

# THE UNCERTAIN PROJECT

Experiencing Devices for the Modification of Marginal Contexts

Gianfranco Orsenigo

Supervisor Prof. Andrea Di Franco PhD in Architectural Urban and Interior Design - XXXII cycle Coordinator Prof. Alessandro Rocca

March 2021

### ABSTRACT

How can the project of a pavilion tell the redevelopment of a prison (if it can)? And therefore of the Italian prison system? How can a street's conversion tell an urbandistrict's regeneration story (if it can)? And therefore of a marginal territory? The research presented moves around these questions, linked to practical research experiences. It would be an empirical investigation into how architectural design can equip itself to be a key stage involved in the regeneration of marginal contexts.

It is customary to think of architecture as the outcome of a process responding to needs and problems. In recent decades, a belief has led architectural practice to be "circumscribed by much more instrumentals demands, in which action is determined in reaction to the short-term priorities of clients and the market" (Awan, Schneider and Till 2011). It happens in a period in which society is increasingly talking about the future through architectural images. "We are building a lot, but we are building big investment projects, as if we're doing architecture without architecture" (Chipperfield 2018). Several studies highlight the current changes and difficulties of design action to be a critical medium of comparison with reality. A progressive renunciation, or exclusion, of being a decision-making tool that is especially evident in marginal contexts. Situations where the overlapping of problems, the concentration of fragilities and the scarcity of resources seem to make any change insufficient because it is too partial. Complexity and uncertainty, conditions of contemporaneity, push these situations to the edges of the city's transformation processes, making them inert.

Practising a self-reflexive observation (Schön 1983) concerning two academy research, I try to experiment with a possible design method and tools capable of supporting urban regeneration for these contexts. The comparison with "real processes" allowed me to practice the designer and the researcher's dimension at the same time. On the one hand, one is called upon to come to terms with the concrete reality of a design process made up of documents, bureaucracy and unforeseen events. On the other hand, it was possible to question it, distancing oneself when necessary to reflect on the implications and effects of one's own practice. Through design, it was possible to test, make mistakes, try again, record the successes, and make the failures profitable. Reflecting on design and the activated ecologies, it was possible to represent - in an oriented way - the events, the technical operations carried out, the processes and their outcomes. Through the stories, an attempt was made to communicate the similarities and differences in methods and tools that were recognised.

The purpose of the practised method and tools is to put particular action and general vision in tension. The transcalar modifications of the spaces activate an inclusive process where analysis and action cyclically follow one another. The process aims to specify the relationship between objects, materials and subjects. In this perspective, architectural design is recognised as an open social practice. Following the relational perspective, the thesis is intended to be a contribution and tool for comparison with those who are questioning what the architectural project can do, inside and outside the university.

### #01 opportunity

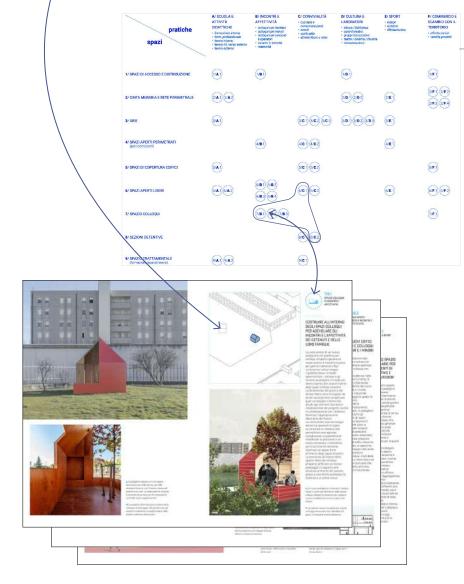
### tried tools



[practice particular]

**BUILT EXPERIMENTS** are punctual events to situate the project in context. They activate and feed a process of pertinent knowledge capable of encouraging inert situation to action. It happens by "making together".

# "from space of detention ↓ to place of relationship"



[practice general]

- DESIGN GUESSWORK is a design vision, among the possible ones, that draw a framework to select and interpret the heterogeneous opportunities that happen. At the same time, It indicates a direction for a multiplicity of transformative actions already ongoing and/or encouraging new ones.



[particular - general]

**RELATIONAL DEVICE** is the habitat where general and particular are put in tension. It is capable to record and, at the same time, make openly operative the project's data stratified over time. It supports a multi-actor process in making decisions in the flow of interactions.

« Cosa fai nella vita? Niente, imparo. Impari cosa? Niente, imparo »

Christian Bobin 2012. Autoritratto al radiatore. Otranto: AnimaMundi edizioni.

### CONTENTS

Introduction Backstory

> Starting from a Master plan A disappointment

## TERMS OF THE RESEARCH

31

11

25

Mutations and Possibilities for Architectural Design	33
Questions based on practice	
Changes in the architectural design	
The politics of design	
Spring 2020	
The Architectural Design as Social Practice	38
A socio-material negotiation	
A selected survay from '60s	
A way of acting in the tangle	
Marginal Territories	50
Increasing inequalities between enclaves	
Self-feeding fragilities	
The drop-out of public action	
The wicked problem as a tool	
Research, Action and Design	56
Research by doing	
Exemplify the action	
Share learning by designing	
Design tool for theory	

# INVESTIGATION BY OPPORTUNITIES

63

#### **PRISON ARCHITECTURE**

<b>The Italian Prison. A Wicked Problem</b> The Torreggiani judgment The debate in Italy The States-General of Criminal Execution	67
Academic Research as an Opportunity	72
The Relational Prospective. A Driving Guesswork	73
The design guesswork	
The <i>Trace of Freedom.</i> An unforseen experimentation	77
The request	
A co-design workshop	
Attempts to realize	
The opening	
The Guidelines. A Relational Device	81
Definition of a method	

Definition of a method The adaptive device Clues of operation

THE VISUAL TALE 86

Polisocial Award 2017 as Opportunity	101
The western peripheries of Milan. A Wicked problem	102
<b>"I move well".</b> <b>A Driving Guesswork</b> A first network of subjects	105
April 2018. The research starts	
The opportunity of Cascine Case Nuove	
The value of failure	
<i>Quarti Park.</i> Learning from experimentation	109
The setting of via Quarti	
The conception of Quarti Park	
Co-design experiences	
Attempts to realise	
The realisation	
The Adaptive Master plan. A relational Device	119
Definition of a method	
The adaptive device	
Clues of operation	
THE VISUAL TALE	125

WEST ROAD PROJECT

# TOOLS OF THE POSSIBLE

145

Common ground despite the topics	147
Design Guesswork	149
Trigger the project as a process (from outside)	
Investigate contingency creatively	
Characterizing the belonging to the meshwork	
Built Experiments	156
Engaging the contexts (from inside)	
Commit to act	
Make way to spatial agency	
Developing correspondences	
Trigger the project as a process (from inside)	
Relational Devices	166
Tensioning particular and general	
Coping with contingency	
Exemplify to generalize	
From open documents to open labs	
Testing the lifetime	

References

185

### Introduction

#### The challenge of complexity.

In 1999, Edgard Morin published "La tête bien faite", a book in which the French philosopher stressed the importance of having "a general attitude to address and deal with problems in their complexity and organising principles that enable us to connect knowledge and give it meaning" (19), in order to face the challenges of the contemporaneity.

The *complex thinking attitude* appears increasingly necessary to act in everyday life of a "complex world, inhabited by turbulence and uncertainties" (Bauman 2016, 11). Complexity is given by "multicentric sources of what happens, contradictory processes that intersect and then divide unpredictably" (12). A world continually becoming "imbued with turbulence. Turbulence is the condition in which most things can happen - perhaps even all imaginable things - but for which nothing can be done with certainty" (11). Complexity and uncertainty are conditions that allow no certainty about the future, often leaving us *hopeless and inert in the face of situations*.

#### Marginal contexts.

In a world changing faster and faster and in many directions, cities and territories appear to be composed of non-homogeneous parts juxtaposed together (Palermo 2009). Some parts are characterised by increasingly rapid transformative processes, capable of experimenting with new living concepts, attracting important capital and technological investments. These are clusters that address more an international dimension than a local one. Next to these parts, we find enclaves that remain in the background. Places where we witness the overlapping of a series of heterogeneous problems, the concentration of unresolved issues, both of spatial and social nature, and which often present such a deterioration of the context that they become marginal situations. Situations where the public subject is often called upon to act in the first person, whose possibilities and abilities in these years have been lacking. These are contexts characterised by inertia to modification. For this reason, they are increasingly placed on the margins of transformation and regeneration processes, a condition that risks feeding itself in a downward spiral, labelling these places as intractable.

In recent years, many (architects, urban planners, anthropologists, sociologists and economists) have described the growth of social inequalities

and gaps between parts of our cities and territories<sup>1</sup>. In the theme of inequalities, Bernardo Secchi recognises "one of the most relevant aspects of what I indicate as "a new urban question" synthesising it in "the city of the rich and the city of the poor" (2013). In his study, Secchi urges urban design to reduce this gap - a call that can also be extended to architectural and urban design - by returning to giving urban spaces greater and more widespread porosity, permeability and accessibility, designing them with ambition. The project has to take into account the quality of the project's knowledge and tools. A reflection that seems even more urgent for the project that wants to deal with *marginal contexts*. Complex and contradictory situations "where the tension towards change is so high that any possibility of a project is annihilating" (Di Franco 2019).

#### What possibilities for the project?

What can a project do in the face of the great complexity of social and urban phenomena? Accepting to act in complexity and uncertainty, can it represent an opportunity to interrupt the descent of marginal contexts and to trigger processes of daily construction of the future? What skills are required to recognise and valorise the opportunities for change, partial and unpredictable, that each situation presents?

Coming back to Morin, he suggests renouncing the reductionist paradigm, based on the decomposition of the world into elementary and straightforward units, and codified with universally valid rules, in order to develop a complex thought capable of "distinguishing and uniting" (Morin 1999, 18).

Complex thinking accepts reality as the irreducible multiplicity of interacting systems, a universe of relations that manifest themselves at different scales, spatial and temporal. Relations activated (or activatable) by the implicit differences of each system. Acting in complexity then means *dealing with the contingency* of each situation without getting lost in it. For architecture, accepting contingency can mean "opening up to dependency not as a threat but an opportunity. That the inescapable reality of the world must be engaged with and not retreated from. And that in the engagement there is its present marginalisation and find new hope. What then?" (Till 2009, 2).

#### Put particular and general in tension.

The direct comparison with the contingency brings the double risk of getting lost in detail (renouncing complexity) exposing to be irrelevant and, on the contrary, always remaining on a general level (renouncing uncertainty) without the translation into actions capable of depositing tangible effects. In the *tensioning of the particular with the general*, it is recognisable that the project can support the hopes that inert situations express. A method that circumscribes partial areas of experimentation and at the same time adopts an "open gaze" that is long-lasting. The cyclical tension between the particular and the general allows the comparison and recording of individual cases

1 In the Italian context. since 2018 the Inequalities and Diversity Forum (Forum Disuguaglianze e Diversità) has been active, a think thank whose aim is "to design public policies and collective actions to reduce inequalities, increase social justice and foster the full development of every person, and to build consensus and commitment about them". This experience began with a seminar that brought together The numbers and places of inequalities. The documents produced and collected by the Forum show how territorial inequalities have increased in recent decades throughout the West, and not only in Italy. https://www. forumdisuguaglianzediversita. org/

and their relationship to the reference system (environmental, social and knowledge).

The posture of this project is still to be investigated. Both in the academic and professional field, there are attempts to explore and experiment with this possibility. The focus shifts from what the architectural design is and its author's intentions to *what the project can do* when it opens up to the contribution of many<sup>2</sup>. In short, it is a matter of recognising a "*choral method*" of action capable of intentionally untangling itself in everyday life. The designer is led to "think in context, practice adaptive design, [which] means introducing slow changes so that they do not upset the order of things so that they are gradually absorbed and integrated with what was before" (Sennet 2018, 310). Slow does not mean that these interventions are irrelevant; the change is in their chorality.

In situations where material, human and economic resources are scarce, the adaptive attitude is important "to draw the result from the potential inherent in the situation and not from a plan elaborated in the abstract to which to attempt to conform the practice, from adherence to the incessant transformation of the real and not from the strenuous effort to modify it" (Jullien1996, 66). A project that opens up, and it is the outcome of a relationship with the context's forces. The *project becomes a social practice*, which finds its center of action in the tension between the necessary modification of the space and the relationship with the actors involved (which can be both a human or a non-human (Latour 1991)).

An attitude not new in the history of architecture, even if marginal, and which had one of its most significant moments in the 60s and 70s (De Carlo, Van Eyck, Team X, Habraken, Hertzberger, Ward, Ghel, Kroll). In particular, De Carlo, with his work, conveys the modification of architectural design from a linear-authorial mechanism to a rhizomatic process. De Carlo's work illustrates the effort to lead the "heroic project" of modernity, supported by the housing emergencies of the two post-war periods, towards its updating concerning the changed socio-economic conditions and the emergence of a problematic plurality of requests that conditioned the transformations of cities and territories.

"Contemporary architecture tends to produce objects while its real role should be that of generating processes. This distortion has very serious consequences for its confines architecture to a very narrow strip of a whole spectrum, so segregating it, leaving it open to the risks of dependency and megalomania, and leading it to social and political indifference.

Change in the physical environment goes through a series of events: the decision to create newly organised space; statement of motives and purposes; choice of location; finding of the necessary resources; definition of the organised system; definition of forms system; technological decisions; use; management of technical obsolescence. This set of events is the whole spectrum of architecture, and each strip is affected in what occurs in all the others. (...) Architecture is involved with the whole complex development the design it produces in only the starting point of a far-reaching process with 2 Here, the project is understood as a process in which the design activity is not always, or not only, aimed at the realisation of what has been drawn. Design serves different purposes such as exemplifying, demonstrating, testing and so on, helping to orientate processes of interaction in which is involved. significant effects" (De Carlo 1978, 6). What interests us here about De Carlo's practice, and the other designers mentioned, is the use he makes of the space modification design as a tool for dialogue and confrontation with the context, relying on the disciplinary knowledge. What is observed are the documents or artefacts produced and how they were used in the process, influencing and being influenced.

Opening up to the processual dimension does not mean sacrificing the question of form. On the contrary, through the proposal of a modification of the space, the architect opens up to comparison with context, with other experts and shared knowledge. A comparison through which *pertinent knowledge* can emerge (Morin 1999) to be made available to those involved in improving places' habitability. It is in the tension between autonomy and heteronomy that the designer can "once again activate a critical examination of reality in which the work describes the new as necessary and fairer as possible, aimed at resolving the contradictions of the reality of the present" (Gregotti 2014, 80). The architecture as artefact no longer seems to be the final (albeit always temporary) outcome of a linear process. In many cases, in the form of a fragment, the *realisation becomes the device to investigate* the design possibilities of a specific context. "The project will turn into a silent modification of the specific present" (Gregotti 1984, 7)"<sup>3</sup>.

#### What performance for the project? Posture and tools.

Within the framework described, it emerges the need to explore the possibilities of architectural design and its tools' appropriateness. The work presented here is an empirical exploration of the nature (one of possible) of the contemporary project in realms of complexity.

An investigation into how architectural design can equip itself to become a key stage of transformations involving marginal territories. The reflections carried out try to confront a "theory of architecture as the foundation of doing" (Gregotti 2008, 8), where the project as a modification is fed both by critical knowledge of the contingency and its disciplinary culture. However, the focus is not on architecture's ability to be a problem-solving activity but on how architectural design can contribute to set the problem in the relationship with the ecology of practices activated. In this perspective, It is an investigation interested in the effects produced (or not) by architectural design through its products and the actions it puts into play within the social system that contains them (Armando Durbiano 2017). The goal is to establish a look that contributes to defining the problem and drawing paths that lead to action, knowing that different may be the answers. For this reason, it seems relevant to reconstruct the links between the process' actions and events (Yaneva 2017), recognising what the designer's contribution can be, starting from his disciplinary knowledge.

As already mentioned, architectural and urban design is increasingly practiced "in contexts of radical uncertainty, subject to stumbling blocks, suspensions, continuous resignifications, which make the hypothesis of design as a stable foreshadowing of future states of the world increasingly

3 Casabella 498/9 "Architecture as Modification" with the contributions of Vittorio Gregotti, Bernardo Secchi and Massimo Cacciari proposes a "research programme" that represents a turning-point in the approach to the project and the territory "as the conditions have changed" (Secchi). On the one hand the interest in getting out of a "logocentric structure" (Cacciari) of the project and on the other hand overcoming the concept of expansion of the city to start a reflection on the theme of working on the built environment. In other words, the invitation was to interrupt the process of abstraction that architecture and urban planning had undertaken to return to the physicality of places

obsolete. Also, because of a crisis in the urban market which is not at all conjunctural in nature, the European city space project can only be open and flexible concerning possibilities, an exercise in experimentation and testing sensitive to change". (Pasqui 2018, 98).

What I want to explore is "the performative nature of the project", its ability to interact with the social questions of a transformation of physical space. For this reason, special attention is paid to the toolbox (Deleuze and Foucault 1972) available to the designer today. There is the suspicion "of deploying outdated tools in a world that, if not new, is at the very least different and requires different levels of responsibility and adequate forms of design" (Magnaghi 2017, 21). The objective is to experiment with forms of design "that are able to offer convincing answers [or ways to menage] - in terms of narrative too - to a social question concerning the transformation of physical space" (2017, 22). In that case, the hypothesis is that it is not necessary to equip oneself with totally new tools but to identify among the known ones those that appear more willing to be innovative. Once again, according to the adaptive perspective suggested by Sennet to introduce slow changes so that they do not upset the order of things but show the possibility of modification. The intention is to try to deconstruct the assumptions on which these devices are based, reinterpret their performativity and combinatorial possibilities, and then describe them, making them available for future experimentation. The process cannot be considered concluded, but the path taken to date is made available.

#### An auto-reflexive investigation.

Experimenting by doing seemed to be the most appropriate way to investigate the possibility of the project being effective in marginal contexts. On the one hand, for a personal attitude<sup>4</sup> and on the other hand, for the opportunities that presented themselves. The research interest comes from the professional and research experiences carried out in previous years. The issues were clarified during the explorative survey on social and spatial conditions in the Loreteggio neighbourhood in Milan. This survey contributed to elaborating a master plan for an urban regeneration program that will affect the area from 2016. The process and the master plan developed, seen from the designer's point of view, appear to be a missed opportunity for architectural design to contribute to a future idea of the neighbourhood capable of being a lever for change over time. It was an opportunity to define a method with which to approach similar situations.

The doctorate is an opportunity to deepen the issues by *expanding the field of reflection*. Getting out to the contingency of the specific research or assignment, I was able to specify the scope and how a certain type of project moves - the research terms - and recognise some possible tools that support a way of conducting the open project – "the tools of the possible".

The investigation carried out by taking part in research activities. Since the beginning (2016), I have been involved in the conception and conduction of Research on Italian prisons' habitability. The aim was to identify possible strategies for their improvement<sup>5</sup>. The following year, with an analogous 4 After graduating in architecture in 2005 I practised the project both as a professional within design groups, practising the project at different scales and stages, both for private commissions and participating in national and international competitions: and collaborating in research and projects at the Department of Architecture and Urban Studies (DAStU) of Politecnico di Milano (in particular Mapping San Siro, PRIN Città Pubblica, DPP Abitare Milano). It has been important for me to practice the project in the two areas at the same time because they influence and support each other.

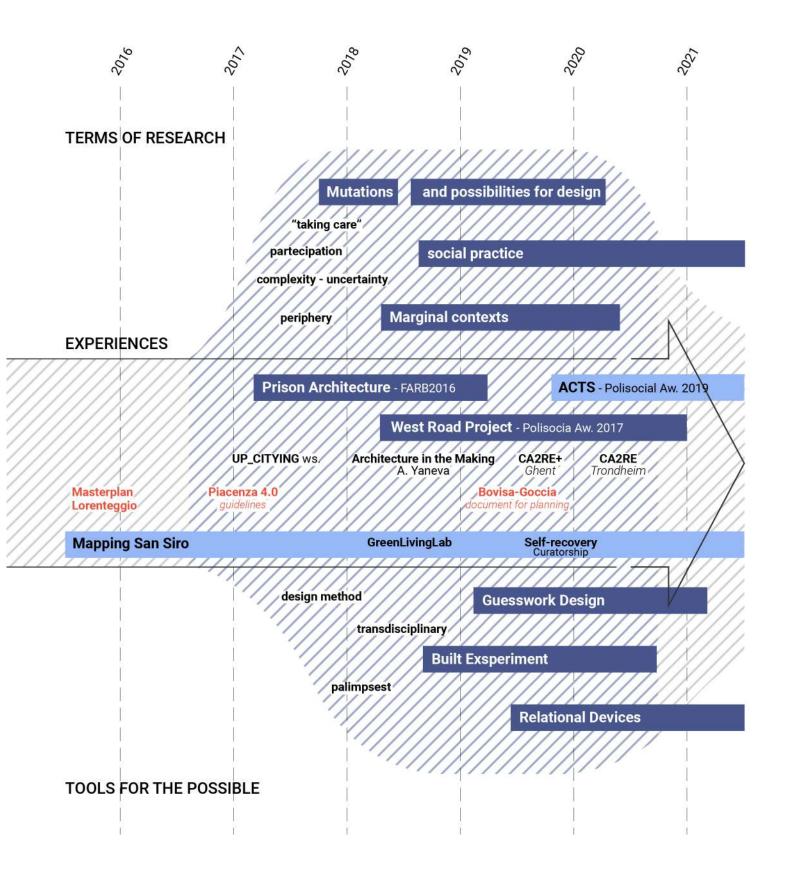
research group, the attention shifted to the peripheral areas of Milan, experimenting with concrete actions of appropriation of public space and promotion of slow mobility6. These experiences, narrated in the section "investigation by opportunities", are a tool and the field of reflection of PhD research. Although distinct by themes addressed, the two experiences represent an exciting opportunity to conduct experiments and observations on the effectiveness of open design devices capable of operating within marginal contexts. In the form of action-research, the two research represent the opportunities to practice methods of activation and management of participatory transformative processes that consider the space design a key step in "bringing out problems" and finding ways for its "possible treatment". Two exciting research are also because they try to relate to the city by activating an exchange whose effects are cultural and social. It is a way of doing research that explores the third mission (or third stream) of the university (Nussbaum 2010, Martinelli 2012, ANVUR 2013, Castelnuovo Cogetti 2013). This commitment to the production and wide dissemination of knowledge outside academic boundaries makes it possible to broaden the comparison to a certain way of practising architecture. In particular, with that world of professionals (often young) who are experimenting with new forms of organisation, creatively practising design processes and procedures, mixing disciplines, materials, economics and knowledge, sometimes going so far as to investigate innovative forms of commissioning<sup>7</sup>.

In a research approach based on "*Reflecting in/with action*" (Schön 1983), architectural design plays a central role. The design is the object of observation and the tool to investigate and produce knowledge, according to Research by Design or Design Driven Research perspectives (Till 2007, Fraser 2010, van Schaik and Jonson 2011, De Walsche and Verbruggen 2015). Today the Research by Design could be seen as a proliferating field. Here, the design is the tool that drives research to understand creative processes that deal with 'wiked problems' and undefined outcomes. The design drives research to better shape processes and focusing on more efficient devices. The design is a posture to stay in action and reflecting on it, opening possible bridges between academic research and professional creative practices.

Having had the chance to attend two different research that followed one another in a short time, partly overlapping, was a significant opportunity to recognise, compare, test or verify in a short time some "discoveries" made. To give an example, the building of a pavilion in the Milan-Bollate prison was an unforeseen event in the FARB research. In the West Road Project, the built experimentations become a crucial action in the research. The doctoral research has not developed so much from a hypothesis to be verified but from the interest in finding tentative forms and design methods, among possible, capable of contributing effectively to the transformation of marginal situations. Through active participation in the Research and critical observation of their passages, I have tried to bring out some recurrences described in the section "tools for the possible". Recurrences are open to being tested on future 5 Prison Architecture: from space of detentione to place of relationship. (FARB2016).

6 WRP – West Road Projects / La Strada dell'Ovest. A device to activate networks and public spaces through (Polisocial Award 2017).

7 Cf. (Catalanotti 2020), (Guadalupi 2019) e (Pepe 2018).



occasions, for my own doing and other researchers, professionals, if helpful.

The moments of reflection in and on action follow cyclically in the doctoral period through design, observation, and verbalisation to feed the investigation through comparison with others. In the last period, I have had significant moments of comparison and discussion of the intermediate results of my work with the research group that involves me at the Politecnico di Milano and other researchers who are questioning the possibilities of the project. I participated in some initiatives promoted at the Politecnico di Torino around the theme of Innovation in Practice<sup>8</sup> and two CA<sup>2</sup>RE Conferences (Ghent and Trondheim)9. The Ph.D. Research Marathon "Innovation in Practice. Unlocking Architecture in City" (Tourin 13-14 September 2019), 18 students with different backgrounds were asked to answer three main questions through theoretical argumentation, case studies, and fieldwork. "Is it possible to consider the architectural project as a technical and social object, which undergoes innovative transformation - such as the technical objects do? What are the paradigms of innovation we can consider when we deal with an architectural project? What are the recurring features of a project that we can use as the object of scientific experimentation - that is, those features we can reproduce and innovate?" (from the call). The CA<sup>2</sup>RE is a collaborative platform for the researcher in all fields of architecture, design and arts, centred on the theme of practice & design-driven research. In its conferences (two a year) it "is intended to bring together senior staff, advanced researchers and early-career researchers to understand, scrutinise and improve research quality through an intensive peer review". These meetings were opportunities to open up intermediate outcomes and test different ways to tell the stories experienced to exemplify the method and devices effectiveness.

The comparison and feedback process of what I observed is not limited to academia but includes those dealing with marginal contexts in recent years. I am thinking in particular of third sector operators and public administrations intercepted in these years of research.

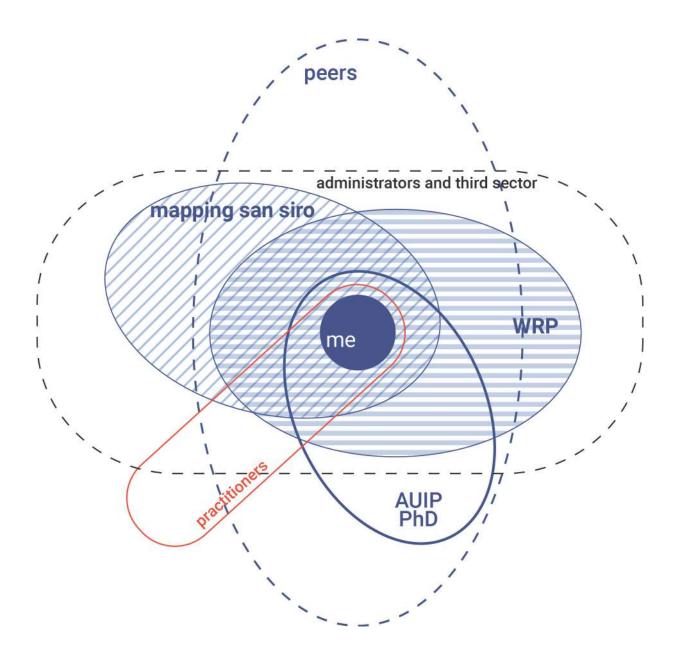
#### The structure.

The research moves along three layers: the project environment and posture, the practice in action-research, and the focus on design methods and tools. Each plan has its field of action, but progress cannot be without the other two. Each event solicits progress in one plan and, at the same time, rearticulates the links with the other two. A progress that is not linear but takes place by discarding opportunities and possibilities in a multidirectional way.

The backstory recounted the socio-urbanistic mapping on the living conditions of the Lorenteggio neighbourhood, carried out just before the beginning of the doctorate course, and it represents a significant event in specifying the research interest.

The terms of research specifies the areas in which research was moving in these years. Research that is interested in *the possibilities of architectural design*. The aim of reflection is the search for an effective success of the action in the field for an effective practical outcome of the scientific work. The survey 8 http://www. innovationinpractice.it/ 9 https://ca2re.eu/

The circles of interactions. There are many different environments that have influenced the research, as well as many potential interlocutors with whom to share the intermediate results achieved, particularly those I have met these the years.



(investigating the contemporary and looking for past experiences) concerns the tools and forms of action that the project can take in socially complex contexts. This specific character revealed the critical issues, such as the lack of ability to produce effects in *marginal contexts*, but also the potential for interaction with the articulated nature of the areas studied, recovering the dimension of *social practice*.

Then there is the layer of the experiences conducted in the first person, an *investigation by opportunities*.

Experiences become *oriented stories* of what happens. In particular, here are reported the two action-researches conducted at the DAStU of Politecnico di Milano: the first one on prison and the second one on peripheral areas of Milan. After a brief description of the context in which they operate, the narrative focuses on design actions undertaken, tools used, materials produced, and events. Forms of design emerge at different scales of architecture, politics, and people's lives. In these experiences, the design is used as a probe able to understand reality and test transformative actions. It allows crossing a series of paradigmatic situations that intercept the material, social and institutional dimensions. The exploratory character, combined with a clear intent devoted to action, aims to produce narratives, provoke new imagery, and trace replicable methods.

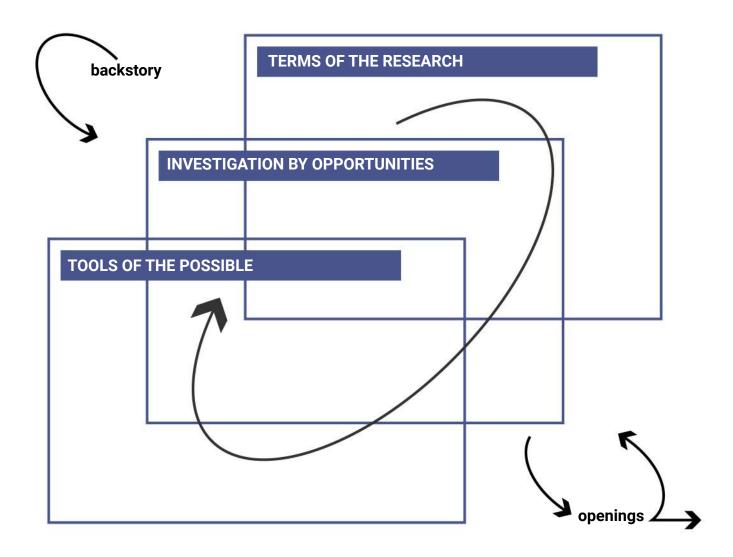
The last layer, *The Tool of the Possible*, investigates possible strategies and innovation paths of some design devices. This point of view, on design in action and its products, is intended to engage in dialogue with those who today are questioning and observing different forms of project operations (researchers), with those who are practising adaptive forms of architectural design (architects) and with those who are trying to open up to new forms of interaction with the architectural project (administrators and the third sector).

Thus, each level becomes a field of exploration and entry point for multiple and transversal reading paths between the different parts. To support a partial reading aimed at the reader's particular interest, it may happen to encounter repetitions, particularly the narration of the experiences conducted. However, each time the stories offer a particular point of view to support the argument of the theme deal with. The stories of the experiences can be occasions for comparison and suggestions for approaching similar themes. The design devices described can be declined in new situations of complexity and find in the research experiences recounted opportunities to exemplify them.

In the end, more than conclusions, there is space for potential research paths towards which to continue reflexive research.

The research moves along the three layers. Each one has its field of action, but progress cannot be without the other two. At the centre, there is the selected tale of participation in two DAStU research.

The other two plans, one is a clarification of the field within which the research moves, the other tries to recognize possible innovations in the design method and its tools.



Introduction Backstory

> Starting from a Master plan A disappointment

# TERMS OF THE RESEARCH

31

### INVESTIGATION BY OPPORTUNITIES

63

**PRISON ARCHITECTURE** 

Mutations and Possibilities for Architectural Design	33	The Italian Prison. A Wicked Problem The Torreggiani judgment	67
Questions based on practice		The debate in Italy	
Changes in the architectural design		The States-General of Criminal Execution	
The politics of design			
Spring 2020		Academic Research as an Opportunity	72
The Architectural Design as Social Practice	38	The Deletional Dream estive	
A socio-material negotiation		The Relational Prospective. A Driving Guesswork	73
A selected survay from '60s		The design guesswork	
A way of acting in the tangle			
Marginal Territories	50	The <i>Trace of Freedom</i> . An unforseen experimentation	77
Increasing inequalities between enclaves		The request	
Self-feeding fragilities		A co-design workshop	
The drop-out of public action		Attempts to realize	
The wicked problem as a tool		The opening	
		The Guidelines. A Relational Device	81
Research, Action and Design	56	Definition of a method	01
Research by doing		The adaptive device	
Exemplify the action		Clues of operation	
Share learning by designing			
Design tool for theory		THE VISUAL TALE	86

11 25

### TOOLS OF THE POSSIBLE

145

Polisocial Award 2017 as Opportunity	101	Common ground despite the topics	147
The western peripheries of Milan. A Wicked problem	102	Design Guesswork	149
"I move well". A Driving Guesswork	105	Trigger the project as a process (from outside) Investigate contingency creatively Characterizing the belonging to the meshwork	
April 2018. The research starts The opportunity of Cascine Case Nuove The value of failure		<b>Built Experiments</b> Engaging the contexts (from inside) Commit to act Make way to spatial agency	156
Quarti Park. Learning from experimentation The setting of via Quarti	109 Developing correspondences	Developing correspondences Trigger the project as a process (from inside)	
Co-design experiences Attempts to realise The realisation	1	<b>Relational Devices</b> Tensioning particular and general Coping with contingency	166
The Adaptive Master plan. A relational Device Definition of a method The adaptive device Clues of operation	119	Exemplify to generalize From open documents to open labs Testing the lifetime	
THE VISUAL TALE	125		
	The western peripheries of Milan. A Wicked problem         "I move well".         A Driving Guesswork         A first network of subjects         April 2018. The research starts         The opportunity of Cascine Case Nuove         The value of failure         Quarti Park.         Learning from experimentation         The setting of via Quarti         The conception of Quarti Park         Co-design experiences         Attempts to realise         The realisation         Definition of a method         The adaptive device         Clues of operation	The western peripheries of Milan. A Wicked problem       102         "I move well". A Driving Guesswork       105         A first network of subjects April 2018. The research starts The opportunity of Cascine Case Nuove The value of failure       105         Quarti Park. Learning from experimentation The setting of via Quarti The conception of Quarti Park Co-design experiences Attempts to realise The realisation       109         The Adaptive Master plan. A relational Device Clues of operation       119	The western peripheries of Milan.       102       Design Guesswork       Trigger the project as a process (from outside)         "I move well".       A Driving Guesswork       105       Trigger the project as a process (from outside)         A Driving Guesswork       105       Characterizing the belonging to the meshwork         A first network of subjects       April 2018. The research starts       Engaging the contexts (from inside)         The opportunity of Cascine Case Nuove       Engaging the contexts (from inside)       Commit to act         Make way to spatial agency       Developing correspondences       Trigger the project as a process (from inside)         Outrit Park.       Co-design experimentation       109       Trigger the project as a process (from inside)         The conception of Quarti Park       Co-design experiences       Trigger the project as a process (from inside)         The conception of Quarti Park       Co-design experiences       Tensioning particular and general         Coping with contingency       Exemplify to generalize       From open documents to open labs         The adaptive Master plan.       119       Testing the lifetime         Definition of a method       The adaptive device       Firsting the lifetime         Clues of operation       Intesting the lifetime       Intesting the lifetime

WEST ROAD PROJECT

Conclude to (re)start

175

References

185



### Backstory

Starting from a master plan.

Since 2015 the Lorenteggio district in Milan has been the subject of an urban regeneration programme, an intense challenge for the public - municipal and regional Administration. After decades of inactivity, the public is called to 'regenerate' part of its heritage in first person, with an important availability of economic resources for a public operator, about 100 million euros<sup>1</sup>.

A public housing district built in the 1940s, Lorenteggio represents a multi-problematic "sack" (Cognetti 2009) in the south-west suburbs of Milan. A complex of just over 2600 highly degraded housing units housing about 4250 people. Significant is the presence of 40% foreigners and lonely elderly people. The majority of families live in severe poverty.

The neighbourhood has been the subject of many redevelopment policies<sup>2</sup> that have never managed to produce significant improvements. Indeed, the degradation (and its perception) has increasingly established itself as a factor characterizing the place. In October 2012, it became public the intention of the Administrations to replace about half of the neighbourhood's housing (through demolition and reconstruction) by realizing other forms of residence (subsidized housing and social housing) in order to recover resources for the maintenance of the remaining public property<sup>3</sup>. The proposal triggers a long mobilization of inhabitants, local organizations and trade unions who oppose the plan and demand a different future for the neighbourhood. The mobilization leads to the constitution of the DRAGO Committee - Dare Risposta al Giambellino Ora (Giving Answers to Giambellino Now), which brings out the requests and priorities for interventions of the territory. The requests are to abandon the demolition projects, address the issue of occupations in need and empty housing and promote initiatives that face the issue of work and social cohesion<sup>4</sup>.

At the end of 2013, the Municipality of Milan decided to finance a series of studies to identify new transformation scenarios for some districts defined as 'at risk'. These include the Giambellino-Lorenteggio district. It is a moment of listening and confrontation between the Administration and the territorial realities. Some representative subjects of Giambellino-Lorenteggio 1 It is not easy to give a comparable picture of public housing programs in Milan in recent decades, just to name a few: in 2005 the "Concorsi Abitare a Milano 1 e 2", has committed about 150 million euro for the realization of 8 new public housing interventions for about 1200 new housing (we refer to the intentions reported in the DPP of the competition notices, to date only 6 interventions of the 8 planned); the program "Contratti di Quartiere II" has invested 138 million euro spread over five districts -Mazzini, San Siro, Molise Calvairate, Gratosoglio and Ponte Lambro.

2 Cf. the table 'Progetti e Politiche' reported in (Infussi 2011, 84-89).

3 The analysis of the feasibility of the project, started between 2009 and 2010, is the result of a joint work between the Lombardy Region, Aler and the Municipality of Milan.

4 For a more precise and accurate description of the facts please refer to (Ranzini 2018).

take action to build a proposal to participate in the call for projects. A proposal that could "provide guarantees of protection for the local instances of the process and express a technical competence recognized by the institutions"<sup>5</sup>. For these reasons, a group of researchers from the Politecnico di Milano has also been involved. The proposal, which took the name "V.A.L.E - Vivere Abitare Lorenteggio ERP" (Live and Living Lorenteggio)<sup>6</sup>, is the only one that shows up and is funded.

In the same months, the Administration announced its decision to abandon all abatement programmes and to allocate €20 million to public works only when the Lombardy Region also committed adequate resources to renovate the buildings<sup>7</sup>.

The survey carried out by V.AL.E. is a socio-urbanistic mapping on housing matters in which I was able to participate, making my skills as an architect available within the research group of the Polytechnic University<sup>8</sup>. The picture elaborated was articulated in: a socioanthropological representation of the neighbourhood; a quantitativequalitative description of the places (at the courtyard scale); in some complex representations; a series of points of attention to be elaborated in an urban redevelopment project of the neighbourhood. The research required an intense work of observation and survey in the field. The frequentation of places produced, also, a significant number of relationships with the inhabitants increasing the value of the work.

A few months after the start of the survey, the conditions for a

regeneration intervention in the neighbourhood became real. The Lombardy Region, urged by the Municipality of Milan, decided to invest about 60 million euros in the district from European development funds. In addition to what has already been made available by the Municipality of Milan and other public funding for specific interventions, more than 100 million euros have been made available9 to promote the project. Although the resources available are significant, they are not sufficient to intervene in the whole neighbourhood. Choices have to be made. However, the conditions are in place to design an intervention that can be an opportunity to improve the whole neighbourhood and have positive effects on the surrounding area. The public Administration is open to the involvement of the territory. The Region and the Municipality show an interest in collaborating actively. The timing seems certain because the European funds must be spent and reported within predetermined dates. The resources allocated are both physical interventions for and social support. The project will redefine a historical public housing district through selective demolition, new grafts and the redefinition of the collective space<sup>10</sup>. Social and labour cohesion policies support physical interventions. The starting conditions seem the most appropriate to elaborate a significant project capable of defining a method of action that can be applied in other contexts where the public must intervene.

The drafting of the master plan and the planning of the project opposit page\_ via Segneri, it cuts in diagonal the Lorenteggio neighbourhood.

5 Ibidem.

6 The team is constituted by Ass. Cultural Dynamoscope, Coop. Soc. Comunità del Giambellino and SAS Spazio Aperto Servizi, with the support of Fondazione Politecnico and Coop. Soc. A77.

7 It should be remembered that the buildings in the neighborhood are part of the Aler heritage, the company for public housing, which refers to the Region.

8 The group coordinated by Francesca Cognetti was also composed of Elena Maranghi and Stefano Solariani.

9 For an accurate description of the financing and its amounts, please refer to the descriptive materials available for consultation.

10 Please note that the neighborhood will host a stop of the new subway line M4, stop Segneri, whose works are in progress.



process is entrusted to Infrastrutture Lombarde (ILSPA)<sup>11</sup>. The method adopted by ILSPA, however, was to divide the project by themes of intervention and entrust their treatment to different autonomous stakeholders. Some were involved in the demolition and reconstruction work, others in redevelopment work, others in financial aspects and so on. Given the limited time available and the necessary skills, for the drafting of the ILSPA Masterplan ILSPA relies on the support of CAIRE Consorzio, a company based in Emilia Romagna that offers consultancy to the planning activities of local Public Administrations. In drawing up the document, CAIRE availed itself of the contribution of the V.A.L.E. team in view of the fieldwork carried out and limited times<sup>12</sup>.

A disappointment.

Despite the premises and favourable starting conditions, the work that led to the drafting of the masterplan, when viewed from the inside and from the architectural point of view - my point of view, practitioner and researcher as interested about the effects of the design in a negotiated process proved to be a lost opportunity<sup>13</sup>. In the introduction, the master plan defines as its objective "social inclusion pursued through the economic revitalization of the social fabric and the redevelopment of housing spaces. The masterplan, conceived as a coordinated set of actions acting on several levels with different instruments, consists of three lines of action - on ERP heritage, public space and the socio-economic

11 Company in-house being entirely owned by the Lombardy Region. www. ilspa.it

12 The interim and final research reports produced by the Vale team are an integral part of the Elaborate Masterplan.

13 Observed from other points of view the experience also presents positive elements, "it was very hard both the relationship with the local network and with the administration but it was also the highest moment of our ability to do [...] I would have never expected them to listen to us so much". This is the opinion of Dario Anzani coordinator of the VALE team and operator of the Cooperativa Comunità del Giambellino, reported in Ranzini cit.

