Abstract: Design for Territories is a rather recent field of study and research. It began to be outlined at the end of the ‘90s and was initially established as a direct application to real situations through action research activities or educational experimentations. Thus, situated design methods are applied and verified, models and processes are improved and specific tools are developed. The aim of this paper is to describe this field of study’s state-of-the-art in order to fulfil the goal of outlining the distinctive features of design for territories from a theoretical point of view. What does Design for Territories deal with? What are its strategies and its methods? The paper aims to answer these questions through a review of design research experiences and the debate with experts in the field, who have been involved in this study through interviews and focus groups.

Keywords: Design for Territories, Practice-based Theory, Situated Design, Community-Centered Design, Strategic Design

1. Introduction

Design for Territories is a rather recent field of study and research. It began to be outlined at the end of the ‘90s, at a time of fervent cultural debate prompted by the economic, productive and social transformation of big cities.

In those years, several disciplines deepened the study of this subject through the development of fields of study, such as territorial marketing, cultural marketing, economy of experiences and big events.

What was the positioning of design in this framework? In order to answer this question, the Design Department of the Politecnico di Milano is developing a research study on the Design for Territories, which is aimed at further deepening this field of study and the reasoning on specific crucial issues. In
the following pages, the first activities developed by the research team will be described. The description of the research field’s state-of-the-art is followed by a presentation of an analysis and an understanding of the subject matter (territory), made possible by the interviews collected for the research. Attention will then be focused on one of the identified dichotomies which emerged from the analysis of the interviews: Theory and Practice, Tangible and Intangible, Competition and Collaboration.

The results of the first focus group on Theory and Practice will be presented in this paper.

2. Evolution of the research field

The interest in the relationship between design and territory has always been there, but since the first action-research experiences, 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.

In terms of academic design research, the path toward territorial issues began in 1998 with the “Sistema Design Italia” (Italian Design System), a national research co-financed by the Ministry for Public Instruction, University and Research and coordinated by Prof. Ezio Manzini. The research, which studied the territorial dimension of Italian design, highlighted variations in the territory, 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 identified new ways of applying design aimed at enhancing local cultural products, environmental historical and cultural resources or the collective imagination linked to the idea of a specific place.

These products or services initiated a dialogue with their places of origin, by renewing and inventing a different interpretation 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 (Parente, 2016).

The following research studies were influenced by these considerations and chose the approach which considers territory as the design action’s object. In the national research project “Me.design”, co-financed by the Italian Ministry for Public Instruction, University and Research in 2002-2004 and coordinated by Prof. Giuliano Simonelli, attention was paid specifically to the exploitation of resources in the Mediterranean area through design.

The research was aligned to what was established at the community level in terms of territorial development and also integrated the interpretation of Magnaghi (2000), who defined the concept of self-sustainability of the territories.

The Me.design research took as a paradigm the concept of "territorial capital", a structured and complex set of tangible and intangible resources which are a territory’s system of values, constraints and opportunities, thus placing it at the basis of the "design for territories" process.

The design experiments conducted in specific contexts with the Me.design research established the methodological foundations for a design-oriented approach dedicated to the enhancement of the territories. The local community is at the core of this approach, playing an active role in the decision-making and implementation processes; in addition, the local community, under the direction of designers, can envisage multi-sectoral and multi-stakeholder 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. In this path, design in / of / for the territory, there is a shift from the physicality of products, to the idea of territory, up to the relationship with the users. However, it must be said that the design for territories includes and amplifies the other two approaches (design in / of territories).

![Diagram](image-url)

**Figure 1:** Design in / of / for the Territories (Parente, Lupo, Sedini, forthcoming)

![Table](image-url)

**Figure 2.** Table showing the levels of actions of design for territories
3. What does Design for Territories deal with?

A research network was launched in order to investigate and analyse the field of Design for Territories. In the first months, it was decided to informally talk to several researchers and professors who have been working in different ways on this issue within the Design Department. We collected about 15 interviews and we asked our colleagues to identify how the topic of places and territories was perceived and approached. The focus was on the following issues:

- areas of interest/objectives
- approaches
- methods and tools
- outcomes

3.1 Areas of interest/Objectives

1. **Place Identity, Local Reputation and Place Experience.** This represents a preliminary phase of analysis and study of places which enables the evaluation of a context’s current reputation and to compare it with the goal of a new identity positioning. This process has to be included in a coherent action plan which satisfies the user’s experience of these places and does not live up to the user’s expectations.

