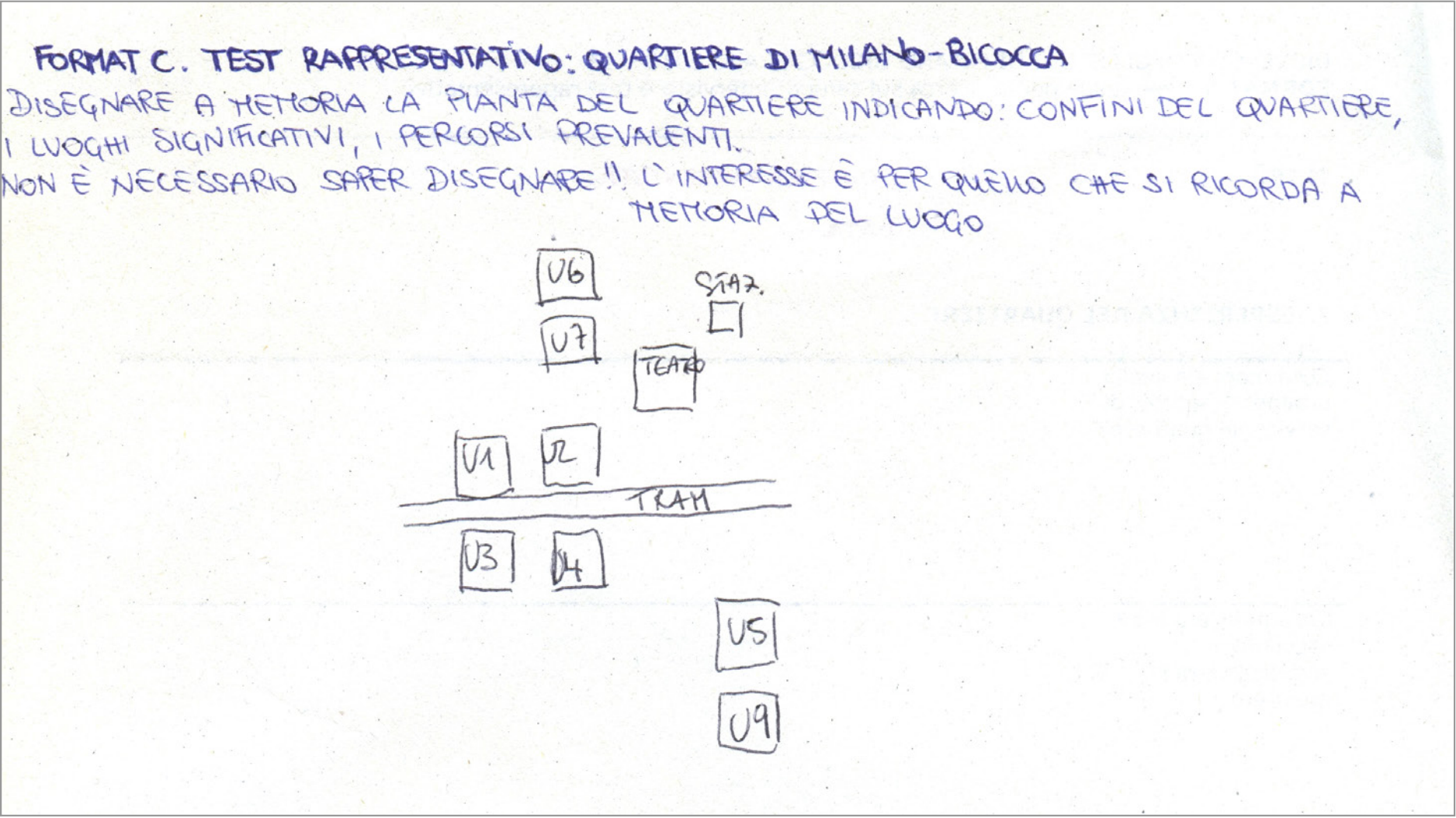
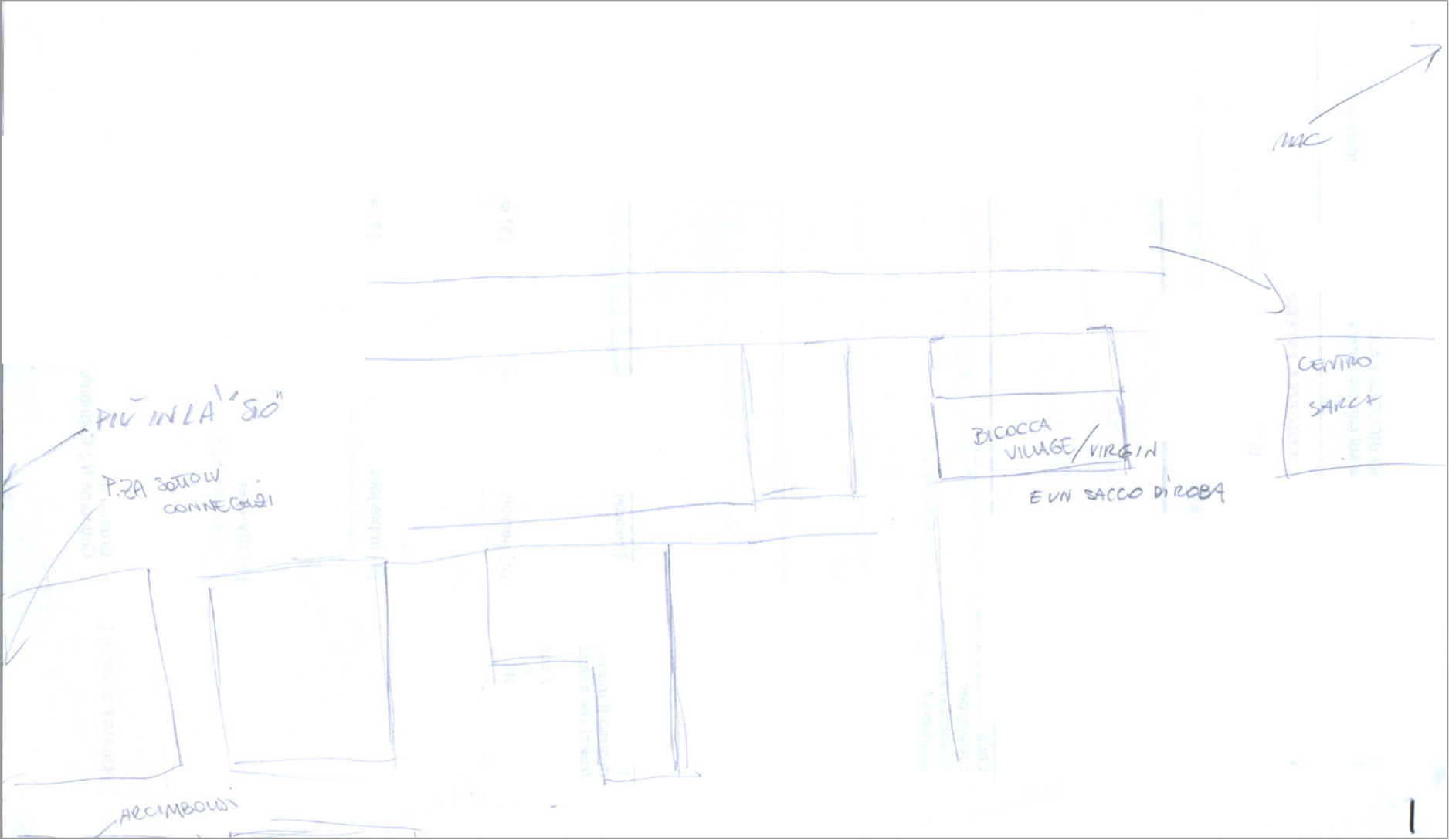
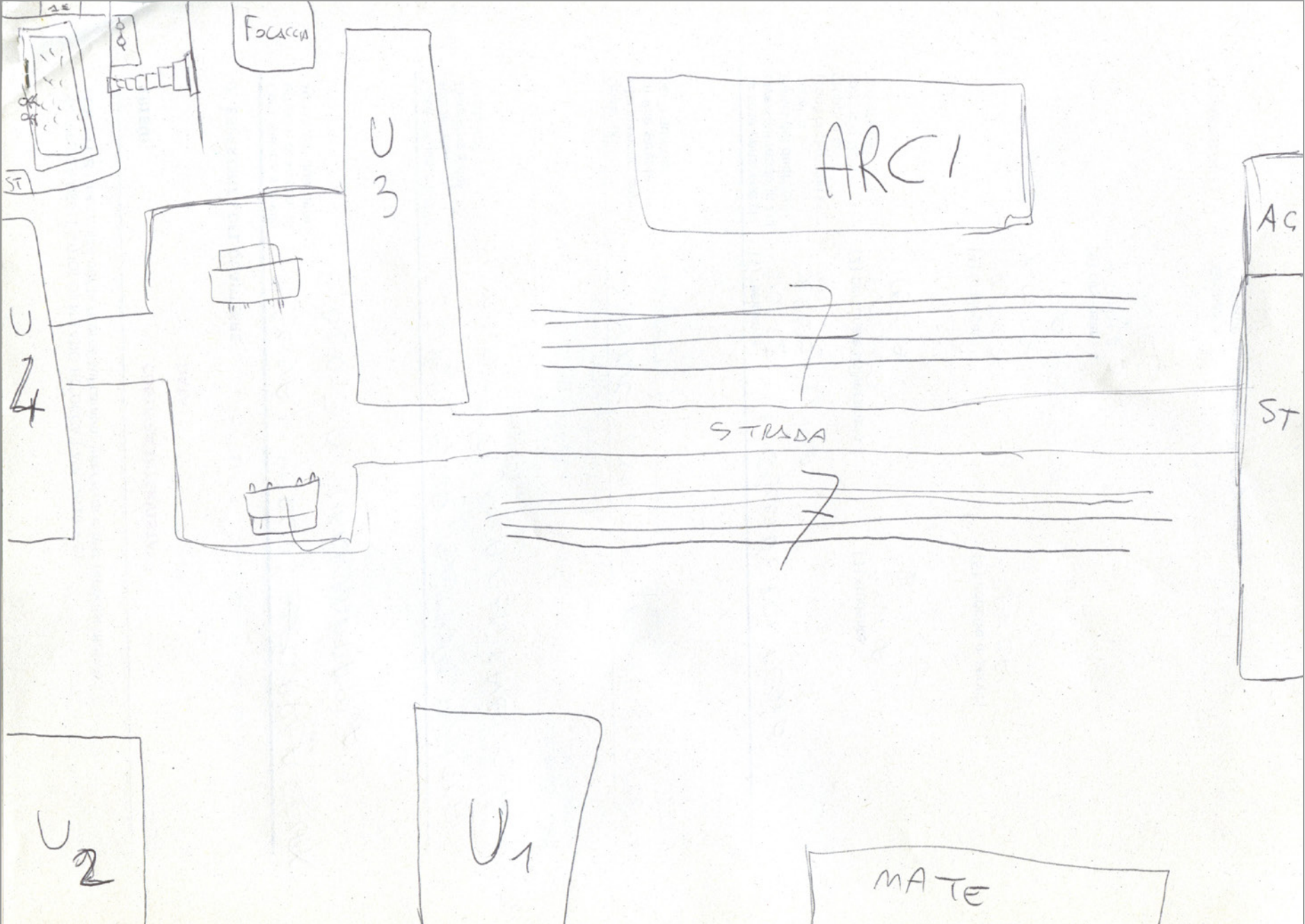


Fig. 2b: students and university people. The images are limited to university building in the central part of the district



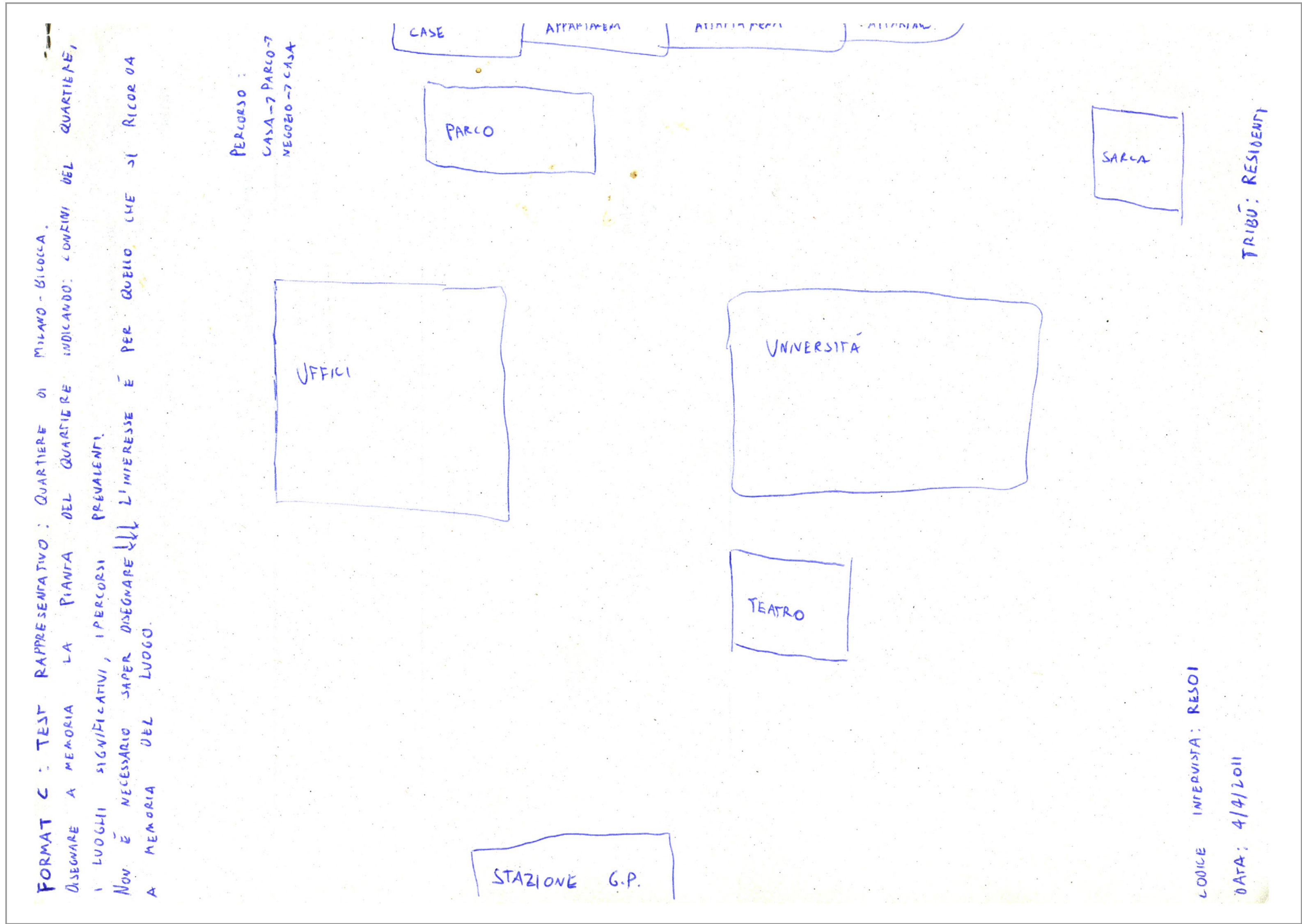
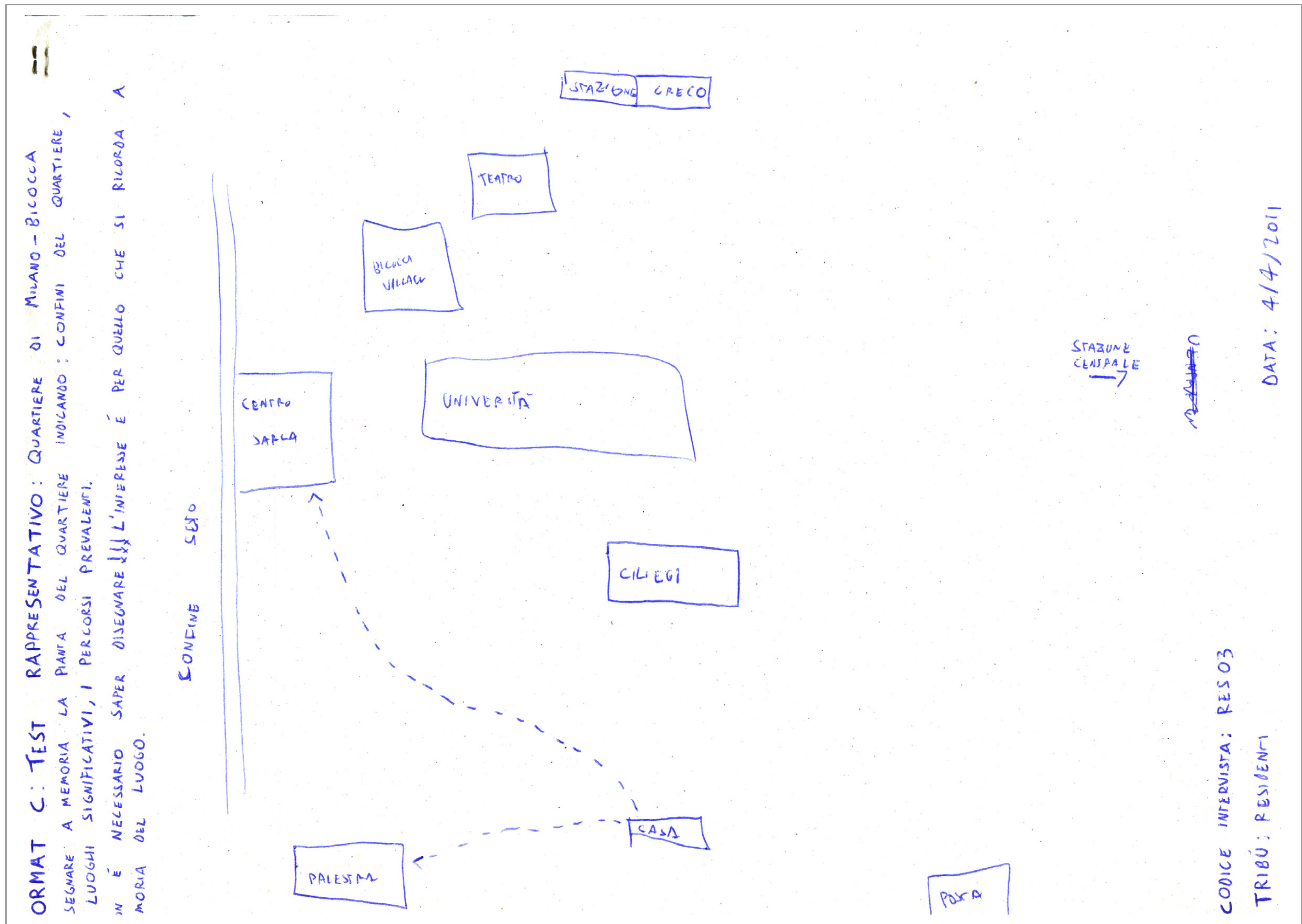


Fig.2c: residents. The group identifies path and social/recreational paces such as the *Collina dei cigliegi* unknown to other tribes



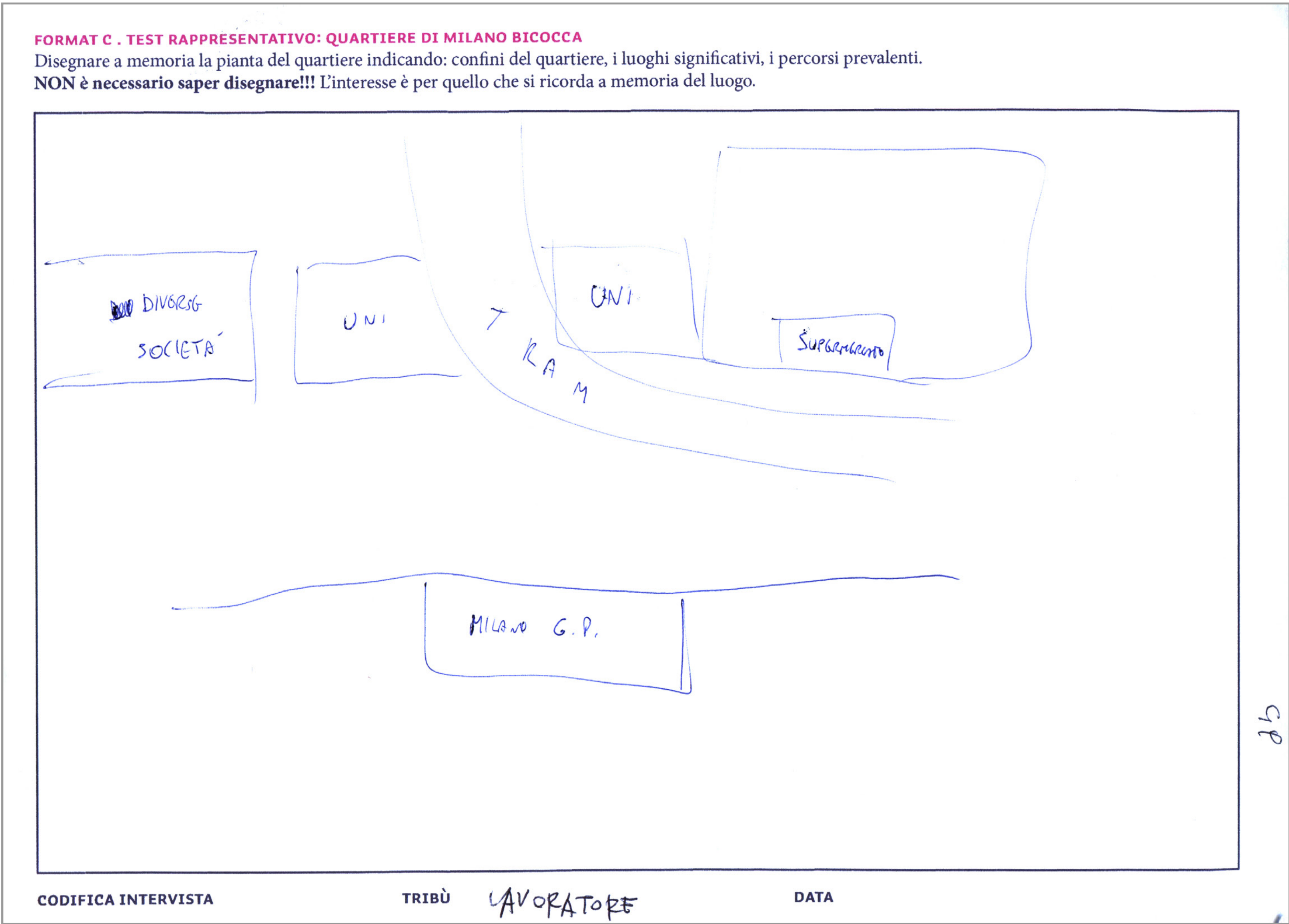
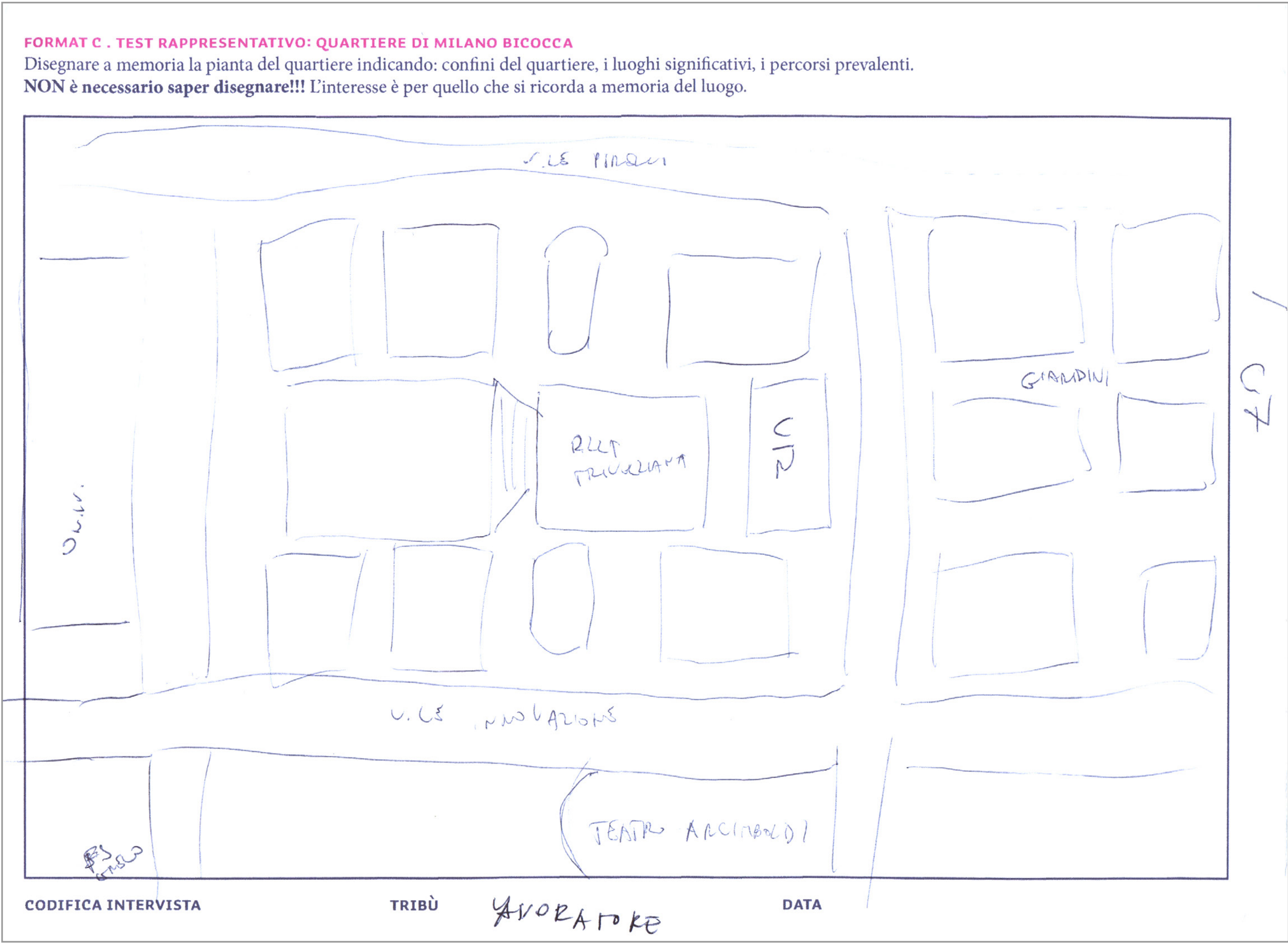


Fig. 2d: workers. They have a strong attention to the *Piazza Trivulziana*, where they go eating and the access gate such as the train station **Milano-Pirelli**



recurring items area of the district by use prevalent:

- Residents: sociality

Residents recall and represent locations on the map of daily life such as supermarket, pharmacy, church, asylum, the central square and the cherry orchard they represent the only gathering places, including urban morphology of the neighborhood.