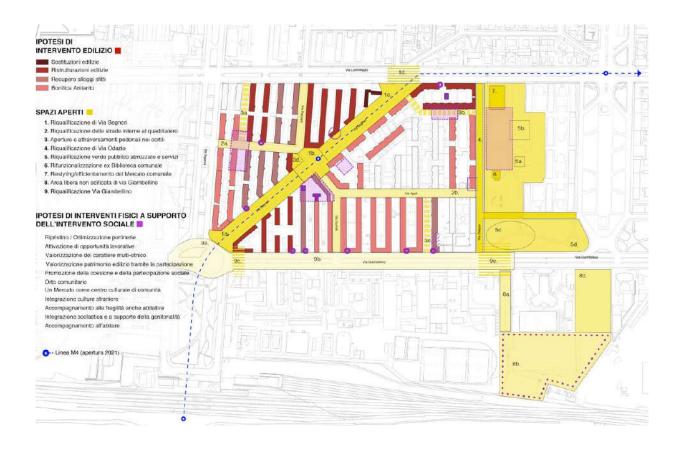




dimension - and will include a social accompaniment and communication plan. Its scope is centred on the area around the neighbourhood of Lorenteggio but embraces the wider Lorenteggio area"14. The renovation and building replacement of some buildings, the enhancement of Via Segneri - a new linear square strengthening the polarity of the services on Via Odazio, redesign of the internal road network, the opening of some courtyards for greater pedestrian accessibility are the primary interventions that affect the space.

During the master plan definition process, the critical and creative capacity of the architecture project played a marginal role, a position that generated the feeling of a missed opportunity. In decision-making, the reasons for easier feasibility, cost-effectiveness, political opportunity and "common sense" prevailed. The master plan uncritically received some preliminary indications elaborated by the VALE group. The transformation of space is seen as a simple building issue and architecture is a technical service that operates "at a later stage", trying to elaborate answers to questions posed by others - politics or other technical knowledge. As if the demolition and reconstruction of a building is not an opportunity to rethink the interplay systems of public space and the productive fabric of the neighbourhood as if to "transform a street into a square" it is enough to limit vehicular traffic and have a metro stop, as if the opening of spaces of sociality (by location and

14 From the Masterplan available at http:// download.comune.milano. it/10\_02\_2016/Masterplan%20 (1455117688908).pdf



number) does not have to deal with the local forces that can take charge of it. These are some examples of occasions in which the project could have actively contributed to formulate the questions and suggest paths for their elaboration, in dialogue with the other present actors.

The masterplan, while trying to make different lines of action interact, has not succeeded in bringing out an image of the future of the Lorenteggio-Giambellino district. An imageable to collect and grow a collective reflection on the habitability of those places. A useful tool to evaluate and argue the choices that the project is called to make every day, to welcome and manage new opportunities and resources that arise over time as well as the unexpected events that happen. A tool that confronts itself with the real possibilities of today and that at the same time projects the action of tomorrow.

#### 1 2

1 the scheme of inclusive progess proposed by VALE. 2 the chart of the Master Plan.

PASSAGGI DI FRONTIERA	
J.M. RICHARDS J.M. RICHARDS PETER BLAKE GIANCARLO DE CARLO	
EDGAR MORIN LA TESTA BEN FATTA	5 <b>2</b>
Jullien Trattato dell'efficacia	
II protessionista rifleasivo D.A. Schön	<b>+</b>
Vittorio Gregotti IL POSSIBILE NECESSARIO	BOMPIANI
I LIMITI DEL POSSIBILE	Pier Carlo Palermo
LA CITTÀ, I SAPERI, LE PRATICHE	Gabriele Pasqui
គ្នីខ្ល Maurizio Ferraris Documentalità. Perché è necessario lasciar tracce	Editori 😝 Laterza
Tim Ingold Making	
ARCHITECTURE DEPI	ends till
Architectural Design Theory	#OLARDETH
Teoris del procetto prehitett	tonico Carocci (2) editore
Armando Durbiano Teoria del progetto architett	torrited a starteter of curiore
SPATIAL AGENCY OTHER WAYS OF DOING ARCHITEC	CTURE

# **TERMS OF RESEARCH**

The terms of research specifies the areas in which research is moving in these years. Research that is interested in <u>the possibilities of architectural</u> <u>design</u>. The aim of reflection is the search for an effective success of the action in the field, for an effective practical outcome of the scientific work. The survey concerns the tools and forms of action that the project can take in socially complex contexts. This specific character revealed the critical issues, such as the lack of ability to produce effects in <u>marginal contexts</u>, but also the potential for interaction with the articulated nature of the areas studied, recovering the dimension of <u>social practice</u>.

### Mutations and Possibilities for Architectural Design

Question based on practice.

The experience of the Master plan Lorenteggio described in the prologue tells<sup>1</sup> of a missed opportunity to develop a project capable of producing a leverage effect over time, concerning resources and possibilities outside and inside the neighbourhood. A significant opportunity to experiment with a method capable of promoting effective ways of intervention for the "public cities" (LaboratorioCittàPubblica 2009) of Milan and, potentially, for the multitude of marginal situations present in our cities and territories.

It was an occasion in which architecture could significantly contribute to supporting "relevant innovations, i.e. non-trivial changes in critical morphologies and forms of social rationality" (Palermo 2007, 23). Innovation intended as "a more demanding and selective idea of a generic change, an unexpected and possible outcome of a process born for all other purposes, produced by a plural culture as a result of cooperation between different approaches and languages" (Donolo Fichera 1988).

Lorenteggio instead reaffirmed a practice that sees the architectural design, even in its urban dimension, be "brought back to a purely technical field of service provision downstream of a decision-making process driven primarily by functional and / or speculative opportunities, establishing a gap between *power and knowledge*, but especially deepening the furrow that the same disciplinary traditions of the project, in their *main stream*, through assertive and definitive approaches - according to a hypothetical (and proved to be ineffective) linear process, hierarchical and impositive choices - had generated" (Barbieri 2017, 130).

The questions, specified in this experience, have become the lenses through which to observe and practice the subsequent research and professional experiences. The investigation, still ongoing, questions the real possibilities of the project to participate in the understanding and evolution of complex situations.

#### Changes in the architecture design.

In recent years, many have told of a progressive renunciation of design action to be a critical look at reality through modification<sup>2</sup>. We are witnessing a positioning within increasingly perimeter and reassuring areas, from which to provide products and services, in response to needs prefigured elsewhere 1 Aware that it is a partial story and from a personal point of view.

2 Critical means the ability of projects, throughout documents and artefacts, to promote arguments and examples of possible futures, desirable or undesirable. (Silber 2007, La Cecla 2008, Gregotti 2008, Palermo 2009, Till 2013, Ratti 2014, Biraghi 2019, to name a few). A tale of the difficulties that the architecture (both as a discipline and artefact) finds to present itself as a critical moment, a decision-making tool and a means of comparison with reality; from different points of view and with different focuses of attention. Wouter Vanstiphout, historian and critic of architecture, states that "architects tend to hide political implications behind different affiliations. That of intellectualism, technocracy, the 'craft' or subjectivity of art. (...) Designers are afraid to engage in real debate with the public and the people whose lives they influence because this would expose them to radical uncertainty"<sup>3</sup>.

A retreat that coincides with an increasing media success of architecture. Success determined by the more and more central role of the image. Gregotti points out "often instead in representing as in building are the tools, that is the means, that take the upwind with their charm on the ends. That is, they detach themselves from the artwork to become an object, and even artworks, in themselves, images endowed with the will of autonomy aimed at the mimesis of the technical miracle of the medium that has become the image of its ends" (2010, 15). The needs to compete internationally and to survive economically drive officies to produce new images every day "in the incessant search for novelty that characterises contemporary architectural practice and its submission to the global laws of the market and consumerism" (Gregotti 2014, 29). The result is an architecture that is characterised by the "propensity for a difference" that is often synonymous with extravagance. The "new", in this perspective, serves architecture above all to stand out, to attract attention: a trick that "it has assimilated from advertising, and which, in emphasising its reduction to an image, confirms its full character as a commodity" (Biraghi 2019, 26).

The popularity that, while on the one hand, made the images of the "established" architecture firm increasingly "necessary" to ensure the success (economic first and foremost) of urban transformation programs, on the other hand, resulted in the marginalisation of architectural design in decision-making processes. In recent years it has often been debated about the need to use the design competition more frequently, a useful and potential tool. Again, however, the call is often thought of as a moment that ends in the development of multiple solutions to choose from. Some experiences instead show how the architectural design can be a resource for the construction of the competition brief and can also be a resource to openly develop the outcomes of the competition itself<sup>4</sup>.

This condition is evident when the project, here understood in a broad sense, is confronted with the new paradigms of contemporaneity (climate change, big data, sharing culture). In the aspiration to return to a past vision of the "promethean designer", the treatment of the theme becomes an opportunity for specialisation often based on the production of evocative images, used to corroborate visions and needs defined elsewhere. In an apparent projection to the future, the images produced are "extrapolations of the obvious present in magniloquent, monumental and rhetorical terms in illusory terms" (Cacciari 3 Architecture and politics. Interview with Wouter Vanstiphout in Artribune 19 March 2015. https://www.artribune.com/attualita/2015/03/ architettura-e-politica-intervista-a-wouter-vanstiphout/ ((consulted on 16.04.2020). Vanstiphout is Professor of Design as Politics - Department of Urbanism at TU Delft and in the presentation of the course writes "In our graduation studios students are given the opportunity to spend a year exploring a subject in depth. We tackle social issues that are high on the political agenda, such as funding flows, the consequences of the financial crisis and the role of the architect in this. A topical theme right now is decentralisation, and what will happen when the welfare state as we know it plays a less significant role. These are not specifically technical assignments, but lessons that encourage you to think about a social assignment and how you can create a design to fit it"

4 Looking at the Milanese context, we can point out two initiatives that have moved in this direction: the international design competition Living Milano 1 and 2 (Infussi 2007, Infussi Fabian 2012) and the latest initiatives for the redevelopment of the dismissed city's railway station: www.scalimilano.vision. 2019)<sup>5</sup>. A succession of "projections beyond" sustained by the constant acceleration of society that subtracts time "to stay, to live, to design" as Massimo Cacciari points out, recalling, instead, the importance of "being responsible for the present"<sup>6</sup>.

An evolution in the practice of architecture determined by the emergence of "neoliberal rationality"<sup>7</sup> (Dardot, Laval 2019) and accelerated by the crises<sup>8</sup> that occurred and overlapped in recent decades. Crises that affected, and continue to affect, the forms of regulation between economy, society and territory, leading to profound changes in the social structure of the territories. If we observe architecture and urban planning, the affirmation of the neoliberal model leads the design of space to adopt an approach characterised by an "extreme functional reductionism" (Bianchetti 2016). In dealing with the neoliberal design approach, Cristina Bianchetti identifies three main topics that characterise it:

relying on "an impersonal power that redesigns behaviour. It refers to trust in hierarchically structured and well-organised systems, which are given logical supremacy and greater efficiency by virtue of their logic and order" (2016, 7);

relying on formal devices that codify space, reducing urban complexity andthequalityofliving to indicators, "regulatory density is first and foremost a multiplication of prescriptions and prohibitions, and this affects the design and its critique, both of which increasingly rely on rules" (2016,111);

the renunciation of individuality, the inhabitant is interpreted as a predictable entity according to rules establishing the canons.

The design is flattened to the norm and the production of "flat spaces" that deny plurality, contingency and difference. An attitude that increasingly divides the distance with the real city, which works for inconsistency and temporality. A specialised vision of the project, reinforced by the increasingly complex set of technical and procedural requirements to be met. A complexity that has transformed the design into an increasingly fragmented process and "the centre of itself" (Biraghi 2019, 178), "divided into parts conducted separately, identifies different roles of responsibility and capabilities deployed throughout its process" (Barazzetta 2016, 50).

A codification of the project process that "may lead to an isolation of design practices from the social dimension, which is the only dimension in which the project can assess – through exchange – its specific mandate" (Arthed 2017, 6).

#### The politics of design.

An evolution of the profession that seems to shun or minimise, for multiple reasons, the inevitable political nature of architecture. A dimension that cannot be renounced as Mauro Palma - National Guarantor of the rights of persons detained or deprived of personal freedom - reminds us when, speaking 5 The reflections of Massimo Cacciari here reported were expressed during a meeting at the Order of the PPC Architects of Milan held on December 11, 2019 on the decarlian themes of the design, participation, ethics and the future.

#### 6 Ibidem.

7 By the term rationality the authors mean the sum of the neoliberal strategies functional to the expansion and affirmation of the global normative logic of neoliberalism. In the essay neoliberalism is defined as "the set of discourses, practices, devices that determine a new way of governing men according to the universal principle of competition" (2013, 14).

8 At the moment I am writing these pages, the Covid-19 pandemic is underway with the inevitable activation of new transformative processes of society and territories that today can only be hypothesized. of imprisonment, he points out "the space concretely conditions the penalty in its unfolding far more than very acute theoretical elaborations" (2011, 52). The reference to the panoptic prison developed by Jeremy Bentham is an obvious example that exemplifies the social effects of buildings, as well as the banality of the Italian prisons built since the 1980s.

Through thick descriptions of some empirical cases, Albena Yaneva, shows how it holds an implicit political dimension, generated "by artefacts, devices, material arrangements, settings, thechnologies and buildings as they connected with many other things in a network. That is, contextual, *relational politics*" (2017, 163). The political dimension of design expands from intentions to the agency of building and built spaces.

With this in mind, Joseph Rykwert reminds us that "architecture can, could still have an extraordinary democratic function, could still be the meeting place of those who try to build the "right city". It could because it is a profession of thought about the city, knowledge in an intimate relationship with the richness of its history, and intellectual milieu sensitive to the bastardisation of the built and natural environment"9. The Rykwert's reflection underlines the possibility and necessity of the architectural design in dealing with "the new urban question" summarised by Bernardo Secchi in "The city of the rich and the city of the poor" (2013). The changing relationships between economies, societies and territories are increasingly characterised by deep inequalities that manifest themselves in the emergence of "spatial injustices" (Soja 2010). Secchi points out that "whenever the structure of the economy and society change radically, the urban question returns to the forefront" (2011, 95), bringing the theme of space capital back to the centre. Moreover, if the theme of space is central, the architectural design cannot avoid being an instrument of critical discussion and a moment of open discussion of the issue. A "reengaging" that has to face with the possibilities of the moment "returning to think about the materiality of the economic, political and social processes within which the process of professional and institutional construction of the project is placed, in a condition of radical poverty of the public sphere and the closure of a long phase of thought and practice of the city project". (Pasqui 2018, 96). An open comparison with the reality that leads the architecture project to decline in diversified methods according to a multiplicity of objectives and contexts with which it relates.

9 Passaggio dell'intervento "l'architettura fa ancora bene alla città?" tenuto alla Fondazione Alvar Alto nel 2001 e riportato in (La Cecla 2008, 26)

#### Spring 2020

At the moment I'm writing these pages (may 2020), the Covid-19 pandemic is underway, a global crisis of a health care nature but which, as Bruno Latour points out, "is part of what is not a crisis - always transient by definition - but rather a lasting and irreversible ecological mutation" (www.antinomie.it 09/04/2020). An "ecological mutation" in turn determined by the succession of a series of moments of fractures increasingly on a global scale. It is difficult to imagine what transformations will determine the current pandemic in social and spatial relations, but we can be sure that it will not be a simple return to "as before". Changes that inevitably call into question the reflections and research actions presented here. At the same time, it reaffirms the need to design space as a place of relations. Relationships that are the weak element of these phases, and that with the theme of distancing require an important imaginative effort so that the issue is not reduced to a simple normative-dimensional solution to manage a transitional phase. What are questioned are the daily practices and their happening in space, the forms of life, the ways of interaction and the exercise of affectivity. This questioning reaffirms once again that "space matters". Architecture and urban planning cannot avoid changing their own doing to contribute to the "promotion of responsible citizenship that does not delegate but involves itself personally<sup>"10</sup>. An open-minded design that more than just advancing solutions provides you with the knowledge to formulate the most appropriate questions.

10 From the open letter sent to the Mayor of Milan Beppe Sala on April 11, 2020 by Don Virginio Colmegna, Silvia Landra, Fondazione Casa della Carità Francesco Maisto, Guarantor of the rights of people deprived of their personal freedom, Municipality of Milan Gianni Tognoni, Secretary General of the Permanent People's Court Maurizio Bonati, Head of the Department of Public Health, Mario Negri Institute, Milan.



During the lockdown, a Roma group use the table for play blackjack, vandalising it, generating a sense of insecurity in the inhabitants. See as a moment of a process, the platform is a tool to deal with the negotiation of existing conditions with the prospect of reformulating them in part.

## Architectural Design as Social Practice

#### The socio-material negotiation.

In the last decades, we witness to a series of ethnographic investigations on the practice of architecture (Cuff 1992, Yaneva 2009, 2012, Jacobs and Merriman 2011) that remind us how architecture, as a concrete fact, contains a set of "social and technical negotiations and conflicts" (Yaneva 2009) that were necessary for its realisation. Inspired by pragmatism and Science and Technology Studies (STS), the researches aim at grasping the sociomaterial dimension of "practising architectures". They show different ways in conducting the process, but what all they make evidence is the plurality of practitioners, human and non-human (Latour 2005), which work to get objectives.

At the same time, these stories show that "architecture depends" (Till 2009), on people, politics, bureaucracy, time and so on. Generally, architects deny this dependency trying to maintain autonomy and control about their practice. However, circumstances intervene to upset the architect's plan.

These studies are a useful tool to "get out of a representation of the project as a direct result of a supposed will of subjective art, in favour of its description as a product of a complex negotiation between agents of different nature (subjects, rules, inscriptions, collective representations)"(Durbiano Armando 2017, 27). A change of perspective that opens up the possibility of subtracting the design work from its reduction to an artistic act or technically programmed task. It seems possible to regain its nature as a "social practice" capable of "make a difference" (TAM 2016) in developing convincing proposals with respect to the social demand for transformation of the physical space. The project becomes thus a contribution to finding a way towards a shared future, the tool to "follow the cut- to see where it goes, and in what direction it takes us" (Ingold 2013, 23).

The project assumes the form of a relational process, a contingent and relative *social object* (Ferraris, 2009). It opens to the contribution of different actors and knowledge, expert and ordinary. In this habitat, the specific contribution of the architecture project is the proposition of "tentative forms" (Barbieri 2017, 135), an explorative prefiguration of the transformative conditions. Forms can come into action at different moments in the design process<sup>1</sup>.

The design architecture tries to measure itself proactively with the inertia and resources of the social and cultural contexts. The architectural project 1 By design process we mean the path that leads to the improvement of the living conditions of a situation as a result of the interaction of space transformation interventions and social and cultural policies. does not renounce to the proposition of its point of view. It uses the proposal in order to put itself in tension with the context, soliciting modifications, confronting itself with contingent and possible balances, reconstructing the different visions present, their reasons and effects. The perspective is to operate within a "field of interactions of which every glance and project become part, contributing to modify forms and visions inherited. It implies a non-formalistic idea of project, as a selective and experimental exploration of evolutionary possibilities inscribed in the context. It put into play, therefore, a non-trivial idea of architecture and urbanism" (Palermo 2009, 104).

#### A selected survey from '60.

A project posture not new in the history of architecture, even if it has never been prevalent. In the '60s we witness the rise of many critical voices in the tradition of the Modern Movement (Team X, N. Habraken, C. Ward, R. Erskin, J. Ghel). They seek to recover the identity of architecture as a complex phenomenon, both social and historical. A reaction to the functionalist reduction to the original assumption of Modern Movement in which the architectural language, the social transformation programme and the ethical dimension are preordered and precoded.

In Italy and abroad, one of the most critical voices is Giancarlo De Carlo. Through the professional activity, writings and participation in international debates, De Carlo carries on "an idea of architectural design as a social and civil commitment, which must respond to the context and finds quality measures only in life experiences that makes possible.

The designer must propose new ideas in which he believes, assuming the risks and consequences, without subordination or conformism but avoiding falling into new dogma, because *doubt* and *experimentation* are the keys for responsible and creative design. The vision requires an attitude always open to confront because «architecture is too important to let it only to architects». Reflective, because you learn through public discussion of projects «from every point of view, without prejudice or constructed hierarchies». Not interested in building a theoretical system, because «every innovator must know that others will develop the ideas in different directions and ways». Purpose of the architectural design is not to create monuments, but «significant space events», capable of contributing to better living conditions" (Palermo 2009, 33-34)<sup>2</sup>.

The experience of Villaggio Matteotti in Terni (1969-75), the design and construction of a district for the workers of Società Terni Acciacierie, tells the story of De Carlo's research as an architectural practice "authentically designed", not based on rules and schemes. The intervention is famous for being a fragment of excellent architecture, which has seen the participation of users to the design and implementation project.

What interests me here is to observe how the project has been a tool to articulate the problem, to open the confrontation between stakeholders (property, workers and municipal administration) and lead the process of the elaboration of the plan and the realisation of the first lot.

2 The passages in the song are taken from (De Carlo 1972)

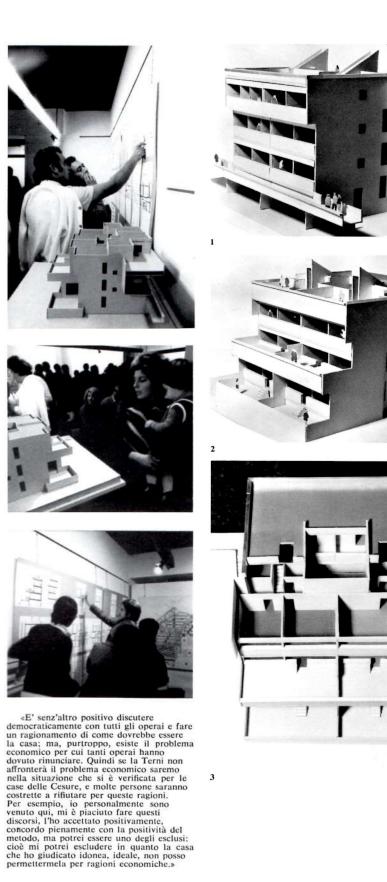
This story begins way before De Carlo assignment, whose complexity is given by the overlapping of three parallel stories that interest the different actors involved and their expectations on the area. "For the municipal administration it represents the attempt to get out of the role of arbitrator between counterparties – the society Terni and the workers, users of the houses – assuming responsibility for the use of an existing or future building heritage. For users, neighbourhood residents and all interested representatives, trade unions, factory and neighbourhood committees, cooperatives, it is an opportunity to express the ability to organise themselves in a proactive force. For the Terni company, less and less able to hold with an economic authority the indifference to the environment, represents the tangible demonstration of changing focus towards social interests" (Bracco 1977, 1).

In 1969 the Accaierie Terni called De Carlo to unravel a complicated situation of contrasts between the company and the workers, to which overlapped the political tension that characterised the company in those years. Built in Fascist times, the Villaggio Matteotti was a complex for the company's employees. A district with a lack of services, with poor relations with the city and widespread physical degradation.

The intervention of the property could not be postponed any longer. "The management was inclined to sell the houses to their inhabitants and take away once and for all the burden of having to intervene with heavy maintenance costs or, worse, renovation. The works council, on the other hand, supported the hypothesis of razing everything to the ground and rebuilding on the same area the volume of residence that was permitted by the land use plan. After lengthy discussions, given that there was no way out between the two irreconcilable alternatives, the management decided to turn the problem over to an architect, i.e. someone who was able to solve it in purely technical terms and therefore unequivocally" (De Carlo 2013, 103).

In De Carlo's description of the affair, the architect's idea returns as a "technician" called upon to resolve disputes through the provision of an objective and measurable service. Formative is De Carlo's answer, which through the instrument of the project, re-articulates the problem in the form of an open question and submits it to the client. "Therefore he asked [De Carlo] that the assignment be postponed until all aspects of the question had been better clarified, and to facilitate clarification, he proposed to study the problem at his own risk in order to draw more precise indications, on the basis of which not only the management but also the works councils, could decide with knowledge.

After a short time, five different hypotheses for intervention were presented. The first envisaged the complete renovation of the village, without changing its original configuration but providing it with the necessary collective services and radically renovating the residential buildings; the second was to replace the original building fabric with a system of buildings with towers equal to those that the Steelworks had adopted in a previous intervention; the third also provided for replacement but with a model similar to those that public bodies for subsidised building build everywhere in Italy; the fourth Giancarlo De Carlo some moments of sharing the design proposals and models of the developed typologies for the Villaggio Matteotti (from Casabella 421)



and fifth proposed a more complex system consisting of three superimposed plates in which linear building sequences were excavated that included the residence, the services directly pertaining to the dwelling and the channels of the pedestrian movement.

Each of the five alternatives was accompanied by the description of its advantages and disadvantages in relation to the different points of view that could be considered. [...] The five alternatives were delivered and accompanied by a note stating that the architect would have been interested in elaborating a project and so in taking up the job, only if the choice would have been fallen on the fourth or fifth solution" (103-104).

In this piece, De Carlo approaches the assignment from a rigorous investigation of the situation through a design perspective. With this posture, De Carlo tries to decode the complexity without simplifying it, keeping the spectrum of possibilities open, defining advantages and disadvantages compared to the objectives and resources of the operation. A non-neutral attitude, because the designer indicates which solutions are the most fertile for the project, for those inhabitants and not according to a priori formulated convictions.

In another passage of the story he reminds that "if he had cut the knot instead of trying to untie it, he would have found himself playing an equivocal role in the service of a power he did not like" (103).

The usefulness of the architectural design lies in this desire to untie the knot through a process that passes by participation: "the designer's task is no longer to churn out finished and unalterable solutions, but to extract the solutions from continuous comparison with those who will use his work. His image will be all aimed at awakening the imagination of his interlocutors and the solution will come out of the contact between the two, passing through a concatenation of alternatives more and more adherent to the nature of the problem that is faced" (70). Openness to participation is not a renunciation to act, to make choices and to take responsibility for the consequences of such choices and actions. The step that De Carlo and his collaborators make is to expand the project "from a moment to a process". In this process, the practitioner takes the sides of the project itself and not one or more of the parties involved. Besides, through the proposition of concrete possibilities of space modification, animates the process.

The project team<sup>3</sup> supported the debate, in the different phases that led to the realisation of the first bunch, proposing a series of types that could be adopted. They showed different ways of living, through international cases, and proposing new solutions as a critical reworking of what emerged from the debate. It outlines a "making the profession" that is characterised by an ethic of responsibility, where the designer "acts with conviction without losing sight of the consequences" (Bobbio 1999), where the propensity for change and the need to adopt compromise choices coexist. An action supported by "design hope" (Maldonado 1970). What Maldonado wishes is to develop a design technique capable of transforming, here and now, the reality in which we live<sup>4</sup>. The design must be considered the foundation of human society and

3 The team that developed the project is characterized by its multidisciplinary nature and Domenico De Masi, Fausto Colombo and Valeria Fossati Bellani are part of it.

4 It is no coincidence that the number of *Casabella 421*, the first of the series directed by Maldonado, dedicates a large service to the *Villaggio Matteotti*. Aldo van Eyck's playground in Amsterdam, historical pictures. (Amsterdam City Archive).



bring about change, exploiting the overlapping technical, sociological, cultural and political imaginary. In the concept of hope, it is recognisable a disposition "oriented towards the unpredictable, the unexpected, the surprising" (Illich 1978, 64) urged by the project. The design action is the tool to investigate "the future [that] is built day by day" (Secchi 2015).

Acting for occasions having an idea of the future is the attitude adopted by Aldo Van Eyck in developing the playgrounds project for the public administration of Amsterdam. An intelligent strategy that between 1947 and 1978 guided the temporary reactivation of hundreds of waiting spaces<sup>5</sup>. The city as a place for children, this is the key to trigger and govern a process of modification which happens for discreet interventions, in the absence of a predefined plan but with a coordinated vision.

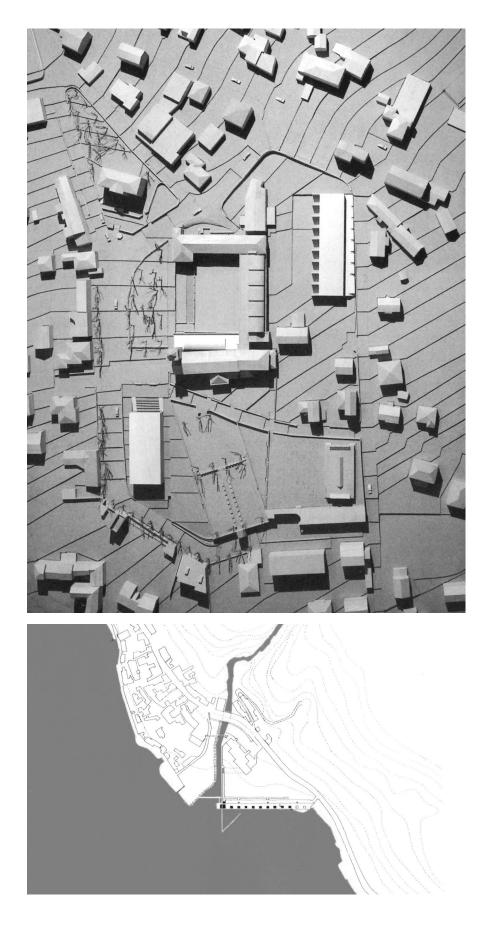
Each intervention, carried out on the inhabitants' recommendation, assumes value both as a single case but, above all, as an extended network of recognisable points between them. Duplicity that allows the system to maintain effectiveness over time, accepting the addition or subtraction of a playground. An intervention strategy that urges, on the one hand, the administration to practice unusual ways of governing the territory, on the other hand, the citizens to be active interlocutors with the administration. The quality of these spaces plays a significant role. Through their design, Van Eyck wants to favour the exploratory and discovery nature of the game. Going beyond social and typological conventions, they offer spaces of interaction that are commensurate and solicit the users. These spaces have been the opportunity to practice, from different points of view, for designers, administrators and citizens, the potential of intermediate space between public and private sphere. The playgrounds can be seen as reagents "in the sense of substance able to activate, within a certain relationship, a further degree of reality, a new idea of reality or new construction of ideas". (Di Franco 2016, 44).

The architectural fact as a reagent is the figure of the work that, for over thirty years, Luigi Snozzi carried out in Monte Carasso (Switzerland). A case that seems far from the previous ones, but that I consider interesting because it shows how "a good architectural form is functional to different functions" (Snozzi)<sup>6</sup>. Architectural form that is the result of the selection of a reasonable number of "questions to the history and context"7. In 1979 Snozzi is called to elaborate the project for a new school in the country. As happened in the case of the Villaggio Matteotti, Snozzi set some design conditions to accept the assignment: to modify the location of the school on the edge of the village, next to the new fast-flowing road axes, foreseen by the Magadino plan. Snozzi proposes the central site of the former convent of the Augustinian nuns. The proposal meets the favourable opinion of Mayor Flavio Guidotti and the citizens which opposed the plan with a referendum against the marginalisation of services. The convent, at that time, was unrecognisable for superfetations and tampering, but it represented an opportunity to activate the redevelopment of the entire central area of the town of Monte Carasso. Snozzi, in fact, also proposed the arrangement and enlargement of the cemetery, the sports areas and the reorganisation of the road network. Through the project, Snozzi, the

5 Cf. Aldo Van Eyck: the playgrounds and the City. Oggi degli interventi realizzati ne rimangono solo 17.

6 (Di Franco 2016, 149).

7 Ibidem, 123.



Luigi Snozzi Model of center of Monte Carasso

guerrillas project – Port and apartment building in Brissago (Sui)1972 mayor and the citizens meet and start a "permanent laboratory" of planning of the village, based on direct intercourse and made "case by case", except for very few general rules. A project based on the densification of the existing fabric and the preservation of the structure of the architectural sediments. The significance of this experience, perhaps unrepeatable, is the relationship produced between population, politics and architecture.

The architecture project as a critical comment can also be found in the "guerrilla proposals" (Frempton 1984) developed over the 12 years in which Snozzi was a member of the Commission for the protection of environmental beauty. Demonstration projects that the Swiss architect uses to argue his case to his colleagues. These projects "subverted the rules and at the same time affirmed clear principles of environmental protection" (Di Franco 2016, 90).

Over the years other professionals have characterised their "doing architecture" as a critical practice open to the relationship, using the theme of the form and its composition: Lucien Kroll - "it's all landscape"; Andrea Branzi - "enzymatic architecture"; Lacaton & Vassal - "freedom of use"; Aleandro Aravena / Elemental - versus scarcity inventiveness; TAM Associati - "Taking Care"; Studio Albori - "Cyclo-feline architecture".

In the last decade, in response to the disappearance of public action, which has affected the quality of public space and the underutilisation or abandonment of obsolete public complexes, new forms of temporary occupation of these places have emerged. These are concrete actions promoted by local communities for the re-appropriation of symbolic places, their narratives and history. Bottom-up initiatives that can generally be traced back to Tactical Urbanism, which "refers to a city, organisational, and/or citizenled approach to neighbourhood building using short-term, low-cost, and scalable interventions to catalyse long-term change" (Lyndon, Garcia 2015, 2)8. Initiatives that, inevitably, mobilise the architecture and design of public space in close relationship with the practices of use of these places. Starting from the ability to produce a social value of these actions we are witnessing the emergence of groups of designers who base their action on temporary and 'light' interventions to engage local actors and support forms of reappropriation and care. Professionals who increasingly operate in different forms of associations than the professional studio, organising themselves into multidisciplinary collectives, non-profit organisations, cultural associations, think tanks or simply informal groups. This galaxy includes groups such as Collectif ect and atelier d'architecture autogérée (France), Raumlaborberlin (Germany), Columbosnext (Austria), Ecosistemaurbano (Spain) Orizzontale and TempoRiuso (Italy).

#### A way of acting in the tangle.

The willingness, sometimes the need, to practice new organisational forms reflects the need to approach the project-process differently. We no longer proceed by linear sequences but case by case we combine appropriate ways: the moments of the emergence of needs and critical issues, the formulation of the question, the conception, the search for resources and implementation. The 8 The term *Tactical Urbanism* is often used to refer to very different initiatives and sometimes used improperly. An approach, also defined as DIY Urbanism, Planning-by-Doing, Urban Acupuncture, or Urban Prototyping. Isabella Inti (2019) in her "atlante eclettico della pianificazione aperta" attempt to draw a framwork of differentiencies through traditions, approaches and authors.

#### ORIZZONTALE (Ita)

Prossima Apertura \_ is an urban redevelopment project carried out by an association of professionals, including social psychologists, in the Toscanini district of Aprilia, in the province of Latina.

#### RAUMLABORBERLIN (Ger)

The White City Center \_ They turned the Bialik Square into a setting for conversation and active listening in order to address the Bauhaus legacy and its influence on the City of Tel Aviv-Yafo.

#### COLLECTIF Etc (Fra)

*Meccalupino* \_ an experiment of collaborative design and relative construction of three practicable installations in the Lupino neighbourhood in Bastia.





sustainability of the projects passes through the aspirations of the inhabitants – to be oriented and stimulated – and the ability to get public or private resources. Conditions that lead to experiment new forms of governance based on the partnership "where relationships are dense, practices are inseparable from the production of meaning and can therefore be shared not only as technical know-how but as everyday politics" (Venturi Zandonai 2019, 4).

Learning to work by building networks seems necessary to produce and sustain the effects of local planning action. At the same time, it seems essential to access the necessary economic resources, in most cases as the result of thematic calls promoted by public bodies and private foundations, whose role is increasingly central9. More and more often coalitions of heterogeneous and changing subjects take part in the calls: designers, third sector bodies, associations and sometimes even private companies and individuals. Coalitions that resemble "hybrid spheres" (Venturi Zandonai 2016) where the distinction between profit and non-profit, public and private, work and volunteering are increasingly blurred. New ways of being and acting to develop innovative solutions to unmet needs and produce places of social innovation that put the person at the centre. Many people point out that we are witnessing a transition from a welfare state model to welfare mix<sup>10</sup>, regimes in which the modification of space, a factor that influences the quality of living, plays an increasingly central role. The "fragments" of space modification, often the result of moments of co-design and self-construction, are more and more the tool to investigate what it could be if: you develop that policy, you complete that transformation, you structure a series of interventions and other possibilities.

Architects are increasingly finding themselves cooperating with third sector realities, citizens and public administrations, in new ways. These situations resemble tangles where the lines of action and interest converge, influencing and influenced by the work of others while maintaining a degree of autonomy. The architectural design is no longer a tool to "cut the knot", as De Carlo's experiences recall. However, it becomes a way of being and acting in the tangle, contributing to its (partial) deployment or evolution through sensemaking activities. With their daily actions, the people involved in the treatment of the critical issue, "give meaning - retrospectively, but also with the ability to predict the future - to the situations in which they find themselves; the investigation in this perspective resembles more the construction and formation of coherence in practical activities than in the logic associated with problem-solving." (Cognetti 2018, 38). The project becomes, even more, a "social act" in which the designer recognises others as social agents and as such is recognised by them, allowing everyone to act according to their intentionality and competence, having mutually recognised the common direction towards which to strive. The unfolding of the tangle, as a collective act, occurs by accepting the complexity of the situation, renouncing any simplification, and on the other hand, by introducing a series of small incremental actions capable of producing effects that, although limited, are capable of altering the given situation and increasing its comprehension. Progress open to the contingency that could be part of a process of "radical incrementalism", of

9 For a geography of the subjects present on the Italian territory see: https:// italianonprofit.it/filantropiaistituzionale/.

10 Cf. Bifulco L. 2015. The local welfare. Processi e prospettive, Roma: Carocci; De Ambrogio U., Guidetti C. 2016 La coprogettazione. The partnership between public and third sector, Rome: Carocci which Edgar Pietese speaks as a "disposition and sensibility that believes in deliberate actions of social transformation but through a multiplicity of processes and imaginations, none of which assumes or asserts a primary significance over other struggles. This position may not resolve the existential struggle of urbanism, but it provides a means to confront the struggle and perpetually work one's way through it, stumbling across what works and what does not" (2008, 6).

In this relational context, the designer dialogues through project documents and "tentative forms" of space modification, which in turn become themselves producers of knowledge and agents of change (according to the scheme proposed by the Actor-Network Theory recalled from the beginning)<sup>11</sup>. The theory proposes that human and non-human components (both referred to as actants) have the same capacity to influence the development of social-ecological systems, represented as actor-networks, putting in place relationships and inscriptions.

Thus, a new posture of the project seems to emerge, one that is closer to the others already known. A way of acting that seems to be effective in marginal situations (the city of the poor), where the public no longer seems to be equipped to act in the first person, and the private sector does not recognise interests to act.

There are many challenges that such a way of designing poses both inside and outside the field of architecture. It calls into question the methods, timing and tools of urban design and architecture, accepting fragmentation, short duration and prioritising tactical action to react to the uncertainty and complexity of contexts. The field of action of the profession changes and expands, the architect is transformed (momentarily) into entrepreneur, promoter and often activist.

The work of public administrations is also questioned because they are called upon to support and authorise projects that cannot be trivially translated into codified protocols, and that often collide with the medium to the long timescale of authorisations. Just as the third sector is called upon to develop increasingly multidimensional programs that involve actions outside of their competencies and are interested in spaces that will be, pushing the eye to the future and not only to react to the present.

These are just a few examples of changes taking place that are simultaneously internal to knowledge but closely related to each other.

After years of experimentation, an articulated debate has begun on the potential and possibilities to acting for occasions and through the activation of networks. Often, these are initiatives that put themselves in an intermediate position between research and professional activity. The most interesting aspects of the debate are not those that try to decode new protocols according to which to act, but those that aim to share the stories of experiences made to build greater awareness and knowledge of the possibilities.

The present work wants to be one of the stories of the debate starting from the everyday contexts frequented, the university research and the Milanese context, opening to the comparison with other contexts and trying to recognise some recurrences in terms of tools of the project.

11 ANT has been developed since the 1980s in the field of Science and Technology Studies by Michel Callon, Bruno Latour and Ihon Law. In particular, the ethnographic investigations in the field of architecture conducted by Albena Yaneva develop this approach. By describing urban transformations as processes of interaction between multiple attention-givers. she overcomes a vision that sees these interventions as outcomes of authoritative thoughts.

## **Marginal territories**

Increasing inequalities between enclaves.

Today it seems more and more necessary to use the plural when we speak about design methods. A consequence due to the complex articulation of urban and territorial situations in which we have to intervene and govern. The complexity that presents itself "as an unstructured set of unequal enclaves, some of which seem to possess remarkable qualities, while others, more critical, are left in the background or pushed behind the scenes" (Palermo 2009, 8). Following his reasoning Pier Carlo Palermo points out that "the possibility of activating territorial effects of good governance is more complex than those who confuse development with the growth of real estate and settlement or the market enhancement of some places of excellence. [...] «Good governance» is a process capable of expressing and sustaining over time a mature and shared collective rationality, according to the rules and practices of democracy" (8-11).

The initiatives mentioned at the end of the previous chapter, where the space design is conceived as an enabler of re-appropriation and care practices of places, mainly focus on the enclaves laying into the background.

As mentioned above, in recent decades, we are witnessing a progressive increase in inequalities "between economic, cultural, social and spatial resources among individuals and the different social groups. [...] Not secondary cause of the crisis that today the major economies are going through" (Secchi 2013, 4). Secchi recalls that the city has always been in the balance between being a device of "social and cultural integration" or an apparatus of "distinction and separation, marginalization and exclusion". Today, the processes of distinction and marginalization prevail, including spatial issue, whose effects are accentuated by a liberal vision based on the competition that penalizes the vulnerable situations.

Usually, the distressed areas are: public housing neighbourhoods, neglected historical centres, "vacant voids" (military barracks, railway yard or centres for service sector consortium offices), places of industrial dismissal (large and widespread plants), and functions pushed out for their negative characterization (prisons, immigrant detention centres). The entrance of Milano-Opera Prison.

A courtyard in the San Siro neighbourhood in Milan.

The San Siro neighbourhood in Milan.