2. **Design for Cultural Heritage, Smart Heritage, Cultural Driven Innovation.** The Design approach to cultural heritage is oriented toward a proactive attitude which does not ignore preservation but focuses on the processes of material or immaterial value generation through user interaction. This is a different view compared to that of the legislator who interprets enhancement mainly as preservation and conservation. This allows the expansion of the field definition’s borders and the consideration of enhancement as the production of new value.

3. **Social Innovation and Service Design.** The term innovation, when referring to territorial contexts, describes a broad concept of transformation and change that considers economic, sociological, political and market aspects (Villari, 2013). The Social Innovation definition corresponds to the definition of participatory design (Manzini and Rizzo, 2011) since:
   - Both consist of very dynamic processes which include co-design activities that are also oriented towards establishing participants’ approval;
   - Designers can participate in these activities as facilitators but also as conductors and project creators;
   - Co-design activities are very complex and need artifacts which were explicitly taught and designed.

4. **Design Policy.** In 2012, the European Commission published a document setting out some insights and suggestions developed by the European Design Leadership Board (EDLB). The document essentially started from the statement that design, far from being only an issue of style or aesthetics, can be a strategic means to foster innovation and generate new economic and social values (Parente, Lupo, Sedini, forthcoming).

5. **Design for Territorial and Local Development.** In this area, the resources of territories (territorial capital) are analyzed in order to define the strengths for the development of sustainable economies. The concept of local development is originated by the European planning of LEADER calls for rural areas. This concept can be applied to
those (economically) static territories, which need to re-focus their own strategic goals.

6. **Design of Events and Cultural projects.** This dimension is particularly focused on the immaterial side of territorial resources and activities. Both event and cultural projects can be triggers of innovation, renovation and consolidation of the identity of places.

7. **Communication Design, Transmedia Design, Game Design.** These areas of interest aim to generate models of communication, knowledge and the use of a place even in an indirect and mediated manner.

### 3.2 Approaches

1. **Metadesign.** This is a methodological process of gathering useful knowledge for the project. According to Alessandro Deserti (2005), Metadesign is designing strategies and preliminary working lines, instead of specific solutions.

2. **Strategic Design.** According to Zurlo (2010), SD is a design activity focus on the product-system that is the integrated system of products, services and communication. An enterprise or an organization can use the product-system approach to go to market (and locate itself in society), and shape its strategy. SD is characterized by: the situated dimension; the ability to open a dialogic process among several stakeholders; the need to satisfy different requirements and, achieve valuable results.

3. **Design Thinking.** “Design thinking can be described as a discipline that uses the designer’s sensibility and methods to match people’s needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity” (Brown, 2009). This definition can be extended beyond the purpose of improving the competitiveness of enterprises and the design of products, to the needs and the goal of territorial enhancement.

4. **Design-driven innovation.** In Roberto Verganti’s view, innovation driven by meaning is the way to create value in our societies. Therefore, DDI is the R&D process for meaning (2009).

5. **Community Centered Design.** “According to Meroni (2008), Community Centered Design (CCD) is an approach that scales up the consolidated methods and tools of User Centered Design to community size. CCD is not focused on the single user but on the entire community as the enabler of local change, as a resource to be valued and from which to learn. Working with such an approach, design professionals are required to have two main competences: on the one hand, the ability to gain knowledge on the community through field immersion and to develop empathic relations with its members; on the other, to use design knowledge to design with and for the community, developing tools to enable the co-design of new solutions coherent with the context and allowing non-designers to apply their knowledge and professional skills to the issues discussed.” (Cantù, Corubolo, Simeone, 2012, p.2)

6. **Participatory design.** Carlo Franzato (2009) talks about “Territorialità attiva” (translated “Active Territoriality”) to describe the local community’s participation in the development of territorial processes. The key principles of participatory approaches are: “Involving people as subjects not objects; Respect for local knowledge and skills; Ensuring influence over development decisions, not simply involvement; A learning process as much as an outcome; An approach and attitude rather than a specific set of technical skills” (EU Commission, 2004, p. 118)
3.3 Methods and Tools

1. *Desk and field research: qualitative methods used in the social research (e.g. ethnographic methods).* The use of qualitative and ethnographic methods and tools can be of critical value because they can provide the designer with information, such as the reason behind choices and behaviours, which may not normally be captured by other methods.