The existing sites aimed at this audience are very institutions - the neighborhood committee, etc. - and low current / popular, some even have been updated until 2004!

The requirement that residents express is primarily to real and virtual places to socialize. In a new urban, suburban living and the presence of very different functions on a relational social networking emerges as one of the important functions of the interconnection network provides. The requirement that emerges from interviews is twofold: a place of gathering and sharing information, often ignored by the residents themselves and the desire to use the web channel as a form of knowledge and socialization as a reason that combining the experience of the neighborhood.

- Students: sharing

For students, the time spent in Bicocca is a significant part of a day and time for socializing and gathering. The district does not seem to encourage other forms of attraction, involvement or recognition of this tribe who spend their social time elsewhere.

The sites are popular and represented the university buildings - in more detail depending on the Faculty - the eateries, concentrated in the central square underground and two libraries. If the fabric of transport - the train and tram - are

identified with certainty, other places seem transparent to their experience. This is the case of the mammoth stage presence and anomalous compared to the rigid regularity of the grid construction in the representations that disappears.

Students represent the tribe that mostly uses the Internet - many of them are already digital natives - and in fact participation in the official forum of the University is particularly strong, as are many groups and fan clubs created spontaneously on Facebook and against teachers, events, etc. structures.

The need is clear in this case is to have structured and autonomous social sites online that allow synchronous and asynchronous interaction very focused on the exchange, interaction between peers. The mood is that of relationship and micro blogging conversation or chatting.

- Workers: information

This tribe over to spend the day in the neighborhood often stop, unlike students at other times using the usual services of both city-users. It is a tribe with blurred edges and highly variable, ranging from white-collar employees and managers of the various employees of multinational businesses that constitute the fabric of the neighborhood services.

The viewing space is superficial: they recognize the strong presences - university buildings, theaters - but they tend to attend only the central space of collective and multi-purpose plaza. The need expressed in relation alluded to the web is especially informative about discovery and community services. More difficult to use the social networking systems often blocked by corporate IT systems or the type of work that requires no computer use.

- City users: evaluations

Tribes across the district who attend - usually in the evening - making the experience particularly partial artificial places of commerce and entertainment. The vision of all places and their knowledge is almost nil. The neighborhood is perceived as a place of transit feature theatre, cinema or mall, rather than as a living place with its own specific identity.

Marked instead using the web to get information and to assess opportunities. Especially appreciated the opportunity to read and share comments and ratings - Typical User generated content - on sites, exhibitions and shows. These are often influencing the decision whether or not to move to these places.

6. Visualizing the space of digital interactions

Furthermore the research has tried to give shape using the digital devices to let people interact with / within the space – using geo-based features, GPS and augmented reality– and among themselves using social dynamics typical of on line communities

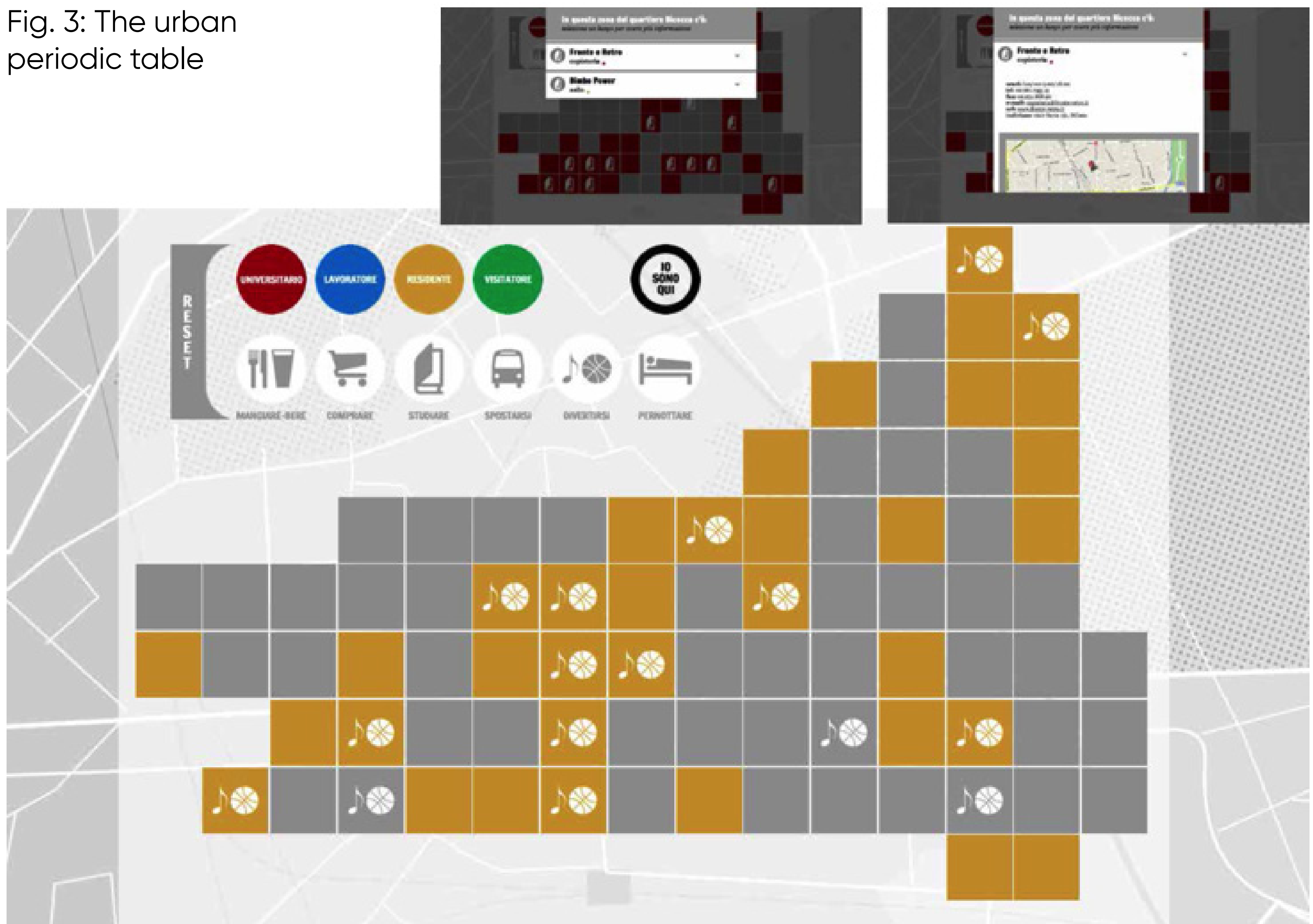
From this third phase of the project ideas have arisen –developed in the Master Degree Course in *Theory and Communication Technology* along the last five years 2010-2015– to illustrate possible follow-up.

According to this analysis several design concepts were developed. The exploration of this conceptual and experiential organization has produced several visual proposals and interaction metaphors.

The physical space as a periodic table

A first approach has experienced a two-dimensional model in which objects emerge according to their relevance in the

Fig. 3: The urban periodic table



policy function or relational – the social landscape – or its physical location – the urban landscape – filtered by a functional and typological organizational logic.

Buildings and spaces emerge in function of the query of the underlying database according to the two main matrix criteria organization: the services and, if they belong to a particular social group, the color code. The view is synoptic both temporal and spatial. Finally a drag&drop option both on the axonometric map and on the drop-down menu allows a panoptic zoom and view of all the district representation.

7. The 3D matrix experience

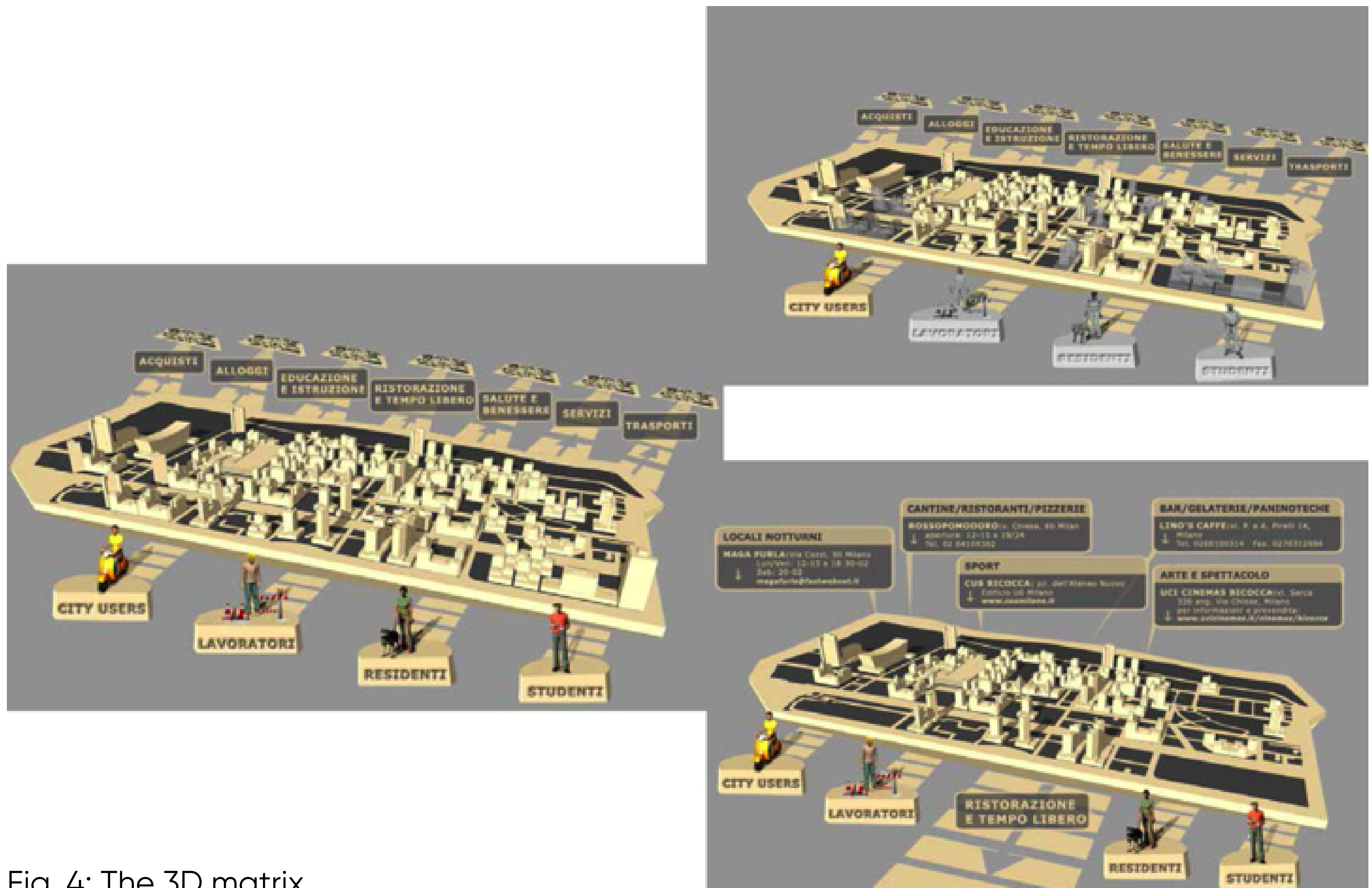


Fig. 4: The 3D matrix

In light of this analysis were produced several concept design in phase 2. In particular from a two-dimensional matrix in which were placed the 4 tribes (vertical path) and macros informative areas / functions of the district was done to achieve a classification *multifaceted* content can intercept both the need a specific user and content in the system. The exploration of this conceptual and experiential organization has produced several proposals in the following are the most interesting. A first model has focused its attention on the temporal overlap between the various tribes within the same urban area - work time and free time - and has produced a structure interaction based on the presence synchronicity of users as a reason for aggregation. A second has instead used the concept of flow, by analogy with the navigation within a site, such as interpretative key. The most interesting proposal

is that it takes - even against the flatness of existing social networking - the spatial metaphor as a key three-dimensional interpretation and identification of the place / tribe (see Fig. 5.) The three-dimensional map is sedimentation of places and relationships that can be scanned vertically - within the tribe - within or across-the functions - or a combination of both.

When visiting the architectural objects are illuminated or disappear on the perceptual model found by the survey on the users themselves in the analysis phase of research. The system proposes that the cognitive model system to facilitate the use of the site or, to use Lynch's conjecture, return readability public image of urban land. The information presented in pop-up instead come from the interaction of users according to a bottom-up selection process. Are users, and considering voting for individual services to determine their presence in the first position, and therefore most clearly visible on the map. The community plays a role not only relational but also build collaborative shared content.

Social interaction in augmented reality

A further proposal uses the Augmented Reality tool to let people interact with the places and among themselves.

AR gives to users a layer of information displayed and contextualized in the physical reality collapsing the experience of geo-location, visual exploration and information retrieval in the same punctual space / time interaction with the surrounding environment.

The overlaying interface its nevertheless natural and transparent to the user, limited and focused on the specific needs he/she is experiencing in a in a given location at a given time of a mobile experience.

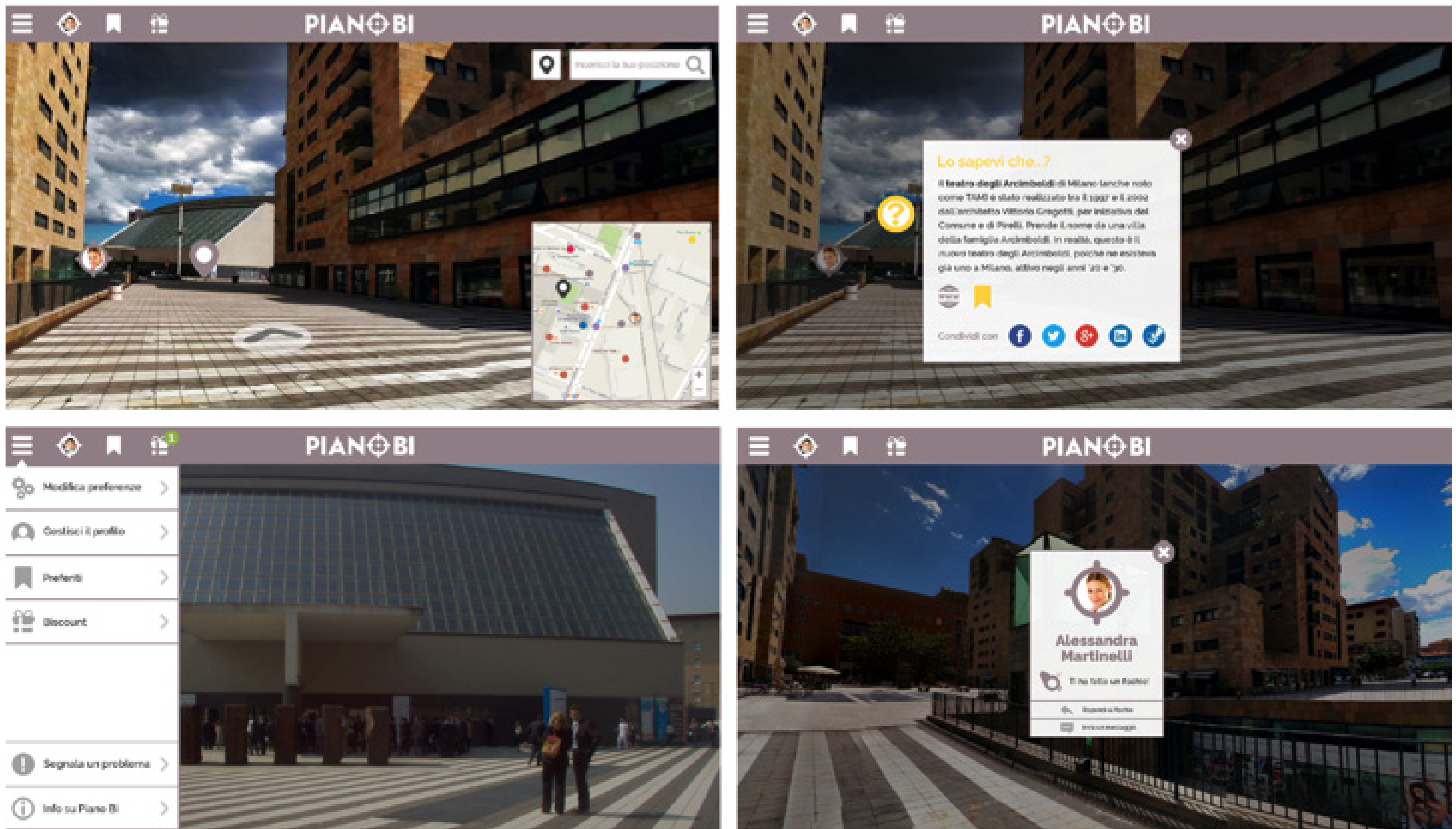


Fig. 5: The social augmented reality

8. Conclusions

The research proposed and the presented methods applied to a case studies tries to propose an alternative set of analysis tool in understanding a urban space, its inner symbolic structure and its cognitive images shared among people that line in it.

This approach uses multidisciplinary knowledge and competences coming from very different – and normally separated – disciplines trying to integrate various perspective on the issue of space planning, both physical and social. The point of view is flipped over the standard approach and focus the attention to user experience of the space and daily needs according to a user-centered and participatory design practice. Understanding the mental models, firstly individual, and then shared by people groups allows to built *personas* defined by the environmental *use* of the city to built – in

a bottom up process – a space respectful of their habits and desires.

Besides, a meta-representation of a possibile organizational models gives deep insight to conceptualize new modalities of interaction both cognitive and experiential.

The digital layer mediated by the mobile device such as a smartphone or a tablet allows to understand, furthermore, also the dynamic interactions, movements and path introducing the *time* as a design variables.

Finally, although applied to a specific case study – but already tested on a lesser scale of intervention and now revived on a large and complex project - the research model and design has the potential to become a methodological approach real reproducible and applicable similar contexts.

Acknowledgments

Thanks to all the students of *Visual & Interface Design – Theory and Technology of Communication Master Degree*, University of Milano-Bicocca and to Tommaso Rosi: *The Urban Island* (2009), final dissertation in *Communication Science Degree*, University of Milano-Bicocca.

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Wayfinding Systems and Street Sign Design for the public streets and pedestrian areas of Egypt

by Reham Mohsen and Andreas Sicklinger

METADESCRIPTION

Development of a new Arabic Calligraphy style for street signs and public areas in Egypt based on readability and Font Design.

KEYWORDS

Semiotic system, visual perception, readability, Arabic Calligraphy, Sign design, wayfinding

ABSTRACT

During the Eighties due to an intensification of urban traffic, it has been undertaken the redesign of Street Signs which are still used today. The same happened with the relatively young Underground system in Cairo and the project of the Azhar Tunnel.

The new design was based on the creation of a new Arabic Calligraphy font which should match the international experiences and standards for visual perception of public wayfinding systems. At a later stage, after some years towards the beginning of the Nineties, the sign designs originally made by hand were elaborated digitally. However, the implementation of a sign system in the Egyptian streets has been affected by several, locally related factors.

1. Three projects for new sign systems in Egypt

“The signs are all around us today, in all of the human applications; there are around us like the water is around the islands.” (Abdel-Hamid, 2005, p. 314)

The words of Shaker Abdel-Hamid underline the high impact which visual communication has in our daily life while moving in public spaces. The streets in Egypt are no exception and an important study in the early Eighties has been carried out by the General Organization for Roads and Bridges in Cairo, in order to redesign the existing road signs. It has been recognized a problem in the used type of Arabic calligraphy, which was the beautiful “Naskh” style and mainly has been used for copying books since centuries. This calligraphy type is fascinating for writing books or scripts, as well as decorating architectures like Masjids, at the same time however it is hard to read for drivers of fast moving cars from which the texts on the signs need to be perceived and understood while driving.

“The traffic sign has become an essential part of modern life, since humans now move around at speeds that are alien to their natural being. The amount of time needed for human recognition of danger no longer matches the speed of movement that is usual in present-day circumstances and far exceeds the natural human capacity for reaction.” (Frutiger, 1997, pp. 345-346)

These new requirements, shared by the international community, responsible for the safety on streets, made evident that also Egypt was in need of a modern design for their streets signs. The second requirement was to match aesthetically the Arabic calligraphy in the signs with the Latin font

used for the English digits, as long as it has been established to write the sign board text in both languages, Arabic and English.

“Pictograms are finding increasing use in modern directional and informative signs, for two reasons, the first of which consists in the necessary limits to the size of the panel. Whether it is circular, triangular, rectangular, or any other shape, the panel must carry condensed information. This principle is in opposition to that of written or printed information, which has to follow the linear development of word assembly and therefore needs wide, more or less lengthily panels, presenting an obstacle to the unification of any system of signalization. The second reason for the growing of the pictograms is that of language itself. Road and rail networks, shipping lines, and airways reach for beyond the frontiers of nations, languages, and peoples. Polyglot inscriptions would call for panels of excessive size and the information content would lose its clarity.” (Frutiger, 1997, pp. 345-346)

Adrian Frutiger resumes the difficulties which communication faces in globalized places, and a Capital like Cairo in the Arabic hemisphere is once more in a difficult condition as far as the Arabic Font is not familiar for whoever is visiting the city. The quantity of information put on a sign might be doubled by the use of two languages, which requires a consequent way of using grids and clear placing of additional signs like arrows in order to accelerate the delivery of information. As a matter of fact, in these circumstances, the use of clear pictograms replacing words reduces the information “overload” through repeated words in different languages and makes the person concentrate on one single item.