#### Self-feeding fragilities.

It is not only the unequal distribution of spatial capital that pushes these parts into increasingly marginal positions but also the overlapping of multiple fragilities.

Spatial fragility. These are mostly mono-functional situations whose accessibility is often critical. There is a lack of maintenance and care, both by institutions and inhabitants, which results in situations of degradation, under-use or abandonment. Lack of care that helps to generate images of neglect that hinder the ability to build and maintain relationships with other parts of the city.

Social fragility. Often, disadvantaged or weak populations - single elderly, people with disabilities, single-parent families, or very numerous, significant is the presence of foreigners and people with precarious life stories – inhabit that places. People that "often are forcest to share spaces and places" where the multiple forms of life "ignore or intertwine" (Pasqui 2018, 17) according to dynamic balances that are characterized by a strong instability and often conflict.

*Economic fragility.* Unstable living situations aggravated by the difficulty of the inhabitants to have stable access to the labour market. When you get a job, it is often a low-skilled, low wage earner job with little guarantee of durability. The lack of economic resources inevitably affects the disposition and planning capacity of the inhabitants negatively.

*Cultural fragility.* The populations living in these enclaves often have a low level of education and leave school early. Besides, cultural activities involving the local population are absent or limited.

The conditions briefly listed, while occurring and conditioning each other in different ways depending on the situation, determine the same effects: on the one hand the "lack of access to opportunities" (Cognetti, Padovani 2018) and on the other the affirmation of "negative narratives" when talking about these areas. Each effect negatively affects the other by defining these situations by subtraction: places of loss of urbanity, citizenship and political participation. Stigmatized images grow that not only crush these places on the margins of development dynamics, but for many inhabitants they become a way of life, in the process of interiorization of the marginal condition.

#### The dropout of public action.

Marginal areas are often in a downward spiral because measures and policies adopted in recent decades were unable to address the complexity and area-based nature of the problems. With time, situations become increasingly complex and crossed by turbulences, conditions that tend to drive away any form of action or process of development – urban, environmental, social, economic, cultural and technological. In particular, because these are contexts in which it is the public administration (at different levels) that must intervene first.

Usually, public subject intervenes through sectoral policies and projects, both for financial reasons (from access to specific European, national and regional policies founds, to administrative needs such as reporting constraints) and for the belief that it can achieve its objectives more effectively. These interventions rarely succeed in significant changes due to their specialized nature and lack of interchange. In some cases, we have witnessed "a therapeutic obstinacy" (Cognetti 2009), where the attempt for a solution accumulates programs and projects whose effect, however, is to generate a more significant fragmentation of the issues addressed and aggravate the stigma of being "places difficult to recover".

The growing specialization leads the public subject to separate spatial and social issues. The trend sees the space issue entrusted to external experts, delegating the social one to third sector organizations operating locally. The tendency is to accentuate the separation between "people and places" (Donzelot 2008 and Bricocoli 2008), compromising the possibility of activating virtuous co-design processes. What we are witnessing is an eclipse of public action, conditioned on one hand by the drastic reduction of resources, in particular transfers to local authorities that are called to intervene concretely on public goods. On the other hand, there is the inability of administrators to plan the medium and long term conditioned by the search for immediate public support. Their attempt is to use the capacity of private intervention to sustain positive effects also in the public sphere. A problematic habit of pursuing in deprived situations because they are not attractive to private interests. The risk is to see part of the public assets privatized having little in return<sup>1</sup>.

The fragmentation and uncertainty of public action make these places increasingly inert and excluded from organic regeneration projects. Paradoxically, these situations are no longer in peripheral positions as often in the past (the dichotomy center-periphery appears now obsolete), but they discover themselves again at the edges of relevant urban and territorial transformations. Processes that strongly project looking international ways and experiment innovative forms of living, from which the marginal contexts draw no reverberation or stimulus of improvement. Just looking at the presented research context, we can see that the Milan-Bollate prison, for example, is closed to the Expo2015 area or the project of the new Inter-Milan stadium is close to critical situations in that part of the city like the public neighbourhood of San Siro.

#### The wicked problem: a tool of de-marginalization.

The figure of the wicked problem applied to marginal contexts appears a useful tool not only to describe the complexity and turbulence that characterize these contexts but also for their treatment. Rittel and Webber defined wicked problems as societal problems with many interdependent factors, making them seem impossible to solve. They might be defined and solved in several ways, and there is no optimal and definitive formula, depending upon peoples' "world view" (Rittel and Webber 1973, 166). On the opposite side, we have tame problems. 1 See, for example, the first hypothesis of intervention for the Lorenteggio district described in the backstory. Some signs of virtuous public-private synergies can be glimpsed with the social responsibility programmes promoted by important private companies whose lasting effects are all yet to be verified. The two theorists underline how the distinction between wicked and tame problems is to be found in the knowledge conditions within which a solution to a design problem is elaborated. In the case of a wicked problem, "problem understanding and problem resolution are concomitant to each other" (1973, 160).

Accept the glance of the wicked problem means to accept that "prior knowledge" is not sufficient, nor is it possible to fully describe the boundary of the design problem and the solution (Winch, 2010). The nature of the project (a combination of physical and social actions) is discovered during the interaction. It is addressed sequentially when the participants in the process are working with the problem.

The condition of marginality is not static and immutable. It is always possible to experience opportunities for "de-marginalization" (at least in part) or in any case make attempts that punctually improve living conditions. Experiments that in the context of the wicked problem do not suffer from "anxiety performance", abandoning the logic of urgent response to an emergency, accepting complexity without simplifying it. In dealing with complexity, we proceed by trial, aware of the partiality and fallibility of the answers because "solutions to wicked problems are not true or false, but good or bad" (Rittel and Webber 1973, 162). The experiment allows advance in the problem understanding "since every specification of the problem is a specification of the direction in which the treatment is considered" (161).

Thus emerges an idea of design that can proceed by approximations, an attitude that allows overcoming the established linear modes of intervention that have determined the inertia of marginal contexts. Designing an interactive process is extremely useful in tackling ill-defined or unknown problems creating many ideas in brainstorming sessions, adopting a hands-on approach in prototyping and testing. The project imagined as a process opens to the valorization of the context resources.

If observed closely in marginal contexts, it is possible to identify elements material and immaterial - capable of supporting potential openings to change and strategies to combat fragility. The exploitation of space resources can be a decisive issue if re-defined and relocated in a broader and comprehensive qualitative conception that relates to those who are present daily in the territory and is committed to it. They are groups of inhabitants, third sector organizations but also local administrators. Processes of regeneration of these contexts cannot disregard the value of the intelligence of these places, "in fragile territories there are extraordinary resources, human, landscape, cultural and environmental, which, if supported by new policies place-based, can bring an economic and social benefit for all. There are great resources in the urban suburbs, where associative networks can be the strengths of real urban regeneration projects" (Balducci 2019). A system that must, however, be aware of the fragility that often characterizes local initiatives (for limited economic resources and time being in most cases voluntary)<sup>2</sup>.

A way of dealing with the problems that can be supported by increasing capacity and experience of third sector and associations to work per project, 2 The reasoning developed in the article refers to the "fragile territories" and in particular to the suburbs, considerations that are considered valid also for the situations here defined "marginal contexts". compete in tenders, develop a capacity for partnership and integration. A capacity to work in variable networks that mix more and more bottom-up and top-down initiatives.

In this framework I conducted my doctoral research, investigating what may be the ways how the architectural project - as a research action and professional practice - can support and operate in relational processes of reactivation of relational contexts. Keep in mind that "every wicked problem is essentially unique" (Rittel and Webber 1973, 162), this means that from every experience we can learn a method to deal with a complex problem and not to set up a protocol to follow.

## **Research, Action and Design**

#### Research by doing.

It has already pointed out several times that this work has been conducted "reflecting in/with/on action". *The Reflexive Practioner* (Schön 1983) is the inevitable reference of this approach. Noting, in those years, a crisis of confidence in the professions and in their ability to contribute to the wellbeing of society through their expertise, Schön points out that the best professionals, through improvisation in everyday life, are able to "find ways to make sense of complexity and reduce uncertainty to manageable risk" (46).

It is a challenge that seems to be very topical even today. Facing the challenges "the workday life of the professional depends [also] on tacit knowing-in-action. Every competent practitioner can recognise phenomena – families of symptoms associated with a particular disease, peculiarities of a certain kind of building site, irregularities of materials or structures – for which he cannot give a reasonably accurate or complete description. In his day-to-day practice he makes innumerable judgments of quality for which he cannot state adequate criteria, and he displays skills for which he cannot state the rules and procedures. Even when he makes conscious use of research-based theories and techniques, he is dependent on tacit recognitions, judgments, and skilful performances" (49).

Tacit-knowledge is also produced in those research activities that deal with specific situations by taking transformative change. The purpose is to recognise the tacit knowledge produced in the practice of the two cases attended, experimenting and observing ways to make it available to other situations and subjects. These years have been an opportunity to "use the research [my] to understand research [with other]" (Appaduari 2000, 9), a "research by research".

#### Exemplify the action

It is a survey in which two learning layers overlap. The first refers to a possible way of acting research, in terms of posture and sharing the knowledge achieved. The doctorate is a part of a personal investigation that I imagine it can continue by doing and sharing research inside and outside the university. The aim is to recognise and tell the new things that have been experienced in the two research. First of all, through the selective telling of each experience, of their ability to produce effects and of the instruments experimented, I want to try to make the knowledge produced explicit and available. They are

stories that privilege the narrative dimension as a personalised exposition of facts, experiences, reflections, sensations and memories (Gregotti 2018). The narration is different from the description that instead tends to be a more or less objective account of a process. The narration is an instrument of space design, of action on space and as an operable legacy of experience.

The aim is to exemplify ways of doing research that can be a help in conducting other studies or projects and not to define replicable models. Adopting a perspective according to which reality and knowledge always exist within a series of historically and socially dependent views that correspond to different attitudes towards the world (Rorty 1979). The tale, renouncing to prescribe, leaves space for the reader to recognise what continues to be implicit.

Comparing the action of the two research we investigate what is recurring in them, particularly in terms of the method and tools used in architectural design, trying to conceptualise their potential and criticality. The devices told in Tools of the Possible, for example, are not consciously put into play by the two research, but it is by observing their work that the tools have been recognised as possible and practicable. The section proposes a first operational description.

The definition of tools proceeds more by reformulation and incremental innovation of what already exists in the designer "toolbox", renouncing for novelty. An attitude that emphasises the recursive and comparative nature of doing research, starting with the people I work with daily and those are interested in similar themes and situations in the research's world.

A process of reflection and sharing that starting from me can be described as an "integrated set of circles of observation, either concentric or not" (Van Den Berghe)<sup>1</sup>. The first circle, the inner one, is occupied by 'me', who performs research actions and observations of my research actions. The second circle consists of the members of the research team<sup>2</sup>, who discuss the actions and observations activating a feedback loop that modify the actions and observations of both, my research and the research carried out together. The third circle consists of the group of "peers", both scholars and practitioners, who discuss the actions and observations activating comparisons between each other's experiences<sup>3</sup>. The fourth circle, not necessarily the broadest, consists in the "non-disciplinary experts" meet in the actions, being involved in the process can gain more awareness in their actions and at the same time constructively criticise research actions and observations.

#### Share learning by designing.

Opening the reflection to those who meet in the process leads to the second layer of learning: the project's ability to produce effects in real contexts. Remarkable is the fact that the two research practised and observed have been conducted according to the research-action model, which is based on the idea that "one gets to know truly only what one tries to change" (Saija 2017, 8). The core is the agency of the research. On the one hand, there is the possibility and will to produce significant impacts in reality; on the other hand, the ability 1 It takes up and adapts a concept expressed by Jo Van Den Berghe in introducing the workshop "Observations, a Cartography for researchers in DDDr" held at CA2RE+ Conference, Ghent 2-7 October 2019.

2 Over the years, at the Department of Architectural and Urban Studies of the Politecnico di Milano a group of lecturers and researchers recognize themselves around the Action-research method and with a certain continuity carry out research activities in contexts of marginality and fragility mainly in the Milanese context.

3 In the last year it was helpful to present a draft of observations to a symposium, conferences and academic meeting. to build cognitive paths rooted in the investigated contexts. The researches acknowledge their political relevance, tied to what Appadurai called "*the capacity to aspire*, the social and cultural capacity to plan, hope, desire, and achieve socially valuable goals" (2006, 176).

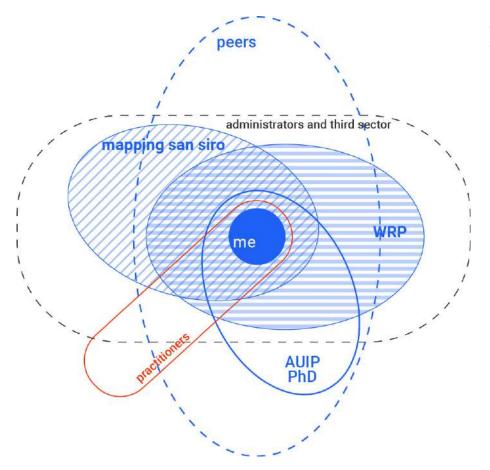
Reflecting on the ways knowledge is produced and the ethical dimension of the researcher, Francesca Cognetti recalls that "action research is research in the field, and the field implies a physical place, but also a relational place" (2016, 44). For those involved in architecture, the relationship takes place by opening up the design process to the context, recognising it as a habitat of "negotiations and controversies" (Yaneva 2009). The proposed modification of space, sometimes involving the realisation of fragments, becomes the sensor through which to investigate the theme and context in a contingent way. The architectural project is not only a moment of "problem-solving" but also a tool for "problem-setting" by practising a sort of "situating" and "networking" (Cognetti Ranzini 2016).

The centrality of the project allows starting a comparison also with all those professional realities previously mentioned that practice "new ways" of doing the project on a daily basis. A comparison that starting from two distinct positions, academic research and daily practice, can find in the modification of space a common ground for growth, recognising elements of innovation that are transversal but also specific to one's own work.

Stressing the opportunity to trigger a dynamic loop between academia and practice for architectural knowledge, Jeremy Till suggests a model organised in three possible research stages: "architectural process, architectural products; architectural performance". He argues that "most importantly the model also describes architecture temporally (as opposed to a set of static fragments), with one stage leading to another and, crucially, creating an interactive loop in which one stage informs another. For research to be most effective, and thus for architectural knowledge to develop, it has to feed this loop" (2007, 4)

#### Design tool for theory

Recently, in the field of architecture and architectural research takes place an articulated reflection about "why theory by design in a valid option" (De Walsche, Verbruggen, 2015) and about how to bring out the tacit knowledge of which the project activity is the carrier. Murrey Fraser commenting on the Research Assessment Exercise (RAE), published in 2008 by the UK Government, points out that "architectural research in Britain come of age (...) for the first time ever, architectural research was shown to be as strong as any academic subject around" (Fraser 2010, 8). Presume you can imagine the impact that critical theory and cultural studies have on the debate on architecture. In that case, Fraser points out that "above all, the crucial new area that will emerge in coming decades is design research. Again, it might seem curious that design – the central, and indeed distinguishing, a feature of the architecture profession and architectural schools alike – is not yet seen as possessing its own corpus of research. This is a deficiency which needs to be remedied urgently".



<< The circles set of observation and sharing of the research.

Fraser, like others, encourages a new research perspective that places design action at the centre. In recent years a series of conferences, research programmes, projects and publications have given rise to an intense debate around "Research by Design". Among the effects, there is the networking of scholars and practitioners who are questioning if and how the project can be a research tool.

Leon van Shaick can be considered the pioneers of Design Practice Research. When he arrived in Melbourne in the late 1980s, he was surprised by the quality of the architecture produced by the local studios. He promoted a series of meetings where he invited architects to examine the nature of their work. During these "meetings of creative innovators" the reflection revolved around the "search for the nature of their innovation". The aim was to identify "an approach to research that was not "about" design but was research in the medium of design itself" (van Schaik and Jonson 2011). Started like meetings, the initiative becomes early a doctoral program at RMIT in Melbourne. The RMIT practice-based PhD programme now operates across three continents Australia, Europe (Barcelona) and Asia (Ho Chi Minh City). Professionals participating in the programme are asked to review their completed or ongoing projects to bring out a new or renewed understanding of their work. A reflection that must lead through the medium of design to a conscious advancement of their future approach and way of working. The Practice Research Symposium (PRS) holds meetings twice a year. During the symposium, candidates publicly show the progress of their research to the group of supervisors and colleagues. Each event also includes public lectures and social events. The objective is to facilitate collective learning and is the tangible focus of a learning community for practice research across RMIT University and its partner institutions.

In Europe, the PRS was crucial to the organisation of the training program ADAPT-r (Architecture, Design and Art Practice Training-research). It opens to researchers in architecture, design and arts. Through training creative practice researchers in the explication and dissemination of tacit knowledge, the program aims "to make a substantive contribution to meeting EU 2020 priorities by building a new generation of creative practice researchers and research-led practitioners able to meet the complex and often competing demands of contemporary Europe"<sup>4</sup>. The seminars are opportunities for early-stage researchers to communicate their research to a public of peers, receive valuable feedback and built a network meeting after meeting.

The benefit of building a network between scholars, researchers and professionals has prompted the three European associations ARENA, EAAE and ELIA<sup>5</sup> to evolve the ADAPT-r experience into the CA<sup>2</sup>RE, the Conference for Artistic and Architectural (Doctoral) Research<sup>6</sup>, a joint platform to support research in all fields of architecture, design and the arts. In the evolution of the programs, we have witnessed an opening (or shift) of the observation core, from practitioners' work to design activities wherever they take place, in academia or practice.

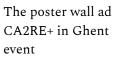
In a perspective of "knowledge for" and not "knowledge of" (Glanville 2005: 122) I carried out my doctoral research.

#### 4 http://adapt-r.eu/

5 Architectural Research European Network Association – ARENA, European Association for Architectural Education – EAAE and European League of Institutes of the Arts – ELIA.

6. https://ca2re.eu/





A day of comparison with the research group Mapping San Siro





# INVESTIGATION BY OPPORTUNITIES

The experiences, conducted in first person, become selected stories of what happens. In particular, here are reported the two action-researches conducted at the DAStU of Politecnico di Milano: the first one in prison and the second one in peripheral areas of Milan. After a brief description of the context in which they operate, the narrative focuses on design actions undertaken, tools used, materials produced and events occurred. Forms of design emerge at the different scales of architecture, politics and people's lives. In these experiences, the design is used as a probe able to understand reality and test transformative actions. It allows crossing a series of paradigmatic situations that intercept the material, social and institutional dimension. The investigative character, combined with a clear intent devoted to action, aims to produce narratives that provoke new imagery and trace of replicable method.

Over the last few years, I have been participating in the research activity of a heterogeneous group of the Department of Architecture and Urban Studies of the Politecnico di Milano engaged in defining a design method of relational architecture for collective (not just open) spaces in particularly critical areas.

The investigation crosses some distinct research's line and practices them in different ways, participating in calls for funding and intersecting research with educational activities. The common intention is to use architectural design as a tool for analysis and proposal for modification, exploring the relational character of collective space as a support for the formal quality and use of places. Open and shared research is an attempt to build a bridge between theory and practice, academia and society, architecture and other knowledge involved in the design process.

As already mentioned, two research, in particular, are the field and investigation tool of the present PhD research: *Prison Architecture* and *West Road Project*. This section describes their achievements, selecting the steps, actions and products that have intervened in the process. Stories that are the outcome and instrument of the project, which aspire to be "examples that can be used as principles of generalisation" (Ferraris 2009, 49); individual events that, when faced with the facts, may suggest actions to be repeated in other circumstances. For this reason, they are not to neutral or exhaustive reports of what happened, but the architectural design is the guide of the narrative flow, what activated the design and what it activates.

By choosing the form of the story in "live", or almost, the intention is also to leave the reader the possibility of "discovering" values and things in our work that we never thought about, conscious that the human factor and contingency are relevant. Thinking of tales as project tools, they can resemble archives whose consultation can be done in parts, and their contents can be implemented over time. The oriented narrative of an experience thus becomes available to be used by other researchers and/or in similar project contexts.

At the same time, the transversal reading of the two experiences becomes a useful tool to argue a possible, even if partial, answer to the research question: how architectural design can equip itself to become one of the key stages of transformations in marginal context. This is why an attempt the two stories are organised according to a similar structure, with sufficiently autonomous steps in order to make partial comparisons between the two parts.

I will focus in particular on: the conditions that tend to render the investigated contexts inactive; the opportunities that have triggered the research activities; the recurrent tools that the research has given itself - the guesswork design, the physical experimentations realised; directs the research, the project's devices designed.

Prison Architecture: from Space of Detention to Place of Relationship.

It is research funded by the Basic Research Funding (FARB)<sup>1</sup> of the Department of Architecture and Urban Studies (DAStU) of the Politecnico di Milano. In the selection criteria, the call for proposals requires that the research funded must be "activities aimed at the expansion of scientific and technical knowledge not related to specific and immediate industrial or commercial objectives".

The research group<sup>2</sup> wanted to address the issue of the "prison space" because it represents a civil emergency in Italy to which it has not so far been possible to give adequate and structural answers, despite the daily commitment of the operators (Directors, staff, etc.) and the associations active in the prison world". The objective of the research is the definition of a planning method, translated into a series of guidelines, which aim to qualify/requalify Italian prisons through punctual interventions of reuse and transformation of a plurality of spaces. To explore and investigate the theme, it used the tools of architecture and urban design, directing his gaze towards the "relational" values of places.

West Road Project. A device to activate networks and public spaces through the widespread periphery

It is a research project selected and funded by Polisocial Award 2017<sup>3</sup>. The theme of that award edition is the "Urban Suburbs" and the reference area is the Metropolitan City of. It is an opportunity to address a theme investigated for some time by the members of the research group<sup>4</sup>, intertwining it with the interest of Italia Nostra Onlus- Milano Nord and the metropolitan belt to promote a bicycle link between the great parks of the west and the city centre.

The project is imagined as a device for activating networks and public spaces throughout the western periphery of Milan. The Spatial analysis and co-design methods are employed in order to foster the improvement of neglected spaces and the future development of local soft connections. The device proposed is an 'adaptive masterplan' that, through the lens of "right to mobility", encourages networks of micro-intervention able to take on a new meaning for public spaces and promotes active engagement of citizens.

1 The fund is established by law 232/2016.

2 The group is composed by Andrea di Franco (scientific advisor), Antonella Bruzzese, Emilio Caravatti, Lorenzo Consalez, Francesco Infussi, Gianfranco Orsenigo, Laura Pogliani with Paolo Bozzuto, Ilaria di Genova, Benedetta Marani, Riccardo Miccoli and Luca Sala.

3 Polisocial is the social engagement and responsibility programme at Politecnico di Milano. Every year it funds initiatives that promote responsible and multidisciplinary research with an effective involvement of local partners and actors, activating productive forms of collaboration on projects with a high social content.

4 The group is composed by Andrea di Franco (scientific advisor), Francesco Infussi, Chiara Merlini, Paola Pucci Gianfranco Orsenigo (DAStU), Alessandra Zanelli (ABC) Adriana Angelotti (Energy dep.) with Anna Cantini, Marianna Frangipane, Valentino Galli and Jacopo Lareno.



## Prison Architecture research

### THE ITALIAN PRISON. A WICKED PROBLEM

#### The Torreggiani judgment.

8th January 2013 the European Court of Human Rights in the judgments about "the case of Torreggiani and others" condemns Italy for violation of Article 3 of the European Convention on Human Rights (ECHR)<sup>1</sup>. The affair refers to the inhuman or degrading treatment suffered by the applicants, seven people detained for many months in the prisons of Busto Arsizio and Piacenza, in triple cells and with less than four square meters each available.

In substantiating its judgment:

"65. The Court notes that custodial measures usually have certain disadvantages for the detained person. However, it points out that imprisonment does not mean that the prisoner loses the benefit of the rights enshrined in the Convention. On the contrary, in some cases, the person imprisoned may need greater protection precisely because of the vulnerability of his situation and the fact that he is totally under the responsibility of the State. (...)

77. The Court then observes that the severe lack of space experienced by the seven applicants for periods ranging from fourteen to fifty-four months (paragraphs 6 and 7 above), which in itself constitutes treatment contrary to the Convention, appears to have been further aggravated by other treatments denounced by the persons concerned. The lack of hot water in the two institutions for long periods, admitted by Government, the insufficient lighting and ventilation in the cells of the prison of Piacenza (...).

The Court of Strasbourg, choosing the pilot sentence, also addresses that the critical problems do not concern only the two prisons in which the appellants are, but "it is a systemic problem resulting from a chronic malfunction of the Italian prison system"<sup>2</sup>. The Italian Government itself declared a state of national emergency in January 2010<sup>3</sup>.

The Italian Government is pushed to act, with emergency measures on the one hand and opening a general debate with the organization of the States-General on the penal executions (Stati Generali sull'esecuzione penale)<sup>4</sup> on the other. The aim was to promote the development of a different culture of punishment and to guide future regulatory choices in this field.

The urgent measures adopted focus on the issue of overcrowding

1 the judgment is available at www.giustizia.it

2 Paragraph 87 of the judgment

3 The state of national emergency for the duration of one year was resolved by D.P.C.M. January 13, 2010 and subsequently extended until December 31, 2012, due to the continuation of the critical situation.

4 See the outcomes of the initiatives at the Minestery of justice https://www.giustizia.it/giustizia/it/mg\_2\_19.pag

and aim to update existing legislation. They deal with the length of detention periods, limiting the use of imprisonment in favour of other forms of surveillance such as house arrest and the use of electronic bracelets. Other actions taken contribute to change the prison system based on the European Prison Rules (Recommendation No. 2 of 2006). The system of "open wings" was introduced; prisoners should use their cells as a place to rest and not spend almost the entire day<sup>5</sup>.

Besides the actions aimed at reducing the recourse to detention and changing the prison regime, the Italian Government answering ECHR<sup>6</sup> mention on-going to programs. In 2010, facing a rate of prison overcrowding of 151, the Government approved the prison construction program, called "Piano Carceri"7. The planned measures are aimed not only at increasing the space available - new buildings - but also at replacing obsolete structures, in order to allow decent detention conditions compatible with the prison regulation and following the Italian Constitution and European standards.

According to the Plan, the interventions should have realized a total of 21.709 new beds to achieve a total capacity of 80,000 prisoners. An amount of 500 million euros were available from the 2010 Finance Bill to carry out the program, and another 100 million euros from the Justice budget. The responsibility for the implementation of the measures lies with the ministerial commissioners from 2010 to 2014.

Overall, the Prison Plan, between

2010 and 2014, improved capacity by 4.415 places, much less than expected. A missed goal as the Accounting Judge underlines, "the final results of the Commissioners' activities, despite the work carried out or in progress, certainly disappointing with the objectives of great speed and effectiveness provided by their interventions"<sup>8</sup>. The Plan was closed in 2015.

Even today, Italy has to face the problem of overcrowding in prisons. The fifteenth report published by the Antigone Association on detention conditions "Prison according to the Constitution" confirms that. After an initial drop in 2010, the number of prisoners started to grow again in the last two years. The inmates are 60,439 at 30th April 2019. Almost 10.000 more than the 50.511 officially available beds to which must be subtracted spaces temporarily under maintenance for a rate of official crowding that is close to 120%.

The Minister of Justice, the Hon. Andrea Orlando, organized The States General of the Criminal Execution<sup>9</sup>, a cultural initiative that implements the emergency actions. It started in May 2015 at the Milan-Bollate prison, and it ended in April 2016 at the Rebibbia Institute in Rome. The initiative wanted to be the starting moment of reflection to get out of a logic of reaction to the last prison emergency. "Six months of extensive and in-depth discussion that should concretely lead to define a new model of criminal execution and a better physiognomy of the prison, more dignified for those who work there and for those who are restricted. The General States

5 For deailed information cf. Ministry of justice. Progress of the action plan submitted to the department for the execution of judgments of the echr, Judgment Torreggiani and others v/Italy 43517/09. Find in http://www.ristretti.it/ commenti/2014/aprile/pdf7/ piano\_governo.pdf

6 It is possible find the copy of letter in http://www. ristretti.it/commenti/2014/ aprile/pdf7/piano\_governo. pdf

7 Order of the President of the Council of Ministers of 19 March 2010, No. 3861.

8 See Deliberation 30 September 2015, n. 6/2015/G.

9 See the Ministerial Decree of 8.5.2015, with which the "Committee of Experts for the conduct of public consultation on the execution of the sentence called "States General on the execution of criminal penalties" was established, and the subsequent Ministerial Decree of 9.6.2015 which provided for the integration of the aforementioned Committee (both published on www. giustizia.it). The initiative was presented on 19.5.2015 at the Milan Bollate prison.

must become an opportunity to put this issue and its implications at the centre of public debate, both in terms of collective security and the possibility for those who have made mistakes to reintegrate positively into the social context, not committing new crimes"10 these are the objectives of the Minister. A reflection among experts, of different disciplines, able to involve the public opinion, making available to all the documents produced. A transdisciplinary approach to deal with a complex and multifaceted problem such as the execution of the sentence.

#### The debate in Italy

Since the 1975 Prison Order came into force, this is the first time that a Minister intervenes to try to implement those parts of the law that concern detention in Italy. The law of 1975, which incorporated the constitutional principles, has never found concrete application in much of its text. "It is therefore 68 years that the fundamental rights of detained citizens remain locked up in the authoritative pages of the Constitution and those of the relevant norms, prisoners of the absence of a culture of punishment" (Polidoro 2016, 30).

Since the passing of the law, the national debate has been conditioned by the emotional wave of individual news stories. On the odious events, prison laws have been enacted, with penalties often disproportionate, in a situation of strong criticality (sometimes illegality) of the structures with decreases in penalties that find no justification and that generate a sense of inadequate protection in citizens.

The reform of the prison system was the result of a long process of socio-cultural growth of the country and the political class. It stated that prison should be a rehabilitation environment for those who had committed a crime and its aim is the full reintegration of inmates into society. Prison must be a place that guarantees the fundamental rights of prisoners also from the daily habitability of spaces. The growth path of those years could be supported by the significant design research of figures such as Mario Ridolfi and Sergio Lenci conducted in previous decades. The first one is the author, together with Wolfang Frank, of the Badu and Carrus prison in Nuoro (1953-1964) and the Cosenza prison (1953-1960). While remaining within established types there is a careful reading of the orographic site, the articulation in geometric figures characterize the plants, the elevations combine the study of the rhythms of the openings and careful use of materials (Sardinian granite and bricks in the Sardinian case). A few years later Sergio Lenci designed and built the Rebibbia District House in Rome (1959-1971), the Rimini Prison (1967), the Spoleto District House (1970) and the Livorno District House (1974). It should be remembered that Lenci, in 1952, began his professional activity as an employee of the General Directorate of the Institutes of Prevention and Punishment of the Ministry of Justice. Although different from each other in these prisons, it is recognizable the attempt to put

10 From the introductory report of the Minister of Justice to the States General, in AA.VV. The States-General of Criminal Execution. Seen by the Prison Observatory of the Union of Italian Criminal Chambers,Pacini Giuridica 2016. in communication interior and exterior. Inside the prisons, he adopts the principle of the campus, articulating the buildings to ensure the best conditions of air and sunshine<sup>11</sup>.

The law of 1975 promotes the creation of more open prisons and of more osmosis with the outside world, where the diversification of accommodation and treatment areas play a central role.

These are the years in which the Sollicciano Prison (1973-1986) was designed and built by the group composed of Andrea Mariotti, Gilberto Campani, Piero Inghirami, Italo Castore, Pierluigi Rizzi, Enzo Camici. It is one of the first times in which they worked with plastic forms, abandoning the right-angle scheme with curved buildings. The cell is conceived as a living unit equipped with a small "private" external space. In 1993, the "Garden of Encounters" will be realized in an underutilized area. It is a result of the collaboration between a group of inmates and the architect Giovanni Michelucci.

It should be noticed that these are isolated cases, the result of the direct involvement of architects outside the organization charts of the Ministry of Justice and the Prison Administration and that they operated in the absence of a clear regulatory and technical framework.

Paradoxically, in these years we are witnessing a progressive disincentive to architectural experimentation. In the eighties, there is a definitive renunciation determined by the massacres for terrorism and mafia. The punitive concept of punishment becomes the guideline of the new prisons, "the gates become the emblem of security; they are placed everywhere in institutions" (Santangelo 2017, 23).

The architectural design disappears completely; a typological scheme is developed whose different articulations are determined by the levels of security to be guaranteed. It imposes a uniformity of image and distribution scheme determined by the construction choices, almost always prefabrication in reinforced concrete, and the objective of reducing costs. The cell space, the shared and treatment areas all resemble each other in terms of total indifference to their size and quality, including guaranteed light and air levels. "Modernity is a long and high reinforced concrete parallelepiped. It is an isolated heath. If the reform of '75 wanted to send a signal about the quality of punishment, who designed the prisons in the 1980s did not catch it. (...) Modern prisons - architecturally insignificant and devoid of any central model of reference stand out grey in grey suburbs" (Castellano Stasio 2009). 40% of Italian prisons were built between 1980 and 1999, and almost always located in peripheral areas. An isolated episode worthy of attention is the competition of ideas launched by the Prison Administration in 2001 for the "prototype of a medium-security penitentiary with a capacity of 200 prison places". Competitors were asked to develop models that "interpreting the new regulatory dictates<sup>12</sup>, would allow a qualified treatment of the prisoner in terms of education, work and

11 For a description and critical reading, not only in an architectural key, please refer to (Bozzuto Miccoli 2020).

12 In 2000 a new Penitentiary Regulation d.p.r. 230/2000 was approved, which imposed an adaptation of the structures to the new regulations. vocational training opportunities, cultural, recreational and sports activities"<sup>13</sup>. 22 proposals attended the competition with 2 winners exaequo. However, the suggestions collected were not developed, and the initiative was soon interrupted.

In recent decades the debate on prisons has become more and more episodic and unable to intervene effectively. In recent years the university world has begun to dialogue with the institutions that deal with prisons. The first case is probably that of the Department of Architecture of the University "Federico II" of Naples and the Guarantor of the rights of persons subject to the limitation of personal freedom in Campania. Some initiatives of the Department of Architecture and Design of the Politecnico di Torino, the Department of Architecture and Urban Studies of the Politecnico di Milano, the University of Salento<sup>14</sup> follow Naples. Collaborations that have not only brought students and university researchers to the prisons but in many cases have managed to leave tangible signs of collaboration<sup>15</sup>.

# The States General of Criminal Execution.

The *States-General* appears a new beginning for an open reflection on the role of space in the penal execution. The aspiration is to activate concrete actions, aware that proposals need time and experimentation in order to affect the conditions of prison life effectively.

The work, coordinated by a committee of experts, was divided

into 18 thematic tables, composed of university professors, magistrates, lawyers, prison managers, representatives of the world of volunteering, culture and sport, more than two hundred people. Each table produced a report, reports followed by a final document, drawn up by the committee of experts, which outlined the main lines of the initiative and some hypotheses of intervention<sup>16</sup>.

Penalty Space: Architecture and Prison is the title of the 1st Table. It is the one that most urges our knowledge, even if it is not the only one. In its report, the commission the "infantilizing, recognizes afflictive and incapacitating role of spaces". The causes detected are: overcrowding; emergency policies for mafia and terrorism "that have limited movements, relegated prisoners to cells, hindered work and relationships"; the results of the "prison plan", characterized by inappropriate territorial locations and obsolete types of construction. The commission has produced a series of recommendations whose objective is to overcome the "separate" character, and which synthetically provide:

1. Opening of a wide process of comparison of the Penitentiary Administration with University, Foundations, Research Institutes, Professional Associations, Local Authorities, Associations, experts, aimed at achieving an architectural dignity of the spaces of criminal execution, also through the involvement of technical expertise within the same Administration; 13 From the announcement of competition reported in the essay of Burdese, New Regulations of 2000, competition for new building types of 2001, prison and city, in Anastasia et alt. 2001.

14 In this case the protocol of understanding also involves the Order of Architects PPC of the province of Lecce.

15 For a more extensive description of some of these experiences see (Santangelo 2017)

16 Prison Observatory of the Union of Italian Criminal Chambers, The General States of Criminal Execution, Pisa, 2016. See also the document of the C.S.M., Resolution on the States General of Criminal Execution

Drafting of criteria 2. for design/restructuring the of institutions aimed at defining compositional and functional systems capable of qualifying residential units and spaces for work, study, socialization, interviews and intimate expression of affection and different religious faiths. concerning the concrete implementation of 'dynamic supervision' and paths of accountability, autonomy and participation of prisoners;

3. Reorganization of the spaces through the involvement of all internal actors and the professional training of prisoners according to their direct participation in routine maintenance work;

4. Drafting of innovative criteria for the localization of new institutions in contexts of active life, reworking the question of the wall perimeter, accesses, physical relationships with the context, favouring the attachment to the urban territory and overcoming the separate and isolated character of buildings. Finding housing for staff outside the perimeter of the prison to replace the housing in the internal barracks;

5. Strengthening of facilities to support external criminal enforcement (Reintegration Centres support for and alternative measures, ICAM, Semi-Freedom Houses. Communities inserted in the urban context). Redefinition of the design of penal colonies, institutions with reduced security, women's detention facilities. Evaluation, in the context of the prison divestment of detention facilities, of reuse hypothesis aimed at an innovative vision of criminal execution<sup>17</sup>.

The need for a long time and new rules for the concrete adoption and implementation of a new prison model should not be an excuse for inactivity. Thanks in part to the sensitivity of some individuals within the institutions, it is possible to carry out precise experiments which, while testing possible paths of transformation, contribute to regularly nourish reflections on the spaces of the prison and its relationship with the territories that host it<sup>18</sup>. These initiatives are occasions of the encounter between the outside world and the "everyday materiality" of the prison world. They are an instrument of "re-education of public opinion", a fundamental step along with a strong political determination to translate the work of the States-General into a profound change in criminal execution (Glauco 2016).

# ACADEMIC RESEARCH AS AN OPPORTUNITY

#### The FARB2016 call, an occasion.

July 2016. the Department of Architecture and Urban Studies of Politecnico di Milano promotes the selection of research considered strategic for the scientific growth of the Department. The occasion is the availability of funds for basic research activities (FARB). These must be able to "contribute to basic/ fundamental/exploratory research",

17 From the final report of the commission's work, https://www.giustizia.it/ giustizia/it/mg\_2\_19.page

18 See the Association Artieri in Torino. to be understood as "activities aimed at the expansion of scientific and technical knowledge not related to specific and immediate industrial or commercial objectives"<sup>19</sup>. The proposals must have a maximum duration of 18 months; they have to consolidate topics and enhance the Department's expertise; they have to be innovative in terms of themes, objectives and method; they have to be transdisciplinary.

The call is an opportunity for some professors and researchers of the Department to share some experiences on the subject of prison gained over the years, making their own contribution to the national debate fueled by the experience of the States-General. The experiences are: the research conducted by Andrea Di Franco as supervisor of master's thesis, with the Padua prison and the Ristretti Orizzonti; the "field teaching" experiences in the prisons of Bollate and Opera by Emilio Caravatti and Lorenzo Consalez; the project of the meeting between parents spaces and children carried out by Antonella Bruzzese (with a working group of DiAP-Politecnico di Milano) in collaboration with Provincia di Milano and Casa Circondariale di Monza; the project experiences, realized and in the phase of realization, conducted by Emilio Caravatti in the prisons of Monza and Opera. The group presented the proposal Prison Architecture: from Space of Detention to Place of Relationship.

February 2017. The proposal gets financing and starts its activity<sup>20</sup>.

#### THE RELATIONAL PROSPECTIVE. A DRIVING GUESSWORK

Starting from the indications of the States General, the intent of the research is to investigate the theme of the prison space to define a modification tool capable of acting on the different critical issues that characterize it. The research questions are "what is the civil role of the space of the penalty today in society and in the city that hosts it? What could be the possible modifications of a space historically inappropriate)"21. Mauro Palma22-National Guarantor of the rights of persons detained or deprived of personal freedom - remembers that "the space concretely conditions the sentence in its unfolding far more than very acute theoretical elaborations", the research starts by observing things, in their essential and irreducible concreteness. For this reason, architectural design and urban analysis are the privileged instruments of investigation "How can the prison institution be put in a position to perform its social service duties? How can the architectural project equip itself to become one of the key steps in the necessary transformation process: from the identification of assumptions to the composition of a common language to the formulation of a system of places and internal and external spatial relations that fit into existing structures?"23 These questions have been answered starting from some assumptions, towards the opening of the prison system: proposing the adoption of active surveillance in all prisons; dealing with the modification of

19 From the call of selection

20 The proposing group is composed by Andrea Di Franco (scientific responsible), Antonella Bruzzese, Emilio Caravatti, Lorenzo Consalez, Francesco Infussi, Gianfranco Orsenigo and Laura Polgiani. Over time have collaborated Paolo Bozzuto, Ilaria Di Genova, Benedetta Marani, Chiara Peruzzotti and Luca Sala.

21 By Franco, from the research report.

22 Mauro Palma together with Francesca Cognetti (Delegate of the Rector of the Politecnico di Milano for Social Responsibility and Territory), Vittorio Gregotti (architect and essayist of international relevance) and Giancarlo Paba (President of the Michelucci Foundation) formed the scientific committee of experts that the research has used.

23 From the research report, taken up in the current publication existing institutions excluding the construction of new ones.

#### The design guesswork.

The willingness to go beyond the affirmation of general principles, setting itself the goal of developing "effective tools" has led the research group to clarify its point of view. Also, this time the reference is Palma when he recalls that "detention must be a source of responsibility and opportunity" (2011). Empowerment and re-socialization become the cornerstones of the whole activity that imagines a conception of the execution of the sentence attentive to the relational dimension. The "spaces of relationship" are therefore the object of research, whether they are readings of the context or proposals for modification. The group believes that "the creation of adequate spaces, capable of supporting and enriching the relational experience of the different subjects involved in various ways in the socio-spatial dimension of the prison and, more generally, the relationship between the prison and the city, can facilitate the activation of the resources that prisoners carry. The enriched relationship could facilitate the inmates' reintegration into society and help to limit cases of recidivism, a determining factor in the overcrowding of Italian prisons"24.

Thinking about relationship spaces in architectural practice is a critical form of analysis and denunciation of prison problems. At the same time, it becomes an act of change aimed at improving prison conditions. In this perspective, the research tries to define a strategy that no longer works *for* prisons but intervenes *with* the prison reality itself in a collective process of the practice of reality and its modification.