2. *Co-design.* Engaging inhabitants, stakeholders and the public to obtain knowledge, information (for example, on how to solve wicked problems) and explore opportunities (Sanders and Stappers, 2008). The project becomes a trans-disciplinary and participative process, in which several stakeholders collaborate.

3. *Simulation and visualization techniques.* These tools are particularly useful in a multi-actor process of comparison. Indeed, they are able to make concepts understandable and favor the dialogue between experts who use different languages. They include graphics and maps.

4. *Scenario building, visioning, idea generation.* These methodologies support the decision-making process and they are particularly useful when designers deal with complex systems which involve several stakeholders (Manzini, 2004).

5. *Storytelling.* According to Tim Brown (2009), stories put ideas into context and give them meaning. Storytelling is essential for design-thinking and it is particularly strategic when applied to places.

3.4 Outcomes

1. *Strategic Vision and Strategic Plan.* A preliminary framework of values and meanings to guide the next steps and to coordinate the different territorial stakeholders’ actions.

2. *Meaningful Experiences.* The experiential dimension is the main objective of the design skills’ application (ranging from communication design to experience design and interaction design) which are put in place both by experts and as diffuse design (Parente, 2015).

3. *Urban Game.* Augmented games redefine the design of the urban experience by considering both the digital and anthropological aspects (De Luca, Bertolo, 2012). They are able to stimulate new interactions with the city and new ways of interpreting, experiencing and discovering it.

4. *Information Design.* Visual representation of complex social, organizational and urban phenomena (Density Design definition, http://www.densitydesign.org/).

5. *Audiovisual and Cultural Narratives.* Narratives have a sense-making function and are able to explain what people think, feel and experience within a certain territory. However, as reported in Anzoise, Piredda and Venditti (2014, p. 937) “Narratives do not just reflect process but also shape them, they do not have equal possibilities to drive changes: dominant discourses are inscribed in societal institutions, in text and discourses, behaviours and material culture, giving them enormous material advantages, whereby alternative discourses tend to remain marginalized (Witkin, 2010)”.

6. *Place Branding, Corporate Identity and Communication Strategy.* It is the strategic communication plan of a territory. It includes the definition of its artifacts (territorial brand and its variations), the selection of channels to use and the distribution methods.
7. Various kinds of artifacts. Products, services, street furniture, road signs, lighting, exhibitions, cultural products and events, graphics, maps, merchandising, etc.

4. Topics of analysis and focus groups

As a result of the interviewees’ identification of the different elements which are included in the interpretation of Design for Territories, it was possible to generate a new level of understanding and analysis of the topic. Three dichotomies were selected which would have been the drivers of the next steps for a deeper understanding of Design for Territories. These dichotomies are:

- Theory and Practices, on the position and the nature of the approach
- Tangible and Intangible, on the fields of application (from products to relational systems) and the design tools used
- Competition and Collaboration, on approaches and tools (from the marketing-oriented competitive approach to co-design)

In order to deepen the identified dichotomies, it was decided to carry on three focus groups in order to discuss the different approaches, goals, tools and methods.

The focus groups were organized as informal meetings of discussion among several experts. The people invited to participate in the focus groups were researchers, professors and professionals from the design field or from other disciplines, such as urban planning, geography, sociology, etc. Moreover, the guests were both from Italy and abroad. The focus groups were organized in September, October and November and each of them lasted about three hours.

The first focus group, on Theory and Practices, attempted to answer the following questions: the design project for territories has its own theoretical foundations or is it an application field of a project practice? Is it the result of a critical reflection?