During the same period of time of studying the font for

street signs, the Egyptian General Organization for Roads and Bridges was also working on a plan to develop the Cairo Underground network, which needed a certain quality of sign system including graphic symbols to be used in the stations for the public orientation. The design requirements for the Underground station can be divided in two categories: the readability of the station name refers to the same category of street signs as long the passengers is in a moving vehicle, while the quality of wayfinding systems in closed public areas refer to manage huge quantity of people moving in an underground area without natural orientation elements like sunlight. Here the readability and understanding of the sign system is based on the clearness of information which might reach again the same quality of the street signs for moving cars when it comes to security aspects and emergency exits (Zagaresi, 2010, p. 215).

A further opportunity to implement a modern street sign system was the project of the Azhar Tunnel under one of areas with highest traffic, connecting the outer edge of the areas “Husain” with one of the main interurban streets and “Ataba”, cutting diagonally the entire Old Islamic Cairo. To guarantee the high quality needed for this project, new in the urban panorama of Cairo, an international company was called to survey the design details and the latter required that the sign system can be made only by professionals in the field of font and sign design. We can say now that it was the same situation like during the constructions of the underground stations combined now with moving cars.

2. The Design Studies by Fathi Gouda

The professional font and sign Designer, the company of the Azhar Tunnel survey was looking for, was the designer Prof. Dr. Fathi Gouda, Helwan University of Cairo. His experiences in visual communication and the field of the Arabic calligraphy go back into the sixties when he worked in the still existing newspaper “Al-Gomhoureya”, and later in the magazine of “Al-Petrol” where he was creating by hand titles in calligraphy for its articles. His designs are result of the combination of art studies and practice, based on the background of a centuries old Arabic Calligraphy tradition.

The design creations of Fathi Gouda have developed successfully over the years fulfilling the always more growing requirements to write texts for newspaper in Arabic, and transferring and applying his experiences later on road sign designs and other environmental visual communication. The Fig.1 shows a sample of font design elaborated as art works and made by Arabic calligraphy. These designs were entirely made by hand, and Fig. 2 shows later designs of calligraphy using computer.

Understanding the problem of bad readability, the trials of the General Organization for Roads and Bridges before involving Fathi Gouda mainly regarded the size of letters. But enlarging the size of the Arabic text in comparison to the Latin text was not successful; observing the difficulty of the drivers, who even needed to slow down to read the street signs, made obvious that this font was not suitable for the wayfinding system. The entire letter syntax of the Arabic calligraphy of “Naskh” type proved not to be designed for this modern purpose of fast reading from a moving vehicles on the road. The studies of Fathi Gouda were aiming to provide the level

of visual perception required for the moving vehicles like cars or trains. The new font designed by him, and named after him, has been after evaluation approved by the English Road Agency as matching the visual perception quality required for safety on the roads becoming the official font for Egyptian street signs 1982.

The new font design is more successful than the traditional Naskh Calligraphy based on its syntax character of the letters. The width of the line is equal throughout the entire letter, unlike the old Calligraphy style, which is based on the natural hand movement to realize the letter with a *qalam*, the antique tool for calligraphy writing. This makes the older font more decorative and ornamental, but giving more visual details it needs more time for the recognition of reading. Image 3 shows a comparison between the old Calligraphy style Naskh and the new font for street signs. To understand the reasons behind these phenomena we need to observe and compare the old and the new calligraphy fonts. Comparison between Arabic Classic type of Calligraphy *Naskh* and the creative design of calligraphy font by Fathi Gouda, Author collection under permission of Professor Fathi Gouda

up with extremely thin ending forms and continuous variations of same letters. Specifically the Naskh style has been developed back in the 10th century to “fit the pace of conversions (...). The script is the most ubiquitous among other styles, used in Qur’an, official decrees, and private correspondence. It became the basis of modern Arabic print. Standardization of the style was pioneered by Ibn Muqla (886-940 A.D.) who is highly regarded in Muslim sources of calligraphy as the inventor of the Naskh style, although this seems to be erroneous. However, Ibn Muqla did establish systematic rules and proportions for shaping the letters, which use ‘alif as the x-height.”¹

Although the most suitable based on uniformation and easiness among the Calligraphy styles, the street sign design was dealing with a font design developed almost 1000 years earlier. Furthermore, according to Frerik Kampman (2011), the main focus of Ibn Muqla, when standardizing the Naskh letters, was in creating rules for single letters, but not the interconnection of letters, a so much important aspect for the readability.

The Fig.4 shows the design rules of the new font, giving evidence to the relation between the body of the letters and the spacing of the letter and their surrounding; the unit of measuring is the width of the letter, we can call this unit *pixel* or *x*; the colored squares are used to make it possible to count how many parts of *pixels* or *x* units is making the spaces. In this new font the spaces of the inner parts of the letter are enlarged in comparison to the “Naskh” font.

The standardization of Fathi Gouda’s design eventually

1. Islamic Calligraphy, in https://en.wikipedia.org/wiki/Islamic_calligraphy, consulted 10/09/2016

also includes the interconnection of the single letters allowing a higher readability.

4. Design of signs in Cairo



Fig.4. The relation between the design of the letter and the spacing inside and around the letter, Author collection under permission of Professor Fathi Gouda

By moving to the new style of font and understanding benefit of an improved visual perception, the whole concept of sign design went under investigation for the signs used on road signs, as well as in the underground stations and other touristic areas like the Tower of Cairo (Fig.5). It started to be understood that for certain environment and landmarks visual communication can live without words and much of the communication is transformed into visual shapes (Fru-tiger, 1997, p. 9-21). The Fig.5 shows sign designs of Fathi Gouda for some landmarks in Cairo, used as communication tool in the underground or as street signs like the Cairo tower. Although approved as an excellent sign of the landmark

by the governmental institutions, some other signs were never applied for other official reasons. The sign design of the Cairo Tower is an example for choosing top part of the building to recognize the whole building, and not necessarily all of the building (Mohsen, 2007, p. 215).

The image 6 shows other sign designs suggested for the landmarks in the Old Islamic Cairo area of “Al-Muez” street,

Fig.5. Group of signs designed by Fathi Gouda for semiotic systems in Cairo, Author collection under permission of Professor Fathi Gouda



in which the focus of information and consequently represented on the sign is the part of the landmark which is more visible from distance based on the location of the building.

For example: a Masjid that stands in a very narrow street and its view is covered by other buildings can only be recog-



Fig.6. Sign Design for Minarets of Prayer House Masjids in Islamic Cairo, Design of the Author (2007)



nized by the highest top parts of the minarets that the pedestrians can see from the street, like the Masjid of “Al-Hakim” and “Al-Aqmar”. In other examples the minarets that have a unique architecture are considered the iconic sign of the building like the minaret of the Masjid “Ibn-Tolun”. In other two examples the buildings show more parts from the architectural façade by standing on a larger place: therefore the signs were designed to show these facades as the visitor will have the chance to recognize the building from this point of view. This is applicable for the sign design of the Masjid “Sultan Hassan” or the Masjid of the “Citadel”.

The choice which part of the architecture is represented as

a sign is based on the visual perception of the building in the reality of the public space while reaching it. That means of course also, that the signs for landmarks will differ among them by the represented element and other design criteria need to be applied to recognize the category of sign, like shape and color scheme.

Almost all landmarks of Cairo are touristic attractions, however it is intended that even citizens use the visual communication to reach the place. The studies are not limited to the City of Cairo. The Fig.7 shows further sign designs for the touristic attraction in South Egypt in the antique city of Luxor; the signs are for the inner tour in the temple of “Karnak” which is characterized by many divisions between halls and corridors. Therefore the signs have also been designed as indicators for most interesting attraction points inside the area. These designs are yet not applied.

It is necessary that the design of signs and pictograms follows international standards, but mainly it needs to orient the visitors. Therefore the redesign of icons and pictograms with its clear message and identification of its meaning went parallel to the development of street signs with letters.

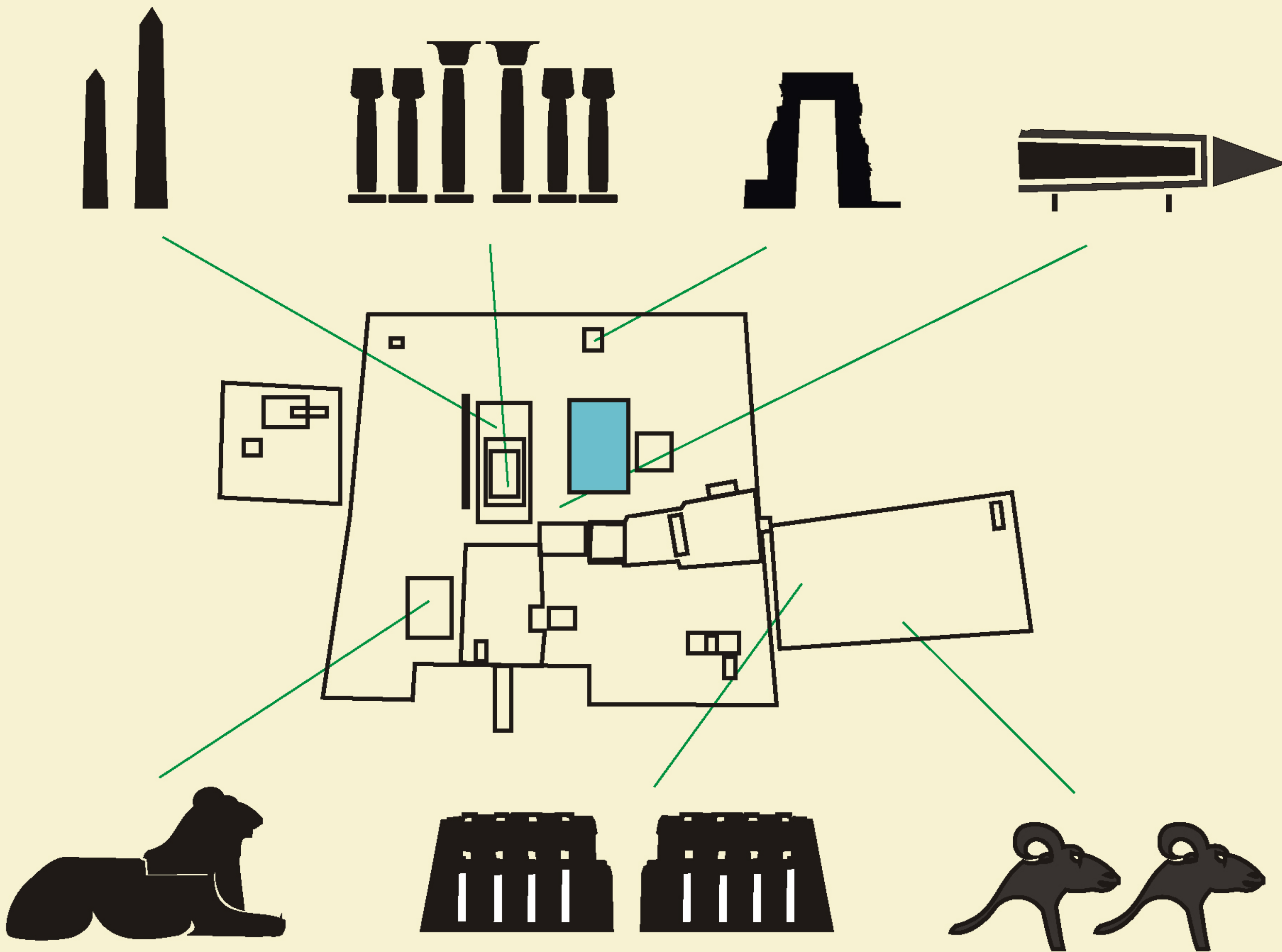
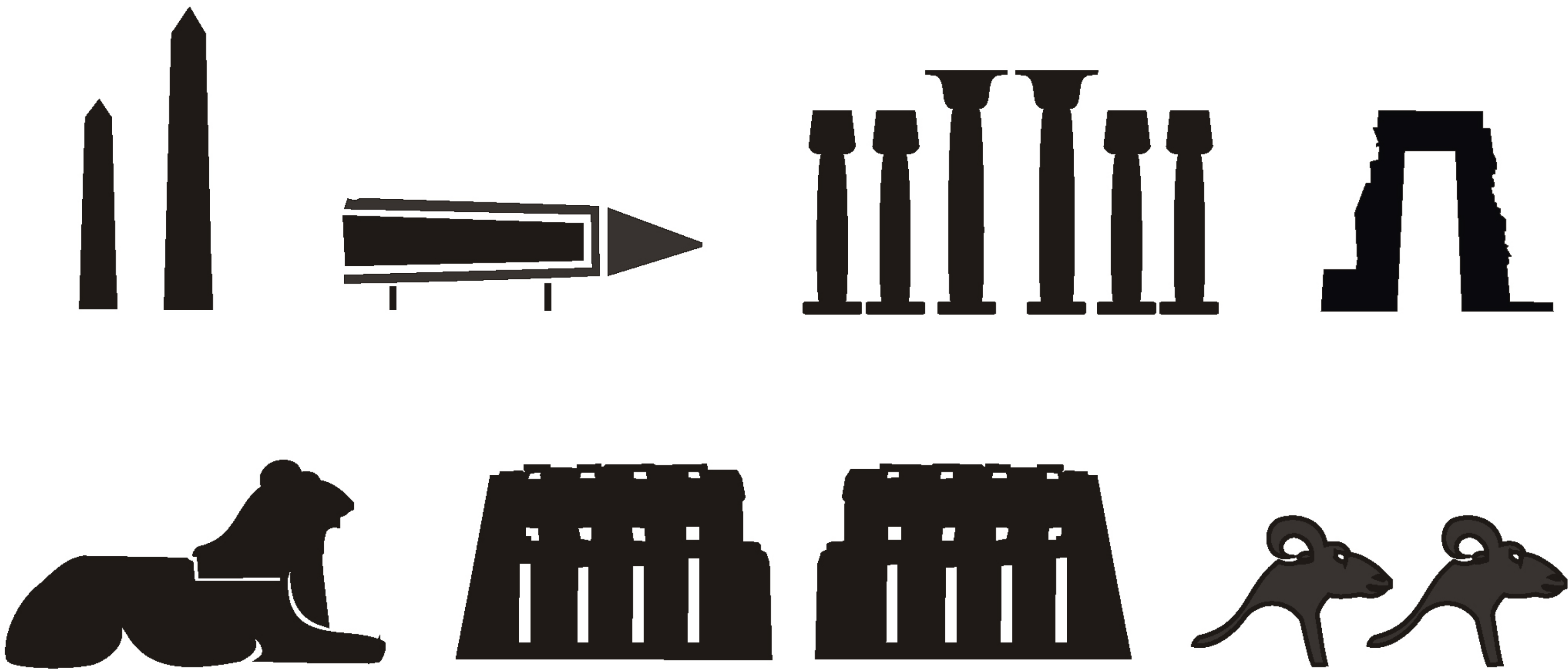


Fig.7 Sign Design and Map for Karnak Temple in Oxsor, Design of the Author (2007)

5. The practical side of the designs.

The Fig.8 shows final designs of sign systems made for the Egyptian Highways, and the Cairo underground called 'Metro', with the exception of the same logo of Metro that was created by the artist "Salah Abdel-Karim".

Fig. 8 The designs of Sign Boards for streets and for the underground Metro in Cairo, Author collection under permission of Professor Fathi Gouda (1980–2000)





Fig.9 Sign Boards Installed in the entrance of Azhar Tunnel in Cairo, Author collection under permission of Professor Fathi Gouda (2001)

The Fig.9 shows the entrance of the Azhar Tunnel project, together with the metal structure that is holding the sign boards.

Initially the designer was involved actively in the realization of the street signs, and for a period of time he was able to control the quality through a direct production. But the practical side of applying a sign system locally is not only based on the excellent design and experience of production techniques, but the authorities and the decision makers are strongly influencing the realization of the final result of the work and applying the sign designs into public locations. By their understanding of the importance and value of providing accurate sign systems for the visual communication

in the public space, they can develop the general output of quality of moving and orienting in the public space, and how much this is saving time and money by finally affecting the general quality of life in the city or even the country. Many projects and designs are still waiting for realization, while the general today's situation in Egypt is result of local economical ways of dealing with business.

The font design for street sign has been largely applied, but different interests have let falling good quality behind economical interests and in many places one can observe the initial character of the design, but can also “appreciate” the wrong spelling of names or inadequate use of letters.

The importance of the work of Fathi Gouda however can only be understood when it is compared to parallel experiences of modernizing Arabic calligraphy. Different designers tried to simplify the Arabic Typography to allow a faster reproduction of texts. Nasr Kattar (1947), the Boutemene Project (1955), Said Akl (1960) and Saad D. Abdulhab (2006) might stand as examples for this issue to enhance the technological progress and new requirements on a thousand year old tradition of calligraphy, which stopped to develop further after the seventeenth century (Kampman, 2011).

But none of these trials were successful and have been implemented in real life, while the street signs of Fathi Gouda are decorating the urban environment as an example of modernized Arabic Calligraphy.

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COMPETITION AND COLLABORATION

A quality label for temporary reuse. Co-design practices

by Raffaella Fagnoni and Silvia Pericu

METADESCRIPTION

Reagente quality label is a service, a process, a brand to recognize value to bottom-up actions and temporary reuse of abandoned parts of our territory.

KEYWORDS

re-cycle, social innovation, temporary reuse, action design based research brand

ABSTRACT

The spreading of re-cycle and temporary reuse practices on abandoned spaces in our cities reveals a shift of paradigm of design discipline toward new ways of acting. It is also expression of social innovation and DIY attitude, that focuses on people more than on goods, throughout bottom-up actions connected to every day's life needs more than to consumption.

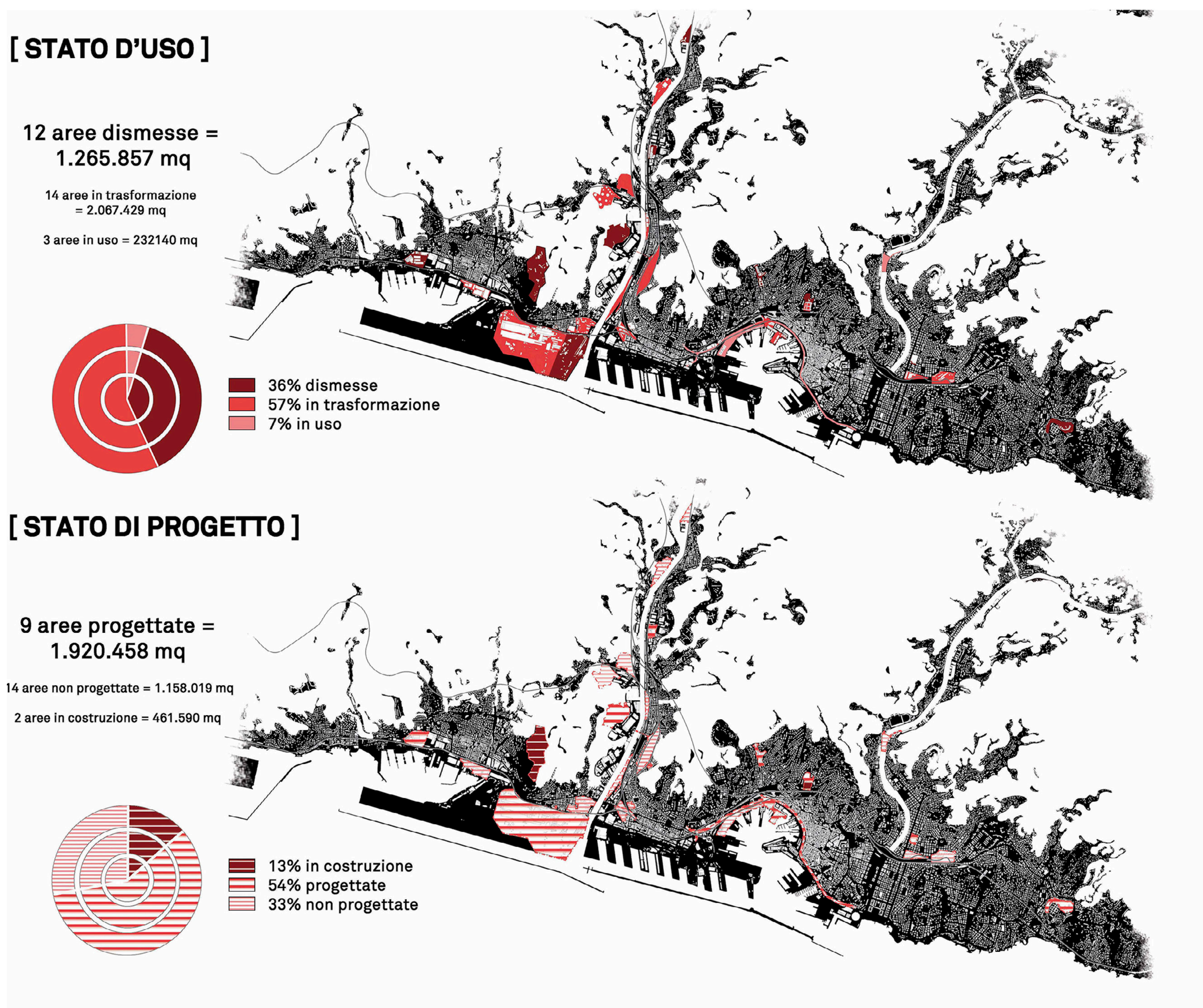
Designing a quality label is an opportunity: Reagente is a strategy to simplify policies, to recognize value to actions on territory and to enhance social innovation. Genoa and its community are an experimental field for a co-design process.

1. Enhancing places, discovering and envisioning territories through recycling and temporary reuse practices

Lately we have witnessed to an exponential growth of empty spaces in our cities and territories, caused by the economic crisis and changes, and the transfer of activities from real physical spaces to the Internet, according to the diffusion of the so-called sharing economy. Therefore, our cities are full of urban areas that have lost their original functions and remain unused¹, due to complex decision-making processes and to speculative logics. If on one hand these areas are resources taken away from the cities, unsafe places of physical and social decline, on the other they represent a breeding ground to experiment social relations, actions and events promoting new contents and methods. Historical buildings and sites also improve and define the view and character of our territories. They contribute to building identity and stories. Buildings and empty spaces are now an experimental laboratory, where informal actions, events and temporary reuse practices become innovative instruments.

In this sense recycling and reuse practices on abandoned areas, that have been deprived of meaning, have progressively spread in the latest years, becoming the subject matter of research groups who investigate the potentials of such strategies. The activist-designer, according to Fuad-Lukas (2009) is an *happener* and his project is an essential human expression able to smooth our transition towards a more sustainable future. Through recycling practices, urban makers

1. There are over 6 million empty spaces (housing, industrial, commercial and public buildings) of which a portion, from 3 to 6%, are spaces in good condition, that do not require interventions. In addition to these there are many abandoned historic buildings and sites, that testify the history and image of our country. Retrieved from <http://www.riusiamolitalia.it>.



State of use and planned areas in the city of Genoa. Genoa Lab Re-Cycle.

reuse devices and instruments and combine them with new meaning, they look for solutions working on waste. Recycling is not only a physical process, it implies a change in meaning that involves the social, cultural and economic context, the various stakeholders and the citizens' lifestyles. Such process also involves those temporary reuse practices of residual spaces, leading to reconsider recycling as a conceptual and operative tool for facing emergencies that arise within a project, in terms of economic, social and environmental problems. Not only a political advantage, recycling is one of the most modern and sophisticated ways of making expressive research on projects.