In this vision, the architectural practice, in thinking the space of relationship, can act both as a "critical form" of analysis and denunciation of prison problems, and as an "action of change", directed towards the improvement of the quality of prison conditions in general.

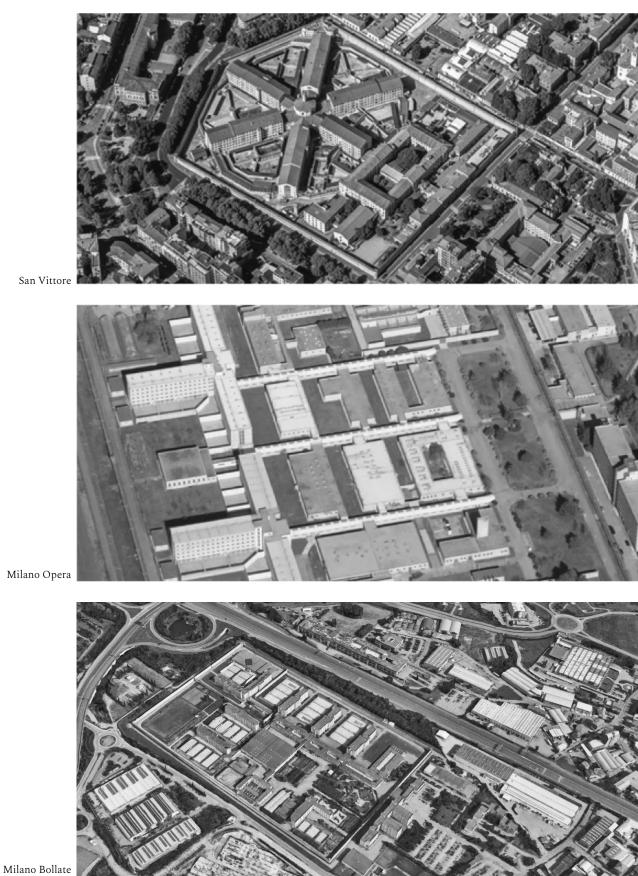
In this patient reading and rewriting of space, it becomes urgent to define a strategy that no longer operates through an action for prisons, but intervenes synergistically with the prison reality itself, through the use of and methodologies collective seek experimentation that to involve those who practice this reality. The relational potential is the lens through which investigate the prison's reality starting from the articulation of the spaces and how the prison and the territory interact.

An "atlas of spaces and practices".

The research uses the Milanese institutes as paradigmatic cases. San Vittore historical institute inserted in the city fabric, Opera in peripheral position and Bollate outside the city (all institutes of the 80's)<sup>25</sup>. The enviorment of the prison is described in its morphological, typological, infrastructural and service characters. The description takes the form of an open and propositional operation of possible modifications starting from the permeability of physical limits. The spaces within the walls are divided into collective, individual

24 From the proposal of request for funding.

25 Within the research were analyzed and briefly described other Italian cases, however, starting from the relationship of architectural quality and the relation with the legislation.



San Vittore

connective. The and analysis of the structure of common, or potentially common, spaces have broken them down into distinct and recognizable elements, available to be recomposed in new forms during the design. The research focuses on the relational spaces as a support system for places, leaving the role of rooms in the background. It is a choice consistent with what emerged from the States-General and with what recommended by the National Guarantor. "The spaces of the cells, for example, are to be considered only and exclusively as 'overnight rooms': hence the need to create other, different places where to carry out daily life. Important, from this point of view, is to have access to green spaces; it is necessary to abandon the practice of cemented courtyards" (Palma 2017).

To bring out the current idea of detention and to promote its idea, the group decided to read the architectural form of spaces together with the uses and practices of individuals and communities that practice them. It is not only about the prisoners but also their families, the security and administrative staff, lawyers and volunteers who for different reasons and ways practice the prison. Prison spaces tend to be generic, different subjects - for roles, uses and times - share the same places. The possibility of building a link between individual and place often happens in the negative, not rarely by rejection. Often those who live in prisons lose the sense of time and relationship. If observed closely, prison is a place of socialization, often forced. The research faces the "spatial and temporal dimension of human relations". It has operated from before a reconnaissance of the multiple initiatives that happen inside the Milanese institutes to operate a work of classification and reorganization then. The result is a catalogue that decomposes and recomposes the activities and practices that happen inside the Milanese prisons and between them and the city, the subjects that practice them and the places where they take place or could be carried out. The research then confronted with the national regulatory framework that regulates the life of prisons, observing those aspects that influenced the spatial configuration of the different structures. The reading of the rules and regulations allowed the validity of the current rules to emerge and to consider them a reference for design criticism.

At the same time, it has been observed how in the European context standards and architectural design dialogue in the definition of prisons that are characterized by the centrality of the relationship's theme. These can be taken as a reference for the modification project. The analysis and mapping of the exemplary cases are codified according to the method of decomposition by spatial elements consistent with that carried out for the Milanese cases.

#### The relation as a method.

In development, the research aims to relate the body of who attend the prison with the spaces of detention. The architectural design is intended as a relationship between people, inhabitants, and the modification of the space. Putting social needs in tension with formal logics is the way to give meaning to the expression of relational spaces. For this reason, attempts have been made to build networks of relationships as wide as possible to connect as many people involved in the complex prison institution. The research has built its path through the interlocution and the work with the Directions and the Police staff of the Milanese Institutes and the Prison Administration Board. A significant contribution to the research has been given by the National Guarantor and the City Guarantor, Nadia Naldi. The comparison with other university study groups, in particular with the Federico II faculty of Naples and the Polytechnic of Turin, has also been carried out.

Over the 18 months, there have been informal meetings, repeated visits to Bollate and Opera institutions and many workshops there. These initiatives held contributed to the emergence of a certain familiarity with places and people, which allowed to consolidate a mutual trust between the parties. The work of analysis and project with the prisoners has been made possible by the mediation of existing working groups in the structures, such as the Group of Transgression<sup>26</sup>, the group of section representatives of the Opera prison, the Cultural Commission of Bollate. These groups gather people detained around different activities and training projects.

A significant role in the process of knowledge, comparison and design experimentation has been played by the Design Workshop of the first year of the Master Degree Course<sup>27</sup> conducted at the Second District House of Milan-Bollate. In the form of *open didactics*, we questioned the civic and social role of architecture through a dynamic process of analysis of places, interaction with the many people who attend the institute and the definition of new types and languages of the detention space, an open path between a necessary realism and a utopian vision.

In the workshop, we tried to formulate a new thought to rethink the prison both as a place of people led to live a different time made of certainties, that of punishment, but also of design hope. Thinking about the spaces of relationship in architectural practice is a critical form of analysis and denunciation of prison problems, at the same time, it becomes an act of change aimed at improving prison conditions. In this perspective, the research tries to define a strategy that intervenes with the prison reality itself in a collective process that practices reality and its modification.

# THE TRACE OF FREEDOM. AN UNFORESEEN EXPERIMENTATION

#### The request.

23rd October 2018. At the garden of the meetings of the II Reclusion House of Milan-Bollate was inaugurated the *Casetta Rossa*. This small pavilion bears witness to the common path taken by the students and teachers of the architectural design workshop, the management and staff of the Prison Police, the *Carte Bollate* group<sup>28</sup> and the *Group*  26 The Group of Transgression is a permanent laboratory of reflection in which prisoners, university students and ordinary citizens participate with the aim of training students, personal development of the convicted person and the development of common projects.. www.trasgressione. net

27 The workshop was directed by Professors Andrea di Franco, Chiara Merlini and Michele Moreno for the academic year 2018/19. The following year Elena Maranghi replaced Chiara Merlini. Both years the laboratory practiced the project having as a case study the Second House of Reclusion of Milan-Bollate. The students were asked to develop a project that worked at two different scales. At the general scale they understood the process of modification extended to a large part of the prison structures, involving in the reflection also the external spaces, deputized for the relationship with the surrounding urban environment. The work carried out at the small scale is expressed as a moment of synthesis of the previous look, calibrating the possibilities of modification with regard to closer objectives, both in terms of feasibility and the involvement of areas of the structure - a pavilion.

#### 28 Cartebollate.com

29 The realization is the result of the first year of laboratory activity, a.y. 2017/2018. Also the laboratory of the following year, 2018/19, maintained the same methodological structure by doubling the project outcome on two scales and compared to two degrees of possibility. The work carried out at the small scale focused on the theme of the relationship as a comparison titled "Agora" of Transgression. The pavilion represents an unforeseen outcome by the research during the writing phase of the project<sup>29</sup>.

September 2017. During the conception of the didactic program of the workshop, the interest of bringing the didactics inside the prison emerges. Angelo Aparo, psychotherapist and coordinator of the Group of Transgression, is contacted as a possible mediator for the activation of a dialogue between prisoners and students<sup>30</sup>. In the face of the willingness to participate in the project, he requests to "leave a physical trace of the collaboration between students and prisoners". The group accepts the challenge and is committed to building the conditions to shape this trace<sup>31</sup>. Thus, was born the initiative "Trace of Freedom", a project within a project.

#### A co-design workshop.

October 2017 - January 2018. The educational workshop has extensively experimented design, both about the modification of the prison structure and by opening a reflection on the spaces' uses. The place of the project is not given in advance. The students have to elaborate on a design thought that defining a specific theme selects and involves the spaces of the prison considered most suitable. towards innovative This path thinking on shared and individual spaces has been carried out in direct collaboration with prisoners and police officers, as co-designers, through specific mechanisms of participation.

The institute of Bollate is a privileged place; since its opening

in 2000, the management has opened and involved the city in its rehabilitation project. An attitude not supported by the shape of the space. The structure reflects the generic typological dictates of highsecurity penitentiaries of the 80s.

The objective of the design workshop is to develop design ideas that qualify the time of people held outside the rooms. Leisure time often has no opportunity to materialize into activities. Free time that takes on a new value with the adoption of dynamic surveillance and open custody system<sup>32</sup>. Students are challenged to ask themselves what "free time" means within the confines of the boundary wall. Figures, shapes and architectural types are put in tension with other concepts such as freedom, limit, separation, connection, well-being to others identified during the design process.

The free space is always declined in a relational key. "This means, for a subject, the freedom to take responsibility for a project for his or her own life, however reclusive, in relation to the projects of the lives of others. That is, the freedom of space is understood as the possibility to inhabit that space with an idea of a project that orients, that gives meaning to one's own time"<sup>33</sup>.

The projects have to qualify the institute according to the "relational key", through interventions of modifications of spaces, both inside the prison and close to it. It should be remembered that the surrounding area has been affected in recent years by significant changes linked to the construction of the Fair and the EXPO 2015 30 The previous years Emilio Caravatti and Lorenzo Consalez had already made use of his collaboration for the organization of some didactic workshops within the Opera and Bollate structures.

31 It should be remembered that at that time contacts had just been made with the management of the institute and that there were no financial and technical resources since the research program did not foresee any achievements.

32 It is a regime that provides for the opening of the accommodation rooms between 8 and 14 hours a day, leaving freedom of movement within the section for medium and low security prisoners. Freedom of movement that it is hoped will also occur outside the section to carry out a series of work and non-work activities. At the same time, the Prison Police is no longer called to implement a static control on prisoners, but is called to observe and know the detainee. The regime was introduced with the circular of the DAP of 14 July 2013 "Guidelines on dynamic surveillance www.polpenuil.it.

33 From the speech by Andrea Di Franco given at the conference Spazio e libertà negata organized by the National Guarantor on October 28, 2019 at the Treccani Foundation in Rome. experience and its legacy. This "city in movement" and prison could enter into resonance, articulating an idea of prison as an instrument of relationship and not of exclusion towards its surrounding.

The experience of the educational workshop is composed of two thematically related projects. One project is more theoretical, engaging the whole prison and its urban context; the other project is closer to the realization, practising the scale of the "small architecture". A new structure inserted in the open-air talks area. Within the overall vision adopted, the participants (students, inmates and agents) had to design a pavilion "that expresses and make tangible the possibility of a project that still survives within the walls. A possibility that is in the hands and thoughts of its inhabitants, and associates precisely to the possibility of the design the deepest nature of the idea of freedom" (Di Franco, 2014).

Not knowing yet the real possibilities we decide some constraints: the size of the structure, a cube of 3 meters side, and wood as the main material to be used, leaving open the possibility of selfconstruction.

Students, teachers, prisoners, operators of treatment activities, police personnel, worked together.

The design process assumed the *participatory form* between students, teachers, prisoners and operators of treatment activities, police personnel. The process developed a correspondence between designers and inhabitants. In a context where living is forced, participation returns a fragment of planning to

those who have been excluded. The project becomes a possibility of choice and a need for comparison between points of view. The common path, for students, it is an opportunity of in-depth knowledge of the reality in which they have to intervene, for prisoners and agents, it is an opportunity to formulate a project thought in the place where that thought is programmatically excluded<sup>34</sup>.

The first meeting took place in October 2017, a visit to the facility accompanied by a police officer and the head of treatment services. Four mornings of co-designing was followed by within the theatre space. Arranged on several tables, each group of students using drawings and models shared and discussed the various phases of the project with some inmates and officers of the Prison Police.

8th January 2018. The experience of the didactical workshop is about to end. Soon we will identify the project that will potentially be realized. The required funds are still missing becouse the research funds are not sufficient<sup>35</sup>. An article about the *Buone Notizie* insert of *Corriere della Sera* is out<sup>36</sup>. In the article, which tells the conducted experience, explicit reference is m

ade to the lack of adequate funding for the implementation. The story strikes the attention of the president of the *Civicum Onlus Association* that with an email addressed to Andrea Di Franco, the following day, asks for a meeting to know more about the project. Known better the project, the association decides to donate the realization asking to allocate a share to the making of a 34 The project of a participatory space inside Italian prisons has a significant precedent in the Garden of Encounters in the institute of Solliciano (Florence) carried out by Giovanni Michelucci in the 80s. Recently, in the "Lorusso e Cutugno" District House in Turin, the Artieri Association has created meetings spaces both for prisoners and for Prison Police officers; Marella Santangelo and the students of the Faculty Federico II of Naples have experimented a system of furniture to make the corridors of the sections in the prison of Poggio Reale in Naples available for collective use (Santangelo 2017).

35 It should be remembered that during the presentation phase of the research project, no implementation had been planned and no funds had been allocated.

36 Over time there have been other releases in newspapers and local news reports.

37 The elaborated proposals have been collected and published in (Di Franco, Gerardi and Guerrieri 2018). video documenting the initiative.

23rd January 2018. The last meeting was an opportunity to show the 13 proposals elaborated and select the potentially feasible *trace*<sup>37</sup>. The jury, composed of inmates and invited teachers, identified three worthy proposals. After a comparison with the management of the institute, the Casetta Rossa<sup>38</sup> was the solution on which to converge the efforts of realization. The proposal is confronted with the theme of affectivity, thinking of an intimate structure and play between parent and children. It is a small wooden structure, painted red, which alludes to the shape of the house. Inside it grows a tree that emerges from the hole in the roof.

#### The Realization.

February 2018. It starts a detailing path of the selected pavilion, both in terms of form and technical solutions. This phase has involved not only the students but also the teachers<sup>39</sup> and the craftsmen (carpenters of iron and wood) of the *Fabbrica Recuperata Rimaflow*<sup>40</sup>, who have made themselves available to build the pavilion at low cost and showing great willingness and collaboration.

In the definition of the form and its positioning within the meeting area, the interviews with the prison warden, Massimo Parisi and the inspector Vincenzo Ormella, in charge of the area, were decisive.

June-July 2018. Once defined, the craftsmen start the production in the factory and at the beginning of summer the laying works. For the realization of the foundations, simple wells filled with concrete, some inmates were also involved. The Rimaflow carried out the rest of the work. In July the structure was completed with the planting of a *Prunus Padus* donated by the Milan North Section of Italia Nostra -Urban Forestation Centre.

#### The Opening.

23 October 2018, is the day of the inauguration. In the conference room inside the prison, an exhibition of all the works of the educational workshop, and a seminar on the theme of prison architecture organized. were This meeting was attended by all the research group, the National Guarantor Mauro Palma, the local Guarantor Alessandra Naldi, the deputy director of the Institute Cosima Buccoliero, the director of the Department of Architecture and Urban Studies Gabriele Pasqui, the Rector's delegate to social responsibility Francesca Cognetti, the president of the Michelucci Foundation Giancarlo Paba, the architect Marella Santangelo of the Faculty of Architecture of Naples and member of Table 1 of the States-General, the architect Valeria Bruni of the Polytechnic of Turin, member of the participatory design group active in the Lorusso and Cutugno prison and the city councillor Milly Moratti. The meeting aimed to narrate, beyond the prison walls, this small initiative, an action as small as complex it is and, in our opinion, of such great symbolic value.

The documentary<sup>41</sup>, produced by Davide Rapp with the collaboration of Giorgio de Marco, is also a product not initially planned. This 38 Project developed by students Alessandro Bucchi, Nadia Buelli, Stefania Rasile and Marta Riccò.

39 In particular Michele Moreno and Andrea di Franco.

40 To learn about the recovery experience of the Maflow factory, after its closure, by former employees, please refer to www.rimaflow.it

41 https://www.youtube.com/ watch?v=Dm6pcY8SjBY

42 The sharing of the experience and the seminar during the inauguration of the Casetta Rossa were the trigger for the candidacy of a research project for the call for funding PRIN 2018. Proposal not financed. is an important tool for sharing and dissemination to the outside world to raise awareness of society in general (which is why the funder requested the video) but also the academic world itself, to build internal sharing in scientific research to make synergistic methods and outcomes towards common goals<sup>42</sup>. Equally important was the selfreflective activity necessary for the synthesis of its contents, requiring an effort to clarify the participatory methodology adopted and to define the paradigmatic aspects of the lived experience. Last but not least, it was a way to thank and enhance the contribution of all those who made the realization possible.

# THE GUIDELINES. AN OPEN DEVICE

#### Definition of a method.

As said, the research has set itself the objective of defining a tool for the modification of prison spaces capable of acting on the various critical issues that characterize it. The will is to share an operational design knowledge applicable to the contemporary Italian institutions. A building stock made up of different prisons, located in different places, but often characterized by similar The guidelines problems. are designed for the short and medium term, capable of moving the inertia and resistance that block any evolutionary policy. Approaches of a strategic nature that trace radical transformative paths in the long term, although necessary, seem destined to remain good intentions, lacking the real socio-political conditions to implement them.

The intention is to suggest a critical design method for existing detention facilities and not the creation of models, although be articulated, to repeated uncritically in different situations. It is necessary to have devices capable of reacting to the contingency of situations. The method of intervention developed declined the particular characteristics that emerged from the readings of the cases studied and from the design investigations carried out in an open strategic plan that allows the operation in different detention facilities. This device took the form of Guidelines designed for those who work every day to improve the habitability of detention places. Today, most of the changes that occur in Italian prisons are driven by the "goodwill" of individual institutions and civil society operating in the specific institution. These are the directors, the operators of the Prison Police and the treatment areas, the volunteers of the associations and the inmates themselves.

#### The adaptive device.

It outlines a strategy of action that operates by a succession of collective experimentations. А method that directs the eye to the occasions and tries to create sharing around them. The project opens up to the occasion; for this reason, the transformative process acts by parts concerning time, of space and economic resources available. Different paths in phases can be described according to whether the contingency favours the aspect of time, space or resources.

In the case of time, trajectories are described starting from a time zero, structure itself for a sequence of phases that, from time to time, reach a stable and resolved structure.

In the case of space, the process of modification is adapted to: the needs and urgencies of use, the more available places and the resources that can be allocated. The research imagines a process by the addition of interventions according to four degrees of transformation.

1. Reuse: renaming/reorganization of the existing (changing the location of activities, distribution relations, with the appropriation of unused space).

2. Stitching: adaptation and requalification of existing spaces and elements, with minimal demolition and construction.

3. Replacement: demolition and reconstruction (also in new positions) of some parts.

4. Enlargement: construction of new structures/spaces both adding and densify.

Finally, the economic opportunities allow calibrating the transformative commitment following partial and diversified lines of modification.

The transversal character of each intervention is that of being a lever that multiplies the effects generated, acting on several themes.

The *Guidelines* are articulated in principles that orient the eye, a matrix that makes the synthesis operative, a catalogue of elementary modification actions.

*The principles.* A series of general principles orient the project,

describe the idea of prison that emerged during the investigation, a set of values, instances and themes to which it seems appropriate to aim, for research. They invite to go beyond the mere observation of the critical issues that afflict the "prison world", by offering a "lateral perspective" to recognize that often complex set of opportunities present. The principles try to redefine possible geography within which prisons are urban and social actors like others. The possibility of change is shown by outlining interpretative and planning horizons that make actors, interests, policies and operational tools interact at multiple levels.

The principles are proposed in an assertive form, to focus their object better and to accentuate their operational value.

The matrix. The matrix mediates the relationship between analysis and design, between criticality and opportunity and between particular case and general rule. Like a palimpsest, it relates places, practices and transformative actions.

On one axis are shown the elementary spaces recognized as relevant. Their selection was made by recognizability in the prison structures and recurrence in the examined structures, but also because they have proved to be fertile in the design investigations. They are the access spaces, the walls and the perimeter net, the airs, the open spaces on the perimeter, the roofs of the buildings, the free open spaces, the interview areas prison sections, the treatment areas. On the other axis are the practices summarized in some thematic areas such as affectivity, work, health, spirituality, education, training and culture, sports, everyday life. These areas represent complex sub-sets of the more general theme of the report. They are the result of the work of reading and frequenting the Milanese institutes, of the comparison with the prisons' operators and the similarity with the international cases. Each area contributes to the general theme starting from the practicability of specific space-time reflection.

At the crossroads between a space and a practice there is a reference to one or more sheets of the catalogue that describes a possible modification, feasible with the resources, material and immaterial, available in a reasonable time horizon.

The matrix is then structured as a design schedule interrogable according to different access keys and different levels of articulation. The emerging criticality and/or opportunity is the element that stimulates the tension, the use and the formal characteristics of a space. The need for maintenance interventions can be an opportunity to ensure wider conditions of habitability of places or to push the administration to seek resources by interpreting project funding for policies that are apparently intended for something else. The resources made available by a specific funding policy can be an opportunity to trigger a project of spatial transformations involving other side practices. Thanks to the continuous activities promoted by associations of prisoners and/or

volunteers, it is possible to design a process of transformation over time, a sum of punctual interventions. These are just examples of how the matrix can be used, not only as a tool to find a specific answer but also as a tool to build and guide processes and projects. At the same time, the matrix remains an available tool to be implemented and updated in every aspect. The shared method allows to extract a general indication from each particular occasion.

Catalogue of possible modifications. The material produced during research43 the was translated into a catalogue of "elementary modifications" that can he implemented with the resources, tangible and intangible, reasonably available. The different projects were broken down into minimum actions that try to improve the conditions of habitability of spaces, putting a place and a practice in tension, starting from a specific intervention. This translation produced vocabulary work а and a sequence of general rules specifically re-declined in other particular contexts.

Every possible modification is described in a chart articulated with different materials. A "code" that synthesizes the space and practice in question; this allows easy identification within the matrix. "diagram" that exemplifies А the type of spatial intervention proposed. The transversal reading of the projects has recognized both minimal interventions such as furnishing and more complex operations such as densification through the construction of new buildings inside the wall.

43 These are the internal workshops of the Milanese institutes, the project experimentations carried out at various levels and at different scales, both in the field of research and teaching, but also the selection and reading of national and international references.

Between these two extremes, there are interventions of elevation, enlargement, covering of open spaces, the redesign of "voids", the re-naturalization of open spaces or to make an enclosed space accessible. A "title" describes the effect that one wants to achieve through the intervention of modification of space. An "example", extracted from one of the design investigations collected, argues and exemplifies how it is possible to achieve the desired modification. A short text, a diagrammatic axonometry that locates the intervention within the specific prison, and images extracted from the elaborated project compose the description. The different charts are organized by "sections" that correspond to the prison spaces listed in the matrix.

Its ultimate goal is to show concrete possibilities of transformation, feeding the spatial imagery and aspirations of the many people who seek to improve the conditions of habitability of Italian penal institutions with the few resources available

#### **CLUES OF OPERATION.**

The research project is described as an open process in a programmatic way. Openness, aimed at the operation of the device and its implementation, ensures that the interlocution with the prison world continues even after the drafting of the guidelines. The openness is also a way to monitor and verify the real effectiveness of the proposed tool.

September 2018-January 2019. The didactic workshop of the following academic year re-proposed the co-designing experience in prison, always in dialogue with the Group of Transgression. The theme of reflection is "confrontation", and the project is called Agora. This time, students and inmates 44 are free to choose the location for the trace of the relationship, as well as materials and technology to adopt. Also in this second experimentation, the possibility of financing is not yet sure. However, being in different places and adopting different technological solutions (in many cases it is possible the self-construction), they constitute a small catalogue at the disposal of the penitentiary institution, that in the next years, wants to realize a small intervention inside the prison.

The frequency with which Bollate was frequented and the interaction of those who work inside - especially during the period of construction of the "little red house" - was an opportunity of familiarization. The consolidation of the relationship, on the one hand, allowed agents and operators of the treatment areas to share events/actions that were taking place45 with the research group and, on the other hand, to advance possible interventions. For example, in March 2019, an important computer services company promoted and financed the maintenance of the playroom, where parents and children meet, also involving an artist for some masonry work. In 2019 at Bollate, we witness the first participatory budget in an Italian prison. The prisoners met to develop and vote initiatives to improve their condition inside the prison<sup>46</sup>,

44 The group of inmates who participated in this second experience has partly changed from the previous year.

45 For example, the painting and execution with murals for children in the interview area. This intervention was financed and realized by a multinational company that has one of its offices in Milan.

46 For more information please consult https://www. ideeinfuga.org/ opening a fundraising platform.

July 2019. Inspector Ormella, whose contribution was relevant in the *Casetta Rossa*, some months after its completion, proposes to think about the possibility to realize an adequate shading system of the existing metal structure used for the summer talks. At that time, theywere using green shading sheets. With a residue of the research funds, thanks to the availability of a woodworking company, the physical contribution of three inmates and the support of the prison administration a wooden sunshade was assured.

The sharing and the proposal of interventions appear the first signal towards fruitful synergies between the many initiatives that happen every day without great resonance, and that can test and implement the device of the guidelines.

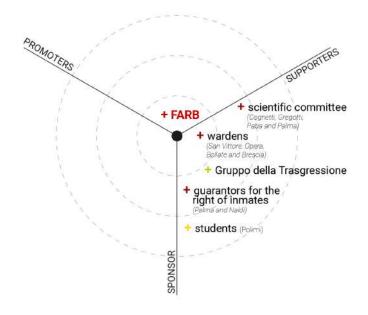
October 2019. The activity also continues within the academic world. Some members of the research group in collaboration with other professors and researchers from other departments of the Politecnico, with the support of prison administrations, sports and communication professionals and the technical sponsorship of some companies, nominated a new research project for the Polisocial Award 201947.

The proposal, entitled "A Chance Through Sport (ACTS) Sport and motor education in prisons: a project of spaces and social reintegration", was among the proposals funded and, in the spring of 2020, began its activity. 47 The Polisocial Award is a social responsibility program of the Politecnico di Milano. Supported with funds from the 5 per thousand IRPEF. The aim of the initiative is to promote the responsible and multidisciplinary nature of research and an effective involvement of local partners and actors, with whom to activate productive forms of collaboration on projects with a high social content, promoted by subjects belonging to the Politecnico di Milano. The theme of the 2019 call was "Sport and social inclusion".

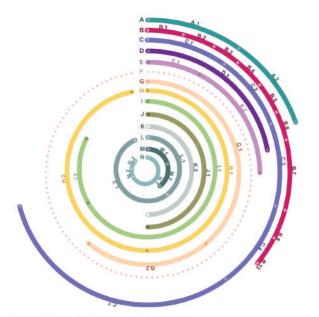
#### THE RELATIONAL PROSPECTIVE

The "spaces of relationship" are the key object of the research. The group believes that the creation of spaces capable of supporting and enriching the relational experience of the subjects involved in various ways in the socio-spatial world of the prison and, more generally, between the prison and the city, can facilitate the activation of the resources that inmates carry. The enriched relationship could facilitate the inmates' reintegration into society and help to limit recidivism.

Thinking about relationship spaces in architectural practice is a critical form of analysis and denunciation of problems. At the same time, it becomes an act of change aimed at improving prison conditions. In this perspective, the research tries to define a strategy that no longer works for prisons but intervenes with the prison reality itself in a collective process of the practice of reality and its modification.

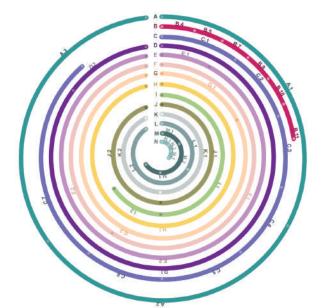








S: Casa circondariale di Milano San Vittore



B: Seconda Casa di reclusione di Milano Bollate

starting from the Milanese cases, the research has built up an "atlas of prison spaces and practices" according to the interpretative lens of the relationship.

left: among the places of the project there are the walking areas.

above: the multiplicity of essential and integrative activities of prison life have been rearranged by themes, comparing their distribution by institutions. O: Casa di reclusione di Milano Opera

A) Attività didattiche	$\frown$
B) Attività culturali	
C) Colloqui e affettività	
D) Formazione professionale	
E) Lavoro penitenziario intramurario	
F) Lavoro penitenziario esterno al carcere	
G) Sport	
H) Biblioteche	
I) Spiritualità	
J) Maternità	
K) Attività di comunicazione	
L) Attività libere e di relax	
M) Pasti e convivialità	
N) Salute	
Attività non prevista/non verificata	



The relation as a method. The research tried to build networks of relationships as wide as possible to connect as many people involved in the complex prison world. The research has built its path through the interlocution (formal and informal) with the administrative staff at different levels.

this page: over the 18 months, many workshops with students and inmates (*Gruppo della Trasgressione*) held in Bollate and Opera Institutions, debating around architectural design.

opposite page: many meetings were organized, in prison and at faculty. The intermediate meeting 1st Feb. 2019 with wardens and guarantors was also broadcast by *Radio Poplare* 







Mauro Palma - national guarantor for the rights of detained persons



Massimo Parisi - (ex) wardens of Milano-Bollate.

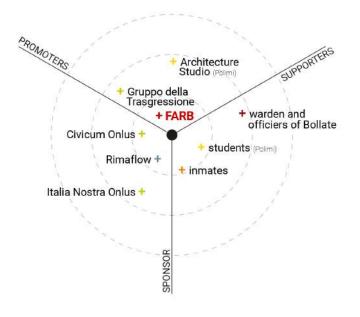
#### THE TRACE OF FREEDOM

Oct. 23, 2018. In the meetings area of the Bollate prison is inaugurated the Casetta Rossa. This small pavilion bears witness to the common path of the architectural design workshop between students, teachers the prison's management and surveillance staff, the Carte Bollate group and the Group of Transgression. The pavilion is an unexpected outcome of the research.

Sep. 2017. During the ideation of the workshop, Angelo Aparo, psychotherapist and coordinator of the Group of Transgression requests to "leave a physical trace of the collaboration between students and inmates". The research group accepts the challenge and by the initiative "Trace of Freedom" it is committed for a pavilion, a project within a project.

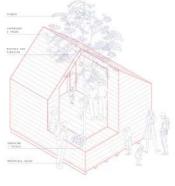
Jan. 8, 2018. The jury of internal competition selects the proposal "Casetta Rossa". The funds are still missing. An article in the Buone Notizie - Corriere della Sera strikes the attention of the president of the Civicum Onlus. He decides to donate the realization of asking to document it with a video.

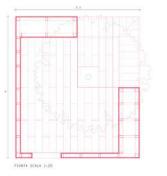
Feb.-Jul. 2018. With the support of the Rimaflow craftsmen, it starts a detailing path of the structure and its realization. In the definition of the form and its positioning, the interviews with the prison warden, Massimo Parisi and the inspector Vincenzo Ormella were decisive.





# LIBERTÀ COME FOCOLARE DI POSSIBILITA' LA CASETTA DELL'INCONTRO











## Il carcere immaginato dai futuri architetti

Un progetto convolge studenti e detenuti per ripensare gli spazi comuni a Bollate



1 The Trace of Freedom network

2 The Casetta Rossa before innauguration

3-4 The drawings and model of the Casetta Rossa proposal for the internal competition

5 The article on the Buone Notizie - Corriere della Sera that catch the interest of Civicum Onlus' president.

Prima c'è stata l'invasione di 65 studenti di architettura nel carcere di Bollate, poi i de-tenuti hanno restituito la visi-ta al Politecnico di Milano.

tenuti hanno restituito la visi-ta al Politecnico di Milano. Non è stata una gita, ma uno scambio nell'ambito del pro-getto «Ina traccia di libertà», partito lo scorso ottobre con lobiettivo ambizioso di ripen-sare i luoghi in condivisione del carcere e con l'idea che progettare un'architettura sti-moli a strutturare da protago-nisti anche lo spazio della mente e della vita. «Sono stati tantissimi gli studenti del laboratorio di progettazione architettonica che hanno fatto richiesta di partecipare», spiega Andrea Di Franco, Il docente che co-ordina la ricera con i colleghi Di Franco, Il docente che co-ordina la ricera con i colleghi tutti con una media superiore al 29, a causa del limite di n gressi a Bollate dove insieme al direttore Massimo Parisi abbiamo fatto cinque giorna-te di incontri fra studenti, de-tenuti e agenti di polizia peni-

Studio Un mome studio du

gli incontri

lavoro è stato suddiviso tra 13 gruppi



tenziaria per capire le esigen-ze e i problemi di chi vive re-cluso». Un sostegno fondamentale coordinati da 4 docenti. Il

Un sostegno fondamentale è venuto da Angelo Aparo, fondatore del «Gruppo della trasgressione», che ha coin-vollo carcenti e agenti. Il lavo-no si è svolto in tredici gruppi, ognuno del quali si è occupa-to di un tema specifico come affettività, culto, scuola, de-tenzione femminile o sport. L'ultimo incontro è previsto per il 22 gennaio alla presenza

delle alte cariche di Politecni-co, Amministrazione peni-tenziaria, Comune e Regione. «I giovani sono idealisti, ma el giovani sono idealisti, ma amano le cose concrete. In questa ricerca hanno visto la possibilità di cambiare in me-gilo la società — continua Di Franco —. Da chi vite nel car-cret sono venui i consigli per ricondurre sulla terra le idee degli studenti ma spesso an-che per osare e pensare anco-na più in grandes. «Ho scelto di partecipare

65

Gli studenti di architettura del Politecnico

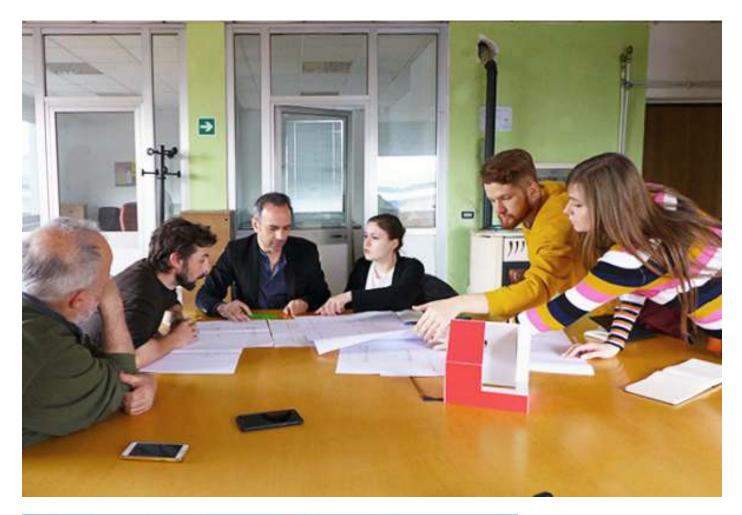
selezionati per il laboratorio «Una traccia d libertà». Il progetto ha previsto anch

cinque inconti

tra universitari detenuti e agenti di poli penitenziaria

proprio perché é un tema aperto a visioni utopiche – racconta cifisitano Gerardi, as ani – e i carcertal hanno spresso pensieri proioni con si sensieri proioni con si sensieri proioni con si sensieri proioni tratorime da problema firatorime da problema partie pen uno strumento pi opico non basta partieri e una parte per crearo pi nuoso di culto o radattare parte pensatos. Un pico-no da parte per crearo pi nuoso di culto o radattare parte pensatos. Un pico-no da parte per crearo pi nuoso di culto o radattare parte pensatos. Un pico-no da parte pensatos. Un pico-no da parte pensatos. Un pico-pi da pensatos da pensatos pensatos da pensatos da pensa-pensato da pensatos da pensa-pensato da pensatos da pensa-pensatos da pensatos da pensa-pensatos da pensatos da pensatos pensatos da pensatos da pensa-pensatos da pensatos da pensatos pensatos da pensatos da pensatos da pensatos da pensatos pensatos da pensatos da pensatos da pensatos da pensatos da pensatos pensatos da p

Francesca Bonazzoli











# $\begin{array}{c|c} 1 & 3 \\ \hline 2 & 5 \end{array}$

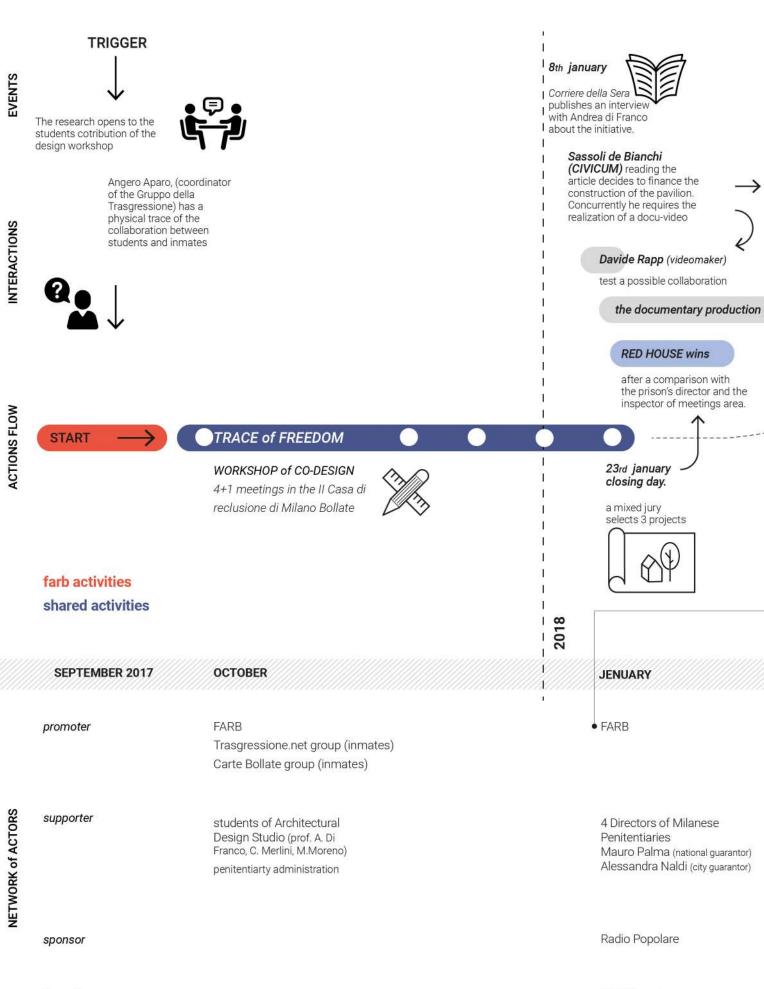
1 a day of project with the craftsmen of *Rimafolw* 

2 the inauguration was a meeting point between the outside world and the inside world.

3 the structure has been tested inside *Rimaflow* laboratories.

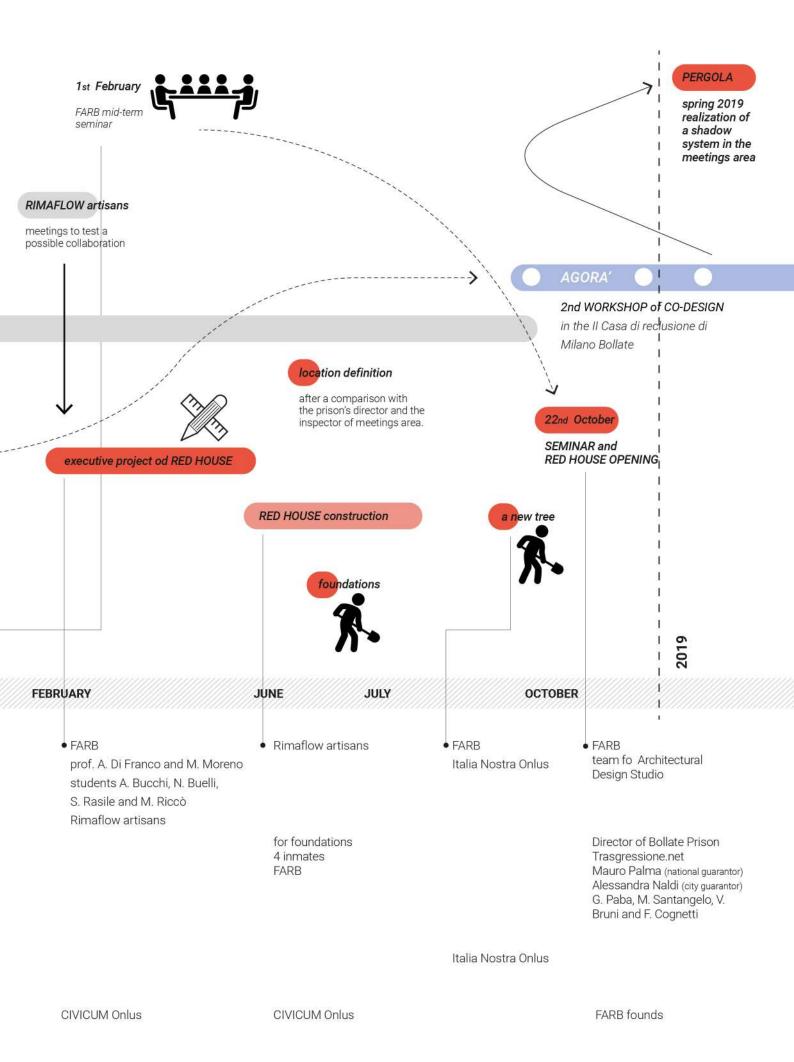
4 the prunus was donated and laid by *Italia Nostra Onlus*.