The second focus group, on Tangible and Intangible, was mainly based on the design methods and approaches used to manage both tangible and intangible heritage, the capacity of design to unveil a territory’s hidden resources, the kind of actions, tools and strategies used by the Design for Territories.

The third focus group, on Competition and Collaboration, was related to the analysis of projects and fields where the collaborative (or the competitive) processes are particularly useful and efficient.

4.2 Theory and Practice: Definition of the Design for Territories

It was possible to identify several crucial issues through the analysis of the discussion resulting from the first focus group.

In addition to the research team, the participants in the focus groups were:

- Vincenzo Cristallo, Researcher (Università La Sapienza di Roma; Planning, Design, Architecture Technology Department)
- Ares Kalandides, Urban Planner (INPOLIS)
- Federica Olivares, Cultural Manager (City Innovation Lab)
- Raimonda Riccini, Associate Professor (Università Iuav di Venezia; Department of Design and Planning of Complex Systems - DPPAC Dept.)
- Beatrice Villari, Researcher (Politecnico di Milano; Design Department)
4.2.1 Vocabulary update and definition of the subject matter

Some of the experts in the focus group participated in the first action-research on territories, such as the above-mentioned Me.design research (2002-2004). The observation of a strong change in the context was a very important premise for the discussion. Indeed, in about ten years the economic and productive scenarios, the relationships between local and global, the political equilibrium and the development goals have shown a deeply changed framework.

As a consequence of these changes, Vincenzo Cristallo stressed the need for a new glossary. In order to define the field of study, it is very important to have a common vocabulary and eventually to update it according to the evolution of the discipline and the subject itself. A common vision and a similar understanding of the concept of territory have to be shared.

During the focus group, Ares Kalandides gave an interesting contribution, pointing out four main methodological levels of understanding of the territorial subject matter: 1) physical, 2) social and relational, 3) representative (words and images), and 4) associative (thought process). The stress on social interactions and relationships, and on the anthropological nature of places was unanimous among the participants. Kalandides (2012) made a very useful identification of the concept of place (which we call territory) as “both the product of social phenomena and a modus of their reproduction. In other words, it is social relations that produce places and places have the capacity to reproduce these relations in an endless movement.” (p.2).

4.2.2 Heteronomous nature and settlement of the design approach

According to this view, the complexity of the subject matter derives the importance of the context. The physical and cultural framework, where the design discipline operates, is crucial.

At the same time, these contexts are changing and as a result, the design tools to intervene in them also have to change and adapt. In this sense, Raimonda Riccini stressed the parasitic dynamic nature of design, in general, but especially of design for territories’ field of study. These contexts are composed by several layers, different stakeholders and a plurality of cultures. The capacity of dealing with complexity is one of the main characteristics of design. Indeed, as Vincenzo Cristallo pointed out, the design approach to the territory is a strategic and systemic approach. For this reason, it is difficult to identify a specific knowledge and to own design for territories’ research tools.

However, design is able to integrate these competences in an action-research.

Design appears to have a micro-role in those research experiences which deal with small scales of intervention. Notwithstanding this however, this micro-role is still very valuable, as both Raimonda Riccini and Beatrice Villari stressed. Design projects that act on a small scale are useful, for example, to create awareness and a sense of belonging within communities or even activate self-design processes or good practices.

Another important aspect which design research on territories has to attach importance to goes beyond the re-interpretation of approaches and tools from other disciplines: design needs to integrate within the territorial projects of other experts coming from different fields of study, as Federica Olivares stressed during the focus group.

4.2.3 Design for Territories and Social Innovation

As previously stated, Social Innovation can be considered as one of the objectives of Design for Territories. This goal was also mentioned during the focus group and its importance was stressed and expanded. Historically, design has always had to deal with innovation. To “bring” innovation within a
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territory means to re-shape and improve an economic, social and environmental status quo. These actions can be generally defined under the concept of social innovation. Beatrice Villari also highlighted the fact that her research has progressively been driven by the integration of design for territories with the idea of social innovation, in order to make the theoretical framework recognizable and understandable.