With a certain delay compared to other European countries², Italy started its route towards recycling with the Re-Cycle exhibition in 2012 in the MAXXI museum in Rome, which launched the PRIN Re-Cycle Italy³ research, involving 11 universities with the aim of exploring the operational consequences of recycling processes on the urban system. The Genoa Lab Re-Cycle has carried out its activities in two synergetic subject areas, one regarding the abandoned patrimony, the other focused on the community: from footprint to promoting temporary reuse policies. The research team have started tracking the abandoned heritage with a system of parameters, in order to evaluate the signs and impact left by those empty spaces and to facilitate transformation actions and processes, and then have experimented recycling practices aimed at producing operational instruments. An agreement with Genoa's Municipality⁴ has allowed to monitor experiences made by active citizens, that have contributed to the creation of a reference system for managing temporary reuse policies and procedures. It's been an opportunity to prove design as a tool for enhancing territory.

2. As in the Urban Catalyst project (Oswalt, Overmeyer, & Misselwitz, 2013) funded in the 5th Framework Programme (2001-2003) or the research Reuse funded in 2005 (www.urban-reuse.eu) where the aim was to identify recurrent issues in the social re-use processes. The regulation of temporary uses, often inserted somewhere between legal and illegal, is the goal in Italy of Temporiuso project (Inti, Cantaluppi & Persichino 2014).

3. see also www.recycleitaly.it. The research team in Genoa was coordinated by M. Ricci with R.Fagnoni.

4. Research Agreement – Comune di Genova. 2015 - 2017- Re-Cycle Practices and temporary reuse on abandoned buildings and underused areas. Processes, experimental projects, communication and events. Academic research management: R. Fagnoni, with C. Lepratti, C. Vannicola, S. Pericu. Municipality management: G. Vincenzo - Participation office, A. I. Corsi - Special projects, and A. Colombini, S. Zarino – Patrimony office.

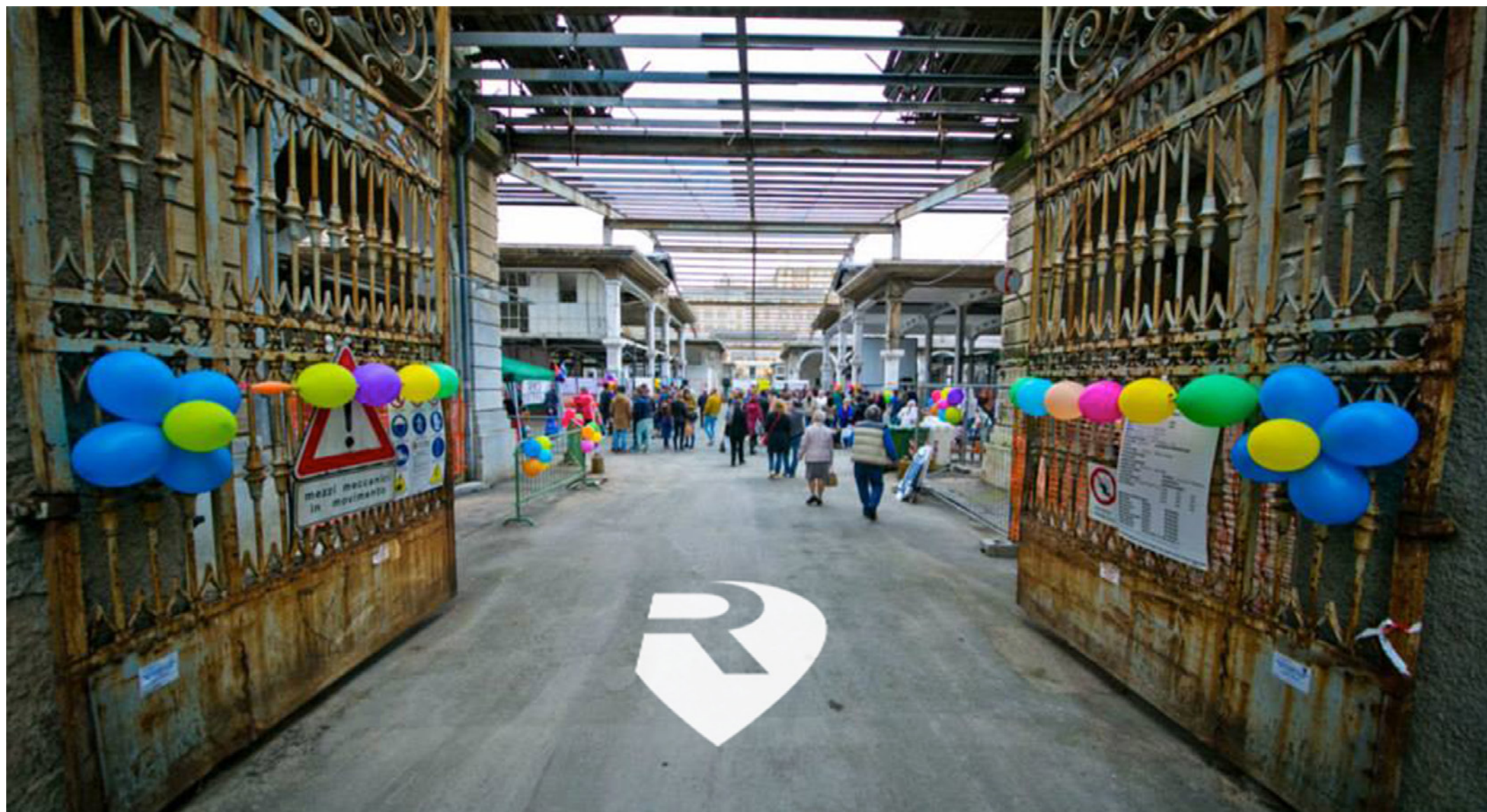
2. Re-cycle. New social, political, and environmental paradigms empowering design actions as new field for design activities and education

It was during the Nineties that designers started to be directly involved in the problem of waste and in the necessity of reusing it to create a meaningful transformation from waste to substance. Our project challenge is to reach this goal without losing beauty, by working on the edge and avoiding those common ideas that associate beauty with the glazed and shiny rather than rough and matt surfaces of recycled materials. The matter is to find “a new idea of beauty, closer to our condition of human beings, who are subject to refusal and discrimination. A beauty that preserves traces of the past, signs of what has been. A beauty that is not abstract, but firmly anchored to what is corruptible, and contains a hope for resurrection, when not for human beings at least for things” (Morozzi, 1998).

This role of designers committed to the public patrimony and welfare, ideologically opposing the most commercial aspects of industrial design, outlines the field of action of *social design*, which “highlights design-based practices towards collective and social ends, rather than predominantly commercial or consumer-oriented objectives. It operates across many fields of application including local and central government, as well as policy areas such as healthcare and international development.” (Armstrong, Bailey, Julier & Kimbell, 2014)

Design discovers its active role within the social, cultural, political and environmental context we are living in, and contributes to facilitate processes of social innovation, providing designers with new opportunities to intervene in a

world where everybody designs (Manzini, 2015). According to Gui Bonsiepe, “To raise our awareness of the contradictions that become apparent between the socially desirable, the technologically possible, the environmentally beneficial, the economically viable, and the culturally tenable should be one of the central goals of contemporary design ethics” (Groll, 2015).



Reuse of former market of Corso Sardegna in Genoa. Re-cycle action carried out by RiprendiamociGenova.

The political potential of design (Markussen, 2013) has been introduced by Victor Papanek (1971) with his so called activist behaviour. It is a call for designers to face the emergencies of our daily life and act for social concerns. Design Activism is defined as an act of developing new processes and artifacts focusing explicitly on social, environmental and political issues without losing the intervention to functionality (Julier, 2013), a way of thinking and practicing design to generate a counter discourse against mainstream drivers of the industry that can make a positive social, institutional, economic, and environmental change (Fuad-Luke, 2009).

The role of design in these new scenarios offers a series of possible explorations and considerations:

Interaction - The project is no longer the work of a single designer, but it becomes a collective space where necessities and

sensibilities are shared. Concepts such as open source trace a route that through participation leads to a soft but active complicity, that reveals itself in the contamination and spread of ideas and information. The culture of re-contextualization and recycling not only of products and spaces, but also of notions and visions, leads to reconsider the opportunities offered by a change of direction which has already started.

Intuition and event – Every human being is born with an immediate ability of understanding reality, that unfortunately they lose year after year growing up in a society founded on the cult of rationality. Intelligence analyzes and theorizes, classifies, distinguishes and smashes real duration. The ability of intuition is immediate like instinct and aware like intelligence (Bergson 1907). Any event is the opportunity to create systems according to which ideas can contaminate and become bigger than the sum of their single parts. Therefore, the increase of connections is a way to access information on the work of our ancestors and combine it with present intuitions, thus transforming it into something new, whose results will be eventually combined once again by someone else.

Education and training - The spreading of design activism, social design and social innovation practices has an impact on the conventional design education, that in Italy, excluding some specific cases, has not yet developed the social, political and economic aspects of design. “To educate designers for this era, from Transdisciplinary Design, to Design and Urban Ecologies, exploring the complex forces that influence urban growth and development, mean to provide opportunities for self-directed learning, cross-disciplinary collaboration, and exposure to academic areas beyond the traditional boundaries of art and design” (Allen, 2013).

DIY and spontaneous processes - The risk and limit of

spontaneous processes have been often attributed to their difficulties of being institutionalized and to the poor effectiveness of their projects, developed without the intervention of public institutions. Local administrations tend to institutionalize relations, forcing processes into official methods and procedures and remaining anchored to them. It is therefore necessary to adopt a new approach, in order to consider such actions not as fixed practices but in their global context. We should not merely interpret such phenomenon as a new way of doing things, but adopt a new point of view to consider what it is done, in order to maximize its effect on the public sphere.

3. The concept of a label, brand, service, network or design process for temporary reuse and new co-design policies and practices

A brand can work as a meme, a cultural unit that spreads from mind to mind. The most powerful memes can catalyze collective changes. They generate perceptions-thoughts-actions-behaviors through trust and reputation on one's social network and so create a chain-effect able to spread those perceptions-thoughts-actions-behaviors across other networks. The creation of a quality label can be a way for spreading values related to interventions, and for proving urban, environmental and process quality. The quality label proposed proves urban, environmental and process quality. It is assigned according to the fulfillment of specific parameters related to the launching of recycle processes of artifacts, areas, buildings, spaces and urban infrastructures. It guarantees the enhancement of cultural and environmental patrimony,

service culture, resources' availability and use, as well as the quality of such use. It represents the beginning of a route that leads to the synergetic promotion of the cities that have joined it.

The brand tells us a story on how we can face the present-future of our cities. By means of a symbol we state a community and its administration's attitude towards recycling, in this sense the brand is marketable to interlocutors and represents the optimization of resources, according to established and quantifiable criteria.



Design tools for Reagente: stencils Label.

Authors: R. Fagnoni, S. Pericu with C. Olivastri, E. Angella e N. Raffo.

Through its topics and values, as core elements to reinforce its audience's emotional and evocative ability, the brand proposes a clear moral. Its relationship with the audience is based upon an instant aesthetic and perceptive experience, and the brand's challenge is to find a new positioning able to communicate thanks to its own personality, through sensations, emotions and aesthetic effort.

The launch and promotion of our brand aim at enhancing single interventions, rewarding the cities-communities that carry out the largest number of actions, and the institutions

that are actively involved.

Through a shared process (from project to promotion) the brand gives visibility to its network and the related actions. Thanks to its distinctive quality, internal (cohesion of all subjects involved) and external awareness (proven quality, proposal of a development model, incentives to act and invest according to its direction), the brand plays a central role in affirming its reputation, and proves its attractiveness and prestige through the values it promotes.

Creating a brand implies many activities, from building its system of values to studying its visual identity, from validating it according to quality standards and criteria set by supervision authorities, to organizing its communication and promotion. It is a complex process, that could though start a new cycle of activities and give birth to a new development logic, founded on collective and results-based rather than punishing-regulatory systems.

4. *Reagente label*: co-design method and process

Reagente quality label, following the principles of the Re-Cycle Italy research, concluded in 2015, intends to reunite into a single label, subjects who are conscious of the importance of reusing territory and reducing soil consumption in the city of Genoa, in order to connect them through the Internet and help them recognize the value of their own actions. Genoa is a shrinking city and its population has been declining for many years; as a consequence, the city is full of abandoned properties, mainly industrial buildings linked to the port, which are no longer in use.

The Design research group⁵ has collaborated with the city administration that, as well as other Italian cities, is working to adopt a formal Agreement on cooperation between citizens and administrations for a shared management, care and regeneration of common urban areas. Thanks to this collaboration, a series of events were organized addressed to active and interested citizens, with the aim of creating a label to be joined through a collective process, that gives the opportunity to develop connections, share specific values and, in the end, give visibility and spread reuse actions outside the project.

The development of the label has two consecutive steps: a first inside-oriented step is addressed to people directly involved in the project or who might join it. Here the Label is a tool for gathering people from a constellation of autonomous subjects to a real community, where all subjects involved can identify themselves, participate and share the creation of common criteria. In the second outside-oriented step the quality label is a tool for corroborating, validating and spreading interventions. It is a results-based system useful to those administrations who want to promote reuse strategies for abandoned areas, forgotten or underused situations, that can be better developed to create social, environmental and cultural benefits, thanks to light and reversible systems, often more focused on soft rather than hard qualities of projects.

More than else, the Label is an instrument to involve a local community and afterwards become a label that can also be applied in other cities to projects with a similar philosophy. It is an instrument able to involve activists, associations and

5. The quality brand has been developed thanks to the support of a Progetto di ricerca di Ateneo (PRA) carried out in 2015: *Quality Brand Re-cycle Italy*. Coordination: R. Fagnoni with S. Pericu and in cooperation with C. Olivastri, E. Angella e N. Raffo.



Reagente call for action. Authors: R. Fagnoni, S. Pericu with C. Olivastri, E. Angella e N. Raffo.

common citizens, who are increasingly launching light reuse actions of abandoned areas all over. Quality certification can also become a way to promote recycle actions of abandoned areas and guarantee their quality and respect of specific parameters, and it can be applied to actions carried out on buildings, portions of buildings, parts of urban areas, infrastructures, infrastructural networks, landscapes, permanent and also temporary events focused on portions of territory

This *modus operandi* is also recognized by Italian law⁶, which states how local administrations can define their criteria and conditions to carry out projects of territorial

6. Art.24. Decreto Legge 12/09/2014.

interventions on common areas, designed by single or associated citizens. This is the reason why the Reagente Label's targets are, together with activists, policy-makers, whose policies support the investment of resources to enhance abandoned heritage.

The creation of the brand should be based on the definition of its own values, that in this case will be set according to the Re-Cycle research principles, in order to produce new values that, in addition to the previous ones, are developed through a collective activity, shared with the activist groups, who are the project's targets.

Who.

A network of active citizens is established in Genoa, with the aim of identifying the active subjects, the types of interventions they carry out, their objects and, in the end, their possible contributions to define the label's parameters. Through a series of events scheduled during summer 2016 it will be possible to define a set of shared criteria for the brand, that will be then available on an online registration platform. Results of this first process will be eventually verified with other stakeholders, represented by political institutions and authorities for the control and management of territory. Scope of such action is to share values with all the subjects involved in the project, in order to identify a common goal which is indispensable for the project's success. The values thus created will become the label's guidelines, which define the criteria in use for evaluating projects, initiatives and active groups who apply for quality certification.

What.

Since the brand's registration criteria can vary, they will be

constantly updated during their spreading process. They refer to parameters involving wider matters, such as public benefit, citizens' active participation, and the ways of intervention on built areas, to indicate which part of the original buildings should be preserved. The Label's assignment process must be absolutely clear and transparent, in this sense it will be open and available to everyone on the Internet, in order to fully share methods and instruments. The process for registering to the Label is based on a self-assessment procedure that the candidate follows by filling in an online form. Once authorized and registered to the Label, he receives the rules for using it properly, and becomes part of an open and flexible database, where all the recycle actions carried out on the national territory are inserted. Such database is in fact constantly updated by the subjects involved in those actions.

Where.

Genoa and the cooperation with the city administration offer the possibility of testing our project with a defined network of subjects and with reference to specific cases. The choice of using a method based on real experiences is due to the intention of eventually exporting such experience already made to other contexts, after an accurate analysis of results and the evaluation of each proposal's strong and weak points. In order to have an exportable brand, its process of assignment must be based on a self-sustainable system, able to work without the constant control of a so-called supervision authority, a system than can be repeated by the interested administrations according to a specific format.

5. Case studies selection

Nowadays design has more and more concentrated on territory as the object of its planning activity and has therefore consolidated project practices in this sense. New design experiments have spread with the aim of enhancing values focused on territory, proposing solutions for localized communicative, productive and service processes (Lupo, 2009), although they are still lacking of a theoretical development able to produce, at international level, an accurate and shared definition of the role of contemporary design in the improvement of place identity and enhancement of territory.

The work proposed for the Reagente quality Label as an instrument for sharing values and enhancing recycling actions on territory, represents a way to explore how the identity of territory and its resident communities should be considered as a choice of project (Zurlo, 2003).

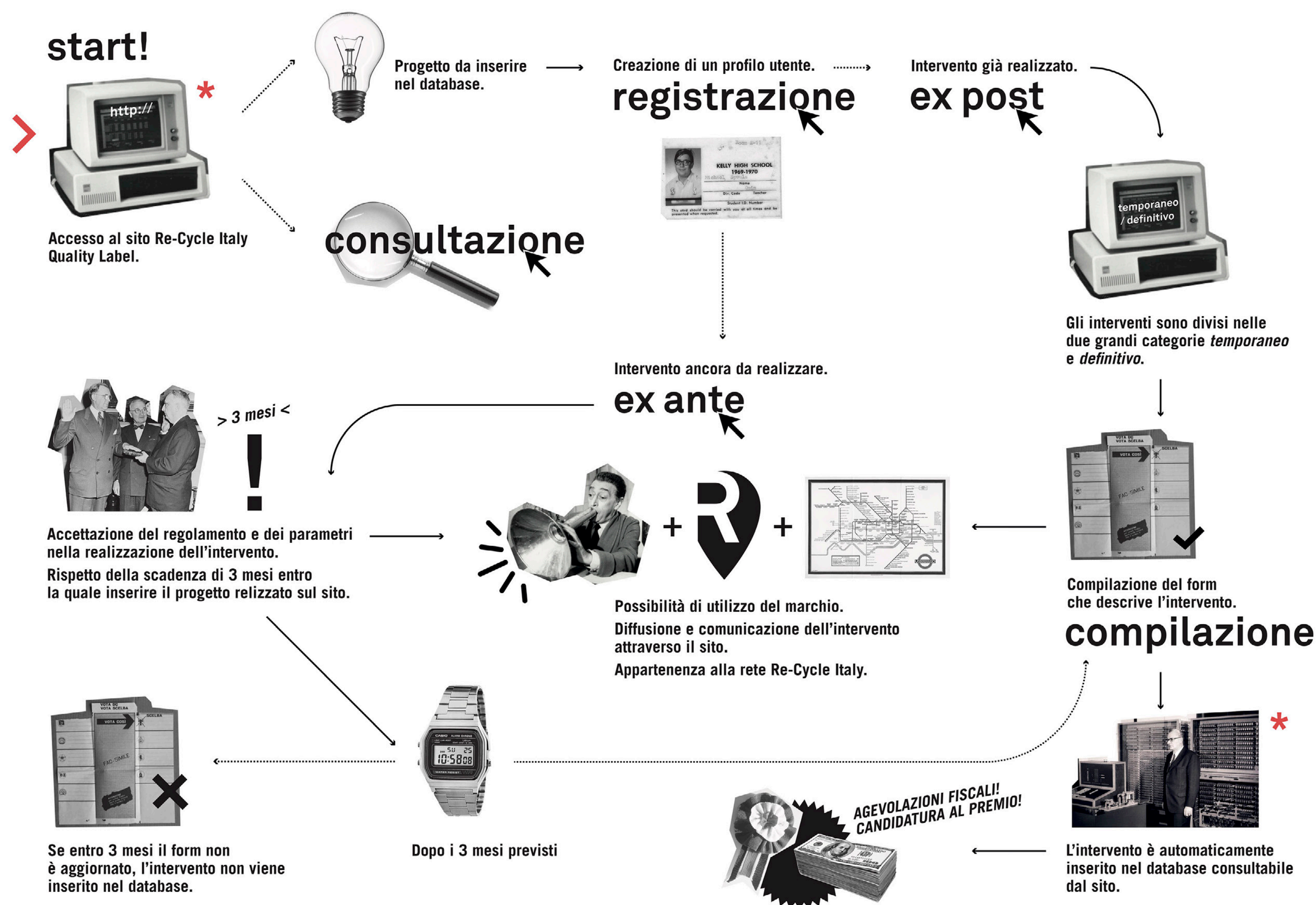
If the identity of a territory should be also built on a specific set of values that define its territorial capital, there is no identity without a collective recognition of the values to share and support in a coherent everyday practice of behavior (Parente, 2012). In this sense, the concept of community together with a collective awareness of belonging to it, becomes relevant.

The particular contribution of design to the enhancement of territories is due to its ability of transferring meaning towards a human dimension, not only as a reference, but also as an element able to connect a system involving places, communities, practices and processes so that it shares the same values.

This process cannot be imposed from above. It should be based upon the shared recognition of an identity within a

community and towards the system it is referred to. Place identity still needs new tools and a further development to its particular field of action – territory – as a consequence, quality labels represent an instrument for enhancing territorial capital, able to offer various unexplored opportunities that are clearly and particularly intended to share values and define reference parameters.

The use of quality brands applied to territories represent a proven method to promote a system of recognition and validation of those territorial entities that, sharing the same goals, have committed to the adoption of responsible behaviors and contributed to the promotion of the culture and methods of economic, social and environmental quality certification.



The first concept of self-assessment procedure for the Reagente Quality Label. Authors: R. Fagnoni, S. Pericu with C. Olivastri, E. Angella e N. Raffo.

It is a results-based system that has initially developed on products and then largely spread to guarantee and validate the quality of diverse services, since it is a transverse instrument that can be applied to products, services and places, and that allows a territorial brand to guarantee quality and become a process for creating a shared system of values within a territory. It has a double function: internally it gathers strategies from the various parts involved within a territorial community, without being focused only on traditional marketing. Externally it works as an instrument to spread specific values as part of a wider system that can be joined by whoever is interested. It does not exclusively work on visual design techniques, which are typical of the large diffusion of images and logos we have been used to in the latest years by the touristic market; on the contrary, it is based on communication and recognition of collective values shared with a community's stakeholders.

Nevertheless, the adoption of this type of instrument implies the consideration of some issues related to the creation and management of a quality brand. A brand is a collective good, whose products are controlled by different subjects, and in this sense it cannot determine individual choices made by whoever might join it. It must proceed on and evaluate already existing activities and invite possible stakeholders to participate within a system of shared criteria. It represents a strategic opportunity and not a coercive imposition, with all the advantages and limits that such condition implies (Demetz, 2015).

Two case studies have inspired the work on Reagente Label: *Quality Design for All Labels* and territorial quality Label *Salento d'Amare*.

Quality Design for All (DfA) Label was established as a label,

with the objective to certify the quality of the DfA's products, environments and systems already accomplished, which express significant principles connected to accessibility. It applies to all the realization of project of the material and virtual reality and it has two steps: DfA-Start and, once refined, the DfA-Quality Label. The work has been taken in analysis for some similarities: for the ability to transmit the values of the design for all through the assessment of projects accomplished and for the ability of the label to communicate complex values, which are not always easily identifiable, in order to promote them for a full social inclusion of all people. Finally it is a quality Label thought to be widespread and replicated. The assessment procedure is conceived as a prize, with a judgment done by members of a jury.

Since 2001 *Salento d'Amare*, as territorial brand, has become a success story of the Italian territory: significant increase in tourism, redevelopment of the area, cutting-edge initiatives to promote environmentally sustainable development. The Union of Municipalities of the Grecia Salentina has launched a brand *Salento d'Amare*, welcomed by local businessmen who had the courage to experiment it in the field of tourism and territorial promotion. The same Union verifies compliance with the parameters of those who embrace the brand (Oliva, 2006). The territorial label has been the tool to make visible products and services of the territories involved, a tool to promote a community which identifies itself with specific values. The shift from public initiative to a project led by private operators is a source of interest. Although not developed for the Internet it appears like a label with a very easy access and regulation.