5 the pavilion is designed for meeting between parents and children.



financier

FARB founds



#### **THE GUIDELINES - A RELATIONAL DEVICE**

The Guidelines are an operating manual for the users of prison facilities themselves, able to identify - from the critical points - possible spatial and design solutions, in relation to the practices in place and their possible evolution. A selection of works carried out within the Politecnico di Milano are used as design examples. The catalogue has explored the strategic and exemplary aspects of the projects produced in order to arrive at a schematic synthesis of the founding aspects that characterize the architectural innovation. A matrix guides the consultation of the guidelines between practices, available spaces and possible transformative actions. At the intersection is the code for charts that selectively reinterpret the projects to present them as exemplary actions. Each chart is characterized by a theme, an action and some design images that spatially exemplify their treatment.

A/ SCUOLA E

ATTIVITÀ

pratiche

spazi

1/ SPAZI DI ACCESSO E DISTRIBUZIONE

2/ CINTA MURARIA E RETE PERIMETRALE

4/ SPAZI APERTI PERIMETRATI

5/ SPAZI DI COPERTURA EDIFICI

6/ SPAZI APERTI LIBERI

7/ SPAZIO COLLOOUI

8/ SEZIONI DETENTIVE

3/ ARIE

DIDATTICHE

lavoro esterno

(1/A 1)

A.1 2/42

(3/A.1)

5/A.1

(6/A.1) 6/A.2

formazione interna form, professionale lavoro interno lavoro int. verso esterno



COSTRUIRE

Costruire edifici ex novo



Ridisegnare lo spazio aperto in modo da attribuire un uso e un significato agli spazi che sono stati fino a tempi molto recenti inaccessibili. L'azione può comportare differenti livelli di intervento, dal ridisegno del verde e dell'accessibilità fino alla realizzazione di piazze e spazi coperti (vedi voce precedente)

RENDERE ACCESSIBILE Rendere accessibile gl spazi aperti interclusi, collegare spazi interni separati, favorire l'osmos tra interno ed esterno del carcere tramite l'anertura di nuovi varchi. L'azione può avvenire attraverso operazioni semplici, quali l'apertura di una porta in un muro, oppure tramite interventi più importanti quali la modifica degli accessi e del recinto penitenziario.

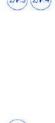
> D/ CULTURA E LABORATORI lettura / biblioteca corsi ricreativi gruppi discussione teatro / cinema / musica comunicazion

E/ SPORT indoor outdoor





1/F.1 (2/F.1) (2/F.2) 2/F.3 2/F.4





7/F.1

#### AMPLIARE Ampliare gli edifici esistenti tramite addizioni in adiacenza che modifichino il volume e l'impronta degli edifici stessi

e portici, permette un uso

prazie alla protezione

RINATURALIZZARE

più ampio degli spazi aperti











ed esterni tramite un

ntervi tecniche paesaggistiche





(1/B.1)

(4/B.1)

(6/B.1) (6/B.2)

(7/B.1) (7/B.2) (7/B.3)

6/B.3) 6/B. C/ CONVIVIALITÀ cucinare e consumare pasti • eventi spiritualità · attività libere e relax

(3/C.1) (3/C.2) (3/C.3)

(4/C.1) (4/C.2

5/C.1) (5/C.2

6/C.1) (6/C.2)

(8/C.1) (8/C.2

(9/C.1)

1/D.1

2/D.1 (2/D.2

(3/D.1) (3/D.2) (3/D.3)



2/E.1

3/E.1

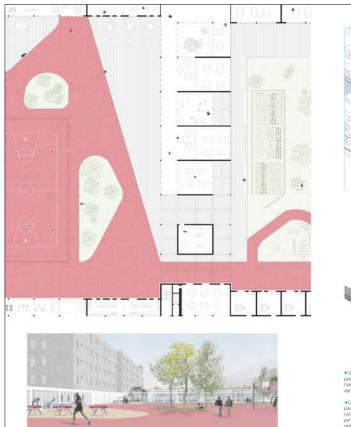
4/E.1

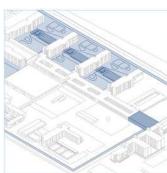
6/E.1













 Una grande camptiura di avementazione colorata caratterizi identità unitaria dei differenti spaz lai corpo costruito per attività indo

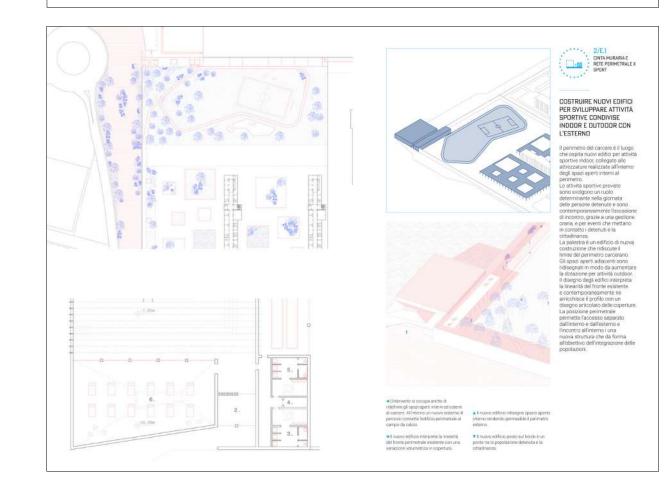
 Emmagne disegnata date pavimentazioni e degli inserti verdi si contrappone all'uniformità dei padigliori permettali, idefinendo il carattine delle conti. o spazio aperto delle arie è ridisegnato ne campo aportivo per attività di aport lettive e individuali outdoor

costruito che separa parzialmene due aree all'interno delle quali sono realizzati campi sportivi all'aperto è spazi per il tempo libero.



#### RIDISEGNARE LO SPAZIO APERTO DELLE ARIE PER FAVORIRE MOMENTI DI SPORT COLLETTIVO E INDIVIDUALE DUTDOR

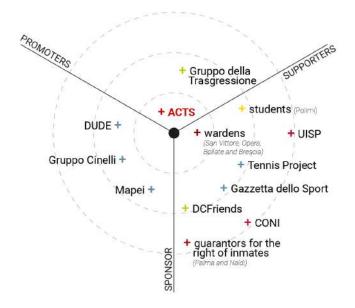
Entervento ridisegna lo spezio apeno delminato dai padginoli residenziale con unuozo disegno di sudo e l'inserimento di padgioni bassio per la attivata indoor di servizo ai campi sportivi La funzione ginno gale prevista di conto con la prevista sportive anteri in condizioni meterologiche anteri a con spai competi permettrono attività sportive anteri in condizioni meterologiche merese e contengoo i dispositi per impianti attrocono lottora con spai competi permettrono attività sportive anteri in condizioni meterologiche merese e contengoo i dispositi per impianti attrocono i dispositi per impianti attrocono i progetto entroli consolito di attroco attro demente dalla contento consolito di attroco consolito di attropo liboro. Pari indue al tampo liboro. La strategia di progetto definemato e la progetto e definemato e la progetto e definemato e la conservicia targo di conservicia anteri a targo taccessivi, ni moto i de dell'intorne disposali multipano, permette di configurare pri riteo settoro come luogo contemporanesmente la intercia aggi edifici redocali multipano contemporanesmente come luogo contemporanesmente con peri targo di conservicia anteri a parte la ricosta di trano contemporanesmente e la testora di porto contemporanesmente e la testora di porte testora di porto contemporanesmente e la testora di porto contemporanesmente con contemporanesmente solito contemporanesmente con contemporanesmente solito contemporanesmente solito contemporanesmente con contemporanesmente con contemporanesmente con contemporanesmente a porto contemporanesmente la porto contemporanesmente a porto contemporanesmente a porto contemporanesmente a porto contemporanesmente porto contemporanesmente porto contemporanesmente porto contemporanesmente p



#### **CLUES OF OPERATION**

The research is described as an open process in a programmatic way. Openness, aimed at the operation of the device and its implementation, ensures that the interlocution with the prison world continues even after the drafting of the guidelines. The openness is also a way to monitor and verify the real effectiveness of the proposed tool.

Jul. 2019. Inspector Ormella, whose contribution was relevant in the Casetta Rossa, some months after its completion, proposes to think about an adequate shading system of the existing metal structure used for the summer talks. A wooden sunshade was assured with a residue of research funds, thanks to the availability of a woodworking company, the cooperation of three inmates and the support of the prison administration. It seems the first signal towards fruitful synergies between the many initiatives that happen every day without great resonance, and that can test and implement the device. Oct. 2019. The research group with other professors and researchers from other departments of the Politecnico, with the support of prison administrations, sports and communication professionals and the technical sponsorship of some companies, nominated a new research project for the Polisocial Award 2019. The proposal - A Chance Through Sport (ACTS) - was among the proposals funded and, in the spring of 2020, started.

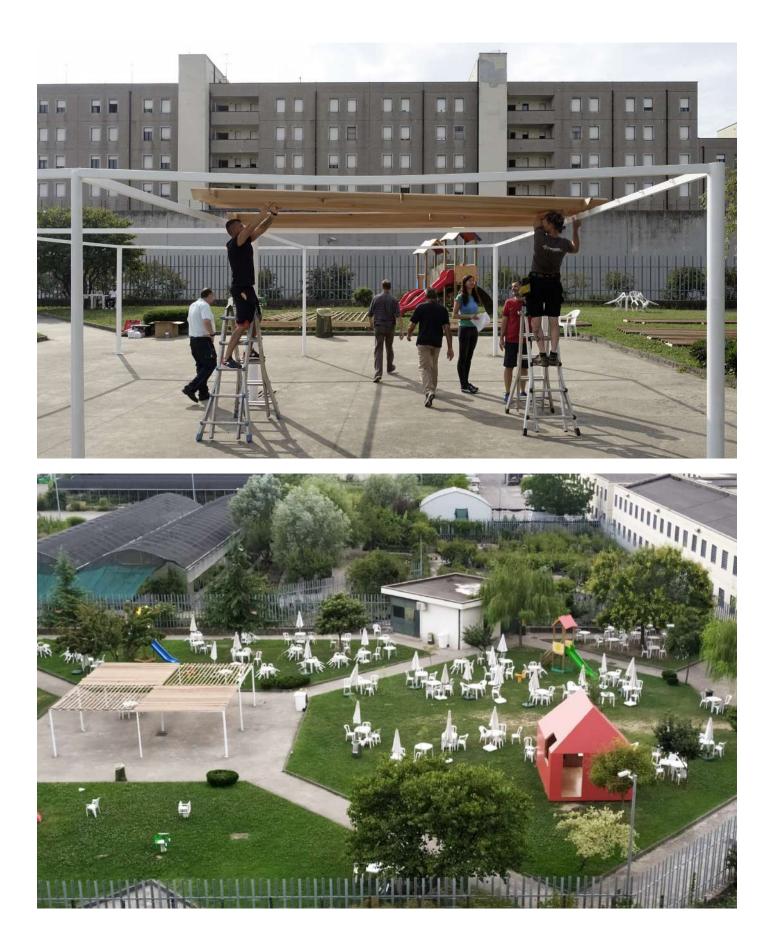


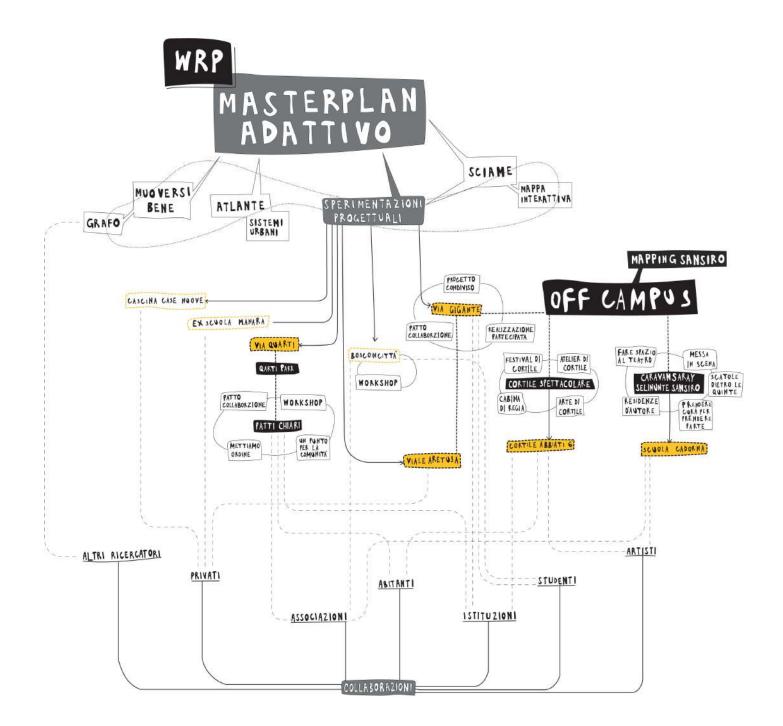


Vincenzo Ormella in front of Casetta Rossa



ACTS - A Chance Through Sport @acts.polimi





### West Road Project

# POLISOCIAL AWARD 2017 AS OPPORTUNITY

2017. The Polisocial June Program announces its fourth "Polisocial Award", a competition that selects and enforces projects with social purposes. The research projects participating "have the goal of fostering social change by generating a significant impact and recognised social utility through their development and take an approach consistent with the new European Union directives on "Responsible Research and Innovation (RRI)" defined by the Framework Programme for Research and Innovation - Horizon 2020<sup>"1</sup>.

The topic of the fourth edition is the Urban Peripheries, and the territorial area of reference is the Metropolitan City of Milan. By peripheries, it is mean not only those contexts located on the outskirts of urban centres but also those areas of the city that, due to the overlapping of multiple social and spatial criticalities, emerge as fragile and marginalised contexts.

The projects will be required to address the "enhancement of local resources, the improvement of the well-being and quality of life of the communities living in them, the activation of systems of exchange and activities with the city and the attraction of new resources"<sup>2</sup>.

For some time now, the Italia Nostra- Milano Nord association has been designing a project for the development of "Via Novara as an infrastructure at the service of citizens, connecting the city centre with the three large urban parks" that characterise the north-west area of Milan. Three parks - Parco di Trenno, Parco delle Cave and Boscoincittà - of different but continuous nature. At the heart of the proposal is the inclusion of a cycle lane that runs from the "Bastioni circle" (the historic centre of the city) to the parks along Via Novara, and then continues to Settimo Milanese and connects to the bicycle lane system in the metropolitan area. "La Strada dell 'Ovest", this is the title of the project, aims to be an initiative capable of involving citizens and institutions to trigger actions for the enhancement of the landscape<sup>3</sup>.

With the publication of the Polisocial Award 2017, Italia Nostra contacts Andrea di Franco, professor at the DAStU to evaluate the possibility of presenting a joint project that develops, specifies and consolidates the "Strada 1 From Polisocial Award 2017 rules.

2 Ibidem.

3 The Italia Nostra Milano Nord - Cintura Metropolitana section is located in the Cascina San Romano farmhouse inside the Boscoincittà. It was created in 2013 as a result of the experience gained with the construction and maintenance of this park which began in 1974. A public park with woods, meadows, waterways and wetlands that reproduce a natural environment within the surrounding areas of the city. The daily management of the park is entrusted to the CFU Urban Forestation Centre, which is the operational centre of Italia Nostra and one of the initiatives underway is the work in the Ongari Quarry in the nearby Paco delle Cave.

dell'Ovest" on the territory and at city institutions.

It is the start of a dialogue to specify a proposal better. The development of a paradigmatic project also for other city situations. The intention is to propose a method capable of rethinking the street infrastructure as an element of relationship and regeneration of the surrounding degradation scenarios.

# THE WESTERN PERIPHERIES OF MILAN. A WICKED PROBLEM

In recent decades the theme of the city's peripheries has once again become a priority issue on the political agenda of Milan and many European cities. Relevance often dictated by news stories that connote these places with a negative implication. In focusing attention on this issue, the Polisocial Award restates the urgency of finding new and effective ways of dealing disadvantaged with contexts and affirming the Politecnico di Milano's commitment to make a useful contribution.

There is a vast amount of literature describing what deprived neighbourhood mean today, from many points of view and in different ways. These pages are not the place to reconstruct a general picture, which is difficult and would require a lot of time and attention<sup>4</sup>. Describing the context of Via Novara one attempts to briefly outline some of the characteristics of the territory that distinguish it and unite it with other Milanese settings and beyond.

Via Novara is one of the radial axes that have structured the shape

of Milan. An axis that connects the city centre with the Magentino area, intercepting the system of Milanese ring highways. Over time, a series of adjustments that have transformed the street into an almost exclusively car-oriented axis. Modifications that have made it inhospitable and dangerous for cycling and pedestrian use. In particular, in the outermost section, the road becomes an element of separation of what lies on its edges - be it inhabited areas or open spaces - and generates numerous situations of spatial and social degradation. Situations that are often generated by the presence of problematic functions located in marginal areas such as this one (bus depots, car depots, junkyards, recycling material collection, nomad camps and informal settlements). The territory on the edge of the road is a poorly structured set of uneven enclaves. Their quality distinguishes some parts. It is the case of the three large urban parks, the result of relevant experiments in the recovery of ecological areas, care and enjoyment of the green areas involving associations and inhabitants. They are a significant resource of open space that can be used by those who live in these places and by the whole city. Each with its own urban character. The presence of the Milano Nord section of Italia Nostra and its Urban Forestation Centre with its headquarters at the Cascina Romano is a vital image and operational resource. The association promotes and supports initiatives for the management and creation of green areas by groups of citizens. The active presence of third sector subjects is another resource

4 The main characters have already been described in the chapter Marginal Context. On the theme of the peripheries as criticality and risosrsa cf. (Infussi 2009, Cognetti Padovani 2018, Petrillo 2019). Some urban situations around via Novara - Milano



of the territory, relevant in numbers and for the actions plurality that land on the territory. The liveliness and social creativity of initiatives, however, is likely to be dispersed due to the difficulty of many people to be part of a strategic-planning vision capable of building a broad consensus.

emergencies Among the of the area, which benefit from the accessibility guaranteed by Via Novara, we can list the San Carlo Borromeo Hospital, the G. Meazza stadium (called San Siro and on which an important project of urban transformation by the two football clubs is currently under development<sup>5</sup>) and the Aquatica Park. Places that, in the face of the territory's openness towards the broader world on certain days or at certain times of the year, are a source of discomfort and serious problems.

A series of isolated residential areas and some public housing districts (San Siro district, via Fleming, via Quarti a Baggio, via Tofano a Quinto Romano and the village of Figino) are among the critical areas, pockets "in which «clots» of heterogeneous problems can be recognised, connoted by the concentration of unresolved issues from a physical and social point of view, which have seen an accumulation and deterioration such as to become «borderline» situations" (Cognetti 2008, 126).

These places constitute an archipelago of degradation and abandonment of public spaces. A figure, now stereotyped, that blends and confuses the complex and articulated phenomena of marginalisation and social conflict, lack of civic sense and security. Territories increasingly inhabited by fragile populations, which are increasingly portrayed in these places also due to the lack of an adequate public transport system or opportunities for slow mobility (pedestrian and bicycle).

The peripheries seem to define themselves as a place of loss of urbanity, "in disoriented neighbourhoods and in search of reference, the question of identity becomes not only the nostalgia for lost belonging but the key to a dreamed and for now not found redemption" (Petrillo 2018, 43).

A series of "vacant voids" belongs the archipelago. Specifically, to here and today controversies are the stadium district, the area of hippodrome and the military barracks of Santa Barbara. "Potential centralities" (Macchi Cassia 2010, 69), which can be considered today a relevant heritage and opportunity for the future of the surrounding environment. In these places, transformations have often been braked for different reasons. On the one hand, because these areas are "full" in terms of income potential, but there is no more space on the market for the traditional residential and commercial operations. On the other hand, because they are "full" of expectations by many entities, from public administrations to trade associations and groups of citizens, that consider them as an opportunity to increase the supply of goods and services for the community. All of this determines the uncertain and conflicting nature of their transformations, often making them

5 Cf. https://www. nuovostadiomilano.com/it places of abandonment.

The wealth of opportunities often clashes with the inertia generated by sectoral actions, confusing procedures and conflicting interests. At the same time, many are the programmes that incentivise and promote regenerative interventions in contexts such as that of northwest Milan, capable of operating in a multidimensional way.

On а global scale, Goal 11 "Sustainable cities and communities" of the United Nations Development Program promotes actions that make cities inclusive, safe, resilient and sustainable. "Making cities sustainable means creating career and business opportunities, safe and affordable housing, and building resilient societies and economies. It involves investment in public transport, creating green public spaces, and improving urban planning and management in participatory and inclusive ways"6.

The European Union has devoted resources from the European Structural and Investment Funds to programmes such as UIA- Urban Innovative Actions and URBACT Driving Change for better cities. The aim is to develop projects and actions to address the economic, environmental and social challenges affecting urban areas and the most marginal and deprived contexts.

As in Italy, both at the national and regional level, different initiatives are promoting urban regeneration and beyond. The "Extraordinary Programme of intervention for urban regeneration and safety in the outskirts of metropolitan cities and municipalities. To catch the goals, it seems necessary to experiment creatively the existing protocol, going forward into the recent attitude "to work by project, compete on calls, develop partnership and networking capacity" (Palermo 2009, 17).

#### «I MOVE WELL». A DRIVING GUESSWORK.

Working for projects capable of finding the resources to influence reality is increasingly leading research and planning groups to investigate policies of a general nature (think for example of the role of European Community programmes and policies) and reinterpret them in relation to the characteristics of the location of intervention. "La Strada dell 'Ovest" immediately appeared to be an opportunity to promote a research project which, starting from the "right to mobility" (Kaufmann 2014 Secchi 2011, 2016; Sheller 2018) would develop methodological and action tools for the urban integration of peripherical areas. The aim is focusing on usable sets of tools, approaches and policies that can "help cities, citizens, communities, businesses and institutions to employ new developments in urban mobility to their full potential and to limit their possible adverse effects and unintended consequences"7.

As Bernardo Secchi remarks, if "we cannot obviously ask urban planning (and architecture we add) to eliminate social inequalities (...) we can ask it to contribute to their reduction by putting a new focus on environmental and mobility issues as relevant and meaningful ways of seeking "social justice" (2011, 91). 6 https://www.undp.org/ content/undp/en/home/ sustainable-developmentgoals/goal-11-sustainablecities-and-communities.html

7 targets that are also at the centre of the recent joint call for proposals of research and innovation projects on urban accessibility and connectivity, co-funded by the european commission (grant n° 875022). Mimi Sheller acknowledges that "unjust mobility regimes are also expressed in built environments, roads, borders and cities that compromise certain types of movement while enabling others" (2018, 54). She tries to go forward when, writing on mobility justice, argues that a just (and sustainable in all of its dimensions) city is one that renders mobility a common: both its infrastructure and its public spaces should become common and share possibilities, duties and management among all citizens. We noticed some similarity with the concept of porosity by Secchi and Viganò, that focuses on spatial relational aspects since it considers how urban spaces welcome citizens to develop their desires and projects.

#### A first network of subjects.

The Via Novara cycling project has thus been redefined and expanded to become an opportunity to recognise an archipelago of potential scenarios, to coordinate precise transformations their and imagine the ways of their connection. The intention is to restore an identity dimension of the widespread marginal situations locally. A project that takes shape through a twofold strategy: the definition of the sustainable network of connection belonging to the Via Novara axis and the regeneration of the open and built public space with environmental qualification interventions.

A research project that inevitably distinguishes itself by being programme-inclusive both in social and project terms. Inclusiveness which means "synergic composition of articulated and transversal instances of modification, emerging from a plurality of actors, including an experimentation on the role of social and territorial responsibility of market players (Guess 2014)"<sup>8</sup>. The experimentation of a method to recognise, activate and related actions, interventions and policies in the territory become one of the central purposes that guided the conception of the research project.

The first action was to build a network of co-project partners and sponsors, involving other competencies from Politecnico, other local actors, administrations also the business world. and With the collaboration of the Mapping San Siro research-action group,<sup>9</sup> we interviewed some third sector companies operating in the Via Novara area<sup>10</sup>. During these meetings, the group shared knowledge, views on suburbs and the right to mobility, evaluating potential interests in being part of the research project. A first network was set up, consisting of: a group of professors and researchers from three departments of the Politecnico di Milano (DAStU, ABC Department and Department of Energy), the association Italia Nostra - Milano Nord Cintura Metropolitana and the Cooperativa Sociale Tuttinsieme<sup>11</sup>.

The design guesswork. The process of sharing and defining the possible aims of the research was summarised in the design slogan "I move well". The slogan proved to be an effective tool to describe the multiple nature of the project and the willingness to focus on a new scenario for the mobility of 8 From the application report for the Polisocial Award 2017, state of the art and originality of the design idea section.

9 C<u>f.</u> http://www. mappingsansiro.polimi.it/

10 It seems significant that many co-design meetings were held at the 30-squaremetre space in Via Abbiati 4 in the San Siro district, the observatory seat in the district of the researchaction group Mapping San Siro. The venue has been reopened, starting from spring 2014, thanks to a self-recovery work by the research group, following the free loan of use by Aler Milano. These preliminary meetings are already a direct survey of the potential of the area. In 2019 the activities of the research group will move to the Off Campus space, a larger space also within the neighbourhood. http:// www.mappingsansiro.polimi. it/3-progetti/3-3-riattivarespazi-vuoti

11 A co-operative active in western Milan and offering socio-educational services that promote people's wellbeing. It promotes activities to promote paths of integration and community cohesion, enhancing individual and collective resources in a perspective of social, cultural and economic development. the sector and the definition of a device (adaptive and participatory) to activate marginal public spaces. The design bias focuses on the action of moving and not on the means adopted, without necessarily referring to technical-technological solutions. The slogan focuses on the person (the beneficiary) as an active subject, recognising the different needs of each individual. It focuses on improving the conditions in which movement takes place and the psycho-physical well-being that movement produces.

The research project started from the assumption that by improving the conditions and opportunities for movement, moments of relationship are fostered, and the sense of belonging to the places by inhabitants is strengthened. Moving well to live well.

The design bias is a useful tool to trace a direction towards which to direct the multiple reading and project actions put in place, by multiple subjects, to patch up the nodes of marginality present in the sector. It is not the description of a point of arrival but a way to define and share a common horizon within which to decline the succession of interventions and policies implemented at different scales.

The research project and the network of subjects promoting and sponsoring it have been specified around the concept of moving well. The *West Road Project* (WRP) proposal was formalised in October 2017. A device for activating networks and public spaces throughout the diffused neglected areas. In addition to *Italia Nostra* and *Cooperativa sociale Tuttinsieme*, the social enterprise Mare Culturale Urbano (support for participation activities) and the association Il Giardino degli aromi (supply of plants and voluntary support) joined the project. The Public Works and Housing Sector of the City of Milan (ALER), the City Hall of Zone 7 and the Association of Metropolitan Interests express their interest in supporting and facilitating the concrete actions envisaged by the research. The objective to experiment in practice the modification of some spaces become more realistic through the technical sponsorship of companies (Vestre Urban Forniture; Canobbio Textile Engineering; Serge Ferrari Textile Architecture; Tovo Gomme).

#### April 2018 - The research starts.

After two phases of selection, the project is among the funded research. In April 2018 it formally began its two-year activity <sup>12.</sup>

Even during the research, the "I move well" has been a useful tool for engaging multiple subjects, both as partners, supporters and beneficiaries. An effective tool for communicating and sharing synthetically the challenges they wanted to face: transforming and reorganising urban spaces to address the issue of sustainable urban mobility and accessibility at local level, from the street to the neighbourhood. To develop practical actions that support a change in behaviour in favour of greater social cohesion. In the first discussions with politicians and technicians of local institutions, the slogan of "I move well" associated with the interest in experimenting opportunities concrete for

12 The story of this experience is contextual to the formal conclusion of the research activity. Some experimental actions and formalisation of the results are still in progress as well as the return of the products and results of the research. transformation has produced a first list of potential situations for critical issues or opportunities in progress. They represent the initial points of the archipelago of places of transformation that the research aims to map.

In some cases, they are public spaces that are the object of interventions carried out with the mode of dismantling the liabilities of private operations. With the mediation of the local administrators, in particular the Town Hall 7, the research group met the owner and designers of the interventions that have made themselves available to an interlocutor. In this way, they tried to specify and sometimes redefine the perimeters of the interventions to include them within the "I move well" network. These experiences have made it possible to make explicit a method of intervention implicit in the design of the research programme, the possibility to act in a "parasitic way" to what already happens, respectfully. This attitude wants to activate positive leverage effects by conditioning and appropriating what is foreseen by framing it in the broader project, that of the "I move well" network. By re-articulating the project and the intervention of transformation of the public space within the more general design, the research implements a strategy of inclusion and restitution of the experience to a wider context.

The opportunity of Cascine Case Nuove. The project for the space in front of the farmhouses Case Nuove was one of these cases. Cascine Case Nuove represents a fragment of the history of the San Siro district, now in a state of neglect and damage in terms of its image and possibilities of use by an incoherent safety intervention. Alongside the farmhouse, the construction of a new nursing home by the Rodevita spa company, which will replace the former San Celso Institute, was being defined. The property, in agreement with the municipal administration, had planned to allocate the urbanisation costs generated by the intervention to the renovation of Via Celio.

Following the recommendation and mediation of the president and the planning councillor of the Town Hall 7, a dialogue with the designers of the intervention was activated. It was made an attempt to transform the project into an opportunity to redevelop the spaces in front of the farmhouse by sharing the available resources. It is a first step towards reactivating this space as a central place for the neighbourhood. The intervention area was re-designed by elaborating a proposal that rethinks the spaces in front of the farmhouse as a small relational place along Via Paravia. The project includes restoration of the ground, some new planting, re-design of the pedestrian and bicycle paths and some paved areas with seating. Trees and furnishings can be a contribution to the research. At the same time, the Rodeviva company has made itself available to maintain the spaces through sponsorship, a procedure envisaged by the Municipality of Milan. The dialogue was extended for a few months, and different spatial configurations

were developed to adapt to the possibilities that were gradually emerging, from rethinking the road network and access system to minimal interventions. The desire to create a place of relationship within a network of interconnected public places remained central. Unfortunately, due to slow procedures, conflicting interests and limited economic resources, the process was interrupted.

#### The value of failure.

Even if the experience had a failed outcome, having practised and documented the co-design experience has a positive legacy within the research. The project becomes the heritage of all those who "adhere" to the West Road Project, and it is the basis for developing a new project if opportunities arise again. The narrative of the process describes the conditions under which the project can be produced and what the limits and constraints may be. I si an important operable legacy for those who will face the same issues in the future.

This experience, like others, we will tell you about, demonstrates the inclusive nature also from a project point of view. In other words, integrating phenomena and urban areas of different scales, belonging to different and distant areas, into the field of study, by delimiting the experimental area through the design of networks and nodes rather than boundaries and delimitations marked by the improvement and regeneration of the existing one.

# QUARTI PARK. LEARNING FROM EXPERIMENTATION

Developing the ability to activate participatory networks is both an objective and a necessity of the research. These are alliances that through successive settings can change over time but which, as time goes by, shape the photography of the subjects that give life to the urban areas of Via Novara. Networks to which the "I move well" project is addressed and which it is hoped they will take charge of its evolution throughout time. A transformation that takes place by summing up multiple initiatives in which at different times the roles of the actors involved promoters, partners, supporters or beneficiaries - can change and be exchanged. Activating and pursuing such collaboration is not only a way to achieve specific goals but also an opportunity to get to know each other and build longterm collaborative links based on trust. The experience conducted in Via Quarti, and not yet concluded, indeed suggests this possibility.

#### The setting of via Quarti.

The presence of the Tuttinsieme cooperative in the neighbourhood has allowed the researcher to experience an opportunity for space design through a participatory process. The cooperative, together with other third sector realities, led the social cohesion project *Quarti Restart* for two years (2016-2018). The project is one of the nine territorial projects that are part of the *Progetto Mix* initiative promoted by the Safety Department of the Municipality of Milan whose objectives are - by involving the inhabitants in the solution of actual housing problems - the development of territorial networks, the enhancement of existing resources and their connection, for the care and protection of common assets and for the requalification of the environment and public spaces of the neighbourhoods.

Via Quarti is a public housing estate owned by Aler, the Lombardy Region's housing agency. A complex of seven buildings built in the 80s located on the outskirts of Baggio and overlooking the Parco delle Cave. The territory on the edge of the city narratives, on the borders of urban development and on the fringes of collective identity. In recent years, however, it has seen the development of various projects to activate and strengthen social ties. More than 450 families, about 1,100 inhabitants, live in this district, which views the denied connection with the Parco delle Cave as a significant factor of further isolation, and which over the years has concentrated phenomena of widespread illegality and inhibition of the social forces present in its environment.

For the promoters of the *Quarti Restart* project, the WRP research is an opportunity to give continuity to the actions undertaken in these years of work and to collect the relevant results<sup>13</sup>. For WRP, the social cohesion project is an opportunity for trying to carry out an intervention in a context that has already tried to be triggered. It should be kept in mind that Quarti Restart has worked for the care of the

relationships and the strengthening of the networks and has managed to open Space 0-99, a venue on the ground floor of civic 17 shared with the Tenant's Committee and comanaged with a group of residents.

#### Spring 2018. The conception of "Quarti Park".

Quarti Restart was the starting point of the awareness process of Via Quarti and of those who worked there. Some members of the research group took part in events planned in the neighbourhood, such as ludobus14, and equipe meetings. In May 2018, the Municipality of Milan promoted the "Bando alle periferie 2018", a call for the selection and economic support of projects promoting urban regeneration in the suburbs. Right from the start, this was an opportunity to give continuity to the cohesion program and greater substance to WRP's intervention of modification in the neighbourhood. The cooperatives Comunità Progetto and Tuttinsieme with the collaboration of WRP research and Italian Nostra Onlus -Milano Nord conceived and applied for the project Quarti Park. Open gates in the city. The proposal follows other programs that have taken care of activating local resources and places the enhancement of the relationship with the park at the centre of the proposal<sup>15</sup>. The objectives were to co-plan the new accesses to the park and new leisure uses of the areas near Via Quarti (related to sport and gardening). A re-design of the places articulated in phases, to support the local community in the process of taking charge of and taking care of the

13 In precedenza (2011-2014) con ruoli e rapporti di collaborazione differenti i vari soggetti territoriali hanno portato avanti il progetto Quarti si nasce, primi si diventa, finanziato da Fondazione Cariplo che ha permesso di avviare un percorso di rete e di avviare prime sperimentazioni di coprogettazione dello spazio, dando vita a un Parco Giochi comunitario, e allestendo un campo da calcio nel Parco delle Cave e un murales comunitario.

14 A mobile toy library, a van full of wooden toys that weekly equips some areas of the neighborhood such as the end of the street with games and entertainment. https://www.ludobus.org/

15 Dal 2014 Italia Nostra e il Centro di Forestazione Urbana sono impegnate in un programma di recupero della vicina cava Ongari: pulizia dalle discariche abusive, sistemazione dei sentieri, lavori forestali e interventi naturalistici. places, bringing out and valorising local skills. Through the definition of a method that integrates topdown and bottom-up initiatives, the project aimed to bring out a vision that questions the imagination and perceptions of the territory and, at the same time, to give back a specific representation of them articulated in tangible actions.

These precise actions were described in a light master plan that frames them in a strategic dimension that could be implemented over time. An experimental platform that, in any case, will allow a shared reflection on the tools that can support processes such as the one promoted by Quarti Park. Unfortunately, in the end, the proposal was not financially supported.

## **Summer 2018** – working tables of via Quarti.

In those months, the research group was invited to participate in the working table on the Via Quarti's conditions, the initiative promoted by the Town Hall 7. Various local stakeholders and the residents themselves attended a series of monthly meetings. The June and July meetings, in particular, were intended to discuss the possible construction of sports and recreational facilities in the areas of the park near Via Quarti. The new facilities are supposed to be part of an upcoming requalification program of Parco delle Cave. The project is carried out by Borio-Mangiarotti, a real estate company, as a deduction of urbanisation cost produced by its Calchi Taeggi - SeiMilano intervention

programme<sup>16</sup>.

The first meeting was an opportunity to present the project generally and a comparison with local realities on the needs and desires of the territory. During the second meeting, the company's architect described the first choices made related to the resources available and the possibilities for implementation. The project includes a new cycle path that runs along the western edge of the park connecting Quinto Romano to the north and the centre of Baggio to the south. Near Via Quarti there will be new access to the park, the redevelopment of the existing soccer field and the construction of a new multidisciplinary sports area.

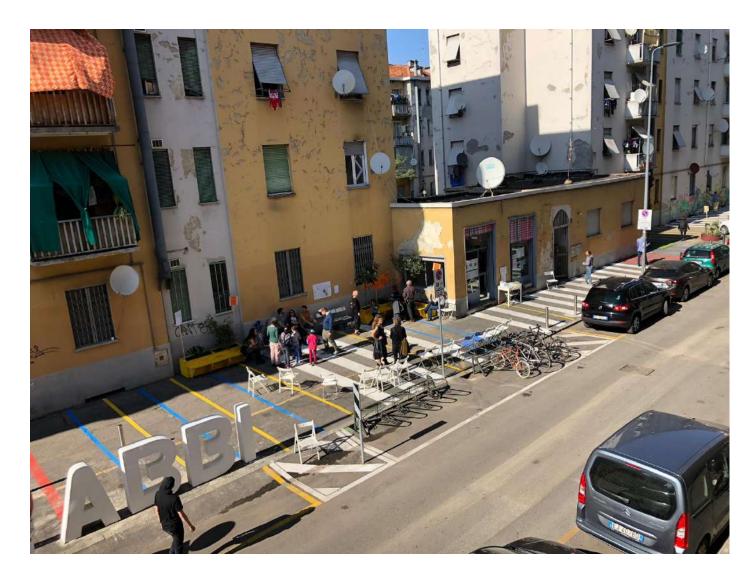
The meetings were a contact opportunity. The days after the research group held a conversation with the project managers to share points of view and the intentions of the respective projects for the street end. During the summer period, a couple of joint work meetings were organised.

### *Two favourable Administration's initiatives.*

In addition to the Quarti's table and regualification of the Parco delle Cave by Borio Mangiarotti, to implement an intervention in Quarti another useful tool can be identified in the Collaboration Agreement. In March 2018, the City Council of Milan approved the guidelines for the experimentation of "policies aimed at promoting the participation of active citizens, informal groups, recognised associations and other operators in the shared management of Common

16 Cf. https://seimilano.com/

#### GREEN LIVING LAB. THE FIRST COLLABORATIVE AGREEMENT IN MILAN



The first Collaborative Agreement, signed on 21st December 2019, is *Green living Lab* with the redevelopment of a sidewalk in Via Abbiati in San Siro. Green Living Lab San Siro is a pilot action of the project "SoHoLab - The Regeneration of Large-Scale Social Housing Estates through LivingLabs", funded by the JPI-Urban Europe program. In a context of widespread abandonment and poor care of streets and open spaces in the popular San Siro district in Milan, the project aims to generate a physical and perceptive change in the inhabitants for the public use of the space. The project, in a broader context of change, focuses the attention on the quality of Via Abbiati public space. The transformation started by Temporiuso.net architects in collaboration with Mapping San Siro researchers and the participation of inhabitants and associations has led to the design, construction and care of a horizontal zebra asphalt graphic along a sidewalk, of bollards for cars and bicycle racks with the words ABBI CURA (TAKE CARE) and three small oases (flower boxes) for community gardening. The participatory process since October 2017 has involved inhabitants, schools and local associations - "SANSHEROES network". The intervention carried out in March 2019 was possible also thanks to the Collaborative Agreement of the Municipality of Milan, which guaranteed the support of the technicians of the Mobility Department, of the Rapid Intervention Unit and Department of Urban





Planning. The volunteers of the Erasmus Plus program and Retake Milan association added their aid during the realisation phase.

For further information and description of the intervention please refer to http://www.mappingsansiro.polimi.it/3-progetti/3-1-spazio-pubblico-e-rigenerazione-urbana; http://www. temporiuso.org/?page\_id=6512; https://www.labsus.org/2019/01/ abbi-cura-a-milano-una-strada-unisce-i-cittadini/. I worked as an architect on the GreenLivingLab initiative. I was thus able to take part in the process until it was completed and the subsequent moments of evaluation. Goods"<sup>17</sup>. A one-year experiment, useful for the writing and adoption of a Regulation for Common Goods. The active collaboration between the Administration and citizens takes the form of the signing of a Collaboration Agreement, a horizontal deal between the parties where choices are made through the sharing of skills, abilities and resources. A tool also designed to reactivate social energies present in peripheral contexts with "lighter" tools.

A tool that also calls into question the procedures with which the different sectors of public administration are used to operate, starting from a sort of self-authorisation of the various implementation steps. On 20th May 2019, the Regulation on the participation of active citizens in the care, shared management and regeneration of urban common goods was finally approved. Among the fundamental concepts within it are horizontal subsidiarity, civic autonomy and mutual trust.

At the same time, the Municipality of Milan promoted the Open Squares project19, in collaboration with Bloomberg Associates, National Association of City Transportation Offical (NACTO) and Global Designing Cities Initiatives. A programme that recalls the approach of tactical urbanism<sup>20</sup> promotes the temporary transformation of some underused public spaces, or in which the car prevails to regain them as places for meeting and socialising. These interventions are often characterised by the colouring of asphalt surfaces and the positioning

of some furnishing elements as bollards for vehicles. In many cases, the two tools are associated as in the case of via Abbiati.

initiations These contribute to making the Milanese context fertile, facilitating, compared to other moments of the recent past, the concretisation of some Realisations experimentations. that often resemble each other in their results (in all of them the colour is the predominant element, for example) but which promote different intentions and targets.

### 15th June 2018 – first meeting in the neighbourhood.

For the WRP group, the end party of Quarti Restart symbolically represents the first meeting with the residents of the neighbourhood. On an axonometry representing the neighbourhood, they began to point out places, criticalities and needs. I was a preliminary work of co-design, conceived and activated with the support of the workers present in Via Quarti. In continuity with the previous initiatives, the aim was to "build together a place where it would be pleasant to stay, welcoming and tailored to the needs and interests of the locals", as reported in the postcard promoting the initiative.