4.2.4 Design as a practice-based theory

The discussion highlighted the fact that often, the theoretical phase takes place after the practical phase, that is, the field-research phase. Therefore, in several cases the relationship between theory and practice is neither circular nor mutual. As Vincenzo Cristallo stated, the critical capacity is missing and this is particularly true when design for territories is taken into consideration. The tools for evaluation and verification are missing in the design processes; instead other disciplines, such as marketing, have developed their own (e.g. the Key Performance Indicator).

The circular approach is very important to plan future activities for research. This is lacking, also due to research timing and funding issues. Indeed, as Federica Olivares explained, when political stakeholders are the research’s clients, they are mainly interested in the intervention phase rather than in the evaluation.

4.2.5 “Toolification” as a risk

This very practical nature of design could provoke certain risky consequences, especially when we talk about territory. Beatrice Villari stressed the risk of design practices’ toolification which, however, is very useful for education. To look upon design tools as being detached from the context where they are applied is a mistake. This can be the result of a socialisation of the design practices, methods and tools. In order to avoid this risk, designers should nurture and deepen what Ezio Manzini calls Design Culture. Indeed, “before being a technique, design is a capacity for critical analysis and reflection, with which design experts produce knowledge, visions, and quality criteria that can be made concrete in feasible proposals” (Manzini, 2016, p.54). Since the definition of the Design for Territories is a matter of cultural approach and positioning, in Raimonda Riccini’s opinion, a deep study on this field of research would be able to define the important role of circularity among theoretical and practical phases.

5. Conclusions

As proposed by the DesignX manifesto (2014), our research on Design for Territories aims to enhance the design tools and understanding of the impact that design processes and projects can have on territories and, therefore, societies.

In order to achieve this goal, a preliminary study was conducted which focused on the areas of interest and the objectives of design for territories, on its methods and tools and on the expected outcomes. In this way, a first map of the subject has been created and, by analyzing the different elements which compose it, different topics have been identified for an in-depth analysis.

During the first focus group’s discussion (Theory and Practice), there was an important moment of debate with the experts from other disciplines: designers were questioned about the role of design for territories and its distinctive features. This was a crucial moment which resulted in the definition of design as an heteronomous discipline which collects methods and tools from other disciplines and re-interprets them. At the same time, several competences and approaches that are specific to design were identified. These competences and approaches are shaped by the cultivation of a Design...
Culture, through which it is possible to avoid processes of solution-ism, participation-ism (Manzini, 2016) and toolification. The research and the reasoning presented here do not have to be considered as being conclusive. However, the distinctive features identified can be summed up as follows:

- Design has a systemic approach to the subject matter and it is capable of having a directional role;
- Design is able to conceive innovative solutions;
- Design places human beings at the project’s core;
- Design is able to mediate, visualize and convey the message.

As a result of the focus group, it was also possible to identify certain open issues, mainly related to the need for deepening the project’s ex-post phases, in particular:

- Those regarding the impact’s evaluation;
- Those related to the theoretical phase which should emerge after the action-research phase (circular approach)

References

Anzoise, V., Piredda F, & Venditti, S. (2014). Design Narratives and Social Narratives for Community Empowerment, in Proceedings of the 5th STS Italia Conference - A Matter of Design: Making Society through Science and Technology, 935-950.

Becattini, G. (2000). Dal distretto industriale allo sviluppo locale, Bollati Boringhieri.

Becattini, G. (1998). Distretti industriali e Made in Italy, Bollati Boringhieri.

Brown, T. (2009). Change by Design. How Design Thinking Transforms Organizations and Inspires Innovation. HarperCollins.

Cantù, D., Corubolo, M., & Simeone, G. (2012). A Community Centered Design approach to developing service prototypes. in Proceedings of the ServDes Service Design and innovation Conference, Co-creating services. Espoo, Finland, 8-10 February 2012. [available at: http://www.servdes.org/wp/wp-content/uploads/2012/02/A-Community-Centered-Design-approach-to-developing-service-prototypes2.pdf]

De Luca, V. & Bertolo, M. (2012). Urban Games to Design the Augmented City, in Eludamos. Journal for Computer Game Culture. 6 (1), 71-83

Deserti, A. (2005), Radici culturali e prassi del metaprogetto, in Collina L., Design e Metaprogetto. Teorie, strumenti, pratiche, Milano:POLI.design.