6. Conclusions

Reagente is a quality label revised in order to develop a certification system for recycle practices and reuse actions on abandoned or underused areas in our cities. It aims to improve the effectiveness of active citizenship and to recognize its value, addressing at the same time to undertaken initiatives, as well as to projects on areas waiting to be regenerated in order to promote this kind of approach.

The process is based on shared values able to ensure the peculiarity of each stakeholder involved, to spread best practices, to simplify the regulation set in assigning spaces to groups of citizens taking care of their environment. It aims also to create a network as reference not only for partners involved internally, but also at a national level for other external subjects interested in it. Italian most important network on active citizenship and urban commons, i.e. Labsus, already showed his interest on the project.

The strategy put in place by Reagente quality label points to transform brand identity from a competitive mode to a cooperative one, for the promotion of interventions that reflect the same values on the recycling of abandoned spaces. It is conceived as an open platform, a mapping action to show links between different ways of regenerating urban spaces through reinventing a new meaning for them. From the beginning Reagente shared its ambition with the City Council of Genoa and the research team has organized three

meetings to involve groups of active citizens and associations, to know each other initially, and at the end of the process to define together with all the participants evaluation criteria and values of a shared labelling system that can be used in different situations. Reagente involves Design's role through service design and design for social innovation. The main abilities involved are the ability to analyze territory, to communicate, to define scenarios, to create a brand identity and to design artifacts for temporary actions.

Reagente is a process that could represent a contribution to the challenge of social innovation and Design's research for policy. The sharing of Reagente represents for the community of the city of Genoa an experimental field. Its improvement through a national network can contribute to evolve a collaborative practice capable to empower institution and citizens to take part in the actual culture of the sustainability and active governance.

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Mapping the territory for cultural development.

The methodological assumptions of Artificio Project.

by Rossana Gaddi

METADESCRIPTION

Artificio project arised from the need of an innovative cultural centre in Como: design-focused, accessible, sustainable, widespread and participated.

KEYWORDS

Cultural Enhancement, Territorial Mapping, Participation, Design Methodology

ABSTRACT

The project Artificio (*Centro culturale urbano diffuso* - Spread urban cultural centre) is an on-going project (originally co-founded by the Cariplo Foundation) focused on the enhancement of the cultural resources of the city of Como, carried out by a participated and accessible purpose in which design plays a strategic role.

Indeed, design can be a tool for cultural and territorial enhancement, not just as a catalyst of good practices through projects, but even as a methodological tool for a deeper comprehension of a territory. In order to deeply understand the territorial resources, a mapping of the cultural resources of the city has been studied and realized. Quantitative and qualitative data were crossed and compared to analogous realities, to help the emergence of the real cultural needs of the citizenship.

Overview

In recent decades, the city is returning to play a distinctive role for cultural, economic and political development. The favourable geographical position of Como, its beautiful landscape and unique morphology, its recent and past history, in addition to its economic vocation, which relies on an entrepreneurial internationally recognized for excellence in production, could make the city competitive among the small European cities. Unfortunately, its profile is damaged by the lack of initiatives and insufficient care of its landscape. Como therefore seems still far from thinking and building an overall strategic project that promotes urban competitiveness, able to renew his physiognomy and economic and social dimension.

The project *Artificio* (*Centro culturale urbano diffuso* - Spread urban cultural centre) was co-funded by the Cariplo Foundation¹ (2013-2016) in response to the call “Valuing cultural activities as a factor of development of urban areas”. The Luminanda Association², networking with the Cooperative CSLS, the Association Nerolidio Music Planet and ComoN-ExT, are the project leader of *Artificio*, born from the desire to create an innovative and contemporary centre of art and culture in the city of Como: accessible, sustainable, widespread and participated.

A creative city is not just a city open to differences, but it is able to stir its diversities towards designing the future. So a creative city feeds on interaction between values, on

1. Cariplo Foudation - <http://www.fondazionecariplo.it/en/index.html>

2. Luminanda Association, main partner of *Artificio* project, is managed and animated by four women: Chiara Gismondi (President), Veronica Bestetti (Vice-Chairman), Ivana Franceschini and Anna Buttarelli (www.luminanda.net).

relations and on the sharing of talent, technology and tolerance, which when shared turn into culture, communication and cooperation. Therefore, the first design intention and the primary goal have been to foster the relational skills of the city of Como.

1. Designing Artificio: the role of design for urban and cultural enhancement

To deepen the knowledge of land resources, in the drafting phase of the project was carried out an info graphics mapping of the cultural resources of the city by a team of the Design Department of Politecnico di Milano³, where quantitative and qualitative data have been crossed and compared to analogous realities, to help the emergence of the real cultural needs of the citizenship.

Indeed, nowadays qualitative data must be interpreted and possible solutions envisaged in terms of sustainability and no longer in terms of unconditional increase in production. Comparing rapidly obsolescent artefacts with a model of long-term validity, which can be applied and replicated in different contexts, has highlighted the key role of design to analyse, visualise and build up possible models that are able to steer strategic decision-making.

The contemporary design has a wider scope for action than a few decades ago, no longer relying just on the strength of the practical design activities, to fit as a fluid discipline, tangential both to the design worlds and the social sciences.

3. The Design team was managed by Rossana Gaddi and Federica Gallarati (Design Department, Politecnico di Milano).

Design feeds on the evolution of the disciplines that could be called “classic” or “solid” but it is a discipline indefinable, in its being “liquid”, constantly changing. Liquid in being adaptable to the large container that is contemporary era.

Design System⁴ is a complex and branched apparatus that from the research point of view touches tangentially the humanities and from an operational point of view defines the procedures, the practices and the methodologies concerning our daily lives. A design strategy not only looks at the creation of a beautiful and quality products, but also to the identification of a specific identity, an effective focus, a collective aspiration to planning. Philip Kotler⁵ proposes a reflection

4. The definition of “Design System” is born from the research SDI (Sistema Design Italia - Italian Design System), a network of agencies for research, innovation and promotion in the field of design, which was founded as a spin off of a two year research program co-funded MIUR (Italian Ministry of University and Research), consists of 8 active branches at universities spread throughout the national territory (Milan, Florence, Rome, Chieti, Genoa, Palermo, Naples Federico II and Second University of Naples) in such as a nucleus of research and training is active for design. Its mission is to produce research opportunities in collaboration with organizations, associations, institutions to promote design as a competitive factor in the national economy and to spread the culture linked to the design also in other national contexts of production, focusing on the relationship existing between design and local production systems (and particularly in the industrial districts). The network also promotes concrete project actions that use the integrated approach of the product-system (the design action as the sum of the strategic aspects, service, communication and product) within the territories. These actions shall be realized through an original action research approach, which acts on the potential development of an entrepreneurial culture through local production and growth processes from the bottom and are addressed to local communities, to local administrations and training institutions, research and government, individual companies and consortia interested to implement innovation processes guided by the design contribution (design driven).

5. Philip Kotler (Chicago, 1931) is Professor of International Marketing at the Kellogg School of Management at Northwestern University in Evanston, Illinois. It was listed as the fourth “management guru” of all time by the Financial Times (after Jack Welch, Bill Gates and Peter Drucker) and hailed as “the greatest expert in the world in marketing” by the Management Centre Europe strategies. It is also considered one of the pioneers of social marketing. He has made an important contribution to the structuring of marketing as a scientific discipline, directing the formation of many students and managers worldwide. His main work is Marketing Management (first edition in 1967), which is generally recognized as one of the most authoritative texts on marketing, and is the most widely used in universities and business schools around the world, with a percentage close to adoptions 60%. Through his consulting

on the role that design can have in a company as coordinator of media plurality (buildings, places, products, services, distribution choices, interfaces) with which the company is on the market, defining its identity, but giving also shape their strategy.

Well-designed and well-structured services, such as cities, also represent an important opportunity for encouraging responsible behaviour and therefore help regenerate the social fabric by solving problems (such as accessibility) and to all intents proposing solutions for an advanced welfare.

According to the original call, the priority of Artificio project is to formulate proposals in order to create sustainable cities, implementing and testing a model resulting from collecting ideas workshops in a bottom-up approach. In particular, the main objective is to create a network of permanent structure in order to improve a design thinking approach to the urban regeneration.

Artificio is intended to make citizens more aware of their belonging to the future of a place, of their context of living, their role within their cities and history. Moreover, the project aims to promote a process of urban regeneration through an interdisciplinary approach involving different sectors of the society (creative people, decision makers, local and national authorities, designers, artisans, students, entrepreneurs) in order to reinforce economic, cultural and touristic cooperation at different levels between countries.

firm, the Kotler Marketing Group (KMG), Kotler has worked with many major multinational companies, including IBM, General Electric, AT & T, Honeywell, Bank of America, Merck and Motorola.

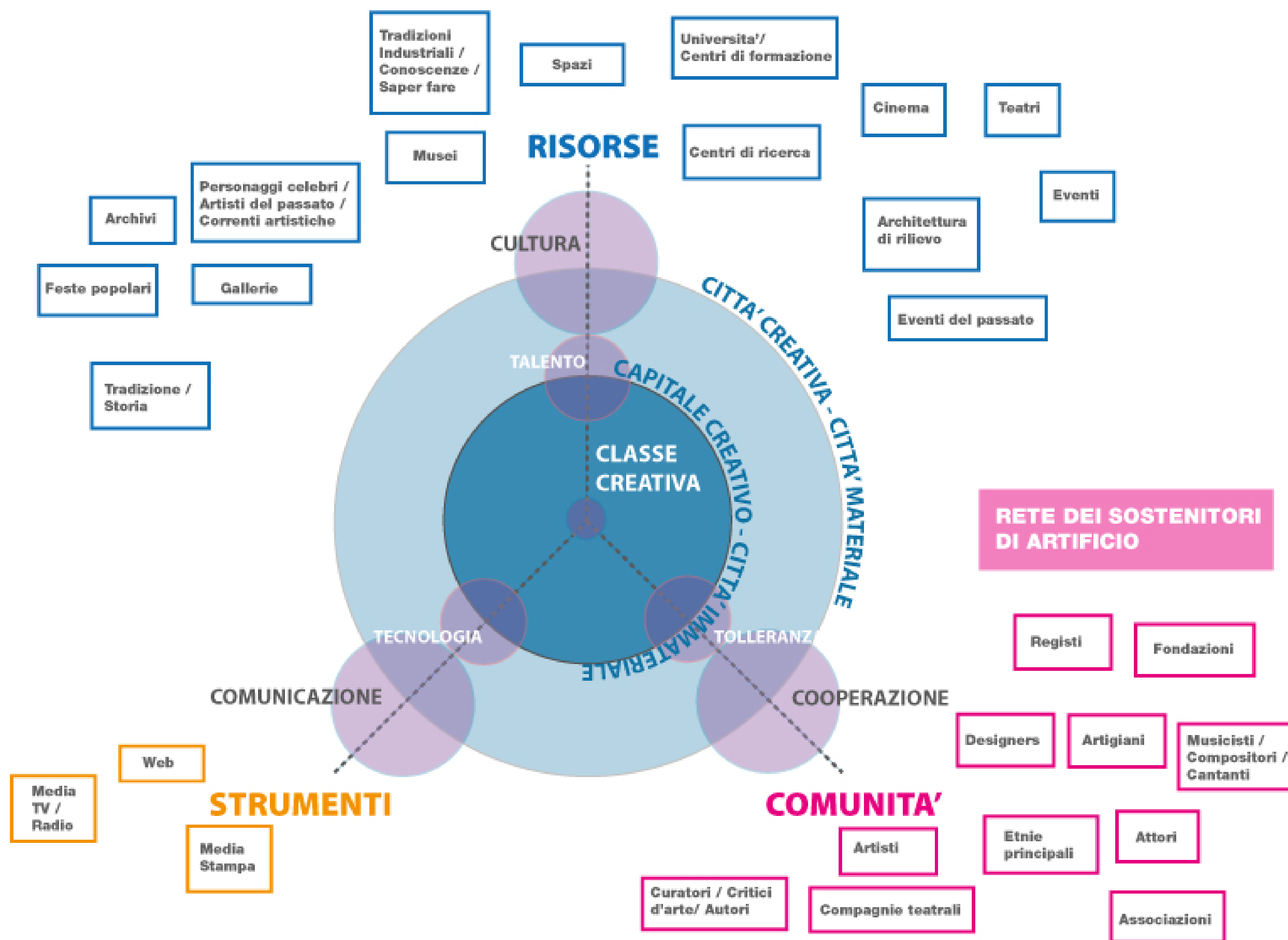


Fig. 1 Creative class / Creative Capital / Creative City (Carta, 2004 and 2008, re-elaborated version Gaddi, 2009 Resources (Risorse), Tools (Strumenti) and Community (Comunità) in Como Original Scheme in Italian language, Politecnico di Milano, Design Department.

Since the project is expected to demonstrate if and in which way design planning may contribute to the urban development in terms of social innovation, it has been appropriate to set up a strategic “reflection phase” dedicated to pilot activities where the project partners will have the possibility to test processes, models and techniques in order to verify solutions applicable to a wider set of users and territories.

The purpose of the project had been originally the networking of skills and public and private resources for the production, promotion and cultural offer as leverage to planning a creative urban development, vital and sustainable.

The primary objectives of the project were fixed in these following points:

- NETWORKING to build a common identity for local cultural operators recognized and recognizable;
- COMMUNICATION AND TRAINING to renew the relationship between citizens and the cultural identity of the city and allow the emergence of local talent;
- PARTICIPATION FROM THE BOTTOM to stimulate the active participation of the population to the city cultural planning;
- TOURISM AND COMPANY to allow a new characterization of the role of culture, no longer marginal and sectorial aspect but true urban development factor.

2. The mapping of the Culture in Como

Simultaneously to the pilot actions, necessary step of empirical audit of the analysis postulates of the cultural realities in Como, the Design Department of Politecnico di Milano, made for Artificio project the mapping of the cultural realities of the city, a “state of the art” of production and dissemination of culture in the city. The analysis was carried out following three main steps:

- A first quantitative mapping, which allowed the emergence of “facts and figures” about culture in Como;
- A second phase of mapping, this time qualitative, where the different realities that emerged in the first step are compared with regional and national indicators;
- A third phase, parallel and not sequential to the first two has been the development of two different types of questionnaires: one addressed to associations, organizations, cultural organizations from different backgrounds, the other to individual citizens, respectively, “dispensers” and

“users” of urban culture. The results of both questionnaires helped and guided the emergence of data otherwise not perceptible by an only theoretical analysis of the urban cultural structure. Data such as the expectations about the future, cultural habits, past attempts to create a network between similar associations.

- As it has been written before, during the feasibility study, it was decided to match the cultural mapping carried out by the Politecnico di Milano with some creative actions on the territory, in order to stimulate the participation of citizens, as well as inform them on Artificio project and test the feedback of possible initiatives to be implement later. A significant finding was the interdisciplinary nature of most of the actions: the coexistence of various integrated artistic languages has allowed to test the work team between the various realities of the network.

In particular, the creative actions have had the following specific objectives:

- Test the partnership and support network in the realization of joint initiatives;
- Validate the findings from the mapping of the culture in Como;
- Evaluate the response and participation of the public cultural offer potential Artificio;
- Contribute to building a communication strategy and promotion of the project Artificio.

All initiatives have resonated on artificiocomo.it website and on social networks linked to the project. Many actions were also promoted on partner sites and supporters and some of them have had a lot of visibility in the local press, both online and offline.

Methodology

The interpretative and methodological key that led the research was therefore based on a multi-channel system where the active participation of citizens (through questionnaires and creative actions organized during the research and mapping period) was intended as a guide for interpreting the phenomena transformation of contemporary urban culture.

The multi-channel approach in this research context was interpreted expanding the technological significance, and becoming a way to show the infinite possibilities of participatory construction of the brand and the urban identity of the city branding.

The research wanted to refer to Action Research methodology, historically used for the social sciences, then reconfigured for design. Action research is a cyclical action and verification process that comes from the awareness that the actions on the territory must necessarily start from below and refer to real situations. Precisely for this reason promotes the establishment of survey opportunities, the development of projects located in specific contexts of land resources, and the development of local systems, linked to places, to know how productive individuals.

Given the high variability of possible outcomes in an urban scale research (vitiating by social parameters, economic and political context), the operational line of action research is a methodological line was flanked inspired by Grounded theory (Glaser & Strauss, 1967) where qualitative research allows developing conceptual categories directly from the data, and then make new observations by further developing these categories.

Specifically, the quantitative analysis allowed the definition ten typological categories (visual arts, plastic arts,

performing arts, music, literature, history and archaeology, nature and tourism, science and technology, sports, as shown in Fig. 2). Characteristic of a qualitative study is the immersion in the present context, where the researcher is operationally involved in the interrelationships that the actors put in place. The hypotheses are then taken directly from the data, without the need to create a priori models. The collection of data and information, follow the coding of the categories and subcategories, and analysis of data, in a continuous process of interaction.



Fig.2. Activity density based on ten typological categories (right to left: visual arts, plastic arts, performing arts, music, literature, history and archaeology, nature and tourism, science and technology, sports, transdisciplinary activities)

Original Scheme in Italian language, La Mappatura culturale della città di Como – Progetto Artificio, Politecnico di Milano, Design Department.

Emerged results

The results of the questionnaires and the SWOT analysis carried out, from both citizens of organizations and associations of the Como area, shown a strong demand for cultural innovation. Enhancement of cultural assets Como is an explicit request of citizens and revival of city competitiveness.

The city of Como is characterized by a cultural offer rather poor and poorly planned, that little remains attentive to the

needs of contemporary life, continuing to offer cultural and tourist offers single-issue, targeted mainly at a high and traditional target.

This trend, in addition of not meeting the needs of a large section of the population, in the long run, risks to impoverish and even paralyze cultural fabric of the city, and further lowering the strategic urban ecosystem quality, presenting to Como the role of a dormitory city. Despite the location of the city extremely favourable at both national and European level, much of the Como population moves to the neighbouring centres such as Milan or the nearby Swiss cities as Chiasso and Lugano, where the cultural offer and consequently the participation to culture, is more developed and advanced.

Nevertheless, there are cultural events and with a strong identity: this refers particularly to the programming of the Teatro Sociale, with a rich variety in terms of exhibition, with more than ten different sub-performing; Parolario, a literary and cultural festival; the prestigious initiatives and training activities of the Antonio Ratti Foundation; ComON, an international creativity sharing event dedicated to young designers and creative talents, in synergy with the local industrial excellence. However, this cultural calendar is poorly arranged and planned: the cultural programming appears sacrificed the urban dimension in favour of a sectorial dimension or even individual and cultural proposals seem to overlook the appearance of a global vision of the context in which they are under reflux with accordingly negative both in numbers and in terms of communication and relationship with the public. Moreover, they remain little synergistic and integrated, far from becoming promoters of new models of urban innovation and unable to pursue a strategic investment for a real renewal of the cultural and social capital.

This little integrated planning is also the result of poor appetite networking by institutions and associations, which tend to establish vertical relations to major institutions, creating little cooperation between similar realities. Hence the need to invest in new horizontal networks, as well as to strengthen and rationalize the cultural and networking the existing structures resources.

The lack of spaces for cultural and artistic experimentation fruition is another important finding emerged strongly from both the quantitative mapping analysis from questionnaires. About 80% of respondents to the question “How do you think could be improved cultural offer in Como?” replied “By creating new spaces for creativity and culture to enhance the city”. Como boasts prestigious locations internationally recognized, but not exploited strategically and underutilized for most of the year.

Citizens also lack places used to sharing and creativity, where you can trigger fertile relational innovation processes. In this regard, the analysis of the cultural endowment of the Municipality of Como territory has allowed the emergence of a substantially clear picture. The cultural realities of Como (which are about 260, about 7 per square km and 3 per inhabitant) does not offer a homogenous cultural service to every possible functionality of space (exhibition spaces, performance spaces, spaces for research, significant architectures). Except for the area of visual arts, in many of these ten cultural types it is found little research that, if present, is not reflected in events, exhibitions, trade spaces.

In addition, from the strictly quantitative terms, the cultural activity has no typological excellent tips that reflect the natural conformation and historical territory.

An example: although Como is a city known for its lake

and the beauty of the landscape, cultural activities related to nature and sport are slim. Same goes for the architectural legacy of rationalism, or the art of abstractionist “Como group”. Following some focus on the most interesting fact emerged from the analysis⁶.

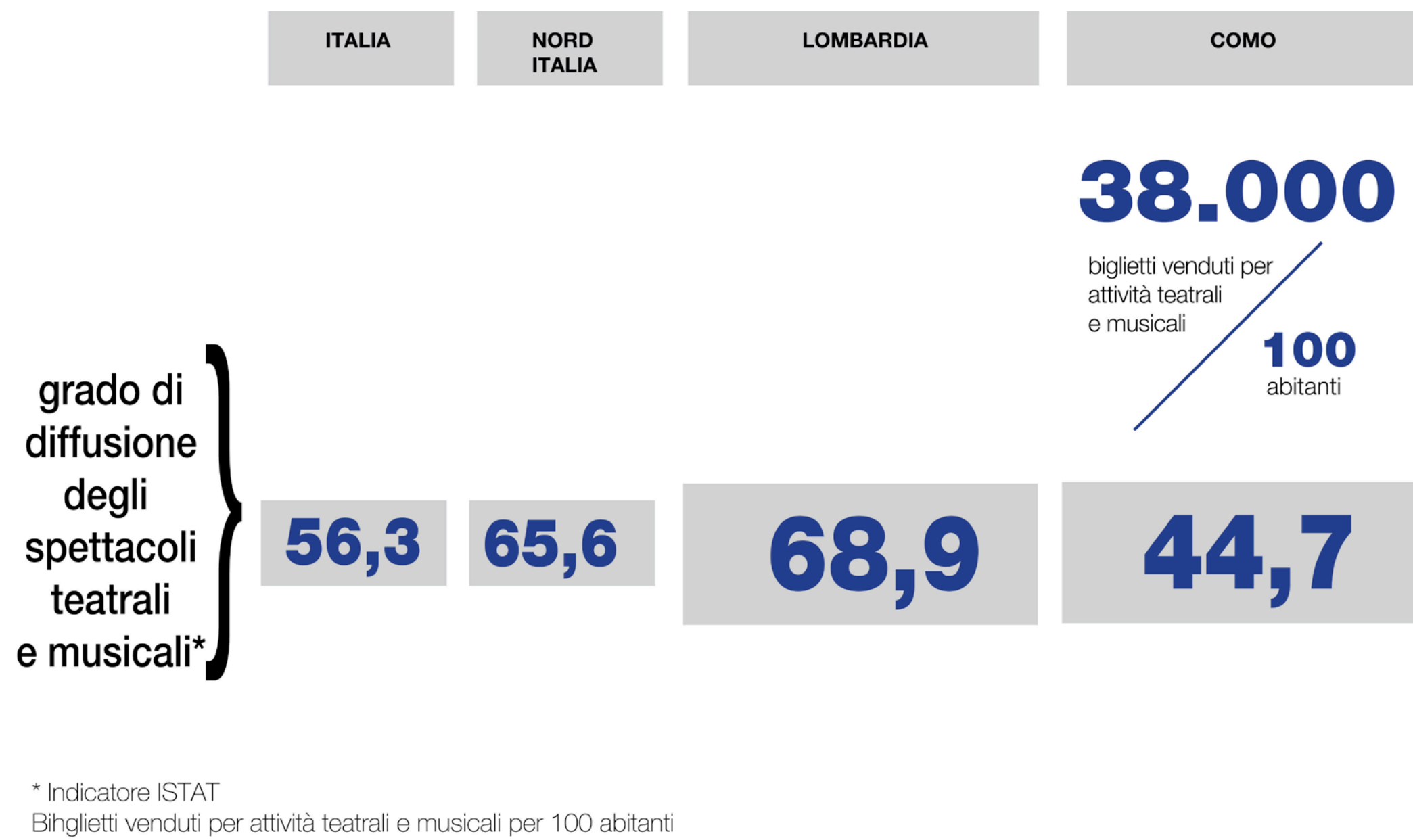
Performing arts

The degree of diffusion of theater and musical performances, Como has an index of about 45 tickets sold per 100 inhabitants, compared with about 70 in Lombardy and 57 Italians.