#### Fall 2018 – start the co-design.

After summer it was organiser a co-design workshop structured in 4 meetings held in the neighbourhood.

18th October - presentation of the processandbeginningconversation. The meeting, held in the shade of some large trees, was attended by about ten residents, some stakeholders

17 Resolution n.461 of 16/03/2018 entitled "Approval of the strategic guidelines for the experimentation of policies aimed at promoting the participation of active citizens, informal groups, recognised associations and other operators in the shared management of Common Goods. Duration of the experimentation, preparatory to the presentation to the Municipal Council of a Regulation on the subject: 12 months. Immediately executable".

19 https://www.comune. milano.it/aree-tematiche/ quartieri/piano-quartieri/ piazze-aperte

20 Term used by the administration, in my opinion improperly since it is more a top-down initiative than a bottom-up one, at least for the first interventions. The places, modalities and times are dictated by the municipal administration. and political representatives of the town hall. In order to support the discussion, conducted in a free and colloquial way, six cards in A3 format were prepared, as well as an axonometry of the neighbourhood. Each card described the element - furnishing object, use of colour and landmark element - that characterises just as many public spaces - three European cases and three Milanese cases. The intention was to demonstrate the possibility of being ambitious and realistic at the same time, showing that the intervention that would be shared could be carried out in awareness of the limited resources available. The choice to propose suggestions was to direct the discussion immediately to an operational dimension. Everyone agreed in recognising the bottom of the road as a significant place because it was recognised as "everyone's space". The neighbourhood is historically divided, not only physically, into two opposing parts: "the three buildings", the first to be inhabited, and "the court" which almost immediately became the scene of highly critical and illegal situations.

Besides, working at the end of the road is an opportunity to build a link with the Cave Park and what will happen here in the coming years, via Quarti a new access to the park. Attention has also been given to the possibility of strengthening the link between the two parts of the neighbourhood at the driveway accesses, a barycentric place with a Space 0-99 and a small space, now used as a warehouse, close to the street.

8th November - what the new square of Quarti will look like. At Space 0-99 we tried to clarify some emerging issues and design guidelines. A significant number of teenagers were added to the residents of the first meeting. At first, a deck of dixit cards was used to collect stories of the neighbourhood, for example, a hot-air balloon event held in the park years ago. Then, using a plan and an axonometry of the neighbourhood, we tried to identify some fixed elements. Supported also by the cards of the previous meeting (which remained hanging in the room between the two meetings), it emerged the desire to create a colourful intervention, associated with the idea of beauty and visibility, which signals the entrance to the park. It was also requested to signal the intervention at the beginning of the street, to imagine a more comfortable waiting bus stop and provide an area for dogs.

In the following weeks the suggestions and indications were re-elaborated by the research group in a more defined and articulated project proposal in various possibilities.

22nd November - a proposal to develop. In order to carry out the confrontation, axonometries and views have been elaborated. They are tools to tell in a simple way how the indications of the previous meeting have been re-elaborated. We propose three different solutions for treating the road surface with blue, red and yellow graphics alluding to different ways of use. The use of prefabricated concrete elements, commonly on the market, to make furniture and bollards for cars. The installation of two Stoopbench seats donated by Vestre. The possibility to plant some trees in the road mantle, with the support of Italia Nostra. The construction and installation of some metal flags to mark the project at the beginning and end of the road.

According to indications, a proposal to reorganise the area near the bus terminal was added, but it was difficult to implement anything within our project.

The proposal to plant new trees met immediately positive interest. We then agreed on a design that favoured children's playgrounds by creating coloured graphics on the asphalt, allocating the areas near the entrances and in the shade of the trees to adults and elderly people with seats and flower boxes. A preference for the use of yellow has also emerged.

13th December - Christmas party: Make the last decisions together! During the annual festival organised with the residents, boards describing the results of the coplanning process were presented. These boards remained on display in Space 0-99 also for the following months.

#### New Year 2019, interactions to realise.

At the beginning of the new year, talks began with different sectors of the public administration to verify the implementation possibilities and define the proper steps to be taken. A series of meetings then involved the Departments of Participation and Active Citizenship, Urban and Green Planning, Mobility and Public Works, technicians from the relevant municipal offices, the director of *Parco delle Cave*, the company Borio Mangiarotti and its designers, and Aler, the owner of the buildings.

Meetings that were also moments of co-planning. All sectors recognised the potential of the project, even proposing to include the interventions within the PII Calchi Taeggi urbanisation plan. Both WRP and the promoter of the building intervention received the proposal positively. The transformation of Via Quarti should be divided into two phases. The first, temporary and selfbuilding with the instrument of the cooperation agreement, will anticipate and experiment with the pedestrianisation of the end of the street. The second, which will respect the timescale of the authorisation of the works plan, will redevelop the entire street by structurally rethinking the road section, the nature of the soil and the planting of other trees. The result will be a project that has expanded its possibilities yet inevitably has to revise the process and timescale.

The first necessary step is the pedestrianisation of the end part of the road. An authorisation of the mobility sector can implement that following a resolution of the municipal council. This step took a few months as it was decided only at the end of January 2020.

The positioning and number of trees were also revised following certain constraints that emerged guaranteeing access to the harvester leaving a 4-metre wide passage free, respecting the distances from the existing sub-services lines. In this operation, collaboration with the Borio Mangiarotti designers was constructive because they shared the survey of the sub-services and the identification of the areas where it is possible to plant. The result is the possibility of positioning three trees: a Fraxinus Ornus, and two Quercus Cerris.

Collaboration with the designers of the park's plan resulted in the modification of the temporary project, especially the horizontal graphics. The design aimed at anticipating the configuration of the places as they will be after the redevelopment works. The project for the redevelopment works of the *Parco delle Cave* began its authorisation process at the end of October 2019 with the presentation to the administrative offices.

### Summer 2019, a new Call for project "Patti Chiari".

The consequence of this extension of the project has been an expansion in time. For the third consecutive year, the Municipality of Milan is promoting the selection and financing of some urban regeneration projects through the Bando Quartieri 2019<sup>21</sup>, deadline 1st July 2019. Applications may be submitted for ten months (from September to June 2020), which propose to "animate neighbourhoods and strengthen activities and services aimed at the residents with projects involving territorial networks and supporting citizens' organisations". Also this time it seems to be an opportunity to boost a process that in Via Quarti is getting longer and longer. The dilation can weaken the relationships of trust with

the residents built over time. By revising the Quarti Park project and focusing on the signing and animation of the next collaboration pact, the cooperatives Comunità Progetto and Tuttinsieme, Italia Nostra with the support of WRP present the project Clear Pacts; from the Collaboration Agreement to the Regeneration of Neighbourhoods (Patti Chiari, dal parro di collaborazione al Progetto di rigenerazione di via Quarti). The objectives of the proposal are similar to the previous ones: "to strengthen the social inclusion of the community groups involved in the project, with attention to the most fragile groups; to favour the emergence of competences of the beneficiaries, contributing to the regeneration of the spaces; to consolidate the activation paths of the inhabitants who become reference groups in the dialogue with the local institutions and the third sector for the care of the Park; to promote new leadership and coalitions for the territory, strengthening the interacting capacity of the residents" (from the project report). The difference is that this time there is a detailed transformation project. The project has been selected and in September startee with an update meeting with inhabitants on the progress and changes to the original project.

The *Patti Chiari* programme also becomes a tool to encourage the implementation of the different authorisation steps necessary for the signing of the collaboration agreement. Efforts are made to set November as a convenient date to allow the planting of trees. The date, however, fails to be respected.

21 Cf. https://www.comune. milano.it/aree-tematiche/ quartieri/piano-quartieri/ bando-quartieri

In order not to completely expectations disregard the of the residents, it was decided to anticipate the implementation of a small intervention that affects the green areas owned by Aler after having met their availability. At the end of November, four prefabricated concrete rings are laid along the path connecting the two parts of the neighbourhood. Coloured in yellow and filled with earth, they will become flowerpots cared for by some of the locals who have made themselves available, supported by the "conducted gardener"22 of the Urban Forestation Centre also with the availability of some of the residents.

With the resolution of the end of January on the pedestrianisation of the terminal part of Via Quarti, the signing of the pact and the implementation of the interventions for the month of March 2020 was rescheduled.

#### March 2020, the lockdown.

In the meantime, other local players have also joined the pact. Unfortunately, the spread of the virus COVID-19 halted the process again. We come back in June trying to push fast to realisation.

#### October 2020, the realisation.

The circumstances are now ripe to implement the intervention. On 24th September the cooperation agreement was signed in the neighbourhood by seven local organisations, the DAStU and the Municipality of Milan. The signature and the entertainment events organised are the opportunity to announce the start of the works and to tell who did not know about the project. The following week the road was physically closed to cars, the holes of new trees were drilled, and the protective rings laid. On Monday 8th October the horizontal graphics were painted with the contribution of the signatories of the agreement, the students of Prof. Di Franco's design workshop and some young people from the neighbourhood. It was an intense moment of confrontation between the promoters of the initiative and the inhabitants who were not familiar with the project. With relative surprise, the decision to close the street and use it for playing met with almost exclusively positive judgements. On 16th October, an inauguration day was organised (although the trees are still missing) during which there was also a debate on the possible continuation of social work in Via Quarti. The meeting attended by the signatories of the agreement and representatives of the Municipality of Milan, Town Hall 7, the Lombardy Region and Aler Milano.

While waiting for the right moment to plant the trees, in November, activities to animate and monitor the experimentation began. 22 Service offered by the Urban Forestry Centre, which consists in providing support to initiatives for the management and implementation of green areas by associations and groups of citizens.

### THE ADAPTIVE MASTER PLAN. A RELATIONAL DEVICE

### Tensioning guesswork and experimentations.

Suppose guesswork the of "moving well" directs the design perspective (general) and the concrete experiments practice the possibility of translating the opportunities recognised by design into oriented actions (particular). In that case, it is necessary to equip oneself with an instrument capable of managing their tension. A device capable of indicating a method through which to build relationships between opportunities, subjects and resources that become available over time. The aim is to ensure that each episode is recognised as a piece of a larger whole and at the same time maintain meaning independently of it. A habitat capable of supporting organisational and organisational forms of rhizomatic development, which develop horizontally between tangles and nets, for parts and occasions, without predetermined successions.

The research has identified in the master plan a sufficiently ductile and interactive tool to regulate a project that has a choral nature, open to different knowledge and actors. It would be an appropriate tool to support, direct and coordinate a multiform set of transformative actions that will build in time an articulated system of spaces for mobility and places of relationship. A set of punctual transformations that are not predictable, to time and the actors involved, but that find in the master plan the device to be contextualised and acquire an

urban sense. Aware of the fact that the city is the object of numerous micro-changes, the research through the design perspective tries to recognise these transformations as an opportunity to deal with the issue of the marginality of peripheral contexts. They are places frequently excluded from significant interventions of urban regeneration or when they are the object of such opportunity often the result is to have moved the marginality a little further away. "Small plan, small actors, small money" (Pepe 2019, 19) producing parts of cities and often very quickly exhaust their transformative capacity.

#### Argue the belonging.

The scope of the master plan is to offer a series of elements to argue that the episodes belong to a themed set of places that can be activated over time. The hope is that the belonging will be able to draw the attention of those subjects who in various ways have to do with those places. The master plan is not a sectoral plan which task is to design the system of slow mobility in the area. But, starting from the theme of slow mobility, the attempt is to bring out a shared view, from a multitude of subjects, capable of building new conditions of habitability for the territory on the edge of Via Novara. A space for negotiation (Yaneva 2012) which, from time to time, modifies the concept of moving well and therefore living in the north-west area of the city. An instrument in constant adjustment and for this reason the term master plan has been associated with the adjective adaptive to underline the

will to be effective in relation to the contingencies of the place and the moment. Every action on the territory can take on greater value by describing its belonging to the *master plan* and at the same time giving back value to the device by making its own experience shareable.

From this point of view, the *master plan* is aimed in particular at the administrators and the articulated world of the third sector who operate daily in this part of the city and beyond.

It provides administrators with a tool that supports them in imagining every local intervention as a possible lever of improvement for the sector and in some cases for the city. A tool that is in dialogue with the current municipal administration's desire to enhance the role of active citizenship. The City of Milan implemented various programmes and policies about the issue, from the experimentation of Collaboration Agreements to the definition of a Regulation for Municipal Heritage to the promotion of the Participatory Budget or initiatives such as "Open Squares" and the technical sponsorship of municipal green areas, just to give a few examples<sup>24</sup>.

#### A driving palimpsest.

The *master plan* could be the place where to deposit the effects of these interventions to build an updated continuously territorial palimpsest (Corboz 1983). An image that can be a guide in directing a series of choices that the administration is called upon to make daily: where and how to allocate the burden of urbanisation; providing topics for evaluating applications for the calls for proposals that it periodically proposes, for financial and nonfinancial contributions; involving parts of the territory in specific actions part of complex financing projects<sup>25</sup>. The current municipal council, and in particular the Department of Active Citizenship and Participation, has been asking many questions in recent years about the ways in which the projects and the communities that live in the areas of intervention can be brought closer together<sup>26</sup>. The master plan can be a first step towards the construction of a habitat that, through stratifications and negotiations, helps to recognise the value and legitimacy of the and those interventions who implement or manage them.

For the multiple local realities, the master plan can be a place where the wealth (or inconsistency) of the network of subjects that act daily on the territory can be recognised. Through the archiving also of the actors involved in the projects and programmes, not only the geography of the territorial stakeholders but also their specific competencies will emerge. The master plan can thus become a place of knowledge starting from the story and archiving of the experiences that follow one another over time. The map that emerges becomes a support for the experimentation of new project coalitions and their consolidation on the one hand, and an argument to give continuity and consistency to new proposals on the other. Clues of operation.

23 http://www.polisocial. polimi.it/it/off-campus/

24 For further information, please refer to the Municipal Administration portal https://www.comune.milano. it/ and in particular to the areas of Participation and Neighbourhoods.

25 In the experience of the Master plan Lorenteggio described in the prologue, an attempt was made, but it was interrupted when we got into the complexity of the procedures and the implementation of the choices.

26 The attendance necessary for the success of the 'concrete experiments' between the research group and the Department for Participation has produced a relationship of mutual trust that has led to moments of discussion on the nature and content of the regulations that the administration is adopting regarding 'participation rights'.

These are potentialities recognised in the master plan; for now, it is only possible to glimpse clues emerging from the relationships established during the two years of research. An activity which, however, takes longer than the Polisocial Award. In San Siro, some projects are underway that continue the experiences of via Abbiati (Green Living Lab) and via Gigante (Collaboration Agreement). Spectacular Courtyard / Cortile Spettacolare is a project financed by Mibact through the Creative Living Lab call, working on the re-design and reactivation of the courtyard in via Abbiati 6 - on which the back of the Off Campus space overlooks through co-design activities with the inhabitants and artists (promoted by Mapping San Siro, WRP in collaboration with Polisocial and in partnership with Outis-Centro nazionale di drammaturgia contemporanea). Caravansaray Selinunte San Siro is an urban dramaturgy project promoted by Outis in partnership with Mapping WRP, Associazione San Siro, Genitori Cadorna e Alfabeti Onlus, in network with Ludwig-Officina di linguaggi contemporanei, Custodi Sociali-Comune di Milano, Telaio delle Arti and Istituto Comprensivo Luigi Cadorna, which imagines the writing and staging of a play in spaces in the San Siro district starting from the schoolvard. Then there is the interest of the company Recordati spa for the sponsorship of the space in front of their headquarters in San Siro, co-designing its re-design with the research group in continuity with the intervention in Via Gigante.

Critical aspects.

There are still critical aspects that need to be addressed. The construction of networks of territorial actors needs subjects who take charge of coordinating and promoting the activities of the network. This is not an easy and time-consuming task. Significant is the work undertaken in recent years by the Mapping San Siro group<sup>27</sup> in the promotion and guidance of the Sansheros network that "gathers most of the local realities, committed, with different aims and roles, within the neighbourhood (...) was born to give back a complex and deep-rooted knowledge of San Siro, useful to build shared visions а transformation of of the neighbourhood and to intervene more effectively in the most urgent situations"28. In this case, the various members have recognised the research group of the Politecnico di Milano as the "lead partner", which is responsible for coordination activities. This role is also possible because it is partly due to research interests, but it will prove its effectiveness if in the future the network will be able to become autonomous<sup>29</sup>. The "leader" role today can be excessively burdensome for many actors.

Another critical aspect is how to translate the different materials of which it is composed into a product/ instrument that can be transmitted, consulted and implemented by multiple subjects.

#### The online master plan.

The possibility to display the *master plan* on a website is being experimented. It has been imagined as a shared platform between the

territory and public administration. Two main sections articulate it: the master plan and an interactive "I move well" map.

The master plan section is divided into: atlas, the graph of moving well, urban systems, the network of schools and project experiences. The atlas collects a series of readings from the urban sector that try to bring out some spatial features and living conditions that are significant for the research objectives. They describe the "thickness" of the context of Via Novara, its characters and its equipment. Layers such the settlement figure, as the private-public infrastructure and services, the open spaces and the neighbourhoods of the public city are part of this section.

The graph of moving well is the network available or potentially available to host slow mobility, in safety and according to different conditions of comfort concerning the users. This is a map created in a GIS (Geographical Information System) environment that, based on the network of routes, it is possible to make a selection of privileged routes according to some indicators identified. Choosing which indicators to adopt is an important moment to reason what it means to move well based on personal needs, making different possibilities to reach B starting from A emerge. The fastest route is flanked by the safest one, the most shaded one, with a greater presence of services and others. It wants to be an "intelligent map", questionable and open, an informed support comparable

with other databases, continuously updated and implemented also following surveys. For the time being, the product graph is only capable of enunciating and making this potential visible. However, its evolution is conceivable thanks to the collaboration with other research groups and institutions. WRP has collaborated with MaudLab (Mapping and Urban Data Lab) of the Politecnico di Milano in the design and development of the graph<sup>30</sup>. The MaudLab also allowed the comparison with some other ongoing experiences such as the Mobilage project conducted in collaboration with other faculties or some experiments on "active mobility" that AMAT (Agenzia Mobilità Ambiente Territorio) of Milan. The BikeItalia/Bikenomist association has also contributed to the definition of indicators of good mobility.

The graph construction work has seen the definition of some 'typical users': students (accompanied or autonomously), workers, those who do sport and those who go shopping. Indicators describing the network of city routes were then taken into consideration. Information that sometimes comes from available databases and sometimes from surveys. Selected portions of the sector were then surveyed for the type of road surface, the presence of trees, public lighting, shops and services and public spaces. These data must necessarily be updated and implemented over time, which is why it was decided to operate with a database-based system to be able to use and contribute to informing other open-source models.

27 Although indirectly, the activities of the Mapping San Siro group have often enriched the observations and reflections of the research that have often been informal simply for sharing the Off Campus space and exchanging views.

28 A description of the activities undertaken since 2016 can be found on the group's website http://www. mappingsansiro.polimi.it/ in the section local networks and skills as well as for a critical account of the role see Cognetti Padovani (2018)

29 The presence of the network is proving to be a useful tool to jointly face the crisis caused by the spread of the Covid-19 virus, sharing information, knowledge and actions put in place to deal with the fragile situations in the neighbourhood, with respect to the skills and possibilities of each person.

Urban systems are interpretative images that, starting from Via Novara, broaden the field of observation and contextualise parts of the sector crossed, reformulating the theme of moving. Starting from the theme of belonging to the place, they are interpretations that want to suggest possible collaborations between punctual occasions and other local resources for the requalification of these parts of the city. The hypothesis is that Via Novara intercepts multiple settlement situations and the theme of moving around well must be declined differently. Enlarging the field we can observe the double level of the system, Via Novara is the site of fast and safe connections between the centre and the outskirts of the city, while the parts of the city on the outskirts will host a network of more articulated and differentiated routes that connect the local addresses. Five systems have been recognised: the radial - via Novara and its thickness; the constellation via Novara meets the dense city; the suburban street - via Novara meets the urbanity of via Zoia; the west room - via Novara meets the system of large open spaces; the network of villages - via Novara meets the outer urban centres.

The network of schools is an image that isolates a set of places that by their nature substantiate the theme of moving well (slow, safe, in company, etc.). It makes it possible to propose elementary and lowcost transformative actions that can be proposed again, producing a widespread effect in the sector. These spaces belong to a "particular family": they are widely distributed throughout the territory, they play a generally shared symbolic role, and, in these cases, the public actor can be the promoter of the interventions by soliciting the participation of students and parents. Imagining a series of interventions close to schools allows us to explore the possibility of working on the continuation and declination of a series of actions.

The design experiments are the section that collects the occasions in which we have had the opportunity to develop projects for the concrete transformation of space. These are areas, belonging to the swarm, which for different reasons have become occasions where we can experiment with the construction of a fragment of the I move well network. The experiences enter the master plan as stories that from time to time filter out the elements and relevant issues that have emerged. They are different stories that answer the question: what have we learned from this project exploration? It is not a question of describing "good practices" but of telling how, through the general design pretext, it is possible to bring opportunities into tension with the resources, subjects and their skills that can be activated in a specific context. If the important thing is to tell what has been learnt in these stories, there may be failures (wholly or partly) because even what did not work becomes shared heritage and teaching for the next opportunities.

30 http://www.maudlab. polimi.it/

The interactive map of I move well represents an archipelago of places where critical issues, resources, opportunities and projects (of various nature) in progress or simply proposed are recognised. It is a heterogeneous whole, and in constant updating, which represents the nodes of the network of moving well. It is an elaboration designed to be consulted rather than to give an overall vision. A map that when interrogated through the other instruments of the masterplan becomes the design space of the network of moving well, where lines and nodes make the potential figure and its partial realisation emerge over time. Each place is described in a card that gives back the multidimensionality and complexity of each point. Through some short texts and drawings it is described what there is, the potential and criticality of the place both in terms of space and human resources, the proximity to services and/or features of the network as well as its belonging to recognised systems.

The list of these areas is naturally open and requires constant updates: some new areas are added; some change their character as a result of events or the implementation of a transformation. If the consultation of the map, as well as of the other tools, is available to everyone, its implementation is open to the collaboration of those who actively and daily operate in the western territory of Milan. A format is being studied in order to report and fill in a descriptive form of new locations of the "swarm" directly on line. The platform is to be considered

an experimental outcome of the research and, at the same time, an openness to its continuation in order to verify effectiveness.

The two years of research ended with the spread of COVID-19, which imposed the lockdown of many areas of the planet. Inevitable is a reflection for those who have tried to experiment with programmes and projects to move well. An epidemic that, once the emergency phase is over, will impose a reflection on how people inhabit the city starting from the way they move. The mayor of the city himself, Giuseppe Sala, stated in an interview with Corriere della Sera that "... the infrastructure system must be modified. First of all, I am thinking of transport and mobility because it will change the way we move". Without looking for answers in the short term, there remains the conviction that the development of an inclusive and safe city is based on the promotion of an active dimension of citizenship and how it cannot do without the right to accessibility according to everyone's needs. In my opinion, it is necessary to equip oneself with transparent operational tools that are able to give continuity and build synergies between interventions of a very different nature.

> Opposit page. The cover and back side of a poster produced by *Italia Nostra Onlus* to promote the idea of a cycle path along Via Novara. On the back side the section that tells the partnership with West Road Project.

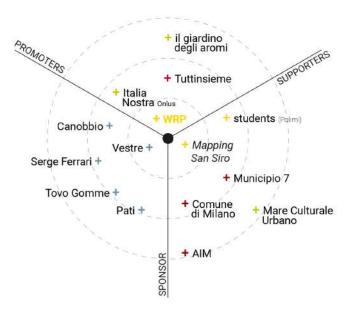


#### I MOVE WELL

The proposal of cycle-path along via Novara by Italia Nostra Onlus "La Strada dell'Ovest" appeared to be an opportunity to propose a research project to Polisocial Award 2017 about the "right to mobility" in marginal areas. The aim is focusing on usable sets of tools, approaches and policies that can help cities, citizens, communities, businesses and institutions to employ new developments in urban mobility to their full potential. The network of applicants summarizes the proposal intentions with the design slogan "I move well". The research started from the assumption that by improving the conditions and opportunities for movement, moments of relationship are fostered, and the sense of belonging to the places by inhabitants is strengthened. Moving well to live well.

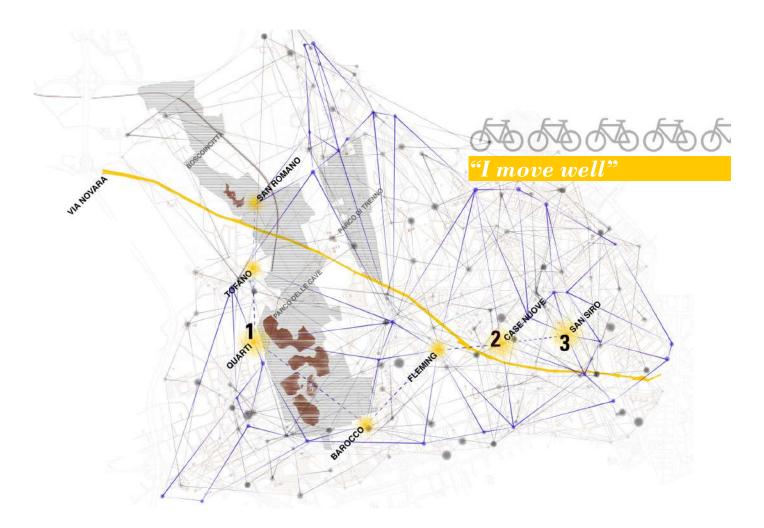
The slogan tries to be a tool to focus on a new scenario for mobility in the area and the definition of a device to activate marginal public spaces. The design bias focuses on the action of moving and not on the measures adopted, not necessarily referring to technical-technological solutions. The slogan focuses on the beneficiaries as an active subject, recognizing the different needs of the individual.

The guesswork design is a tool to direct the multiple reading and project actions put in place, by various players, to connect the nodes of marginality present in the area.











 $1 | 2 \frac{3}{4}$ 

1-2 The research group experimented the potentialities and criticalities of the area.

3 The reinterpretation of Italia Nostra proposal in the "I move well" network.

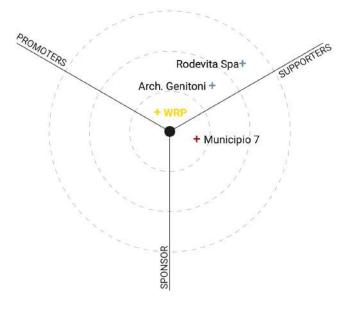
4 A postcard printed to promote the research outside university

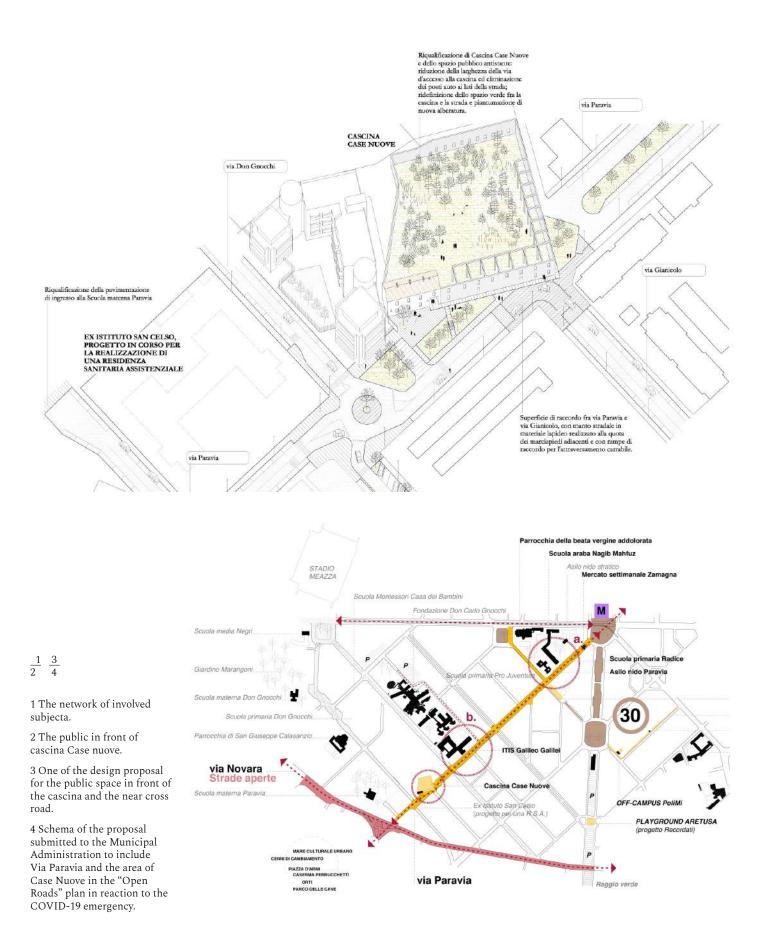
#### **BUILT EXPERIMENT #06 - CASCINE CASE NUOVE**

The proposal of cycle-path along via Novara by Italia Nostra Onlus "La Strada dell'Ovest" appeared to be an opportunity to propose a research project to Polisocial Award 2017 about the "right to mobility" in marginal areas. The aim is focusing on usable sets of tools, approaches and policies that can help cities, citizens, communities, businesses and institutions to employ new developments in urban mobility to their full potential. The network of applicants summarizes the proposal intentions with the design slogan "I move well". The research started from the assumption that by improving the conditions and opportunities for movement, moments of relationship are fostered, and the sense of belonging to the places by inhabitants is strengthened. Moving well to live well.

The slogan tries to be a tool to focus on a new scenario for mobility in the area and the definition of a device to activate marginal public spaces. The design bias focuses on the action of moving and not on the measures adopted, not necessarily referring to technical-technological solutions. The slogan focuses on the beneficiaries as an active subject, recognizing the different needs of the individual.

The guesswork design is a tool to direct the multiple reading and project actions put in place, by various players, to connect the nodes of marginality present in the area.





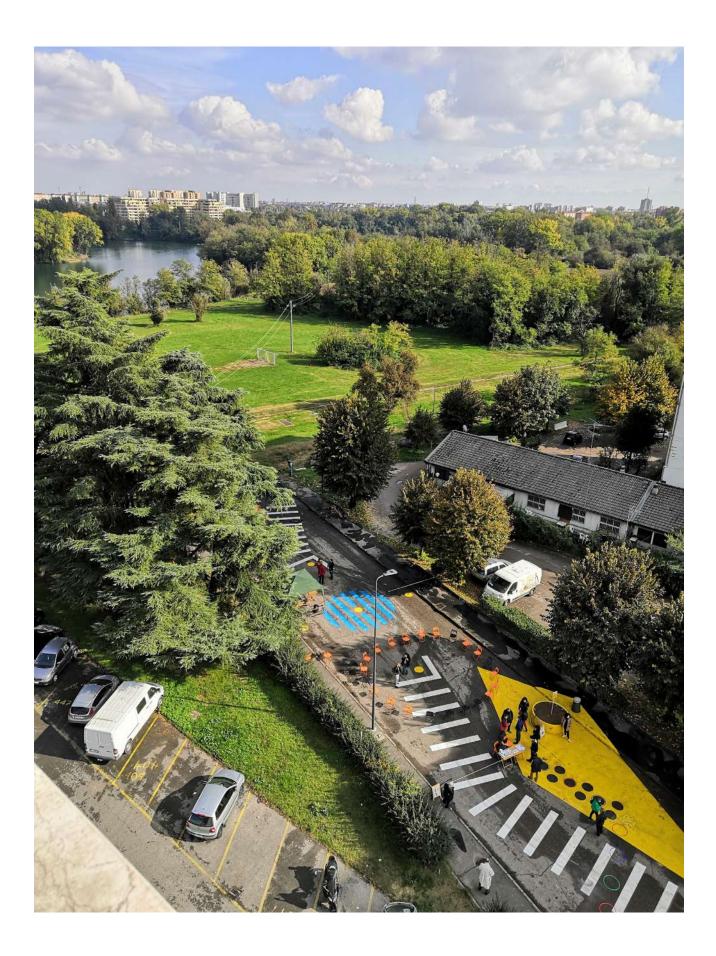
#### **BUILT EXPERIMENT #07 - QUARTI PARK**

West Road Project since 2018 is carrying out an intervention in the neighbourhood of Via Quarti. Seven towers of public housing in a suburban context overlooking the Parco delle Cave. Supported by some local associations and engaging citizens, it was developed a project for the redefinition of the end of the street that cut in two the neighbourhood. It will be a common space and a new entrance to the park.

The cooperative Tuttinsieme, a research partner, was involved in Quarti Restart, a program of social cohesion. The initiative was ending in spring 2018, and it was the starting point of an experiment in the neighbourhood. First of all, to get in contact with other local stakeholders and inhabitants and design with them a proposal.





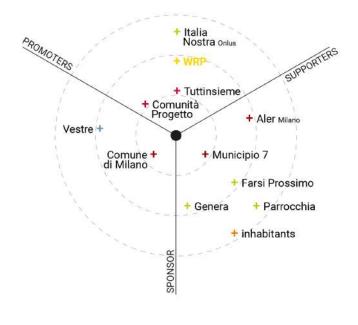


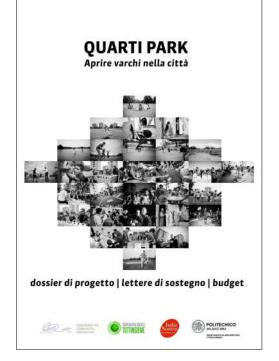
#### **QUARTI PARK, FIRST PROPOSAL**

West Road Project since 2018 is carrying out an intervention in the neighbourhood of Via Quarti. Seven towers of public housing in a suburban context overlooking the Parco delle Cave. Supported by some local associations and engaging citizens, it was developed a project for the redefinition of the end of the street that cut in two the neighbourhood. It will be a common space and a new entrance to the park.

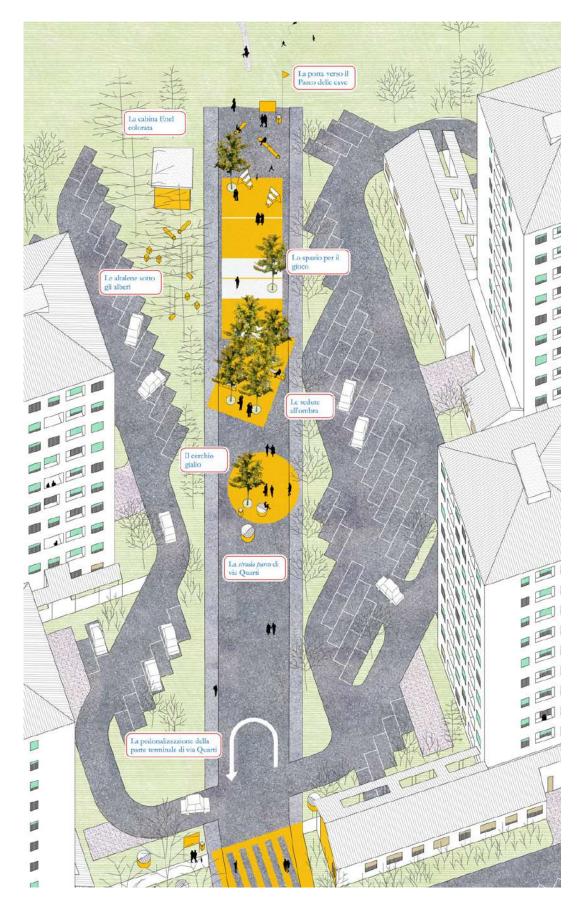
The cooperative Tuttinsieme, a research partner, was involved in Quarti Restart, a program of social cohesion. The initiative was ending in spring 2018, and it was the starting point of an experiment in the neighbourhood. First of all, to get in contact with other local stakeholders and inhabitants and design with them a proposal.

West Road Project represents a chance for a follow-up. So the cooperativa Comunità Progetto and Tuttinsieme, with Italia Nostra Onlus and WRP applied to the call Bando alle Periferie. They submitted Quarti Park. Aprire varchi nella città. The main goal was to create a bridge between different programs that worked on the local resources and tried to strengthen the relationship with Parco delle Cave. Unfortunately, they lost grant, but a workshop of co-design was organised in autumn.











1 The Quarti Park network.

2 The cover proposal submitted to *Bando Periferie* 2018.

3 The first meeting of the codesign workshop.

4 The proposal for the modification of the end of via Quarti as the workshop's outcome.

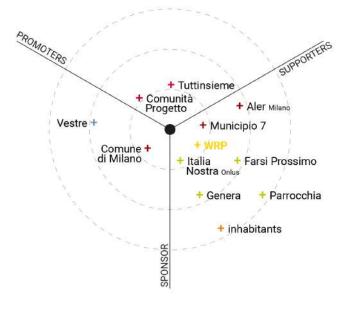
#### PATTI CHIARI, FINAL PROPOSAL

January 2019. The co-design workshop ended with a shared proposal. It starts the dialogue with the administrations to verify the implementation possibilities and define the proper steps to be taken. A series of meetings also the company Borio Mangiarotti and its designers, and Aler, the owner of the buildings. The meetings were also moments of co-planning.

All players recognised the potential of the project, even proposing to include it in the PII Calchi Taeggi urbanisation plan. The first step is the pedestrianisation of the end part of the road. This step took a lot of time, until the end of January 2020, expanding the timetable.

Summer 2019. For the third year, the Municipality is promoting the Bando Quartieri 2019. Again, it is an opportunity to boost the process that is getting longer and longer. The local network presents Patti Chiari. The project has been selected and in September started with an update meeting with inhabitants on the progress and changes to the original project.

October 2020. With many stop&go the network signed the Collaborative Agreement, and with the contribution of students and inhabitants start to realise the transformation. The trees are coming.











1 The Patti Chiari network.

2 To not disappoint the hopes of the inhabitants, flower boxes were built in November.

3 A sketch from the dialogue between WRP and the the architect in charge of interventions in the park.

4 The proposal after the comparisono with administration and the developer Borio Mangiarotti.

#### PATTI CHIARI - THE REALISATION









# $\frac{\frac{1}{2}}{\frac{3}{4}} = 5$

1. 24th Sep. signature of the Collaboration Agreement in the neighbourhood

2-3. *5th Oct*. Co-realization activities.

4. 16th Oct. Openinig day.

5. *16th Oct.* The opening day is an opportunity to organise a round table on the future of the neighbourhood.

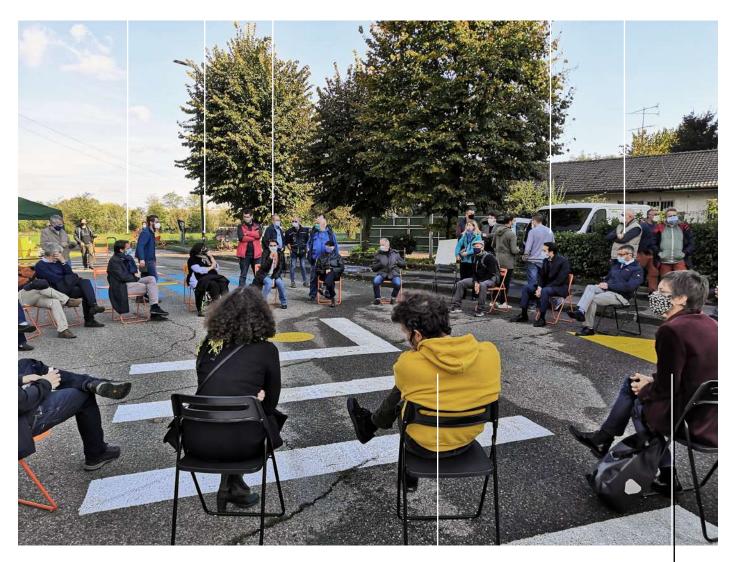
#### Local Administration

### Local Administration

### City Administration

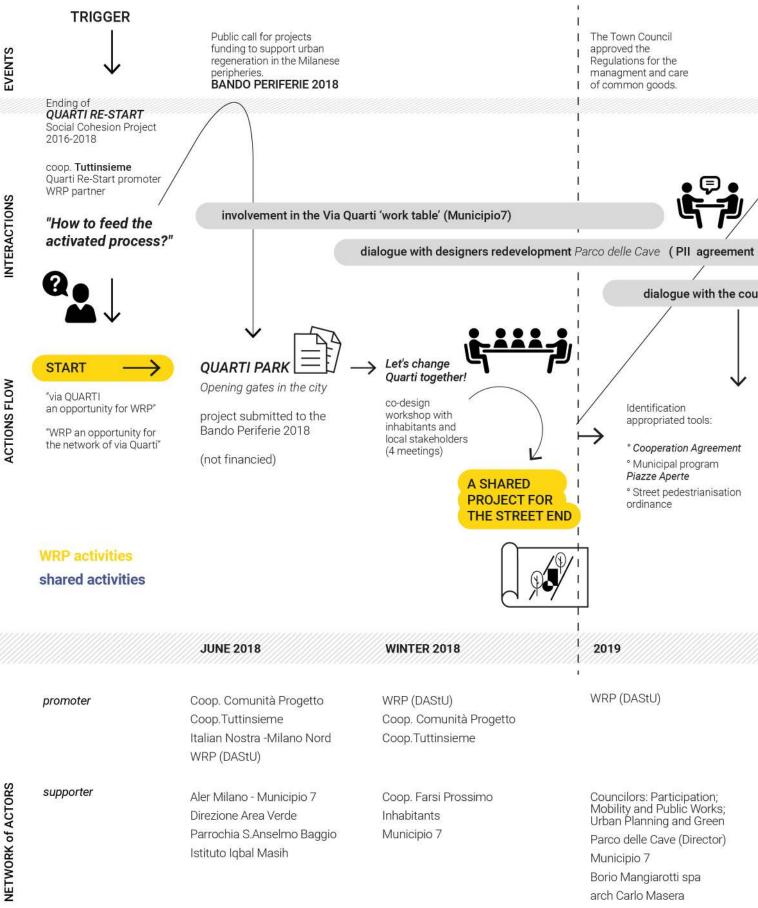
local stakeholders

**Regione Lombardia** 



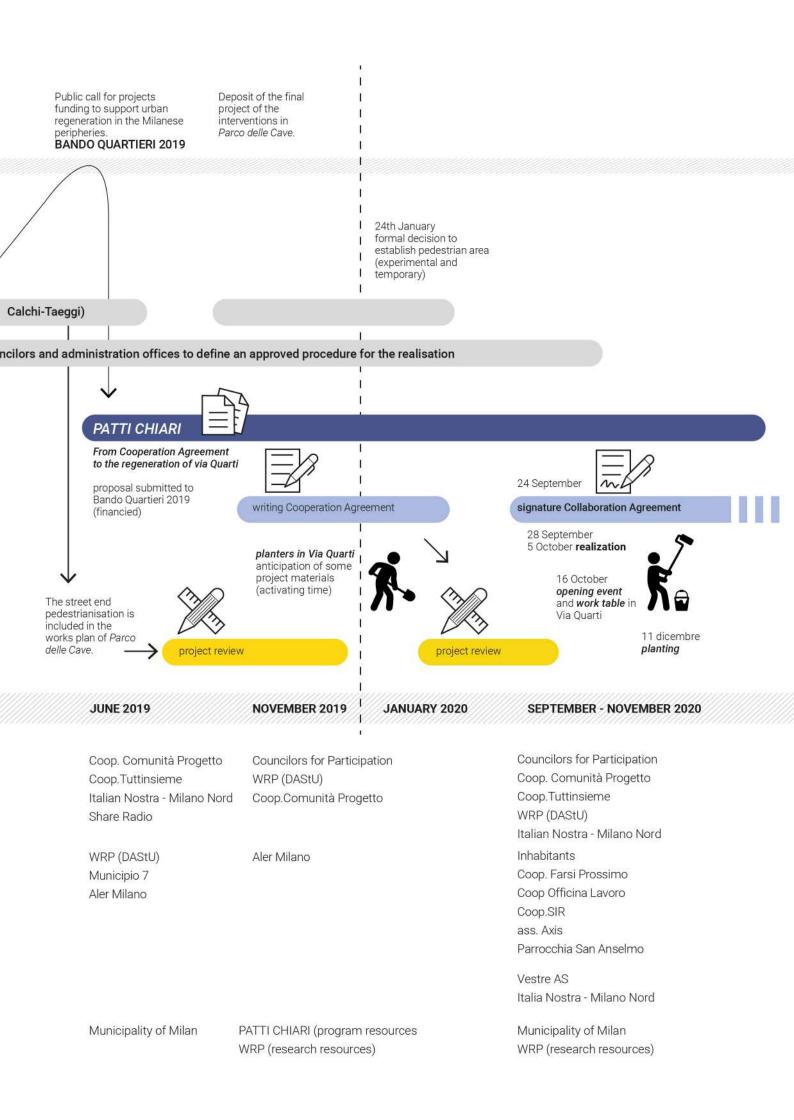
local stakeholders

Politecnico di Milano



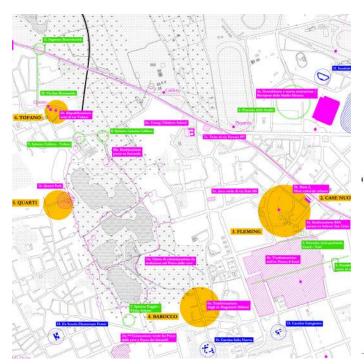
sponsor

financier



#### THE ADAPTIVE MASTERPLAN

The Masterplan is a device in continuous evolution, made up of multiple tools: the atlas of interpretative analyses of the territory, the archipelago of places where projects promoted by local players are in progress or where they could find a place, the graph of moving well that investigates the actual accessibility of the mobility network, the project experiences that WRP has promoted and supported by taking part in it with the intention of giving back to territories shared and durable public space projects.