European Design Leadership Board (2012), Design for Growth & Prosperity, Report and Recommendations of the European Design Leadership Board.

EU Commission (2004), Project Cycle Management Guidelines, [available at: http://www.europa.eu.int/comm/europeaid/qsm/index_en.htm]

Friedman, K., & Stolterman, E. (2015). Series Foreword, in: Dorst K., Frame Innovation. Create new thinking by design, The Mit Press.

Kalandides, A. (2012). “Place Branding and Place Identity. An integrated approach.” Tafter Journal, 43, January 2012, [available at: http://www.tafterjournal.it/2012/01/03/place-branding-and-place-identity-an-integrated-approach/]

Magnaghi, A. (2000). Il progetto locale. Verso la coscienza di luogo. Torino: Bollati Boringhieri editore.

Manzini, E. (2016). Design Culture and Dialogic Design in Design Issues, 32 (1), 52- 59. doi:10.1162/DESI_a_00364.

Manzini, E. (2015). Design, when everybody designs: an introduction to design for social Innovation, The Mit Press.
Manzini, E. (2004). Il design in un mondo fluido, in Bertola, P., & Manzini, E. (eds). Design multiverso. Appunti di fenomenologia del design, Milano: Polidesign.

Manzini, E., & Rizzo, F. (2011). Small Projects/Large Changes: Participatory Design as an Open Participated Process, CoDesign 7, 3-4.

Meroni, A. (2008). Strategic design: where are we now? Reflection around the foundations of a recent discipline. Strategic Design Research Journal, 1(1), July-December, 31-38, [available at: www.unisinofsdrj/].

Parente, M., Lupo, E., Sedini, C. (forthcoming). Design for Territories. Approaches and Methodologies for the Re-Production of Places. Paper presented at the Conference “4t 2016 Ethics of [re]production”, May 12-13, 2016 Izmir, Turkey.

Parente, M. (2016). Design for Territories as reflective practice. In Parente, M., Sedini, C. (Eds.), “Design for territories”, PAD-Pages on Arts and Design 13, 10-27. Siracusa, LetteraVentidue Edizioni.

Parente, M. (2015), Designing the City Identity: Strategic and Product Design for New Experiential Ways of Living, Enabling and Interacting with the Urban Context, Design Management Journal, 10(1), 62-71.

Phills, J. A., Deiglmeier, K., & Miller, D. T. (2008). Rediscovering social innovation, Stanford Social Innovation Review, 6(4).

Sanders, E. B.-N., & Stappers, P. J. (2008). Co-creation and the new landscapes of design. CoDesign, 4(1), 5–18.

Santagata, W. (2000). Distretti culturali, diritti di proprietà e crescita economica sostenibile. Rassegna economica, 64(1), 31-61.

Swann, C. (2002). Action research and the practice of design. Design issues, 18(1), 49-61.

The DesignX Collaborative (2014), DesignX: A Future Path for Design [available at: http://www.jnd.org/dn.mss/designx_a_future_pa.html]

Valentino, P. (2001). I distretti culturali. Nuove opportunità di sviluppo del territorio. Associazione Civita, Roma.

Verganti, R. (2009), Design-Driven Innovation, Boston: Harvard Business School Press.

Villari, B. (2012). Design per il territorio. Un approccio community centred, Franco Angeli.

Witkin, S.L. (2010). A discourse perspective on evaluation. Culture & Society, 1 (1), 109-122.

Zurlo, F. (2010). Design strategico. in XXI Secolo - Treccani.
About the Authors:

**Marina Parente** Architect, PhD, Associate Professor at the Design Department, Politecnico di Milano. She is engaged in system-product and strategic design in order to enhance territorial and cultural heritage, with research activities, teaching and planning. Coordinator of Research Network D4T - Design for Territories (http://www.d4t.polimi.it) and Director of the Brand of Territorial Systems course.

**Carla Sedini** Sociologist, PhD, Research Fellow at the Design Department of the Politecnico di Milano. Her research focuses on the dynamics that affect the attractiveness and the development of places. Co-founder, with Prof. Parente, of the Research Network D4T. She teaches in several Masters programmes and at IED School.

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