If we return to the first scheme, the activity density based on typological categories (Fig. 1), we notice a substantial absence of theatrical experimentation. No school of higher education, no research center, and an activity that turns at only three main theaters and a number of associations and theater companies (see comprehensive document mapping for more details). It should also be noted that there are two theatres currently closed, Teatro Cressoni and the Teatro Politeama.

Despite the greater theatre Teatro Sociale has a very rich offer in terms of exhibition (with more than ten different sub-performing categories), the most relative turnout is in the one and only exhibition of the Teatro Nuovo in Rebbio, the dialect festival (sold the 94% of available seats).

6. For the complete analysis, please visit www.artificiocomo.it, or contact the author.

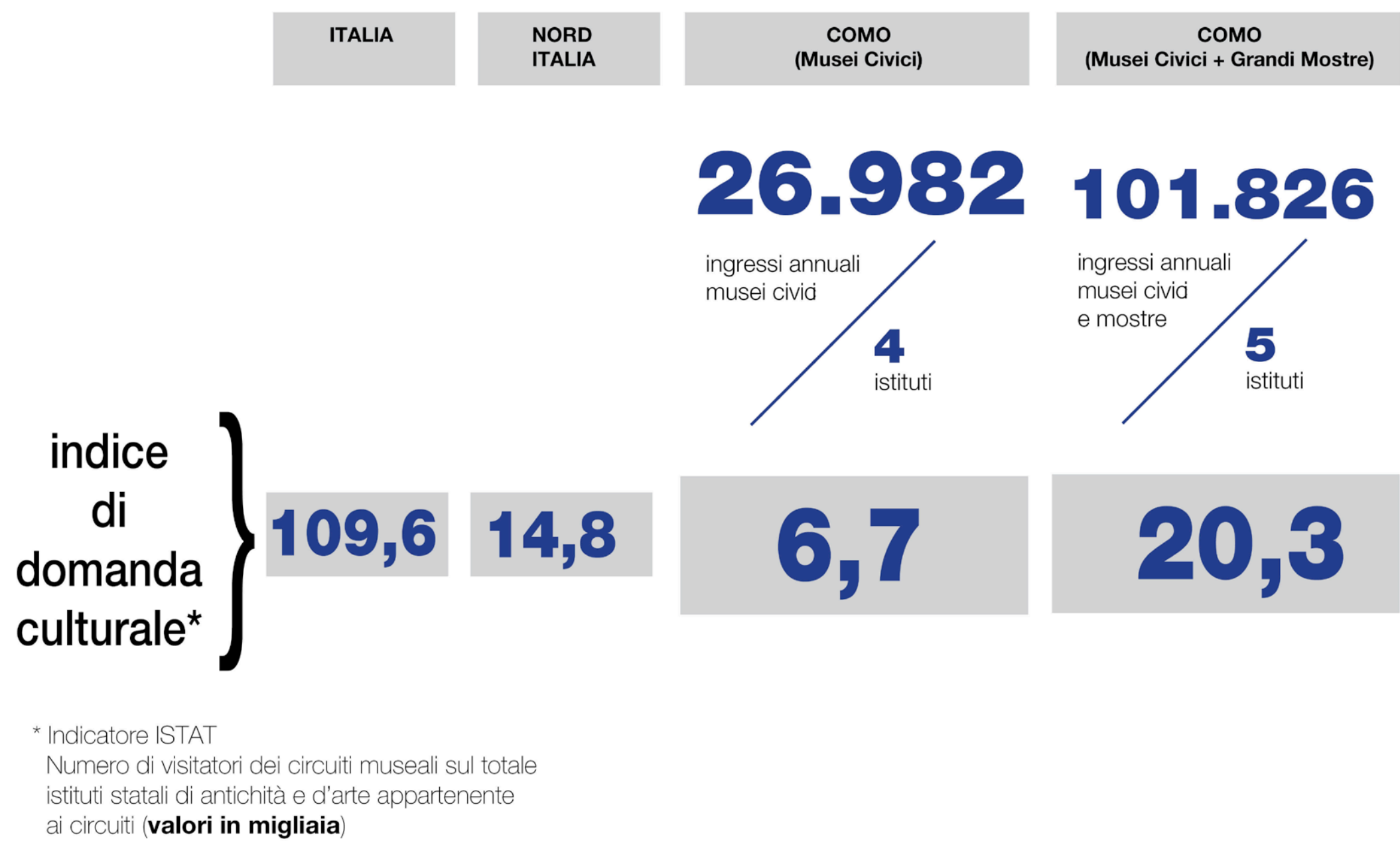


Index of cultural demand related to theatre and music shows / Comparison with Italian, Northern Italy, and Lombardia data.
Original Scheme in Italian language, La Mappatura culturale della città di Como – Progetto Artificio, Politecnico di Milano, Design Department.

Museums

If we consider the unique museums Como and compare with the standards of the North Italy, we will notice that they are very weak compared to the index of Istat⁷, which highlights a small number of visitors to each museum of Como civic museums circuit.

Even from the questionnaires to citizenship it has emerged a little affection to Como museums, as they are now conformed. Therefore, the lack of attractiveness of museums -not adapted to the contemporary and far from being a strong place of identity, urged a rethinking of these spaces, a



Index of cultural demand related to museum access / Comparison with Italian and Northern Italy data
Original Scheme in Italian language, La Mappatura culturale della città di Como – Progetto Artificio, Politecnico di Milano, Design Department.

7. ISTAT – Istituto Nazionale di Statistica, Italian National Institute of Statistics, www.istat.it

change in their appearance and functionality on the basis of a mode of use of the new cultural than in the past.

Cinema

The two active cinemas in Como try to make up for the inability to offer a rich program with quality exhibitions that have proportionally some success to reach the numbers of ordinary programming.

Comparing the SIAE⁸ data input to the halls in Italy, where on average there are about 2 inputs per inhabitant per year (the figure is almost identical in Lombardy), it can be seen in Como this figure is 4 times less, with 0,5 inputs / year per capita.

Despite the slightly varied and quantitatively limited supply, the questionnaires to citizenship emerges cinema as the main leisure activities, which suggests that many Como crossings to film outside the city. The shift of citizenship to neighboring centers can be attributed not only to the poor cultural offer, which presents the almost total lack of activity at certain times of the year, but also in part to an error in communication if not deficient of the activity taking place on the territory (since this emerged clearly from the qualitative analysis it is that the questionnaires to citizens).

120.582.757

ingressi cinema
Italia

60.626.442
abitanti
Italia

1,9

ingressi
per abitante
1 anno

20.126.000

ingressi cinema
Lombardia

9.917.714
abitanti
della Lombardia

2,1

ingressi
per abitante
1 anno

44.431

ingressi cinema
Como

85.000
abitanti
di Como

0,5

ingressi
per abitante
1 anno

Index of cultural demand
related to cinema access /
Comparison with Italian and
Lombardia data
Original Scheme in Italian
language, La Mappatura
culturale della città di Como –
Progetto Artificio, Politecnico di
Milano, Design Department.

8. SIAE - Società Italiana Autori e Editori, Italian Society of Authors and Publishers
www.siae.it

3. The final result, Artificio project

www.artificiocomo.it

The main activities, available from a local and international audience, of Artificio project are:

- *Theatre Off "Visionaries Selection"*, a series of shows selected by the citizens, spread in the city, shared with the artists, international.

Selected from below: shows "Visionaries Selection" are chosen from about 50 citizens of Como, who selected each year 5 performances of contemporary theatre companies to be presented to the city.

Spread in the city: the Theatre Off Artificio does not take place in just one stage but spreads throughout the city, wherever there is an available space.

Shared with the artists: after each show another begins, that of the encounter between the public and the artists, who will have the opportunity to cancel the distance between stage and audience, discussing the show together.

International: all shows are subtitled in English to allow the presence of an international audience, tourists, international students (Activity supported by Mibac, Italian Ministry of Culture).

- *Festival of Intimate Theatre*: starting from the idea that theatre can be done anywhere there is an audience and that there is no need for large stages to stage great works, there is a new space to host performances and open rehearsals to meet artists and spectators in an intimate place. The shows will be presented to enhance the space of the Sant'Eufemia cloister (headquarter of Artificio) turning it into a place of performing art fruition.

- *Artifisciò, the little big Variety of Friday night*: in the first year of activity, over 100 local and national artists and have performed on the small stage called Artifisciò. Staged once a month, from the first episode has always sold out. On stage, performing artists of all kinds: comedians, acrobats, clowns, musicians, singers, actors, dancers, and the public, that can take to the stage to propose its own performance.
- *International residences for the performing arts*: the Sant'Eufemia cloister is part of a network of Lombardia residences dedicated to the production and experimentation in the performing field (dance, theatre, performing arts). Through a call for selection issued at the European level, in the year 2016/2017 will be selected companies and international filmmakers who will be housed in the Como area offering a rehearsal space to achieve an artistic production. This practice has the aim of strengthening the link between artistic creation and citizenship, through the involvement of the citizens of each city in the creative process. Moreover, the company will be allowed to establish bonds with the city, its history and its contemporary cultural experience.
- *Music Courtyards - Festival of music and words*: a review to listen to quality music and meet the artists closely. Always combined with an aperitif or a Sunday brunch. The music comes from the repertoire of national and international songwriters. In July 2015 Courtyards in Music has been realized in the charming courtyard of the Sant'Eufemia cloister, getting a great response from even international audience. The goal is to spread the event in other courtyards, to rediscover and enhance urban environment, hidden and evocative corners, out of the normal tourist trails.
- *Performing Guides*: unusual tourist guides in which visitors

are led to discover the city and its history from a different point of view. Actors, musicians and dancers are involved in the guide to discover the territory, not just describing but staging it, narrating a story to the visitor.



Chiostrino di Sant'Eufemia, Como.
Some of Artificio activities (Music courtyards, Intimate theatre, Artifiscio)

4. Conclusions

Heritage, architecture, history, landscape, geographical position: Como has a very strong competitive image, perceptible not only in Europe but also worldwide, of which all the social and economic fabric of the area could enjoy (citizens, public administration, businesses in the tourism and cultural sector, the manufacturing companies, etc.) that needs to be supported and promoted.

Despite the presence of two industrial districts of absolute international excellence as the silk and the wood and furniture district, the mapping data shown a framework very clear: a poor attitude to the strategic enhancement of these competitive factors. These assets should be valued more systematically, because it could provide a strong cultural advantage and, not least, a significant touristic and induced business impact. In contrast, the city is likely to experience a decrease in possible new private investment and a consequent cultural offer doldrums.

Policies towards culture, a shared orientation towards experimentation of new cultural strategies, oriented to innovation and to the contamination, the dialogue and cooperation between cultural operators, third sector, public sector and manufacturing sector, could provide new opportunities growth in Como, making it a creative city and state of the art, which promotes the integration and participation as a lever for the renewal and improvement.

Starting from a planned design attitude, Artificio tries to respond to this imbalance between cultural needs and resources, with an active, participatory, adaptive and constant planning.

Artificio project in the year 2015 has consolidated its

presence in the city thanks to the partnership with the Municipality of Como, which has entrusted the management of Sant'Eufemia cloister, that has found new life, not just the general headquarter of Artificio but a collection centre of all the project activities taking place in different spread locations in the city of Como.

Artificio in 2015 has received a major recognition at the national level by achieving the approval and the consequent support of Mibac, Italian Ministry of Culture, for the activities carried out in the first two years of training of a new generation of active audience.

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CampUS: co-designing spaces for urban agriculture with local communities

by Davide Fassi, Laura Galluzzo and Annalinda De Rosa

METADESCRIPTION

Co-designing community gardens as a means for social inclusion in urban public spaces: schools and universities as supporting labs for communities.

KEYWORDS

social innovation, strategic design, co-design, participatory action research, community-centred design

ABSTRACT

This paper aims at gaining insights and reasoning on social innovation-based experimentations developed within the research project “campUS. Incubation and settings for social practices” – at the Politecnico di Milano. The project is acting for a virtuous relation between university spaces and competence, and the local context in which they are located.

The authors start analysing the theoretical basis of participatory action research, its application in the research process and the reflective perspective of community-centered design approach supporting design activism for urban territories (social and spatial context). The paper focuses on the issues of urban agriculture developed specifically within the research project and more widely by the research team in general. It examines the design strategy, methodologies and impact, in terms of social innovation, of two experiments carried out in a nursery school and a middle school in Milan – zone 9. These were project-based experiments connected to specific contexts and goals; they were a step forward in a process working towards infrastructuring: “a more open-ended long term process where diverse stakeholders can innovate together”. (Hillgren, Seravalli, & Emilson, 2011). At the final consideration stage, almost at the end of the project, the authors reflect upon future steps to take in terms of outcomes and in terms of process development, starting by analysing the achievements and failures of the experiments. How can the experience gained in this and in previous research-actions on community-centred design for social innovation lead to a more strategic approach to developing urban territories through diffused hubs supporting communities?

1. Framework

campUS: objectives, actions and actors involved

“campUS – Incubation and settings for social practices” (2014/16) is a research programme acting for a virtuous relation between University spaces and competence, and the local context in which they are located. This relation between urban neighbourhoods and universities can be made possible through the organisation of spaces and actions that are able to increase resilience and facilitate interaction, integration and social cohesion. The campUS project falls within this scope and aims to become a flexible model for the interaction of local, social spaces, and an agent for the implementation of social practices.

The project is organized into four main work packages, one per goal to be achieved:

- WP1: the development of a new community garden on common land close to the campus;
- WP2: the implementation of the web social-TV involving “NEETS” (young people who are “Not in Education, Employment, or Training”);
- WP3: setting up a mobile pavilion in the neighbourhood to host activities by different associations in a four-months period during spring / summer 2016;
- WP4: developing an economically sustainable model to support the long-term continuance of the three previous goals.

The concept of this research originated in the Polimi Desis Lab¹ of the Design Department. In 2010, the process of

1. www.desis-network.org - DESIS NETWORK, Design for Social Innovation and Sustainability.

creating a Living Lab at the university's Bovisa campus began with the aim of enabling local residents to discover and use the campus, and to help students to come into contact with real life needs and design opportunities. This paper discusses the community gardens action (WP1), focusing on the educational urban agriculture activities developed in two schools in the university neighbourhood.

Community urban gardens: a cross-research topic

The focus here is on the community urban garden action, as part of a longer research process: campUS is the 2nd step in a complex, structured path started in 2011 with the creation of "Coltivando, the convivial garden at the Politecnico di Milano". In 2011, the Polimi Desis Lab research team started to work in the context of the Milano Bovisa campus, considering the main green area as a hidden public space to be empowered. The campus, hosting the School of Design, was built at the end of the 90s on the grounds of "Ceretti & Tanfani", a historical company producing cable railways, which made the Bovisa neighbourhood a working class district. The campus became an "island for students" and most of the people who once knew the place as an industrial area have never had the chance to see how it has transformed. Coltivando attempted to change this tendency. For this reason, the actors involved in this process are both from the academic community (professors, students and researchers) and from the neighbourhood (inhabitants and local organisations). The co-design activities played a central role in the design process, strongly involving the local communities in the development of a new shared urban space hosting a community garden.

This research project, now an established place in the

neighbourhood and recognised throughout Milan, led to the campUS action-research, which is trying to expand the experimentation into other contexts of the Zone 9 district, advancing the idea of the community urban garden as a means of social inclusion.

During the 2-years of research, the experimentation took place in different contexts, engaging various combinations of actors:

- the Bovisasca community garden, involving local organisations, groups of inhabitants, the local middle school community and Politecnico di Milano design students (masterclass, master thesis for in-depth analysis and actions, trainees);

- the Catone kindergarten community garden, involving children, teachers, parents, and Politecnico di Milano design students (master thesis for in-depth analysis and actions);

- the Maffucci middle school community garden, involving pupils and teachers, and Politecnico di Milano design students (master thesis for in-depth analysis and actions);

All these actions experimented co-design methodologies for social innovation and social inclusion, with a strong educational component all along the iterative field research process.

The project timeline

The research project started with a 3-months exploration by mapping the operational entities in Zone 9 in order to select touchpoints in the context. In this phase, the research team focused on intercepting local stakeholders (local organizations, informal groups, ongoing initiatives) and the main contact – already focusing on the urban garden topic – was “9x9 – Idee in rete”, an organization for the development of a community garden in the Bovisasca community

(not investigated in this paper). The exploration continued during the co-design and co-creation process of the Bovisasca community garden and lead to contact with interlocutors at local schools: the Catone nursery and, later, the Maffucci middle school.

A getting-to-know-you phase was crucial for each stakeholder: for this reason, a series of meetings between the research team, the Coltivando gardeners group and the teachers and children of the Catone kindergarten took place. Activities were organised to exchange and disseminate the good practices already tested within the convivial garden at the Politecnico di Milano.

A further 6-months of involvement were fundamental for the team-building process and the development of co-design workshops to set up the community garden in the Catone kindergarten. One year later, collaboration with the Maffucci middle school started: the same process was carried out, adapting the workshops to the different ages of the kids involved. A prototyping process was part of this step, planning and implementing activities for the co-creation of the schools' community gardens (hard and soft components): the system of actors (researchers, Politecnico di Milano design students, teachers and children) worked on: the orchard layout and fencing, positioning and planting the different species and building an insect house; the orientation and communication system, including the orchard manifesto; the distribution of tasks and roles for the following months.

Main focus

Almost at the end of the campUS research project (the project will finish in October 2016) and in the light of the research and teaching experiences, the authors reflect on and

attempt to consolidate the theoretical basis for future steps.

The reflection that follows starts by analysing the theoretical basis of participatory action research, its application in the research process and how contemporary issues are addressed through the dialectical and reflective perspective of a community-centred design approach that supports design activism for urban territories (social and spatial context).

With insight gathered from the experiments, the paper tries to evolve the discussion into a strategic design approach that aims to organise design thinking competence and methodologies into a system of actors able to address and support diffused opportunities. This paper seeks to lay a theoretical foundation for a reflection on how these processes can evolve from design experiments (that are fundamental to building relationships in the specific context) to a more strategic, long-term development, based on the concepts of “agonistic space” and “infrastructuring” (Björgvinsson, Ehn, & Hillgren, 2010).

2. Methodology foreword: participatory action research

The contemporary context: a (designerly) participative community

The social context today is characterized by the active involvement of people in the transformation of their existence, acting in their environment to achieve social change. This change is “social” because people² are not just asking local authorities or national governments - who are responsible

2. In this paper the authors use the word “people” to refer to groups of individuals not trained in research, such as clients, customers, users or citizens, according to research branches.

for that change in a top-down model - for economic, political or social transformations in a passive and abstract way, but are assuming a pro-active role through the development of bottom-up activities and actions; they are involved in local organizations and informal groups or through individual initiatives. These processes reveal a growing awareness of specific problems, how to tackle them and how to bring to light shared values and beliefs, increasing social networks in more or less local contexts. Activities and initiatives include various subjects, since they are related to specific concerns, but all contribute to an immediate problematic situation. This tendency is spreading more and more nowadays and what is remarkable is how the innate creativity and design capacity of human beings to invent and realize something new (Manzini, 2015) is bringing about a shift in contemporary society. The strength of this pro-activism lies in the level of diffusion and in the overall impact of these transformational processes. The problems in question are the so-called “wicked problems” that the contemporary world is facing and that social innovation embraces, addressing specific, complex and always changing issues in a diffused way, and involving multiple actors in multiple partnership configurations (individuals, groups, organizations, local governments and trans-national agencies). This continuous process of inquiry into social innovation can be carried out using the design thinking approach and applying a participatory action research methodology.

The co-design activities organized by the campUS team are participatory action research based. During the first year of the research, a co-design process with the Bovisasca residents and a parallel path with the communities in the Catone and the Maffucci schools were organized at the same

time.

Both processes consisted of 8 co-design workshops with the communities, but the order of the activities differed in accordance with the different typology of participants. In the neighborhood community most of the participants were adults, so activities started by examining the possible meanings of a community garden and its regulation and then moved on to more practical activities. On the other hand, the kindergarten community, consisted mainly of children, so it focused firstly on various practical activities and moved on later to the theoretical ones. Moreover, dealing with 3/5-year-old children and 11-year-old near adolescents also implicates rather different approaches.

The processes were designed to fit the specific context: the typology of participants, the specific dynamics of the actors involved and the specific design opportunity. These are, briefly, key foundations of the methodology applied - participatory action research (PAR) in co-design processes.

Participatory action research: reflections around the methodology

PAR is a methodology employed in various fields and settings and its nomenclature underlines a variety of approaches and interpretations: *action research, collaborative inquiry, emancipatory research, action learning, contextual action research, co-operative design, joint application design*, are only some of the terms used. From these emerges the basis of this methodology, highlighting its constitutive assumptions.

First of all, PAR is a social process and has its origins in social sciences: it is transformative in aim, contributing “both to the practical concerns of people in an immediate problematic situation and to further the goals of social science simultaneously” (Gilmore, Krantz, & Ramirez, 1986). It involves

researchers, practitioners and people in general (who), through collaboration, inclusion and social action (how), for a planned organizational change to solve real problems (why).

Therefore, PAR is applied to real, specific contexts, and sees the active engagement of both the researcher and the traditional object of social research: people.

The process of the action itself – cyclical, iterative and adaptable to changing circumstances – is much more relevant than its output, since it deals with a continuous co-learning and adjustment. Action research is in fact about learning by doing, through considering / reconsidering data, conditions, standpoints and procedures in the dynamism of human action, in dialectic exchange between theory and practice, subject and object.

The *object* we are talking about is a complex system composed of:

1. space (a specific and defined place, area or territory);
2. time (a specific period taken into account, time range of / for action);
3. people (for specific groups, communities, citizens).

These three main aspects are strongly connected one to the other, so defining the context of the action. Thus, addressing a (systemic) change or an evolution of a given situation requires combining many elements in a new way and a change in mind-sets.

Participatory action in design research

In design research, the level of participation and involvement are widely discussed.

PAR, as mentioned above, has its origin in social sciences and the research around this topic has been and is still

extensively examined and analysed.

The user-centred approach was acquired by the design discipline and later developed into co-designing with the user: a human-centred design approach.

Co-design was defined by Sanders & Stappers (2008) as a way “to refer to the creativity of designers and people not trained in design working together in the design development process”. Creativity is defined as the capacity to contribute and participate - in different ways - in a design process.

Human-centred design (HCD) scales up to community-centred design (CCD) (Meroni, 2007) when facing complex systems of challenges dealing with groups and communities at society scale, in order “to create innovative new solutions rooted in people’s actual needs”³. The design discipline addresses a system of contradictory and continuously changing elements, made of complex interdependencies.

This brief, in-depth analysis on methodology characteristics, and these last quotes, together define exactly the approach the authors employ in the action-research projects conducted, and especially in the on-going theoretical and experimental experience gained in the campUS project, which is the main focus of this paper.

3. Community-centred design in urban public spaces

HCD and, better, CCD are decisive approaches to addressing social issues, the main action platform of which are urban public spaces.

3. *The field guide to human-centered design: Design kit.* (2015). San Francisco: IDEO.

In the post-industrial era, the public space of contemporary cities is the scene of societal challenges, changes and actions: its transformed uses are the evidences of new emergences (individuals to sharing communities), new dominant structures (hierarchies to networks), of new design approaches (technology-centred to HCD)⁴.

CCD can support and implement the ability of design research and practice to impact on societal challenges and to promote a social change.

This is actually design activism (DA): a design act is “a designerly way of intervening in people’s lives” and “urban design activism is about introducing heterogeneous material objects and artefacts into the urban field of perception which invite active engagement, interaction or offer new ways of inhabiting urban space” (Markussen, 2013).