 $\frac{1}{2} \frac{4}{5}$ 

1-3. Some interpretative readings of the atlas.

2. A portion of the archipelago.

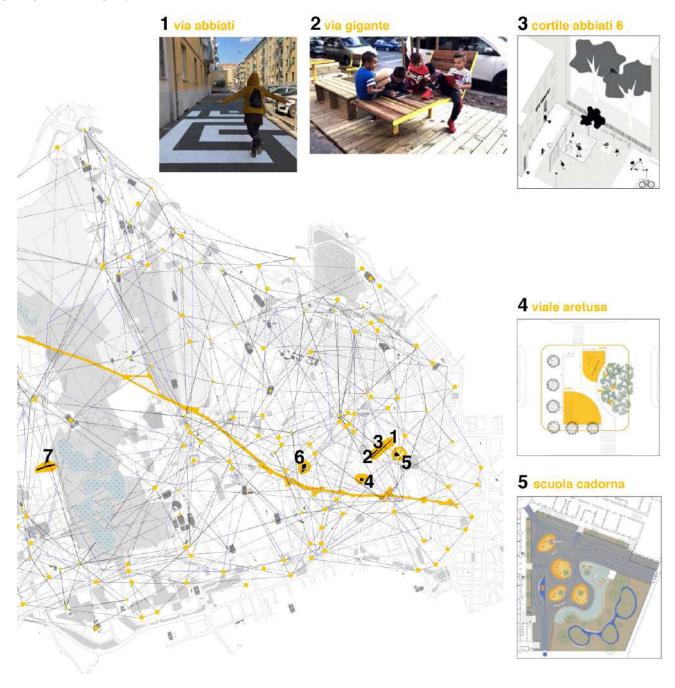
4. The scheme of how the masterplan is composed

5. A portion of the relief of the graph of the *I move well* (realized in GIS environment)

#### **CLUES OF OPERATION**

Overtime, other experimentations have been activated, a result of the cooperation between many players in different coalitions. They obtained funding by winning calls for projects. In San Siro, the proximity of some interventions and the presence of the Sas Heros local network make the neighbourhood a privileged field in which to observe the validity of the Master plan.

In San Siro, a project was born from the will of Recordati Spa, a private company based here.



#### **#02 VIA GIGANTE**





# POLITECNICO MILANO 1863 OFF CAMPUS SAN SIRO



**#04 VIALE ARETUSA** 









# **TOOLS OF THE POSSIBLE**

The Tool of the possible investigates possible strategies and innovation paths of some design devices. This point of view, on design in action and its products, is intended to engage in dialogue with those whom today are questioning and observing different forms of project operations (researchers), with those who are practising adaptive forms of architectural design (architects) and with those who are trying to open up to new forms of interaction with the architectural project (administrators and the third sector).

#### Common ground despite the topics.

To face a specific complex context, the two research, if read and told individually, reconstruct the attempt to find a possible design strategy. The aim is to acknowledge a method to operate with continuity over a long time by welcoming and composing the possible contributions of many people. The story also exemplifies a method of proceeding that can be adopted in other similar contexts, making the appropriate adaptations to the particular situation.

Suppose you leave a reading by chance or theme, and try to observe the two experiences transversally. In that case, it is possible to recognize some repetitions and deviations of a "way of doing and using" the urban and architectural plan<sup>1</sup>. In this part of the thesis, the attention is placed on some design tools that recur in these experiences. The observations around the tool want to be a contribution and open comparison with whom today are experimenting with alternative forms of design to be more effective in dealing with the challenges of the transformation of marginal situations. These situations are characterized both by uncertainty and inertia mainly due to their being public situations. As already mentioned in the section "the terms of research - marginal contexts", in recent decades there has been a lack of capacity for action by public actors and the lack of effectiveness of the leverage effect of private interventions. Since the beginning of the new century, however, it has been possible to see the emergence and consolidation of a diverse group of third parties (foundations, entrepreneurship, cooperatives, associations and ordinary citizens) who have taken the initiative. Some of them have replaced public action. Others have advised institutions to identify forms of support for bottom-up initiatives, or co-action itself<sup>2</sup>. This activism starts from the conviction that it is necessary to overcome technical-sectorial protocols because when dealing with very complex issues "it is the case to learn by doing, one can no longer expect an effective contribution from feasibility studies, cost-benefit calculations, archistar projects" (Laino 2019, 927).

The similarities between the two research are possible because they share two principles that guide the design process: *architecture as a social practice* and the shared space as a *space of relationship*. These principles imply the project (also as hope) where the modification of the space is strictly necessary for the possibility of action and appropriation of the place by those who live there (in 1 These shifts can also be observed because the research groups that conducted the experiences are largely overlapping. The temporal proximity and the diversity of the topics covered by the two researches have allowed to deepen in West Road Project some tools and methodological approaches that Prison Architecture has only had the opportunity to identify. For example, in WRP, the theme of "leaving a trace of the relationship" was intentional, while in the case of the prison it was a fortuitous occurrence.

2 This observation is limited to the Italian context.

the broadest sense). The modification is the result of an exchange between a multiplicity of subjects that in various ways intervene in the transformative process, among which we find the architect.

These are Interventions that take place on the completed project and therefore are called to update the assumptions that had determined those configurations and at the same time gave rise to multiple expectations for the future, which often prove to be conflicting. The design of the space, promoted by the developer, can potentially be a probe of knowledge of the situation of possible transformations and the necessary and available resources.

The project through tentative forms. In order to accomplish this task, it seems appropriate that the architectural project opens up to comparison in an interlocutory form. An attitude practised, or it has been attempted to practice, in the research presented here and from which I'm trying to isolate some clues, doubts and tools for more conscious future research action. In detail, attention will be focused on the potential and limits of the three design tools identified - the guesswork design, the built experiment and the relational device. These tools want to support the development of the contribution of the architectural design in a choral method of dealing with complexity. The autonomy fo architectural is recognized here as a critical-propositional moment to be able to start a comparison with other expertise (specialized and common) and the materiality of places. Thus emerges a procedural and cyclical perspective of the moments of the project that "is not so much to be understood as an image of a future state of the world, but as an approach to action" (Pasqui 2018: 95).<sup>3</sup>. The project takes the form of an exploratory and interpretative activity of the situation that tries to solicit and deposit, from multiple points of view, temporary forms of cohabitation, accepting the procedural nature that is aware of its contingency and finiteness. These temporary forms are to be understood not as a transitory phase of activation, typical for example of tactical urbanism interventions, but as a constant rewriting of places in reaction to the agency of modified spaces. The distinctive feature of the experiences conducted, and here my particular interest of the research, is to try to go beyond the episodic activation of "new paths to take to revolutionize [abandoned public places] and make them attractive again" (Orizzontale ). The aim is to build open project facilities able to trigger, support and relate a multitude of effective interventions in contexts extended in space and time. The attempt is to promote a project capable not only of arriving before but also of staying after, regardless of the promoters and designers that may eventually take place over time. A process capable of working multilaterally to go beyond the times of policies and the bottom-up initiatives that are increasingly squeezed into the present. To do this, as designers, it seems necessary to update the form and use of some design tools, not necessarily invent new ones.

3 The term action refers to the pragmatist tradition where action and thought are strongly permeated with each other, see for example Calcaterra, Rosa Maria (edit by). 2006. Pragmatism and analytical philosophy. Differences and interactions. Roma:Quodlibet.

# **DESIGN GUESSWORK**

#### Trigger the project as a process (from outside).

Starting from the focus on the *design guesswork*, the experiences conducted in recent years have tried to address the multidimensionality of the contexts investigated effectively. As Raymond Boudon points out in *La placedu desordre* (1984), a plausible formulation based on experience is different from the possibilities - only hypothetical - and scientific explanations - whose validity has been empirically verified. Design guesswork is a principle whose validity can be verified overtime only by observation of its consequences. This design vision, which is a first narrowing of the observational scope, solicits the context starting from the treatment of a specific theme. It is the instrument through which to approach a context, begin its experimentation and be guided in our wanderings. Compared to a scenario or a vision the design guesswork accepts the ambiguous character to operate in the turbulence of situations, it does not want to lead to a choice but rather to feed a "projectual thinking".

Many opportunities can prompt the proposal of Guesswork design: the request of an association, the direct frequentation of a context, the personal interest for the theme, a professional assignment that opens to different possibilities and others can be included. From this particular setting, which generally involves few individuals, begins the comparison between the first network of subjects that leads to a first tentative formulation of design misconception that broadens the possibilities of the effect. A formulation that is still uncertain, which opens up in many directions - in terms of producible effects, of subjects that can be involved, of resources that can be activated and of transformative possibilities - but at the same time distances others.

What the guesswork does is to imagine an investigational key of the present through which to look at possible futures whose achievement is to be verified along the way. Its formulation takes place in an abductive way, that is, through a process that "allows the formulation of a general prediction, but without any guarantee of a positive result; moreover, abduction as a method of prediction offers 'the only possible hope to regulate our future conduct rationally' (Peirce 1965-66, 2.270)''' (Sebeok 1983, 25).

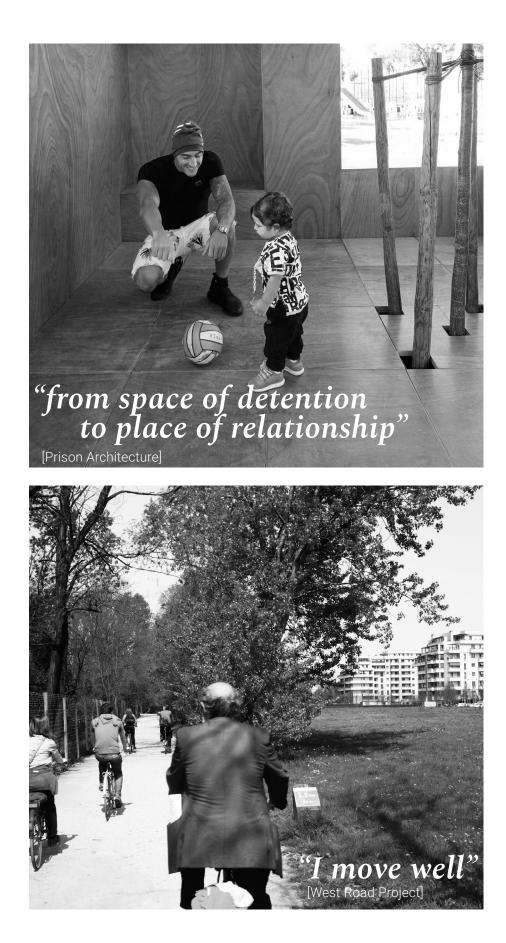
Identifying a principle that over time can address and establish tangible evidence of change in living conditions is the first effect that you want to achieve with the design prejudice. The idea of a living space, that the promoters/designers<sup>1</sup> propose, becomes the tool to build alliances between subjects, local and non-local, who commit themselves to undertake a project that tends to a necessary and possible transformation of the state of the places. 1 With the combination of the two terms it is recalled that the design vision proposes a different use and transformation of space to achieve better conditions of habitability, for this reason its formulation is the result of a comparison of different points of view and not only of a disciplinary knowledge, that of architecture. An alliance that starts from sharing what you are doing or that you are willing to do. The "I move well" in WRP, for example, is the synthesis produced by the possible synergy between the willingness of Italia Nostra Onlus to create a bike lane alongside Via Novara, the research group of the Politecnico di Milano to continue the research-action experience in the Milan suburbs and the willingness of the cooperative Tuttinsieme to make use of their experience in the promotion of socio-educational services in western Milan, for example the project SPLUF (creative playful pedagogical space) which uses street playing as a tool for relationships, education and aggregation means.

The guesswork design must thus be equipped with an imaginative openness capable of stimulating the imagination of most people, and at the same time be translated into 'easily' concrete actions. It is configured as an utopian vision that does not want to be evasive of the present, based on a "hopeful design" (Maldonado 1970). Even if over the years the term design has taken on different meanings with respect to the idea proposed by Maldonato, what seems useful to update his conception is the persuasive capacity towards the modification of the state of affairs in a process that does not give up an ideal tension of the future<sup>2</sup>. In tracing a possible direction of modification coexists the present and the future, the particular and the general as a provisional adoption of "an explanatory inference to be subjected to experimental verification and which aims to find together with the case, even the rule" (Echo 1983, 244). This rule, in the experiences conducted, urges the architectural project to adopt a proactive attitude, leading it out of the rigid logic based on technical-scientific models. The complexity of contemporary situations requires the assumption of a design methodology capable of managing changes over time, equipping itself with tools capable of adapting to the change, sometimes sudden, of situations. The design guesswork can be the tool that measures the distance of an opportunity, resource or action from the objective of the project. At the same time, it can be the key to reducing distances.

The conjecture is a proposal among some possible, the result of choice compared to what you have available. As Pier Carlo Palermo recalls, the tentative nature of the proposal is possible because "in any case, one should never forget that complex problem can be addressed according to a variety of different and often competing paradigms, none of which can count on general and definitive empirical confirmations. It is always up to the researcher to make a choice: which perspective to follow, and for what reasons, among the possible alternatives" (2009, 24). To go beyond the tension for the search for ways to concretize the particular intervention, in the words of Palermo it is possible to recognize the need that among the activators of the process there are general stakeholders. In WRP, it is a question of going beyond the cycle and pedestrian lane alongside Via Novara. In the experienced cases, this role is played by researchers at the Politecnico. Imagining other subjects besides the academic world does not seem easy, but some clues may suggest that some third sector subjects, new forms of professionalism related to the world of architecture and urbanism and networks of mature local subjects could experiment in the short term experiment this dimension too if they are not already doing so<sup>3</sup>.

2 In an interview with Hans Ulrich Obrist, Maldonado himself recognizes how design has taken on a multiplicity of meanings, recalling that "what it has gained in extension, it has lost in thickness". Maldonado, Tomas. 2010. Arte e Artifatti: interview by H. U. Obrist. Milan: Feltrinelli.

3 See for example the experiences gathered in Segnali di Futuro, a project conceived by Stefano Pareglio for La Triennale di Milano, realized by Avanzi srl with the contribution of Fondazione Cariplo.



In this collaborative work the designer work, both researcher and professional, changes because the architectural proposal does not describe the design guesswork but through the proposition of a vision of modification, which shows the potential of spaces. Architecture, therefore, becomes a key actor in its formulation. A key contributor that allows the project to *arrive before* the transformation demand and contribute to defining the problem. It is desirable that in the design guesswork always coexist a spatial dimension and one linked to practices in a perspective that recognizes that the "territory *is the use that makes us*" (Crosta 2010).

#### Investigate contingency creatively.

The design guesswork is an attempt to open a path that from "the here and now" improvises a journey into the future, "not to project a future state of affairs into the present; it is to look where you are going, not to fix a point of arrival" (Ingold 2013, 122). The design process tackles wicked problems from a lateral position intending to be effective in everyday life and think of proceeding on occasion. The attempt is to circumvent the inertia to action induced by the complexity and uncertainty of the problem by formulating lateral thoughts (De Bono). Thoughts that by dealing with some issues by creatively combining actions, try to disrupt the static condition by showing that it is possible to act by dealing with apparently secondary issues. With "I move well" WRP interprets the right to mobility as a tool to select a series of points and lines that not only respond to road logics but also involve an array of conflicting places. Through the proposal of interventions in favour of crossing and frequentation of these places, the project hopes in produce "public" as a process of social interaction, starting from the involvement of the residents themselves4. Designing the transformation of critical places means to pave the way to activate collaborative networks capable of starting processes of change at different scales and with multiple logics, capable of involving other problematic issues.

There are many possibilities to combine constraints and possibilities because they depend on what is feasible at that time, as well as multiple are the ways to deal with a wicked problem. The guesswork is a tool that helps to assess, from a particular perspective, the potential opportunities available at a given time and place. But also something more, it proposes an integration of them.

An interpretation of the range of actual possibilities, protected from expectations of ideal origin, in absolute terms. An attitude mindful of what Khun suggested to the sciences where often "it is preferable to do one's best with the means available than to stop in contemplation of divergent approaches" (2000, 82). The general character of prejudice, stimulating a broadening of the gaze, allows to creatively combine actions, events and accurate spaces that are often found by identifying local (technical) solutions. Through small adjustments, however, these technical responses can become building blocks of a larger project. It is what could happen in the case of the transformation of the space in front of Cascina Case Nuove in San Siro, WRP's experimentation.

4 Note that the project is not limited to the transformation of space but to a coordinated set of design actions and policies resulting from the integrated collaboration of the partners that make up the project team.

The elements that open to the possibility to realize a fragment of the network of "I move well" are the realization of a new private intervention that foresees public works next to a historical place in a state of abandonment and the mediation of the representatives of the local Municipio 7. Collaborating with the designers of the real estate company, the research group (from spring 2018) has elaborated a project that retraces and modifies the initial interventions on public spaces also involving the area in front of the farmhouse. A proposal that takes into account the needs of the private company, preliminary indications of the technical offices and a possible contribution in materials by the research. The realization imagined as well as being a hub, and part of the cycle/pedestrian route network could be an initial response and support to groups of citizens who for years have shown interest in using the open spaces of the farmhouse. The process was interrupted (spring 2019) because of the slowness in pronouncing some municipal technical sectors, and the high costs of some technical requirements to be met, which made the intervention incompatible with the needs of the building society<sup>5</sup>.

Even if the project was not realized, the experience contributed to articulate and clarify the general vision and to enrich the situation's knowledge. The knowledge is available for a future attempt. Following the spread of COVID-19 (spring 2020), the city administration of Milan has developed "Open Roads" a plan to rethink mobility and public space in the post-lockdown phase. According to the plan, the design of the space in front of the Case Nuove has been resumed becoming a section of a possible re-design of via Paravia. Via Paravia is a street along which there are school services, health services, densely inhabited neighbourhoods and an axis that connects Via Novare with the M5 Segesta subway station. The design vision has been transmitted to the administration, thus integrating the planned plan whose effects will be visible in the coming months.

These examples outline the operational nature of the design guesswork, a tool of coping with contingency. Dealing with contingency thus calls for one to have a vision but, at the same time, to be modest and light-footed enough to allow that vision to be adjusted to the circumstances. Its ability to move through scales and times help architects to bridge the gap "between what architecture – as practice, profession, and object – actually is (in all its dependency and contingency) and what architecture want it to be (in all its false perfection). [...]Bby opening up to dependency not as a threat but an opportunity. That the inescapable reality of the world must be engaged with and not retreated from. And that in the engagement there is the potential for a reformulation of architectural practice that would resist its present marginalization and find new hope" (Till 2009, 2).

#### Characterizing the belonging to the regeneration meshwork.

The guesswork design, becoming the key through which to assemble, dismantle and re-assemble opportunities that arise outside of coded schemes, is the principle that expands and guides the design process. It is a creative<sup>6</sup> combination not only of spaces, projects, policies and implementation procedures, but also subjects. The investigation that does not proceed "from 5 For a more detailed description of the experience see pg. 130-139.

6 The creative term is used here in the definition formulated in 1906 by Henri Poincaré in "Science and method", that is the ability to combine in an unusual and original way elements already existing, finding new and useful combinations. case to rule but from case to case (...) leading to the possibility of identifying other similar cases" (Amirante 2018, 69) and, driven by everyday life, is projected into the future.

A journey from the "rhizomatic trend" (Deluze and Guttari 1980) in search of and careful to the encounter with places, subjects and resources (financial and skills) that can nurture the project. The journey is not relativist, it "is not a random sequence; it has an intend direction – guided by the research question – but the destination is not absolutely fixed. Contingency that comes one's way are thus seen not as competing fragments but as a field of opportunities to be gathered to a greater or less extent, and then filtered by the intent of the project" (Till 2009, 48). The guesswork is a tool that helps to cope with contingencies and at the same time helps not to get lost in particular. By looking up from the specific case it is possible to recognize the horizon towards which we are stretching; by looking down it is possible to adjust the direction of the case towards that horizon.

Belonging to the general project starts from the sharing of the subjects, whether they are the promoters of the particular action or those who report a criticality, or the bet by the guesswork. In fragile contexts such as those investigated by the research presented, it is rare to meet groups of citizens able to self-organize and promote projects, more often are social enterprises and / or third sector entities operating in these contexts to promote policies and projects that support the residents and in some cases their mobilization. These are often initiatives that propose innovative activities to respond to deep-rooted or new needs, in sectors that the public administration or private companies are not always able to effectively supervise with traditional methods7. These are initiatives financed through thematic applications for the selection of candidates promoted by public administrations and, in an increasing number of cases, also by private foundations<sup>8</sup>. These modalities, on the one hand, are influencing the conception of the project and its implementation (in relation to the outcome of the competition), on the other hand, they stimulate creativity in the conception and the ability to network among subjects in order to compete more effectively.

What is being observed more and more frequently is the construction of temporary coalitions of subjects that come together to achieve funding and share efforts to implement their interests. Coalitions that from time to time take on different configurations.

To dynamically represent the geography of these coalitions seems a beneficial<sup>9</sup> activity that can be supported by the assumption. At first, the design guesswork is a tool to identify and articulate a network of subjects that build relationships around a project that has yet to be specified. This alliance is built around specific situations and interests. It is thus conceivable to represent a network wherein the nodes-occasion (a call for funding, for example) converge the lines of the subjects involved, regardless they can be promoters, beneficiaries, facilitators and sponsors.

If you observe the network of events and subjects over time, the image seems to be able to change the structure. Some projects are carried out; others

7 Venturi and Zandonai in their hybrid enterprises. Imprese ibride. Modelli di innovazione sociale per rigenerare valore (2016) tell of the emergence in recent years of "hybrid spheres" where the distinction between profit and non-profit, public and private, work and volunteering are increasingly blurred. New ways of being and acting to develop innovative solutions to unmet needs, producing places of social innovation that put the person at the center. What we are witnessing is a transition from a welfare state model to welfare mix regimes. See for example Bifulco, L. (2015) ) Il welfare locale. Processi e prospettive Roma: Carocci; De Ambrogio, U. & Guidetti, C. (2016) La coprogettazione. La coprogettazione. La partnership tra pubblico e terzo settore, Roma: Carocci

8 For a geography of the subjects operating on the Italian territory see https:// italianonprofit.it/filantropiaistituzionale/

9 Activities that were not explained and systematically represented within the two recounted but which were missed during the closing and return of the results. stopped. Those stopped may stop permanently, reactivate and, in some cases, become the starting point of their re-design that will lead them to be something different. Similarly, the geography of involved subjects changes, the roles are changed due to the necessary skills but also due to changing interests. Some actors withdraw, others are being added. The lines of connection begin to turn, intertwining and tangling. Lines that represent more "systems of empathy and desires, without even a point but only lines, all curved, that emerge and immerse themselves in hubs made with all sorts of textile art: braids, knots of all kinds, spirals, intersections and weavings" (Spuybroek 2011, 321).

The resulting graph resembles what Tim Ingold describes as a meshwork, "these lines are bound together in the knot but they are not bound by it. To the contrary, they trail beyond it, only to become caught up with other lines in other knots. Together they make up what I have called a meshwork" (Ingold 2007, 81). In the interweaving is recognizable the particular interest of each subject and following the continuation of each one intuiting its continuity in other situations. Compared to the knot, the plot allows a greater degree of freedom of participation, helping to tolerate different positions and conflict situations during the episode. Everyone participates according to their interests, possibilities and abilities. Through the narrative of a design idea, and not its specification, the guesswork can be the key that guides the individual lines to find points of convergence with others and at the same time go further towards another knot. A movement between interests and opportunities that from time to time, recognize the opportunity to cooperate and give continuity to the action (individual and therefore meshwork), because the effect comes from the continuity of the transformations. The assumption becomes a tool that "expands the time of the project" even after the action. The guesswork design can become the way to "make it happen (or rather, let it happen, because this is too unjustified), it is not trying to impose the effect, as when you act, but let the effect impose itself, by progressive sedimentation - taking shape, making mass" (Jullien 1996, 67-68)10.

The skill of feeding and monitoring the meshwork lies in the ability to evaluate the effectiveness of the principle and understand when it has lost its proactive and guiding charge. The loss of effectiveness can result in the proposition of a new prejudice depending on the ability of the subjects of the network to recognize themselves as interested in promoting a new project path. We are still trying to identify a proper method and tools to map and monitor the meshwork.

For the guesswork design to be a useful tool for involvement and guidance, its statement must have the communicative capacity, the key sentence in a hypothetical "elevator speech". A formulation that is not linked to a specific subject-knowledge but that can be used and told by those who at that time want or can take charge of carrying it forward. Just as it seems productive that spaces and practices are combined in it and that there is no direct reference to adoptable solutions. 10 See for example how in the experience of via Quarti in WRP around the interweaving of the transformation of the bottom of the street over time, subjects, programs and actions have approached and moved away.

### **BUILT EXPERIMENTS**

#### Engaging the context (from the inside).

As it has been previously defined, *design guesswork* is a first attempt to build a wider horizon that can combine multiple actors and different kinds of operations creatively.

In the beginning, design guesswork has to be considered as an abduction that needs to be assessed each time in new and experimental ways. The assessment cannot be predicted nor planned, and it will happen during the project's implementation. Anyway, what happens should not be considered as the result of chance but it is directly connected with the designer's attitude and with his ability to look at the context, understanding hidden potentials and enhancing new ones. It is an active attitude defined by Hirschman, the one of the *activist*, someone who "tries continuously to understand what may happen and tries to convey people's attention on certain topics. [...] I always try to make suggestions and to persuade people that some actions are actually possible, this is what makes me an activist" (1994, 62).

Since the first steps of the process, the relational aspect has always been very important. The presentation of the project itself, as well as that of its possible consequences, has a central role. It needs to be shared with each actor potentially interested. It is not simply a presentation, it is the chance to make the attendants an active part of the process: it is now that it is possible to collect their thoughts and desires. This is the time where it is possible to acknowledge their skills, it is the place where all these things can become resources for possible actions.

A concrete example of this approach appears when looking at what has happened with the project at Cascine Case Nuove, part of the WRP. During one of the first meetings with public administrators, the President and the Urban Planning Delegate of *Municipio* 7, some places were chosen for testing an experimental transformation. Among these, *Cascine Case Nuove* was mentioned. Cascine Nuove is an abandoned rural area, part of the wider San Siro neighbourhood, and its reuse represents a big challenge for all the residents. Closer to this area, a new nursing home is going to be realized by *Rodevita spa* and it will completely replace the *Istituto San Cels*o. The project will deliver its planning fees to the renewal of via Celio. The following step consisted in the organization of a meeting with developers and planners in order to testify the chance to tie together different interests. Although the risks of slowing down the process and of raising the costs of the whole operation were high, all the actors involved agreed that it was worth it. They reviewed the project and they decided that it would have been important to realize, next to the main rural building, a small *relational place*. The new proposal consisted of the renewal of the grass, the planting of new trees, the making of new paths and the realization of wider spaces with new benches. Rodevita spa agreed to take care of the maintenance through a sponsorship (a well-known procedure available in the Milan Municipality), while the actual purchase of trees and street furniture was going to be financed with part of the research sponsorship.

Different solutions were suggested and a final one was chosen, but due to procedural procrastinations, the process came to a halt<sup>1</sup>.

This experience is an example of how opening the process and involving different actors could lead to unexpected directions. The chance and the willingness to translate a general wish into specific actions helped to build the network. Each specific action can be considered as a *boundary object*, as Star and Griesemer defined it in 1988 when they were analyzing positive spillovers emerging from different actors' interaction. The researchers argue that the implementation of projects in complex contexts requires that those projects tap on different strategies without necessarily making them converge. "Boundary objects are objects which are both plastic enough to adapt to local needs and the constraints of the several parties employing them, yet robust enough to maintain a common identity across sites. [...] They have different meanings in different social worlds, but their structure is common enough to more than one world to make them recognizable, a means of translation." (Star and Griesemer 1989, 393).

From this perspective the project becomes potentially achievable: different goals concur and at the same time they can exist independently: the administrators can promote a project that addresses residents' needs and claims, Rodevita spa can guard a space close to its intervention. Anyway, we must point out that this cooperation is limited to a specific and detailed action and does not involve main topics and general principles<sup>2</sup>.

#### Commit to act.

Cooperation is not only oriented to actors' self-interest. Each choice shows responsibility towards other actors involved, a deep commitment is aimed both at reaching your own goal as well as supporting the rest of the individuals who take part in the process. We can describe their action as ethical, not only rational (Sen 1982). Acknowledging the engagement of all the actors involved helps the activation of cooperative processes and projects and it makes them stronger.

This is what happened if we look at the experience of *Traccia di Libertà* that took place in Bollate's penitentiary. The project started as a commitment between the research group and the *Gruppo della Trasgressione*: it was central and fundamental the intention to "leave a physical sign of this relation"<sup>3</sup>, although at the beginning nobody was sure the project was going to be

1 It is possible to read part of the experience in the WRP research, pag.128-129

2 Here again the image of the tangle as described in the Design Guesswork chapter Characterizing the belonging to the regeneration meshwork.

3 This is what the coordinator of the group, Angelo Aparo, requested in one of the first meetings finalized to verify the conditions for a possible cooperation. implemented<sup>4</sup>. The same feeling of engagement could be found among the penitentiary administrators, who facilitated the project's realization, accepting and suggesting small compromises.

The commitment is also directed to people who are not part of the process but still are involved as inhabitants or users of those places. The project must be considered as something that wants to achieve a better habitability of a place, although sometimes its realization or its denial could produce negative spillovers. This is what happened in San Siro, via Gigante, during the lockdown in 2020.

The project's goal was "to make public again" (Staeheli et al. 2009, Ostanel e Cancellieri 2014) a part of the sidewalk in via Gigante used as a parking lot, that located near the Off Campus San Siro5. This part of the sidewalk has always been a threat because of its misuse and its conditions. The project's aim was to rehabilitate this space and to enhance it, involving residents as an active part of this change. From a more theoretical point of view, this project deals with the 'right to be' (Lynch 1981), a topic which often is not mentioned or taken into consideration because it can cause conflicts at a local level. During the realization of the wooden floor, of the benches and tables, many residents critically said that it would certainly become "a place for those people" (immigrants and Roma) and it would last a short time. In the beginning, thanks to the presence of the people using Off-Campus, nothing strange happened in this place. Anyway, the Coronavirus outbreak had an effect on its use since a wide group of Roma started to stay in this space from the early afternoon until late night playing blackjack. This new use of the space created a huge feeling of discomfort among the residents who started to feel unsafe and perceived this area as dangerous. Things got worse: in the following weeks the wooden floor was vandalized by the players while trying to pick up coins lost under the planks.

What to do in this situation? Which steps are the best to take? These are some of the questions that challenged the research group. As an act of commitment, we decided to clean up space and repair the wooden floor together with some local actors, waiting for the end of the lockdown that would allow residents, volunteers and operators to get back again to use and guard those places.

#### Make way to spatial agency.

Researchers and designers were forced to make a deeper analysis of what happened: what did we learn? We want to focus on the role of agency played by the space after its renewal. We can say that this space became the place where it was possible to play blackjack because this was the only space that could allow this kind of practice in the neighbourhood. Indeed, only here it was possible to find a table with chairs. Transformation of a single space was able to take back bodies and their multisensoriality into the city. It could be considered as a "way to enrich the spatial capital of urban space" (Ostanel and Cancellieri 2014, 49). An alteration of the urban space made it possible to let emerging issues related to social rights and inequalities, it proved, once again, that there is a political aspect in designing urban spaces. Therefore, 4 This specific experience is described at pg. 90-95.

5 Off Campus is an initiative promoted by Polisocial, with the aim of strengthening the presence of Politecnico di Milano inside the city of Milan, following the principle of a university that is more responsible, open, aware of social challenges and closer to the community. http://www. polisocial.polimi.it/en/offcampus-en/

6 Since 2014 Italia Nostra Onlus is involved in a project finalized at the reuse of Cava Ongari, located in Parco delle Cave.



A group of scouts use the platform of via Gigante for their activities .

The Trabucco Gigante hosts a theatrical performance.

[West Road project both]

"what is design, if design is about the relationship between bodies and space? Where neither of these two aspects is abstract? What does it mean to design without being functionalist or organicist?" (Bianchetti 2020, 132-133). Cristina Bianchetti tries to find some answers to these questions using the notion of *touching*. The touch, as well described by Jean-Luc Nancy, connects space and body. "It provokes challenges, it stirs up personal dispositions, values, general laws and goals" (133).

As we could see with the West Road Project, the research promoted physical transformations as a trigger and not as the result of a design process. The research tried to create a connection between the project and the context 'touching' it, using and experimenting a *tentative form* (Barbieri 2017, 135). New artifacts stress habits and the routine of these places. One goal is to "give space" to daily uses, to let people make this place their own, to enhance a sense of care as individuals, as a group and as a community. The realizations are "spatial agents (...) they are negotiators of existing conditions in order to partially reform them. Spatial agency implies that the action to engage transformatively with [societal] structure is possible, but will only be effective if one is alert to the constraints and opportunities that the structure presents" (Awan et al. 2011, 31).

The research developed a specific methodology to deal with opportunities and constraints using each intervention as a trigger. Indeed, the suggested projects could be seen as fragments of change. They are part of a wider process that in the future may allow a deep change of the context while being strictly anchored on present time. One of the starting points is the willingness to recognize and foster territorial capabilities and to promote pragmatic actions. This attitude often implies acting on what are the side-actions of larger and more complex issues, although the effects are easily connected with the bigger picture. Looking at the Bollate's penitentiary experience, it is clear that the project of the *Casetta Rossa* is emblematic - the iconic shape, the red colour, the tree located next to it- and it denotes the issue of the relationship between inmates and their beloved, their families. At the same time, it challenges the more complex issue of the quality of life into Italian prisons.

Physical projects become another possible tool that might open the process and mobilize a wider part of the community.

#### Developing correspondences.

The research itself and the architectural design don't follow codified protocols anymore, they became part of a fluid and spontaneous process. Since the main goal is to promote and realize actions, all efforts are devoted to "find all the features that can support the implementation of the project; [...] pushed forward by inclinations; to make it short, the plan is not intended as a scheme to be compelled, but in each situation becomes a priority to find potentials and to foster them" (Jullien 1996, 20).

This attitude leads the researcher to the necessity to live the place also in informal ways, to get in touch with routines and everyday life. It is what has been done in via Quarti, (one of the WRP projects), in a social housing



The Pergola was built with the help of a construction company and some inmates. [Prison Architecture]

The parents of the Cadorna School students collaborated on the courtyard project.

[West Road project both]

estate. In 2018, during Spring, a project enhancing social cohesion in the neighbourhood was ending its activities. Since one of the partners of the research, the cooperative Tuttinsieme, was also involved in that program, the research team could take part in some equipe meetings called Quarti Restart. During these meetings, it was possible to get in touch with other stakeholders and community groups interested in giving continuity to the actions implemented by the social cohesion program. The chance for West Road Project to contribute to this goal led Cooperativa Comunità Progetto and Tuttinsieme, together with Italia Nostra Onlus- Milano Nord<sup>6</sup> to take part at the call for projects made by Comune di Milano, Bando alle Periferie 2018. They submitted the project Quarti Park. Aprire varchi nella città. The main goal was to create a bridge between different programs that worked on the activation of local resources and tried to strengthen the relationship with Parco delle Cave. These meetings' purpose was to let emerge a challenging vision that might alter people's perception of places and may generate tangible actions. The attempt was to develop a planning practice that can mix top-down and bottom-up initiatives.

Although the project was not selected, it mobilized actors, capitals and ideas and it will lead in September 2020 to a partnership called *Patto di Collaborazione*. This program will focus on the transformation of a specific spot of the neighbourhood and on its reconversion into a playground. *Quarti Park* can be considered an occasion toward a physical transformation of the urban environment and was achieved through small steps: a co-design workshop done with residents and local actors (4 meetings from October to December 2018); several meetings with both the city and local administrators; the deal with Borio Mangiarotti, developer of the project for Parco delle Cave, who agreed to include in the project also the renewal of via Quarti<sup>7</sup>; finally the creation of a Patto di *Collaborazione alla rigenerazione di via Quarti*, that was financed by the *Bando Quartiei 2019* and could give continuity to the initiative<sup>8</sup>.

This strong cooperation created a sort of "investigating community" where each member was able to learn from each other, where each one contributed to the accomplishment of the goal using its own specific knowledge. A community emerged as a result of a slow and continuous relationship that made it possible to combine pieces of knowledge, interests, and abilities. Tim Ingold talks about "correspondence" in order to describe the creation of connections that lead to the creation of a shared vision about the future. Ingold refers to the act of exchanging letters in order to underline how "reading a letter does not only imply to read about the writer but it puts you in the conditions of reading with him or her" (2013, 178). In this *common walk* toward the same direction different people "get to the same pace [...] sharing the same visual horizon" (178). Ingold underlines two central questions referring to correspondences: "first, that it is a movement in real time; and second, that this movement is sentient" (177). Firstly it is important to point out that actions are the propellers of the process since they urge a reaction from other

7 The real estate Borio Mangiarotti is actually working on a project called SeiMilano, located on the former Calchi Taeggi area. Planning fees are going to be compensated by a list of small punctual projects inside the Parco delle Cave. Thanks to the active role of the technical staff of Milan Municipality, as well as of the availability of the investors, among these projects will be possible to include the remaking of the ending part the entering road.

8 For a better understandment Quarti Park in the paragraph Investigation by opportunities, pagg. 130-139 people involved. Furthermore, "correspondence lines are filled with feelings that will become explicit not in speech but in the act of writing, into the traces left on pages" (178). Those feelings will leave physical traces, physical marks.

When we try to represent these lines, one for each player involved, we can see how they move sinuously. They start far away from each other and each action brings them closer and closer, directed through a common end. They seem to attract magnetically other lines, which are to be considered other actions and decisions of making something. As I said, this happens through physical work, through making and producing. The architectural project enables these correspondences during different stages. In the beginning, we have the request of alteration of the space as described in the sketches that give inputs, and afterwards, we have its actual realization that creates correspondences. That's why it is important the choice of the right kind of representation of the project (also in its tangible shape). It is crucial to have sketches capable to describe what might be and to trigger a "symbolic exchange" (Durbiano and Armando 2017)9. Sketches become the basis for an active confrontation and negotiation; they become "social objects" (Ferraris 2009). Designers use sketches as a path that other players involved could follow, could question and could contribute to modify. Suggestions given are taken into account and are used to do new sketches for the following meetings. It is a cyclic process where the designer is in charge of using his skills and experience to give shape to the issues that emerged during those collective moments.

The workshop for the renewal of Via Quarti took place over several months. During the first meeting was used an axonometry of the neighbourhood in order to visualize the places interested by the projects (often residents find it difficult to think the neighbourhood as a whole); six panels showing three different tools for the modification of public space - street furniture, a landmark and the use of colours - two case-study - one European and one in Milan. These panels were useful to visualize the elements which could be used to make change happen in the future. The three meetings that followed were dedicated to give shape to the project. After each meeting, sketches and all the documents used remained displayed in order to be seen even by people who could not attend the encounter and became an occasion to have informal talks about the project. Sketches were as simple as possible and not detailed; they needed to leave space for imagination. The final design was afterwards presented in a more official report that became eventually a starting point for other typologies of interactions, especially with local administrators.