The urban territory is here interpreted as a complex system, a diffused entity that goes beyond national boundaries: a platform for global capital (Sassen, 2004) to be seen as a holistic system in which actions and changes at the local level have the capacity to influence the overall networked structure.

This is why experimentation before, and a strategic design action after, are fundamental to improving places in a participative way: an exclusively top-down action in public space would lead to new spaces, while dialectical and reflexive approaches encourage the fulfillment of its existing potentialities.

The role of the university as a lab for a design-driven innovation

4. Krippendorff, K. (2006). *The semantic turn: A new foundation for design*. Boca Raton: CRC / Taylor & Francis. p.14.

In the contemporary city-system, universities can play a central role not only for the internal community but also for the external one, counteracting the decline of national regulatory capacity (Chatterton, 2000). Nowadays universities play a pivotal role in-between public administrations, ventures and citizens and are encouraged from both sides to be active at their local level and leaders at a global one, in a complex territorial dynamic.

Design universities, above all, bring with them a design thinking approach, where user involvement, co-operation and action-creation-testing and continuous learning milestones can be introduced into governmental and civil society.

As stated in the first paragraph, the campUS project sees Bovisa campus as the pivotal starting point for experimentation, reflecting on how a hub for design education could enhance social inclusion at the local level. The “citizens” of the university (researchers, students) are actually part of a living lab, an incubator of knowledge with the capacity to spread it.

In the campUS experimentations, we shift slightly from the educational hub of the university acting on the local territories, to the integration of other educational hubs – local kindergarten, primary and secondary schools – realizing how these can become trans-territorial spaces for spreading the systemic change.

During the research process the communities we have chosen as the main targets – elderly people over 75 years and NEETs (Not in Education, Employment or Training) – and especially the second target, have been very difficult to reach through local organizations and charities. At the same time many local schools contacted the campUS team to be guided into the design process of developing their own community

garden.

For this reason, the research team started to work with the kindergarten community and with the other two middle schools involved, not only with the kids but also with their teachers, parents and families. Coltivando, campUS project and the university campus became a reference point for the local schools and for the neighbourhood. The territories close by the university campus were engaged through the schools and their communities.

4. The goals of the experimentation

Through acquired knowledge and connections with the local context, the Polimi DESIS Lab started several educational programs to develop vegetable gardens in the local nursery, primary and middle schools. From this perspective, the vegetable garden itself is a means of applying design thinking to help, implement and motivate the final users to create innovative solutions for the society in which they live and to increase awareness of a sustainable lifestyle.

Schools often have underused green spaces. The goal of re-designing and enhancing existing green spaces is also part of a re-appropriation of common areas that may allow a greater number of collective and shared (especially outdoor) activities.

The purposes of the redesigned schoolyard are academic, behavioural, recreational, social (increased sense of belonging, self-esteem, and compassion), political (the schoolyard as a visible community asset), and environmental improvement (Blair, 2009). Schools are an excellent means for reaching out to families, both the younger generation, and those

responsible for the children (parents, grandparents, teachers). They also offer opportunities to deliver health promotion messages regarding the consumption of fruit and vegetables (Collins, Richards, Reeder, & Gray, 2015).

The activities focused on the multicultural language of food. Different recipes were discussed by parents, teachers, designers and children starting with the same ingredients, such as herbs and vegetables, to show different traditions and cultures.

5. The two experiments

The kindergarten, where the first co-design journey took place, is located in the private street “Catone”, in the Bovisa district. The piece of land chosen by the school administrators for the vegetable garden is a rectangle of about 20m², with sides of 3.5m and 5.5m. The teachers decided to dedicate a modestly sized space in order to see the children’s reactions following the first trial of cultivation activities and then to decide later whether to increase the size of the space.

At the beginning of the design activities, the land needed some basic work: thanks to the collaboration with “Coltivando - The convivial garden at the Politecnico di Milano” some garden tools were provided to remove the weeds and turn the soil to prepare it for seeding. During the design process with the children, it was decided to divide the beds into six 1.5m square frames, in which the vegetables, which had previously been sown and had sprouted during workshops held in the classroom, were grown with the support of the teachers.

The activities were carried out by four teachers and four designers, initially working with two parallel classes at the

same time, for a total of about forty children (3 to 5 years old) and then with a single class of about twenty children (divided into two groups of ten children). The design team together with the teachers decided to halve the number of participants (forty to twenty) in order to be able to interact more easily with them and improve the overall quality of activities. The duration of the activities varied between 30 and about 90 minutes.

The co-design process: 8 workshops of team building and co-creation

As mentioned above, the co-design sessions were organized in different ways according to the ages of the participants.

At the Catone nursery, with children aged 3/5-years, the designed workshops were:

- Workshop 1. 22/4/2015. “Germination of the sweet potato”: was based on the growing process of the sweet potato introduced by a short presentation about its characteristics, where it comes from, where it is commonly used for food, how to cook it and the germination process.
- Workshop 2. 29/4/2015. “Co-designing garden layout and combinations of crops”: the second workshop focused on the garden layout and how to combine the vegetables to be sown. The layout concept was presented to the children through the metaphor of giving each vegetable a “house” (garden bed) in which it could live with vegetable “friends” (vegetable combinations in the same bed).
- Workshop 3. 12/5/2015. “Creating the fences”: the third workshop was focused on designing fences for the garden by using recycled materials.
- Workshop 4. 19/5/2015. “The insect hotel”: from the pre-

vious workshops, the design team noticed that the children were extremely interested in small insects found in the garden. Given their importance for biodiversity in a garden and the children's interest, the design team decided to dedicate the third workshop to co-designing the insect hotel.

- Workshop 5. 27/5/2015. "How to set up a garden": the activity began with a brainstorming session stimulated by some question-cues, and getting the children to draw the answers to these questions on postcards: What is a garden? What is it for? What does "shared" mean? With whom do you share it? ... Then the design team showed the children a story called, "The history of our garden", a tale for children used as a useful way of retracing the process and confirming understanding of the steps to that point.
- Workshop 6. 28/5/2015. "What are management roles?": the last workshop focused more on defining the roles that the children would have to play in taking care of the garden.

At the Maffucci middle school, with kids aged 11-years, the designed workshops were:

- Workshop 1. 15-19/2/2016. "What is a shared garden?": the first workshop started with a guided visit to "Coltivan-do: the convivial garden at the Politecnico di Milano" led by local gardeners.
- Workshop 2. 1-4/3/2016. "Co-designing the layout": The second workshop included choosing crops, placing crops on a mock-up and positioning other activities. The second workshop was organized around an activity about co-designing space. The purpose of the activity was to encourage young people to organize areas of the school according to

activities to be performed, types of spaces, position of vegetables and general layout of the garden.

- Workshop 3. 14-18/3/2016. “Preparation of the ground”: the final layout was presented; clearing the soil of rocks, weeds etc. began. Students were asked to take a “hands on” approach, and most of the activities were done in the garden using garden tools. These were lent by *Coltivando* to continue the strong relationship between the two projects.
- Workshop 4. 4-8/4/2016. “Soil preparation and germination of the potato”: the fourth workshop focused on continuing soil preparation and on the use of the “Potato germination” workshop already conducted in the “Catone” nursery.
- Workshop 5. 18-22/4/2016. “Seeding, transplanting and borders”: the fifth workshop started with the presentation of a format to be used in the following activities, an A3 sheet with cards representing vegetables and the drawing of the existing plants. The design team gave two different tasks to each team: one team created the borders using a coloured cable while other students filled the garden beds with fresh organic soil. The final proposed layout met with the approval of the students, who also remembered many details of what was expected from them during the second workshop.
- Workshop 6. 2-6/5/2016. “Garden care and decoration”: the sixth workshop focused on stone decorations to make signs for the vegetables.
- Workshop 7. 16-20/5/2016. “Urban bees”: the seventh workshop was focused on urban beekeeping. A lecture on the importance of bees in the biological cycle was given by a postgraduate student who was developing a thesis on urban beekeeping. The thesis resulted in a handbook for running workshops in schools through a series of exerci-

ses, named “Beehave”. It was aimed at teachers in primary schools to help students understand the world of bees and their importance.

- Workshop 8. 23-27/5/2016. “Co-design of the Manifesto”: the last workshop was about summarizing the previous ones through the creation of a “Manifesto” of the activities. The task of drafting the five points of the Manifesto required considerable maieutic skill given the students’ low level of concentration.

The impact on the urban social tissue

As a result of these two similar experimentations, we gained insight into the relationships within the actor system involved in that specific circumstance. The interconnections between them affected the level of impact of such a process on the urban tissue.

Firstly, the research team had to adjust the workshop development to fit the school timetable, unfortunately weakening the possibility of involving parents and grandparents, and of opening up the school to the different neighbourhood communities as well as the school community. Secondly, although the meaning of a “shared” garden was fully understood and the children’s level of involvement rose from “neutral” to discovering new skills, the researchers were always presented as “teachers”, in a top-down educational model, and the vegetable garden wasn’t understood by the teachers as an educational, learning process to be integrated in the programme, but as a secondary activity to be developed only in the presence of researchers.

The partially achieved goals suggest that a longer planning phase is required by part of the users involved, in order to successfully spread a design thinking method, to increase



Fig.1 campUS project, Bovisasca community garden, first co-design workshop
 Fig.2 campUS project, Bovisasca community garden, second co-design workshop
 Fig.3 campUS project, Bovisasca community garden, third co-design workshop
 Fig.4-5 campUS project, Bovisasca community garden, Sabato della Bovisasca event



Fig.6 campUS project, Maffucci School garden, second co-design workshop



Fig.7 campUS project, Maffucci School garden, third co-design workshop

Fig.8 campUS project, Maffucci School garden, fourth co-design workshop

Fig.9 campUS project, Catone school garden, first co-design workshop



the collaboration of all the reachable communities, and to help, implement and motivate the final users to create innovative solutions for the society in which they live.

After two years of work many things could be improved but the most important is the relationship with the schools. In the past two years, campUS worked with the schools but in a temporary way, co-designing the community gardens as experiments. The next step could be a more structured path that transforms the schools into open-schools: opening them to other activities and other communities also in out of school hours, adding not only a community garden but also new services (kitchen, theatre, sewing machines, etc.) for the neighbourhood.

In the future we can imagine the schools as small hubs, embedded in the territories like the Politecnico campus but on a wider scale. The school communities are inside the territories and the social changes could start from there; also the negative aspects of gentrification processes can be reduced if a change starts from and with the local communities. The schools could become perfect examples of widespread transformation hubs within the territory. Through an urban approach that we can liken to acupuncture, the local schools could become the needles of the territory.

6. Discussion on future implementations: a dialectic between project-based experimentation and infrastructuring

The campUS experiments act in specific space / time / actor-system conditions. Reflecting on how to move a step forward, from experimentation to strategic action, the difficulty emerges of being in a dialectic process between the essential

specifics of an always variable complexity and the need for an adaptable strategy. The dynamism of any action and the resulting environment change must be taken into account, avoiding the stagnation of sterile models.

One of the final goals of WP1 in the campUS research is to lay down community garden guidelines and share them with the Milan municipality. The municipality is actively supportive towards the openness of the social innovation, community gardens and school spaces, and towards the whole issue of reusing neighbourhood and public spaces. The experiments in the research project were all developed in collaboration with the Council Area (zone 9). The guidelines consist of different toolkits (developed also thanks to the experiments): they are open, flexible models adaptable to different variables (space, time, location, community, purpose, etc.).

The definition of these guidelines unfolds the theoretical reflection around how project-based experimentation can guide infrastructuring in democratic urban development processes. Ongoing design research and practice is reflecting on how participatory actions, based on co-design processes, could be merged with strategic design in order to increase its impact in contemporary societal transformations and environmental challenges. When the micro-environments of these initiatives permeate the platform of urban territories, they act in a holistic way influencing the global system (Sassen, 2004). How can strategic design amplify this potential to regenerate the urban tissue?

In this paper, by focusing on a specific topic –*urban community gardens* – and in particular, on the present stage of a research experiment – *with local schools* – at the end of a longer and wider process started in 2011 – *the development of*

Coltivando the convivial garden at the Politecnico di Milano –, the authors have attempted to highlight the “ripple effect” of the research and experimentation carried out by the Polimi Desis Lab in the Milan Zone 9.

These prototyping actions on urban territories were conducted in the short-term, in a specific time span and with a partially agonistic perspective – the inclusion of marginalised voices – to set up forms of local alliance. This was fundamental in order to amplify the strategy by involving organizations, civil servants, municipalities and different groups of inhabitants. The Polimi Desis Lab acts as an urban living lab for local social innovation processes, precisely to establish the above-mentioned “ripple effect”, actually a first step towards infrastructuring. The purpose of Strategic design is to trigger systemic change by enabling the system to evolve through a series of actions. In an iterative and adaptable process, constructed and reconstructed over time, the innate temporariness of a single action is integrated into a complex strategic system that supports diffuse (space - time) opportunities. Thus a necessarily place-centred approach (space) is integrated into a trans-territorial one (service).

The ongoing reflection could rest on the following steps, which would seek to examine the effective role of these guidelines. The first research opportunity, at the end of the 2-year campUS project, could be to experiment the guidelines in another context, so as to understand whether they are applicable and whether the insights gained from a context A could be applied to a context B, and in view of that, to understand differences and similarities.

Another possible research opportunity would be to explore possible exit strategies in-depth: What is the role of the designer? Are all the inputs instilled in the social environment

fully acknowledged and assimilated, so as to enable further development without the designer?

Summing up, this paper focuses on how the 5-year infra-structuring process has been conducted, illustrating the role of the university as a lab for design-driven innovation and exploring the ongoing design research influences in what has already been done, and in the possible next steps. The dissertation contributes to the critical reflection around participatory design and co-design for urban context social innovation towards strategic design.

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The relevance of participation in the Systemic Design Approach for Rural Development

by Miriam Bicocca

METADESCRIPTION

The definition of the actor team for each phase of the project as one of the results of the research carried out to identify solutions for rural communities.

KEYWORDS

Systemic design, Rural development, Cooperation

ABSTRACT

The goal of this paper is to investigate and underline the importance of the role that the actor-team plays in a project focused on Rural Development. More specifically, the aim is to emphasise the relevance of the relationships among different actors in the research (Department of Architecture and Design at the Politecnico di Torino on Systemic Design Approach for Rural Development) based on the case study applied in the Mexican State of Guerrero, in the small community of Ahuacuotzingo. Especially the success of this research project is the definition of the relations' network that is generated in the designed system in order to activate and revitalize the territory. It is necessary to foster and manage the dialogue between the various actors during all phases of the project. The birth of the cooperative of farmers and other active actors on the area, it is an index of the successful of the project.

1. Introduction

The main issue discussed in the paper is the importance of the actor-team in the projects aimed to reach development in a sustainable way (that works for people, planet and profit - a 'triple P' challenge (Nattrass, B. and Altomare, M., 1999) in marginal and complex areas, in particular, in rural areas.

The term "rural" defines the non-urban territory of the land area of a municipality. It includes areas classified as non-urban (or not intended to urban sprawl) in which the main activities are agro-forestry and pastoral. The variety of existing definitions of the term "rural" is justified by the complexity of this topic. Depending on the specific case, usually, it is chosen the most fitting definition so that it is suited to the political strategy that is adopted. Usually, these definitions are related to geographical units combined with characteristics linked to the population. Define the rural area and its boundaries is not trivial or irrelevant. From this, indeed, it depends if an area is eligible or not to the political strategy. The United States Census (2000 Census) defines rural areas as those with fewer than 2,500 residents with a maximum population of 999 persons and a minimum of 1 person per square mile. Rural Development is a very relevant topic because of the quantity of people that lives in the territory around the world. More than 3 billion people live in rural areas and 1.4 billion people are extremely poor (IFAD, 2011). Therefore, it is crucial the identification and definition of innovative processes for the local development of small-scale farmers.

The main issue that is discussed in this article is the definition of the team of actors and the role of the farmers within the application of Systemic Design Approach (Bistagnino,

2011) for Rural Development. We deal with rural and marginal territories where agriculture, usually subsistence agriculture, is definitely the most important economic activity, sometimes the only one.

Design rarely deals with Rural Development. When it does, it often focuses on the design of product or service. Mainly, the designer has so far been committed to put his/her experience and expertise, related to product design, at the service of local handicraft in developing countries. The designers undertaken in this issue, work on design *with* or *for* the developing countries. In the first case there are projects developed from the contribution of local people, aimed to find a balance between consumption and production. In the second case there are mainly projects that research for solutions for the daily life emergencies. In both cases the aim of the work of the designer is to improve the quality of life in relation to specific activities. More and more often, however, the designer moves from being focused on the product or service to the process. This is particularly true when the approach that is used to develop the project is the Systemic Design Approach (SDA). In the design field the approach is usually considered systemic when it is able to put together the systems thinking and the human-centered design theories.

The central role that play local resources and relationships in the SDA makes it a very effective approach to support and encourage Rural Development in a sustainable way. By applying the SDA, it is possible to manage local resources and local products in a way that allows economic strengthening of the farmers and communities that live in the territory.

Since farming is a mainstay of most rural economies, the research aims to promote economic diversification combining traditional agricultural skills and new technical and

technological know-how.

In this case the Systemic Designer (SD) makes a further shift by moving the final goal of the project from the process to the whole territorial system. This kind of approach allows the SD to design and work on territorial level, on social networks generated in the territory. Especially this article looks at the social network that is based on collaboration and co-operation managed and conducted by the SD. This issue has been investigated during the PhD research “Rural development and sustainable innovation. How systemic design approach can contribute to the growth of marginal regions” by the author in the Department of Architecture and Design at the Politecnico di Torino. The research is based on a real case study applied in the Mexican State of Guerrero, in the small community of Ahuacuotzingo. The PhD had two objectives: on one side the development of the project carried out initially with 6, then with 15 Mexican farmers. On the other side the definition of models useful for future projects in similar contexts. The aim of this article is to underline one fundamental aspect that results from this research, particularly relevant for the success of the project: the role of the local Cooperative and the team of the actors involved in the project.

Considering the relevance of the Rural Development topic, it is essential that the projects that are dealing with this issue are designed to be replicated and, possibly, scaled in other similar context. This is why one of the most important outcomes of the research has been the definition of 3 models useful for future similar projects: the first one about the actors team involved in the processes, the second one is about the 4 steps for the implementation of the project; the last one is the framework of the whole project useful for other

designers that work in the same issue. As mentioned before the article explores just the model related to the actor team involved. In this model the participation is a crucial aspect: very often, the local actors, farmers, are asked to make substantial changes in their behaviour and lifestyles. We speak of a real, active participation, because they are not involved in a superficial way, but they are those that make real the implementation of the project. They are the ones who are committed, for instance, to convert the current cultivation in organic farming, to undertake new activities, they can decide to participate workshops to learn, for example, self-construction techniques, they can build micro-digestion plant to turn waste they produce in the fields and houses into something useful for the land. They can change their eating habits, aware of the link between this aspect and the impressive spread of cardiovascular and chronic diseases. Above all, they are the ambassadors of new values and different vision of the future.

2. Presentation of the research

Ahuacuotzingo, State of Guerrero, Mexico.

The most demonstrative case study of the PhD research is located in Ahuacuotzingo, Mexico, State of Guerrero. This region was chosen because of its particular features related to food, both the production and the consumption, and the high level of crisis that strikes the area. Take action on these aspects means managing environmental, social, economic and health consequences. Approximately one quarter of Mexico's people live in rural areas, and depend primarily on

agriculture. Farming is important for land use, for the management of natural resources and for their subsistence, thus, farmers are fundamental social, cultural and economic actors in rural areas. The agro-food networks are also important because they can be the leverage point of the changes.

The territory of the State of Guerrero, Ahuacutzingo in particular, has been investigated and analysed from several perspectives with a complete holistic diagnosis.

Named from Vicente Guerrero, a leader in Mexico's wars for independence, the region became a state in 1849. Guerrero is divided into local governmental units called *municipios* (municipalities), each of which is headquartered in a prominent city, town, or village. Much of the state's population consists of impoverished Indians and Mestizos, a significant minority speaks an indigenous language as primary language; more than two-fifths of the people live in rural areas. Considering the standard economic measures, it is easy to notice that Guerrero consistently ranks among Mexico's most impoverished states. The rural population lives dispersed in scattered and often very isolated villages; in 2010 just over fifty-eight per cent of the state's population was spread among more than seven thousand communities with fewer than 2,500 residents (INEGI, 2010).

For a substantial majority of the rural population, the subsistence agriculture with supplemental commodity production or seasonal wage employment, it remains a way of life.

Actor-team model

Among key results from the research there is the development of the actor-team model. The actors involved are not subject to a hierarchical structure. There is not a more powerful actor than another one, but rather more significant

flows of information that run from one actor to another depending from the phase in which the project is (Analysis, Project and Action). The success of the project is closely related to the positive interaction of these actors. The role of each actor changes according to the objective and each one brings specific expertise to the project aimed to achieve a common and shared end-goal. The actors who have been identified as key players in the process of rural development achieved through the SDA are: the *farmers*, the *cooperative*, the *connective actor*, the *SD*.

What has been defined as *connective actor* is the one who is responsible of linking *farmers* and communities with the *SD*. He is essential during the whole process, from the analysis phase to the action one, focused on implementation.

The mentioned actors are the ones always involved in every phase. Furthermore we have identified, as important actors, the whole *community* and the *consultants*. For instance agronomists, biologists, sociologists that speak primarily to the systemic designer. But also technicians, that speak directly to the cooperative of farmers; experts on organic farming and methods for biological pest control, on self-construction and maintenance of micro biodigesters, on compost production, on green building, on self-construction of dry toilets.

The lack, the inefficiency of even just one of these actors hinders the system development affecting the success of the project.

Ahuehuetla Coop.

Since agriculture in Mexico is not only a fundamental economic activity of the rural population involving about 37% of the total population, but has also deep social significance and cultural meaning, the farmer is the central figure around

which the PhD project in the community of Ahuacuotzingo is developed. In the implementation phase of the project the farmers organize themselves into a cooperative.

In the mexican case-study with the Ahuacuotzingo community, we initially identified 5 farmers (Nacho, Tonio, Josè, Angel with the Cavideco - Centro de Apoyo para el Desarrollo y Vinculación Comunitario, Beto) holding a total land of 43 hectares, but currently cultivating only 12 hectares. During the first year of the project other members of the community decided to enter into the Ahuehuetla Coop.: 1 group of women that cultivate organic vegetables in a greenhouse, 1 group of women who have recovered the activity of production of panela which had been abandoned by their father. The actors of the system work as if they were part of the same organism. Each farmer or actor becomes specialized in one particular activity. The waste of each activity are used and returned in other productive activities on the territory: this allows the generation of new products. Nacho is the farmer who recently became part of the Ahuehuetla Cooperative. His role in the project is important as a farmer of fish. For his breeding he uses worms arising from the production of Tonio. Tonio, which is at the moment the farmer better organized and with the best production, in the project produces sugar cane, which is useful for the feeding of animals but, above all, is brought to the group of women for the production of panela and derivatives. Thanks to a micro biodigester he produces biogas used in his tortilleria. In this activity he uses the corn that he produces on his own field. His other productions are butter, cheese and yogurt, worms, compost, agave. The main activity of Beto is instead the dairy where he produces cheese, butter and yogurt. These products can be partially sold and partially used at the Cavideco.

Jose produces sugar cane, corn and nopales. He has a small breeding whose products sells directly on the production site. Angel is the operator of the Cavideco that was founded in 2009. This centre was founded with the objective of developing the skills of men and women respecting environmental sustainability, promoting natural tourism projects and volunteering using local resources for the community development. This centre is one of the key locations for the project. It's a meeting point for cooperative members. There are the restaurant and the natural swimming pool for the whole community, there are laboratories for the transformation of the food produced by the farmers of the cooperative. Furthermore, it's the place where workshops and seminars will be organized. An important part of the project provides that the Cavideco will become an essential place to develop the potentiality of the whole community. Seminars and workshops will be organized primarily to support the farmers and other workers of the community in their activities. The part of the project relating to the education and organization of these courses is a practical outcome that we have already achieved. Inside the event Verano Intercultural courses were held to educate farmers in relation to self-construction of micro bio digesters and greenhouses for vermicomposting. Those are essential activities in the complex system project. Cavideco will also be the point of contact, the link between the Ahuahuetla Cooperative and the rest of the community. Here indeed it will be possible to purchase the products of the cooperative that will become the main results of a virtuous production system that uses in the best way possible the resources of the area and considers the output of the system not as waste, but as an important input for other productive activities.

The role of the Systemic Designer (SD)

The team of the actors involved in each phase of the project is multidisciplinary and requires the participation, on several levels, of professionals and inhabitants of the rural community, both during the analysis phase and during the implementation phase, that's a very delicate phase because of the necessity to put together around the same table professionals with very different skills. SD must collaborate and communicate with different actors with special characteristics and competences. This is necessary to design and sketch the output and input flows that run from one system to another, to organize and optimize all parts within the ecosystem so that they can evolve consistently with each other. Community participation in rural development projects is now considered a necessary basis. The creation of partnership and participatory forums structures pivotal point of any action plan on rural development (Celata, 2008).

The collaboration between local farmers, linked by a common history, a shared desire for a real and active re-appropriation of the land they own, becomes a strong base and a perfect substrate for the definition of the project. The role of the farmers was different depending on the stages of the project and on the objectives of the phases. During the analysis, for the drafting of the Holistic Diagnosis, the SD must investigate the context, approach the culture, understand the key features background, the potential and critical issues. He/she must get in touch with farmers and community members that will become part of the cooperative with which, then, he will develop the project. The SD must be able to point out the specifically needs of the community. In order to define the effective intervention strategy to obtain the necessary information it is not enough a simple

interview or a questionnaire designed hundreds of kilometres away. It is crucial the ability of the SD in generating trustful environment. In this initial phase, the SD must learn from the farmer. The farmer must teach the SD. It is not a trivial, obvious and predictable concept. I have experienced personally, that, cultural barriers, the distances that undeniably exist between the SD and the farmer, especially when you are working on a rural context, becomes in some ways a constraint, or rather, an obstacle. This is why the SD must create a good connection with farmers and he helped by the connective actor.

Finally the opening of decision-making has an intrinsically importance and represents a direct goal. It is about encouraging collaboration and the strengthening of the capital, building institutions, collective learning and empowerment, and promoting democratic participation by citizens. Participation is not only a way to increase the effectiveness of policies, but is itself the goal: “development is freedom” (Sen, 2000). The Indian internationally famous economist is not the first one to explicitly connect the concept of freedom to the opportunity to participate in political discussions or deliberations. Freedom is also connected to the social, political and economic life of the community and to the training of public decisions focused on how to foster development and social innovation. Involving key stakeholders, or those that are in local policies called beneficiaries, in a local development project, rural or not, it is not a new concept, nor recent.

The application of a framework provides beneficiaries that are not only actors involved in a superficial way, but they are essential part of the project both during the Analysis stage, the Project one, as the Action one.

The actors involved in the design process are many others,

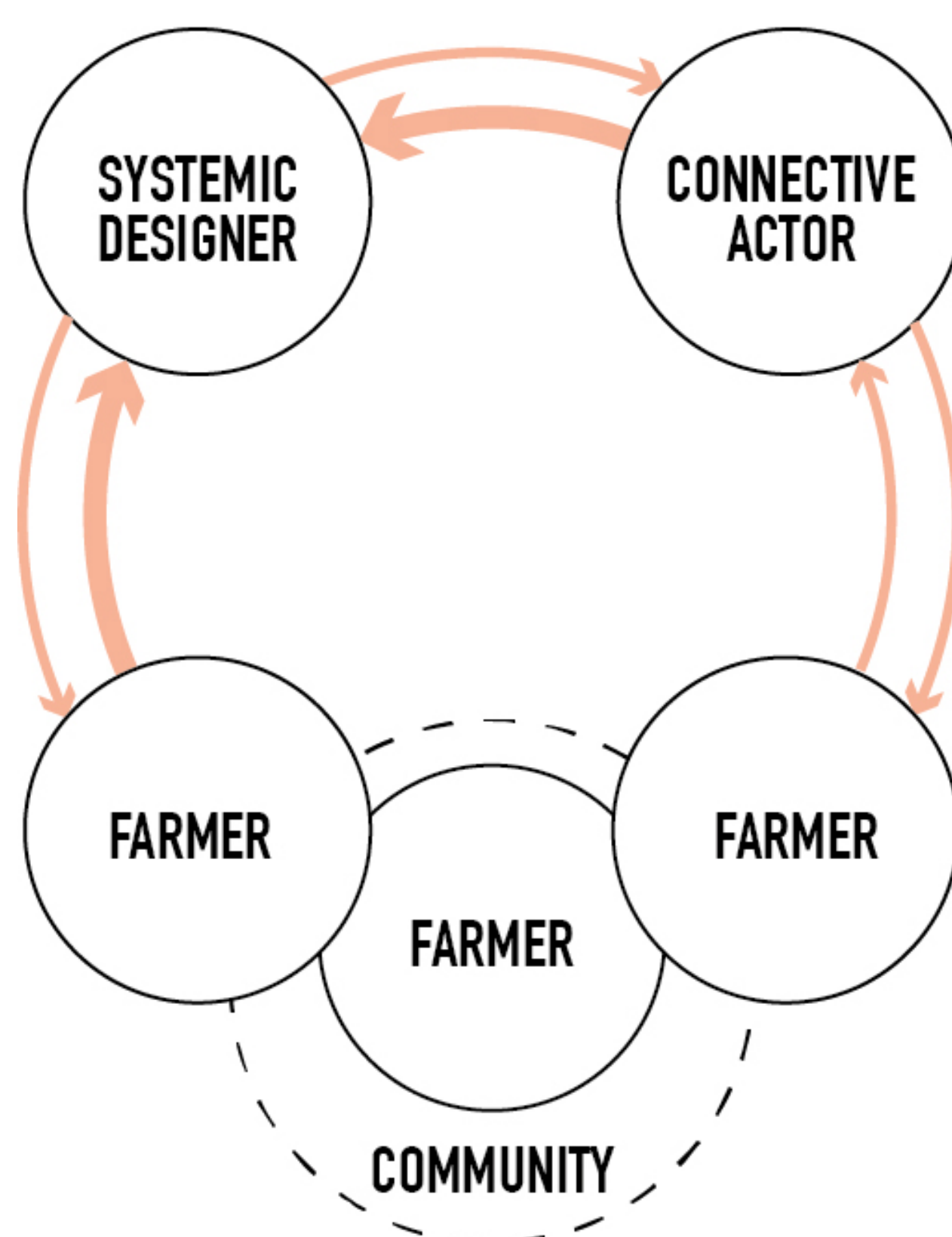
not only the farmers, as already mentioned, inhabitants of the community, such as the teacher or the doctor, who still have a very specific social roles.

The model shows us how the actors will change depending on the stage in which the project is. Actually, the actors do not change, are the relations between them and the flows of information that change.

As we can see in the picture, we have 3 different teams according to the phase.

Analysis phase:

The SD initially have to learn about the cultural, natural, social and territorial context and must build a strong relation with the community by explaining them the objectives and approach that will be used for the development of the project. In this phase, the SD must listen, learn, he have to dip to learn about the roots of the culture.

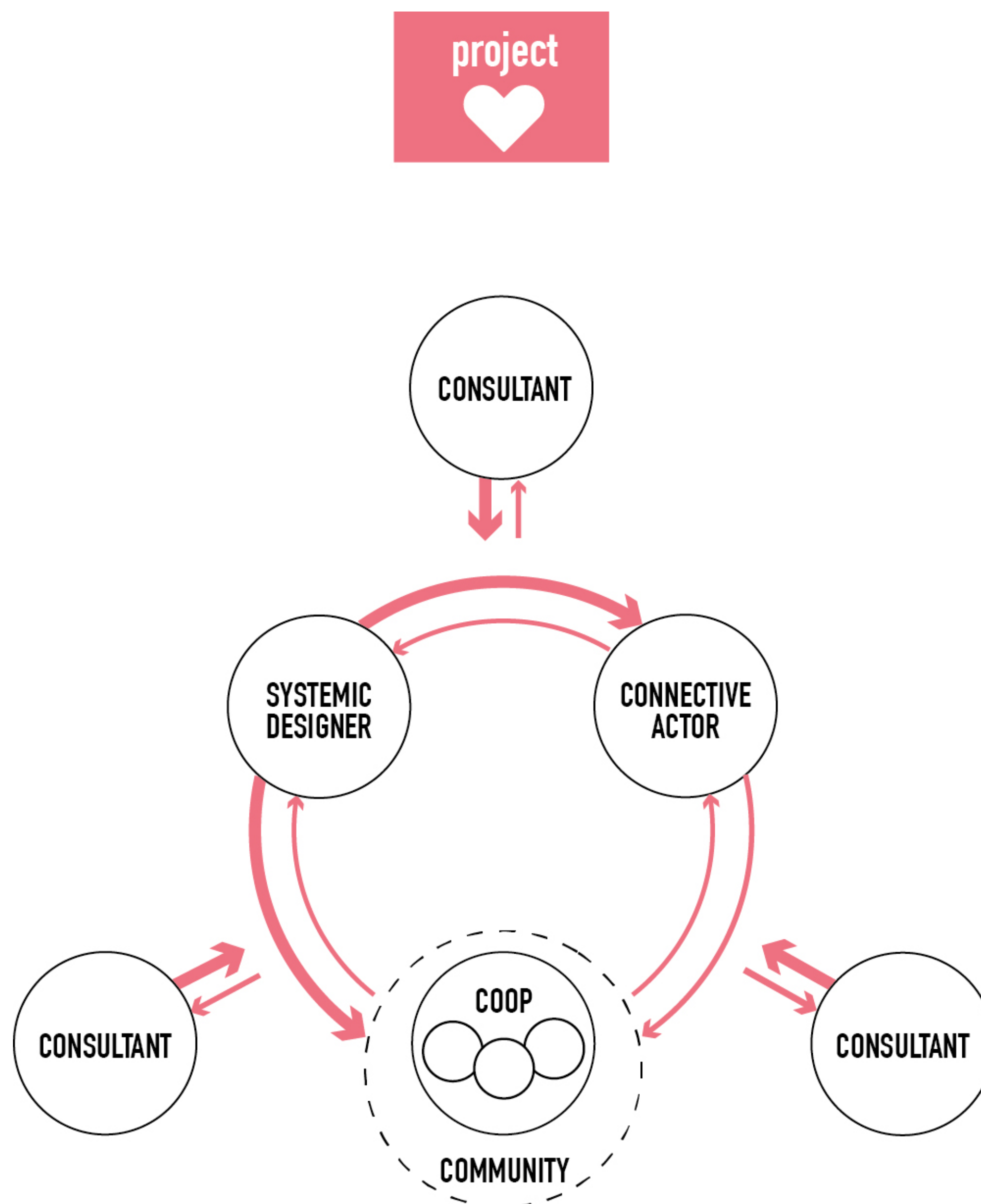


Actor team in the analysis phase of the project.

Project phase:

The consultants come into play at this stage, not only to provide their knowledge, but also to learn, from the SD, from the cooperative and the connective actor, the information about the system and the context. In this central phase the more consistent information flow runs from the SD to the cooperative and the connective actor.

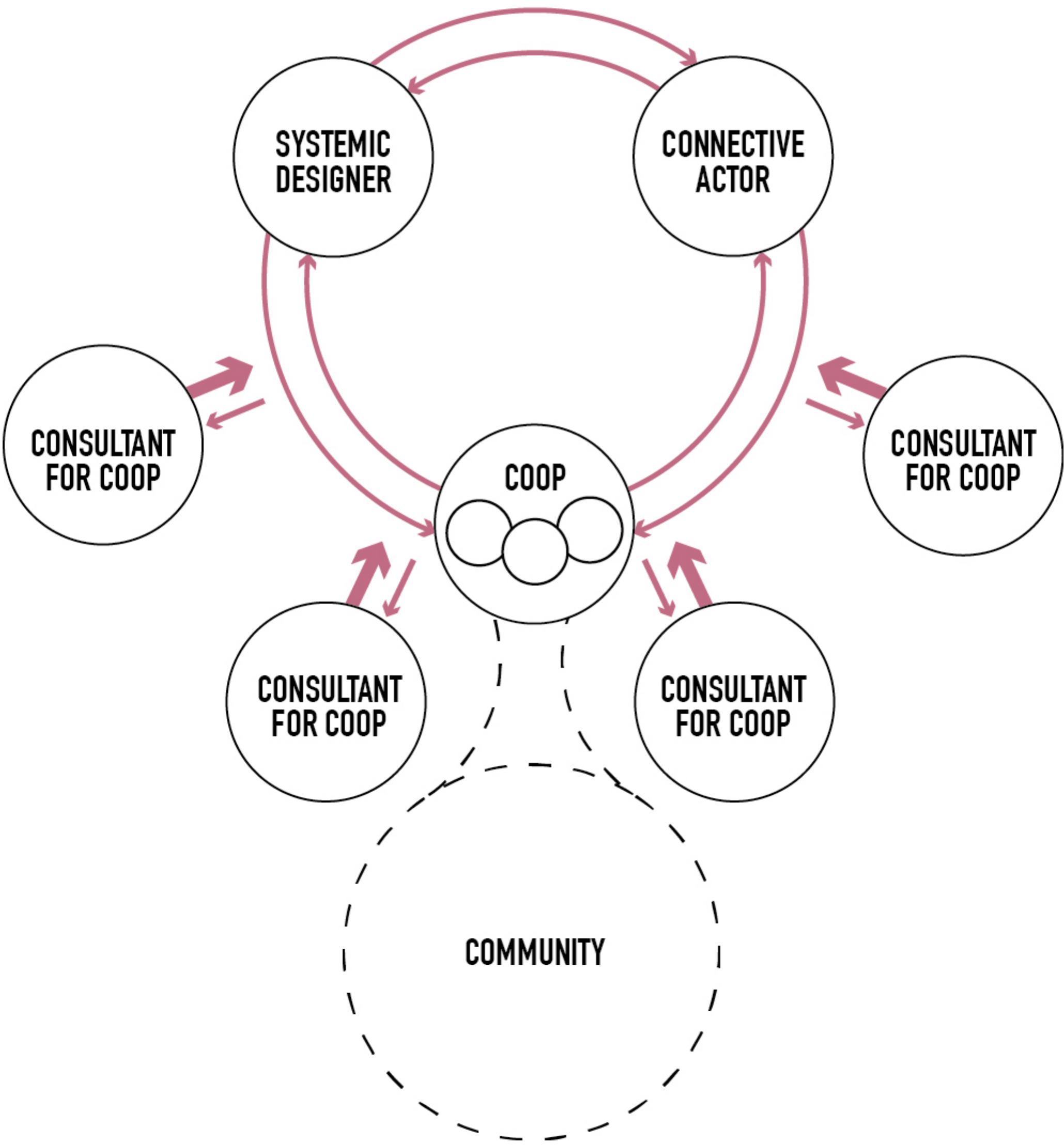
Actor team in the project phase of the project.



Action phase:

The implementation implies the presence of consultants who collaborate with the cooperative. The community becomes a relevant actor in the moment in which it buys products of the farmers cooperative and because it is involved in the processes of production and transformation of the products of the cooperative.

Actor team in the action phase of the project.



Left: Anguel, Mexican farmer, Ahuacuotzingo, 2015
Right: Miriam Bicocca: José, Mexican farmer, Ahuacuotzingo, 2016

3. Conclusion

The innovative aspect that emerges from the diagram of the team of actors, is reciprocity. If the DSA is characterized mainly by flows of matter and energy, which are created between the actors, so also results to be the actor team. This means that among the various actors there is a continuous exchange, an input and feedback system, which allows SD, but also the farmer and the consultant not to fit into a rigid and pyramidal hierarchy but rather in a circular structure in which relationships are built and develop into multi-directional way.

The role of SD, as connector and designer of flows, ends after the implementation of the system which, reached a situation of autopoiesis, generates itself without the need of the designer.

In conclusion, with this article I want to highlight the results of research carried on the application of the SDA to a rural context, specifically the small community of Ahuacutzingo, State of Guerrero, Mexico. The research allowed studying and defining a useful model for the construction of the team working on projects for rural development. As shown by the research work, by applying a SDA the key to success it is no longer the product (or service), but the network of relationships that is created between the actors, first and foremost among farmer-farmer, farmer-community, farmer-consultant. From these collaborations it is possible to build a real network of relationships and output exchanges that are converted into input. It is precisely this network that determines and leads the revitalization of the entire territorial system.

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SUGGESTIONS FOR DESIGN

PHOTO BY CARLA SEDINI

Photographer Carla Sadini, co-editor with Marina Parente of this issue, gave us permission to publish a selection of images about "design that is not there", "design that may be" and "tacit design" within urban territories around the world. We hope that many creatives will interpret the "Suggestions for Design" launched here.













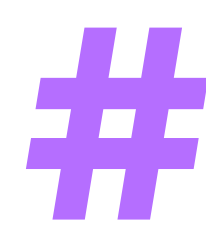












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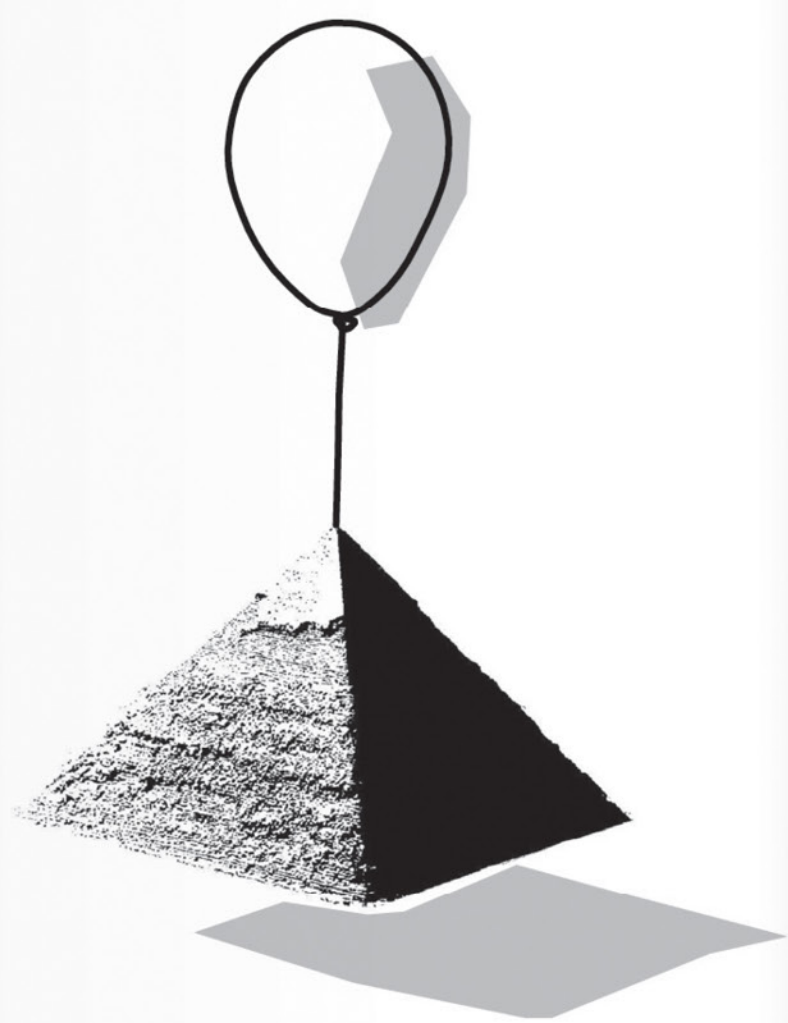
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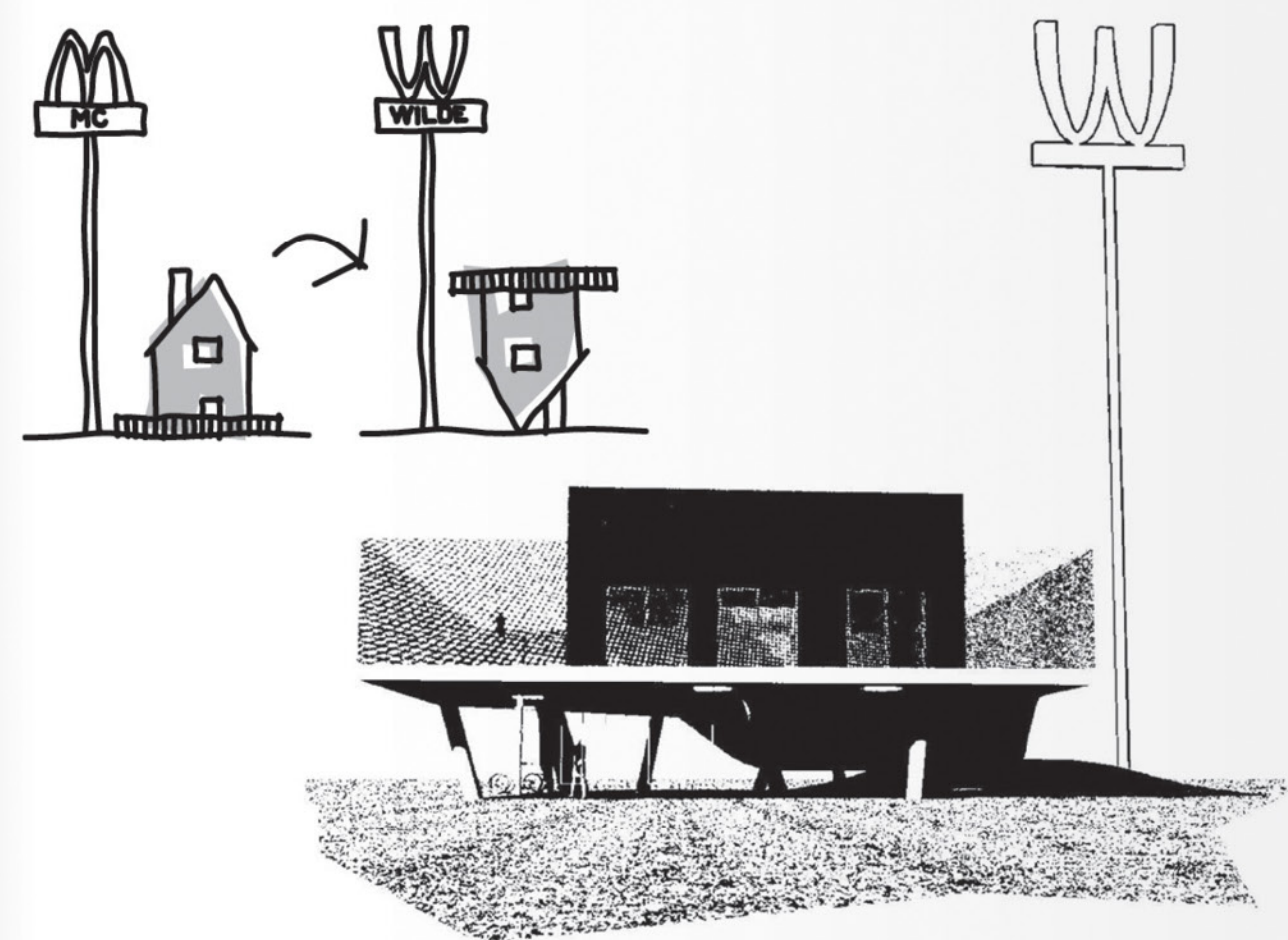
If openness is your aim, an excess of walls is hardly the right answer; if it is linear simplicity, don't propose bewildering mazes; if you are looking for lightness, maybe you should minimize the number of elements and their dimensions...



50

take risks

You can always learn from mistakes, in order to not repeat them. But above all, you can use them as a form of creative growth, as an exploration of the unexpected.



51

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