Debating on sketches and on how the project might affect the urban environment, as well as the actual use of the space, was properly what gave reliability to designers. It helped to bond relationships, to reinforce acknowledgement, and to create trust between residents, researchers, designers. Trust helps when it comes to giving meaning to small actions and at the same time, it increases the commitment of promoters. The project became more and more complex and its implementation required a longer time than initially planned. Above all the problems, there was the need to change the road rights and make it pedestrian, a task that required long bureaucratic 9 Authors describe the design process as a mix of symbolic exchanges, stages of opening and socializing, bureaucratic actions, convergences and authentications. steps. Few months did pass without any news, so the promoter group decided to realize a small action included in the project. In November 2019 four flower boxes were built and located in the central part of the neighbourhood. They represented a small but significant action that was also able to boost future transformations: the colour, the materials used, the active involvement of residents in the making of it and on its maintenance. It was a chance to meet people involved during the first meetings and to get in touch with new ones.

#### Trigger the project as a process (from the inside).

Building relationships based on trust is what is needed in order to develope an *open project* that wants to deal with wicked problems. It is an approach that helps to collocate specific events into a bigger picture.

As an example, the proposal *Patti Chiari* shows how all the local communitybased organizations - as promoters of the project - wanted strongly to see their project implemented and to accomplish their necessity of having a new space for their activities. The West Road Project supported the proposal and helped to make some adjustment to it: community events and social actions have enriched the phases of building. Furthermore, part of the budget has been used to finance the construction and to get an architect who was to be in charge of monitoring the project and helping, if needed, with bureaucracy and possible hitches. Usually, social projects avoid these kinds of costs<sup>10</sup>. Anyway, the experience of the built experiment showed that a synergy between architectural interventions and social projects is possible and fruitful.

The local organizations working in via Quarti operate in many different neighbourhoods of Milan. The cooperation experimented within this project turned out to be an approach reusable and that could also be used in other situations. The third-sector representative became not only co-designers of the design guesswork but also receivers and testers of this approach.

Something similar happened with local administrators and with the city technical staff. The cooperation resulted from the necessity to address them specific questions and requests as well as to gather their opinions and guidelines. The President and the Urban Planning delegate of Municipio 7, as we already mentioned, were extremely dedicated at networking private interventions with experimental ones (Rodevita spa in Cascine Case Nuove and Borio Mangiarotti Spa in via Quarti). Choosing the Patto di Collaborazione as a tool for implementing the projects<sup>11</sup> made it possible to get in touch with the Department for the Citizens Participation of the City Municipality and to establish a profitable relationship with them. Although in the beginning the cooperation was aimed at dealing only with specific and contingent issues, soon also more general topics were discussed. These meetings became an occasion to test and assess the opportunity to use emerging resources or to link different kinds of projects. This happened, as an example, when it was announced the chance to realize in the neighbourhood a community library. This project was going to be supported by the Milan Municipality, but it was necessary to find a space for this activity. The library was not eventually realized, but it showed the potentials of this cooperation.

10 The decision to use part of the budget for physical interventions was taken also in order to minimize the risks. West Road Project was going to finish in March 2020 and the authorizations were taking a longer time that thought. Since the outbreak of Covid19 slowed down all the process, Polisocial board accorded to give time until December 2020.

11 This was the case of via Quarti a well as, previously, in via Gigante and via Abbiati, both in the San Sito neighbourhood. We need to point out that building a trustworthy relationship between public administrators and local organizations might have been affected by the reliability of Politecnico di Milano. These kinds of considerations will be part of the assessment of the research as a whole.

Something similar happened in the experience of Prison Architecture, in the Bollate's Penitentiary. Here, after the project 'Casetta Rossa' another project was made in the garden where the visits took place. The project was about creating a shadowing system using an existing iron framework and it has been suggested by the Chief Marshal of the prison and realized with the help of some inmates. During the following months, the penitentiary administration, together with the Social Team of the Bollate penitentiary worked in order to support the nomination of a research project to give continuity to the first experience<sup>12</sup>.

These experiences show how it is possible to activate a broader regeneration project using small interventions. From this perspective research itself, as well as practitioner's work, move from a general vision to a specific one and try to follow rhizomatic movement, from punctual interventions to general considerations without pretending to be universal. As Hirshman suggested, what these experiences have in common is to have as a starting point something that works. This something can then enable action and it helps to find ways out in times characterized by stagnation. Hirshman talks about a "Bias for Hope", a hope strictly linked to the call for change toward the achievement of a "Happiness Pursuit", a happiness of being part of collective action. As Antonio Torretta, one inmate who took part in the project *Trace of Freedom*, said: "designing generates adrenaline". 12 The new project is A chance through Sport - ACST, defected by Polisocial Award 2019

# **RELATIONAL DEVICES**

#### Tensioning particular and general.

As we have seen in the previous chapters, *design guesswork* (general) and *built experiments* (particular) can be used as tools to mobilize local communities and to trigger processes that deal with complex issues. These tools can create synergies and a better outcome when they work together. Two views overlap: "the high level view, connected with the urban landscape and the tridimensional view, the latter consisting in urban equipment and urban spaces". This approach brings innovation into the design process and takes into consideration "the whole part as well as details. Together. It allows us to use the physical city as a tool to cope with differences and this approach can also help to use repetitions wisely. This is the only way you can design and plan a contemporary city" (Macchi Cassia 2008, 73). Here, repetitions refer to a succession of transformations with a common goal and are not to be intended as the mechanical application of the same template.

A third tool is needed when these two views are overlapping. A tool that can work as a mediator that could let emerge new possibilities, and at the same time a tool that can record what happens and be a memoir of it, useful for whoever will take part in the process. The two initiatives analyzed, *Prison Architecture* and *West Road Project*, used, respectively, as a tool, guidelines and an adaptive Master plan. Both these tools are not new to architects and designers but they have something innovative: they abandoned their typical prescriptive approach and they have been used because of their inner capacity to exemplify a method that supports actions through contingency. The contingency that is made up of "turbulence and uncertainty", a condition in which "the most things could happen - maybe all of them - but nothing can be surely done" (Bauman 2016, 13).

I suggest calling these tools *relational devices*. Here, *device* refers to a tool that can deal with heterogeneous elements. This definition has to deal specifically with wicked problems and it refers to what Michel Foucault's wrote in the '70 – and that was afterwards commented by Gilles Deleuze (1988) and by Giorgio Agamben (2006). Foucault, in the interview *Le jeu de Michel Foucault* (1977), specifies that the notion, first of all, refers to a "thoroughly heterogeneous ensemble, bringing together both discourses and institutions, architectural structures and scientific statements, regulatory decisions and administrative measures, as well as philosophical, moral and philanthropic

proportions, in short, it encompasses the said as much as the unsaid. [...] Secondly, what I'm trying to identify in this apparatus is precisely the nature of the connection that can exist between these heterogeneous elements. [...] In short, between these elements, whether discursive or non-discursive, there is a sort of interplay of shifts of position and modifications of function which can also vary widely. Thirdly, I understand by the term «apparatus» a sort of formation which has as its major function at a given historical moment that of responding to an urgent need. The apparatus thus has dominant strategic function" (Foucault 1980, 194-195).

What is important to us is that Foucalt's description suggests building a device that could recognize and enhance links between different elements in a contingent way, a device that could solve urgent needs.

*Relational*, on the other hand, stresses the importance of building connections, that is the core of this device. Linking different projects, elements and local players results from a continuous negotiation that takes place in a specific moment and place: it is not the starting point, but it is the output of this approach. The device keeps traces of the relations that have been built during the whole process.

These devices can also be used as tools that organize information emerging during the process. Guidelines and Master Plan can be used while ongoing and help to check and update the state of the art. *Prison Architecture* works on the issue of relations in a specific and confined way that enables, as a result, to rethink the main issue of penitentiary institutions in Italy. The definition of the field of action was extremely rigid because of the particular situation of the penitentiary world itself. The field of intervention is strictly related to spaces where the project can create some possible modifications. Typologies of spaces, their uses, and desirable modifications became part of a directory and became variables for the design of a list of possible viable actions. Each action is described in details and suggests how these places could change physically and how this may affect their livability. Guidelines have been represented using a matrix that lists on the ordinate the range of uses and on the abscissa typologies of spaces; the intersection shows which actions could modify the existing and how each situation can slightly change<sup>1</sup>.

The use of guidelines as a tool in this experience shows many differences from previous and more traditional projects. Guidelines do not show a replicable model or a defined project, but they are used to show different tactics related to an overall shared strategy. The livability of penitentiaries is not a project by itself, but it becomes a relational, contingent process with a certain degree of independence (Ferraris 2009). The project, as a process, works as a trigger in the making of documents, trials, examples, specific values and many strains toward change. The multitude of the outputs (events, relationships, techniques and skills) requires a *choral methodological tool*. It needs to fit in different situations and to recognize the chance of different outcomes. It needs to use wisely the *bricolage* (Levi Strauss 1962), since the effectiveness of this open project, *a project of projects* (Di Franco 2018, 12), lays in the ability of collecting, organizing and keeping all the elements found, "on

1 A more detailed description could be found in *The Prison Architecture: from Space of Detention to Place of Relationship*, section *Investigation by Opportunities* and in "Orientamenti al progetto" in (Bozzuto, Di Franco 2020). the principle that «they may always come in handy»" (Levi Strauss 1962, 18).

#### Coping with contingency.

The *bricoleur's* approach is adaptive, open and sees the challenge of contingency as an opportunity (Till 2009). "The *bricoleur* is adept at performing a large number of diverse tasks; but, unlike the engineer, he does not subordinate each of them to the availability of raw materials and tools conceived and procured for the purpose of the project. [...] The rules of his game are always to make with «whatever is at hand», that is to say with a set of tools and materials which is always finite and is also heterogeneous because what it contains bears no relation to the current project, or indeed to any particular project, but is the contingent result of all the occasions there have been to renew or enrich the stock or to maintain it with the remains of previous constructions or destructions" (Levi Strauss 1962, 17). When it comes to entangled situations, the ability to cope with different issues gives designers (architects, urban planners as well as cultural promoters) the chance to start specific actions that could reactivate a stagnant moment.

Working as a *bricoleur* does not imply starting from beginning each time. Each experience can take advantages of what has been previously learned and give an essential contribution to a better understatement of what might happen. The relational device supports this process and it is designed in order to be used as a guide. It records and describes each action using stories. Storytelling (using a visual and written text) is suggested because, as Ingold states, "stories lead you without being too much specific" (2013, 185). Each experience becomes an example and suggests actions regarding what to look for, where to go, without being deterministic. Stories give a lot of freedom of choice and intervention.

A chapter in the Master plan of the *WRP* introduces each experience giving a title, and localizing it on a map. Opportunities and potentials of the projects are pointed out. A more detailed description of the area where the project is located and of its opportunities and constraints follows in a different page where also the whole process is described in details: how and why the intervention emerged, which were the goals at the beginning of the process and how they have changed through time, which obstacles needed to be faced in the beginning, the players that took part to the process, the solutions that have been designed and the one that actually has been implemented. Diagrams and graphs summarize the main elements of each case and give a synthetic visual representation useful if comparing each project.

#### Exemplify to generalize.

The act of narration becomes part of reflective practice: it is the moment where it is possible to identify tools and objects and it tells how they have shaped each experience. Narration makes these examples re-usable. It suggests how the same tools and objects could be used again in the same way, on similar occasions, as well as for a different purpose in different contexts. Narration helps to move from the individual story - where each experience is unique-



The guide lines elaborated in *Prison Architecture* are hosted in the research book

N. SPAZI DI ACCESSO E DISTRIBUZIONE   N. SPAZI DI ACCESSO E DISTRIBUZIONE   N. SPAZI DI COPERTURA EDIFICI   S. SPAZI APERTI LIBERI   S. SPAZI DI COPERTURA EDIFICI   S. SPAZI DI COLLOQUI   S. SPAZI DI COLLOQUI	pratiche spazi	A' SCUOLA E ATTIVITÀ DIDATTICHE • formazione interna • form professionale • lavoro inti verso esterno • lavoro esterno	B/ INCONTRI E AFFETTUTTA • colloqui con familiari • colloqui con familiari • colloqui con familiari • colloqui con familiari • concentori • nocentri n intentea • maanimaa	C/ CONVIVIALITÀ - sociare e construire parts - eneriti - eneriti - attorida idane e relas	D/ CULTURA E LABORATORI - setuar / baloreca - consi nometriv - guago descussione - teatro / coverna / musica - comunicazione	E/ SPORT · indox · outdoor · dilettanti
AVARIE AVARIE	1/ SPAZI DI ACCESSO E DISTRIBUZIONE	(1/A)	( <b>B</b> )		(1/B)	
4' SPAZI APERTI PERIMETRATI gationations     40       4' SPAZI APERTI PERIMETRATI gationations     40       5' SPAZI DI COOPERTURA EDIFICI     5A       6' SPAZI APERTI LIBERI     6A (6A 2)       6' SPAZI OCULOQUI     70	2/ CINTA MURARIA E RETE PERIMETRALE	2/41 2/42			(2/D 1) (2/D 2)	2/E
(a)         (a)           5/ SPAZI DI COPERTURA EDIFICI         (a)           6/ SPAZI APERTI LIBERI         (a)           (a)         (a)	3/ ARIE	(3/A 1)		(3/C 1) (3/C 2) (3/C 3)	3/D 1 3/D 2 3/D 3	3 31
6/ SPAZI APERTI LIBERI 6/ SPAZI APERTI LIBERI	4/ SPAZI APERTI PERIMETRATI (path/conti/contil)		(4B)	(4/C 1) (4/C 2)		(4
0: SPACIO COLLOQUI     (0.1) (6.4.)       7/ SPAZIO COLLOQUI     (0.1) (6.4.)	5/ SPAZI DI COPERTURA EDIFICI	(S/A 1)		(SIC 1) (SIC 2)		
(NB (NB 2) //B3)	6/ SPAZI APERTI LIBERI	6/A 1) 6/A 2		6/C1 6/C2		
8/ SEZIONI DETENTIVE	7/ SPAZIO COLLOQUI		(7B) (7B) (7B)			
	8/ SEZIONI DETENTIVE			8/C 1) 8/C 2)		
9/ SPAZIO TRATTAMENTALE (A) (A)	9/ SPAZIO TRATTAMENTALE	9/A 1 9/A 2		(9/C 1)		

to the general - each experience can refer to possible situations - without claiming to be universal. As Ferraris states "when we say that somebody, in an unexpected situation, acts in an extraordinary way, it does not mean that he followed the plan but, instead, that his own exceptional behaviour turned out to be appropriate to the challenges faced. Because of its effectiveness, the same behaviour is also proposed in other circumstances" (2009, 50). The catalogue of what happened should also include negative experiences and failures. This collection of stories is not a list of best practices, but a catalogue of fragments that could produce new knowledge. That's why also failures can help in this reflective practice.

Stories contribute to give a continuous interpretation of how each situation differs from the others and which circumstances allowed to achieve a specific outcome. They show how networks changed during time and how interactions between different players modified these geometries. Furthermore, stories show that a project (the general vision) takes time and "that time is not a minor component, it can't be underestimated or reduced just to some moments. It is a time intended for growth, training, formation" (Ingold 2013, 123).

Master plan as a tool is not only a list of experiences but it is composed by other sections, made after a careful selection of technical assessments as well as theoretical meditations: an explanation of the design guesswork, a collection of interpretative maps of the context and of the mobility system and its accessibility. A special section shows a map of places - open spaces, buildings, the mobility system- that are likely to be modified through interventions and projects: built experiments have been selected from this map. It is a map of an archipelago of places and everybody could contribute to its definition accessing the online website. The map is in progress and new contributions can be added. It will be possible to fill a file that will describe in detail the places that should be added: physical characteristics and conditions, opportunities and constraints connected with those spaces, communities involved (actual or hypothetical) in its reuse, modification and maintenance.

To summarize, relational devices are a chance to use and demonstrate how 'pertinent knowledge' works. Edgar Morin defines *pertinent knowledge* as "information and data that are placed in their context. We can say that knowledge itself grows not through sophistication, nor formalization and abstraction, but thanks to the ability to contextualize it and bring it to a global dimension" (1999, 8).

#### From open documents to open labs.

We described how *pertinent knowledge* is the outcome of a continuous and contextualized relationship between different people - experts, citizens, public administrators. This knowledge emerges during the co-design and the implementation of the project and becomes a shared heritage of all the people who took part in the process.

When a *choral approach* is promoted the attempt to build an *open city* (Sennet 2018) takes shape. It is the occasion to learn how to face and handle challenging situations together with other people- experts and residents. In

this context, promoters feel the urgency to share this kind of knowledge to a broader public. When the design is intended as a process that grows through time, what has been learned needs to be accessible to whoever might deal with similar issues or similar design experiences.

The research Prison Architecture obtained a grant for "activities of Basic Research, defined as activities for scientific and technical research not related to industrial or commercial goals"<sup>2</sup>. Although these restrictions, the research group decided to share some considerations and part of what came up from the project with people who have to deal with penitentiary daily and are not part of the academic world. It seemed essential to make "a pragmatic knowledge for the contemporary world". This awareness guided in the selection of an audience among "those people who, having different positions and tasks, contribute to create better living conditions within the penitentiaries" (Bozzuto, Di Franco 2020). This pragmatic knowledge- the guidelines - has been collected and organized in project charts "easy to be read and understood by people without a technical background. (...) The ultimate reason for making this list of actions it is not to prescribe executive solutions but to show and suggest viable options that could make improvements and change spaces, as well as spatial imagery and aspirations" (ibidem). Guidelines are included in the research book in the section "Design directions". Although they have been created as part of the main research, it seemed natural to make them usable and easy to find and read inside the book.

The decision to use this format - the project charts- and to create a sort of catalogue is strictly connected with the decision to create an open document, where new ideas could be added and collected as a sign of *a new collective beginning*. An obvious limit to this goal is that the paper format prevents the circulation of this information<sup>3</sup>.

The limits came into view during the *FARB* experience, suggested the *WRP* research group to try a different method and to test the use of the web<sup>4</sup>. The *adaptive Master plan* has been transferred into a website: *wrp.polimi.it*. The main reasons are easy to list: first of all, a wider number of people can be reached, compared to a traditional publication. Secondly, contents can be modified throughout time. The website's architecture is not intended to explain what the research was about but to make the relational device more pragmatic. Each section of the website shows the same elements of the adaptive Master plan. The website bears information that might be found by anybody. Community-based organizations could use it for writing proposals or find new partners, as well as a starting point for dealing with local administrators. The image that emerges from the website shows the variety of the transformations that are happening and that will take place; it can be used to suggest possible connections between projects or modifications that could improve their implementation.

A third reason must be added, although it still represents a challenge: it is the chance to create a virtual workplace where anybody who wants to suggest the modification of a place can add it at the archipelago map. Another challenge lays in the chance to modify the structure of each project suggesting 2 The reference to this legislative act can be found in the ministerial order of March 2001 "Criteri e modalità procedurali per l'assegnazione delle risorse finanziarie del Fondo per gli Investimenti della Ricerca di Base"-Evaluation Criteria for the Basic Research Grant

3 We can compare this specific document to the one realized by the Garante Nazionale dei diritti delle persone detenute e private della libertà personale that was presented in March 2018. The mentioned document ("Norme e Normalità. Standard per l'esecuzione della pena detentiva degli adulti (Raccolta dalle Raccomandazioni 206-2017)") collects evidences and proposals written during a two-year research on the conditions of many Italian penitentiaries. Some basic standards are proposed as 'goals that are accessible and could act as a propulsive force toward better living conditions'(Palma 2018, 6). http://www. garantenazionaleprivatiliberta. it/gnpl/resources/cms/documen ts/5ee050da96a72e6d311420e81 6e3921e.pdf

4 Prison Architecture started one year before West Road Project. Researchers of the latter used the outputs and the aftermaths noticed in the first one as a guide in order to make adjustment and address specific issues. new details or new design of the spaces. The website is a first attempt in the direction of building an open process but still leaves many open questions. Unfortunately, it won't be easy to evaluate the contribution of the website, since the research almost came to its end.

The emerging questions are a starting point for new research<sup>5</sup>. In March 2020 a new project has been granted by Polisocial Award 2019: *A Chance Through Sport- ACTS*. It is a project that tests whether sport can be a catalyst for change in penitentiaries. The thesis is that sport can enhance personal well-being, relational skills and improve the sensitive issue of contacts with the world outside the penitentiary<sup>6</sup>.

This project is strictly connected with the previous research FARB2016. This time a website has been created as a starting point and a special section, *ACTS Report*, will share the analytical stages in real-time.

#### Testing the lifetime.

The assessment of potentialities and effectiveness of the website takes us to consider another important question, still not solved: who can possibly manage throughout time a relational device? Who can preserve it as something that feeds the open process? The tools we have analyzed are all part of a study-research that seeks to understand its effectiveness in real life. But once the effectiveness of these devices has been proved, who can take care of them? It might be the public as well as a group of local non-profit organizations, or experts selected by the public<sup>7</sup>.

We, now, prefer to focus on the aware action of the researcher, as Sennett says (2018), that needs to be seen as part of the bigger picture. As we mentioned, we need a design approach that can work in particular as well as on the whole context, an approach that instead of being top-down is both rhizomatic and multiscalar.

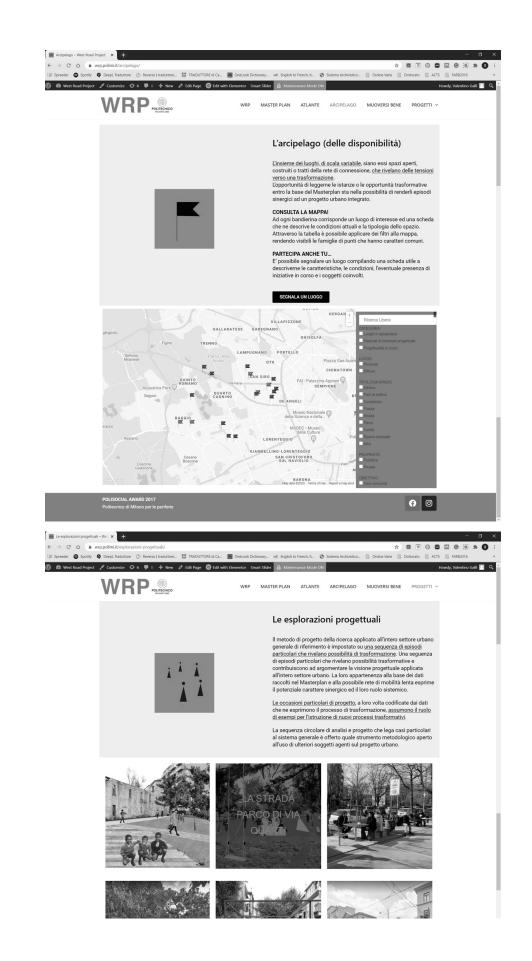
Anyway, relational devices are relatively recent and have not been tested in the long, nor the medium, term. Another question arises: how long will the device last? And what about its effectiveness? Is it going to decrease with time? There are two options: the first one is that the device will last until the design guesswork's strength burns out. The second option is that the relational device will stop to produce its own effects when built experiments determine a radical change of the design guesswork.

In conclusion, the relational device wants to be the tool for design to "think of its own time out off closed self-referential logics, but not even in the restricted field of professional and market constraints" (Pasqui 2018, 100) to experiment itself as a social practice by collaborating in the activation of marginal contexts.

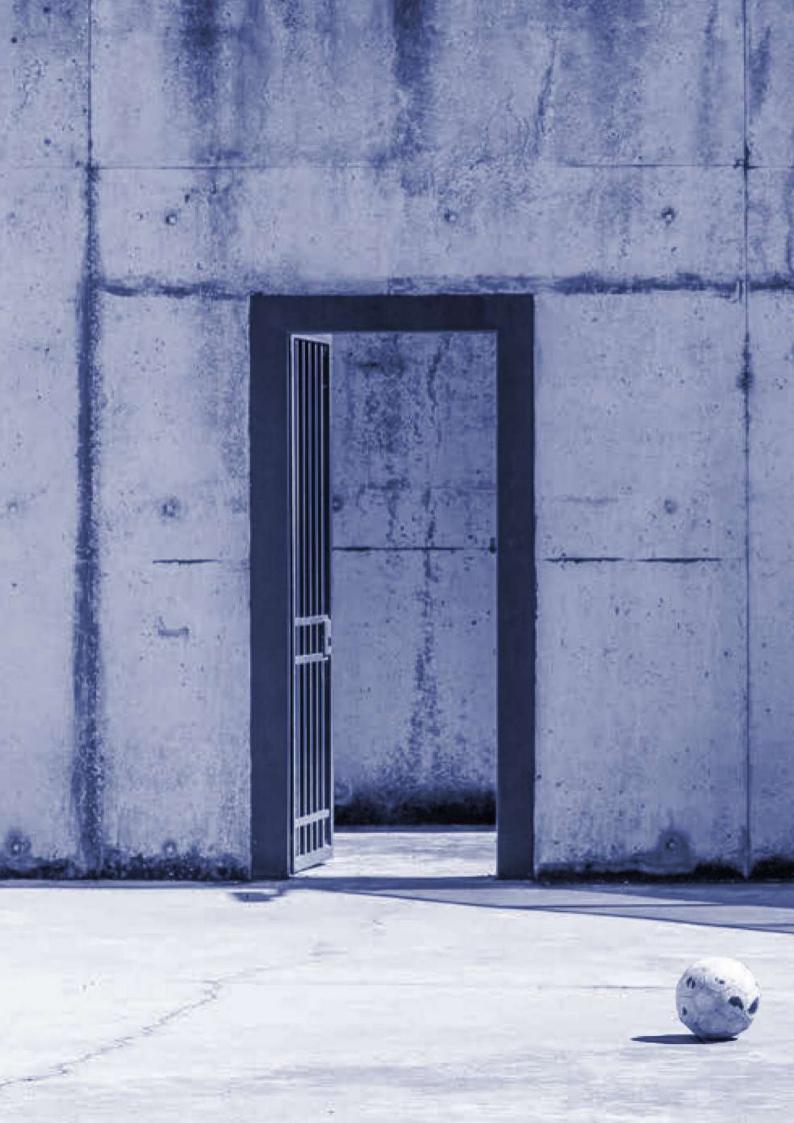
5 Each research is, at the same time, a chance for a better understanding of how an open project can act in marginal and deprived contexts.

6 The project was presented by researchers from the Department of Architecture and urban Studies together with professors coming form the Department of Design, the Department of Electronic Engineer, Information and Bioingegneria. The group is coordinated by Andrea Di Franco. www.acts.polimi.it

7 We can look at different experiences to find some models. In Milan Mapping San Siro is working with the network Sansheroes, made up by local organizations that do have different aims and roles. In 2016 in Belmonte Calabro (Cz) another experience, La Rivoluzione delle Seppie, took place. Here the group that is in charge of guiding the transformation process is made up by a group of young architects, residents, the city council and London Metropolitan University.



The WRP Adaptive Masterplan is tentativly shaped in website articulated in Atlas, Archipelago and Built Experiments



# **CONCLUSION TO (re)START**

In the research path carried out, many different and sometimes divergent levels of reflection have been intertwined. An overlap conditioned maybe by being a research carried out through other research. A process that at times tried to go deep into single issues, other times crossed themes and contexts observing recurrences and differences.

The research in these years has empirically investigated how architectural design can contribute to activating regeneration processes in marginal contexts and how it can equip itself to feed inclusive processes. Processes capable of catching multiple resources economic, services, spaces of quality and the vitality of local society. The personal research, which began before the doctorate and will continue tomorrow, has found a fertile period of broader and transversal reflection in the doctorate. What has been experimented, and translated into a method - even if it is still in a tentative form - is a way of design that tries to solicit the contexts to formulate a project query and glimpse possible ways of dealing with it through tentative forms of space modifications. The interaction takes place through making. The project uses the built experimentations as a tool to explore both the local and the general scale. It promotes co-designing activities to engage the territorial stakeholders and those who have the task of administering the places. An inclusive project, which does not evade the complexity of the phenomena, reducing them, but it tries to recognise the transformative possibilities of the moment through the design action. It is a multiscalar and relational investigation.

The research has the ambition: to learn from the paths taken, to offer some tools that are exemplary in other situations, to raise a series of questions to be posed by other territories, to encourage the search for similarities and possible synergies with what others are experiencing, both in the academy and in the professional world. In fact, in these years we are witnessing the emergence of new forms of professionalism that is testing other (heterogeneous) ways to carry out project starting from the space agency (Petrescu et al. 2009, Menu 2018, ). New ways of conducting the architectural profession in reaction to the challenges and changes imposed by the crises that occurred in recent decades. In this way, it is possible to open up a comparison between academic and professional research that can produce advances in terms of operativeness and innovation in processes and procedures while recognising its operational specificities.

To conclude, I will try to return to some keywords to summarise the

intermediate goals achieved, which simultaneously represent directions along which to continue the research.

The first two keywords, marginal contexts and transformative research, reconstruct the favourite framework to measure progress in terms of knowledge, where what is acknowledged and discussed here can play an exemplary role. Within the shared objective of making each transformative occasion an open and inclusive lever of change, I think that the challenges of complexity require the adoption of different design methods according to the situations we operate (contexts, objectives and ways).

The following keywords try to specify a possible design method and its tools.

#### Marginal contexts.

The two academic research have been used as knowledge probes. Although different in form and theme, they have dealt with places that can be described as urban margins. Feelings of isolation and exclusion are common in these contexts. The marginality is not linked to their geographical location but to being places where, over time, multiple forms of environmental and social degradation settle down.

In the progress of my research, I preferred to characterise them for their being on the edges of transformative possibilities, for their difficulty in intercepting articulated regeneration projects and programmes. The exclusion results from the sedimentation of critical issues that make these situations full of friction, seemingly indistinguishable from each other, which are self-feeding in a downward spiral. A complex interweaving that renders these contexts inert, nullifying any project thought. It is a condition aggravated by to be excluded from any form of ordinary maintenance by the public administration, owner and manager of these places. Today, the public nature of these territories requires the implementation of a new type of actions, having to face a growing lack of possibility and capacity of action of the public subject.

Often it is used to witness conflicting narratives about these situations. If the tale comes from outside, they are situations told with negative meanings, the need for radical intervention is often evoked. However, it is always postponed because of the resources' scarcity and fear of failure. If the tale comes from inside, the optimistic vision is prevailing; it describes them as contexts rich in resources, human and spatial, and design skills. Positive stories often clash with the inability to deposit significant changes because they are fragmented, and the outcomes link to short-term funding, where the contribution of volunteers is essential and the networking of experiences is difficult.

Today it seems appropriate to continue investigating alternative forms of effective action in these contexts, comparing them with the different ideas of urban regeneration emerging in the European public debate. A transformative research.

Based on the research experience, what is proposed is the practice of a median posture. On the one hand, the suggestion is to try to grasp the particular by carrying out specific activities that make it possible to situate oneself in contexts. Being in contexts allows to develop "neighbourhood relations" that support producing more detailed descriptions of the situation. At the same time, these situations are paradigmatic for broader contexts, fragments in wider frames of meaning and project. The exemplar role makes it possible not to get lost in detail and to carry out more comprehensive projects. The "general scale" is the medium to establish dialogues and collaborations with public actors and the multifaceted world of the Foundations and third sector, whose role is increasingly central in sustaining programmes and projects in marginal contexts. A process of observation, action and description that cyclically combines bottom-up and top-down practices.

It was practised a "research in the city", walking through it, inhabiting it, experimenting with it. We have intertwined the glances of different researchers. We have acted with local players and with the institutions. We have confronted institutional and place narratives, and above all, we have practised the physicality of the spaces. It is a way of doing research that practices transformation programmatically; the design modification of places produces knowledge. The research puts into practice its advocacy action concerning the themes and places practised through design modification. Through the project of modification, the research puts into practice its advocacy action concerning the themes and places practised. It is a way of design according to a tanscalar and rhizomatic process guided by the proposition of transformative actions.

It is a way of doing research made possible by being first of all university research, which moves according to the perspective indicated by Giancarlo De Carlo: "the university must be an active part of society, of the city, towards which it has rights and responsibilities" (De Carlo, Bunčuga 2000, 159). A field of the research described in the literature as the third mission (or third stream) of the university (Duderstadt 2000, Lazzeroni and Picaluga, 2009, ANVUR 2013, Cognetti and De Carli 2013). In particular, they are cases of cultural and social advancement, in which public goods are produced, and they increase the well-being of society. These goods may have cultural, social, educational or civil awareness content. There are no costs for the benefit of these goods or, in any case, a market cost (ANVUR 2013)<sup>1</sup>. The openness to the outside implies the ability to participate in formal and informal networks, strategic tables, urban coalitions, in which the university is an actor among the actors (Bagnasco, 2004). Participation in large networks allows the research to draw knowledge from the territory, but that makes it responsible for giving back to the territory the knowledge produced. Taking this path "also implies a profound revision of the usability of academic knowledge and the ways to make it accessible, comprehensible, appropriate, starting from the questions and skills that emerge from society" (Cognetti 2013, 21).

The experience acquired in recent years suggests using of the architectural

1 The Anvur recognises another family of activities related to the third mission: as the economic valorisation of knowledge that aims to foster economic growth, through the transformation of knowledge produced by research into useful knowledge for productive purposes. and urban design in particular situations, practising tangible experimentation, as a fertile device to activate and feed a process of production and sharing of pertinent knowledge capable of encouraging inert situations to action. In other words, to carry out an activity of public engagement.

We must be aware that practising the project and its implementation within university research allows degrees of freedom compared to "ordinary processes" in society. On the one hand, achievements are the result of selfcommitment. The founds come from the university's calls for research, allowing more decision-making space in the design options and how to use the project. The limited financial availability imposes strong limitations on experimentation, risking the ephemeral effects, but at the same time, it makes failure and reversible actions more acceptable. On the other hand, the umbrella of the Politecnico di Milano facilitates the activation of some relations, especially with other institutions.

However, autonomy and freedom increase the responsibility of research towards the territories involved, where the focus is on not disregarding the commitments taken to them. In this 'inside-outside' relationship, the innovations are activated "between 'academic utility' and 'social utility', in which the two terms must both be rethought. These two types of utility not necessarily have to coincide. This relationship cannot be thought of in full adherence and understanding: the space of academic reflection will be fed by thinking developed close to practices, just as on the other hand, field-projects will treasure the issues matured within the university" (Cognetti 2013,21).

Practising a space of exchange between universities and cities can open up an articulated dialogue about what the design does and how it can do it, among the multiple players involved in the design process. A comparison that could, and should, also introduce forward shifts in the "ordinary procedures" of governance of marginal contexts.

#### The project of projects.

It has been said that marginal contexts are places where the practice of the project appears as necessary as it proves impractical in reality. How, then, can architectural design reconsider itself to introduce "design hope" into these places without evading the complexity of the phenomena present?

In order to answer this question-need, a design method has been experimented, which can be defined as an "open work". It is a project that takes shape from and offers itself as the foundation for a series of projects that occur over time and by many players involved in various ways; a "project of projects" (Di Franco 2018).

The hypothesis is that in order to know and practice marginal contexts we have to put different glances at work, using lenses and transdisciplinary tools, without forgetting to wear the designer's glasses, measuring ourselves with the real possibility of modification - through the identification of sparks, engagements and systems of opportunities - moving in that median posture previously outlined, between particulare and general, marginality and innovation. The value of the specificity of space modification remains the architect's task, but he puts his particular skills at work within a richer process awareness.

The project is no longer the foreshadowing of a final state to strive for, albeit momentary, but one of the devices within a flow of interactions where decisions are the outcome of a complex multi-actor process. In this flow, the design becomes a tool both for taking decisions and building mechanisms of activation of resources and knowledge.

The architectural design becomes the architect's way of being actively involved in the transformation. Through the idea of space modification, attention is paid to the specificity of territorial objects, both material and immaterial, going beyond simplifying and unifying images. The projects carried out in these years of research are, on the one hand, qualitative experimentations of places, from the materials to the equipment present, and on the other, the construction of the network of actors, their initiatives and competences in a vision that tries to specify the different phenomenologies of identified problems. They are the attempt of a first effective negotiation of these problems, from lateral and biased positions. Locally, these experiments have the value of reactivating the design dimension of places by showing tangible signs. The built experiments are an attempt to enhance the value of the space agency.

But to ensure that these interventions do not remain partial and soon run out of effect, it is necessary to recognise them and show them as the leverage of a more comprehensive project. This is why the project-process idea proposed here practices both the particular and the general scale, suggesting the use of guesswork design. A design vision that, among the possible ones, selects and indicates a direction towards which it can direct a multiplicity of transformative actions. It becomes a tool for catching initiatives already underway or encouraging new ones related to the framework of recognised possibilities. Initially, the vision is shaped as an intuition that starts from an opportunity, be it a call for funding, the launch of a specific project, a local administration and organisation's initiative, or something else. It is a direction identified by a "lateral thinking" concerning the conditions given at that moment. Over time this intuition will be verified and clarified through both the transformative experience and the development of multiscale networks of stakeholders that the proposal is able to attract around itself.

#### Ecology of practices.

Guesswork design and built experiments are two tools of a project that gives itself in abductive form, which, case by case, becomes precise and adaptable, trying to react to the stumbles, bifurcations and twists it encounters in the process. So, on the one hand, the built experiments have the task of distinguishing the complexity of the situations; on the other, the guesswork design has the task of enhancing the exemplarity of the experiments, making the project communicable by building links between the parts.

I think it is important to underline two factors in this continuous tension between the particular and the general. The first is the importance of making. Although partial and limited, the realisations make tangible the possible effects of space modification, and adopting an inclusive process, they help bring out a feeling of trust among the participants. Making together becomes a moment of joint learning and knowledge sharing. In this light, the project is no longer an activity for but a process with the context.

The second is the importance of telling the experiences to make the knowledge produced by the action shared.

At the general scale, the tale of guesswork design makes the transformative vision communicable and allow to built links between particulars. At the particular scale, the stories of built experiments exemplify a possible method to decline the overall vision in other places concretely. Thus, the project is changing from a vision of the future to be achieved to a process towards a future built day by day.

The project thus seems to take the form of what Isabelle Stengers calls "ecology of practices".

"What I call an ecology of practice is a tool for thinking through what is happening, and a tool is never neutral. A tool can be passed from hand to hand, but each time the gesture of taking it in hand will be a particular one [...]. Here the gesture of taking in hand is not justified by, but both producing and produced by, the relationship of relevance between the situation and the tool" (2005, 185).

So, the project assumes the form of a relational process, a contingent and relative "social object" (Ferraris, 2009). It opens to the contribution of different actors and knowledge, professional and common. In the pushing and pulling at constrains, the practitioners recognise their limits and also push against them, to re-establish them again and again. In this habitat, the specific contribution of the architecture is the explorative prefiguration of the transformative conditions of the places.

Understanding the project as an ecology of practices is a way of opening up marginal contexts to the city, placing them back into the bundle of temporalities with which the city is built, making them potentially interesting for heterogeneity of projects.

#### New design devices

It seems necessary to have a device that is capable of recording and at the same time making available openly the project data that stratify over time. Data knew through the practice of the guesswork design and the built experiments. The device is the palimpsest (Corboz 1983) of the project of projects.

The two research, used here as investigation fields, have selected available design tools trying to stress their possibilities in terms of openness and implementability over time. In the case of Architectures of Prison, the guidelines have experimented. Here the role of the matrix is central. It is a multidimensional and multi-entry tool that gives to the fragment a general sense and allows package actions from time to time. West Road Project investigates the potential of the masterplan defined adaptive. The specification underlines the dynamic nature of its governance ability. A device that from time to time helps to build links between heterogeneous parts and elements. Both instruments have been conceived as a non-disciplinary device for who work daily to improve the habitability of the investigated contexts.

Considering the operability of these tools (even if their working period is still very short) the emerging feeling is the need to start the definition (and maybe the nomination) of a new device (at least in part) that breaks the customary understanding of regulatory design tools, be they guidelines, masterplans or others.

By thinking about the concept of the relational device, I have tried to trace some characteristics of this tool, starting from being a medium to cope with contingency. A tool that contributes to the emergence of new possibilities, and at the same time a tool that can record what happens and make it available to those who participate or will participate in the regenerative process.

Devices because it has to deal with and operate through heterogeneous elements: documents, normative, rules, policies, rules, pieces of knowledge, people, institution and so on. Relational to stresses its ability to distinguish elements (material and immaterial) and build connections between them. They links different projects, features and stakeholders as the result of a continuous negotiation that takes place in a specific moment and place. The relationship becomes action and not a project's outcome, and for this reason, it is updated continuously.

The relational device is at the same time disciplinary and open to other knowledge, potentially operable by multiple subjects.

The device's ability to communicate becomes central to make the collected data available and provide possible interpretative keys. An openness that goes hand in hand with the ability of the device to welcome and record the production of new knowledge. This is why, in the last period of the West Road Project, we have tried to experiment with the possibilities to use the web to design the device, experimenting with the media's potentialities. A path that it is still at the beginning, but it appears to be a necessary direction. The communicative skills acquire importance concerning what the device "releases to the territory" and what communicates to other research and researchers. Related questions will have to be addressed: who manages and powers the device over time and its validity to give examples.

The specification of what a relational device is and what it can do could take place in dialogue with the establishment of Agenzie sociali di quartiere (neighbourhood social agencies), a proposal put forward by Giovanni Laino in the conclusions of the Fifth Report on Cities promoted by Urban@it. These are centres set up on the urban periphery "capable of dealing with certain fundamental needs in an essentially integrated manner" (2019, 195). The structures are open into neighbourhoods and supposed to be managed by multiprofessional teams from third sector organisations, public administration, the professions and the world of research. In dealing with daily needs by sharing experiences, knowledge and the making of space and its modification seem to be an integral part of a transdisciplinary approach.

Another path along which to develop the relational device is more internal to the world of research. The device can be the place where the multiplicity of research (academic or promoted by private foundations and research institutes) can be deposited and "put at work". Research that investigate specific contexts or themes from different points of view and with different methodologies. Through the account and comparison of individual experiences, it is possible to identify relevant themes and potential approaches, both in operational terms and in terms of research development. The device can be imagined as a support for the advocacy activity carried out by the research. At the same time, participation in the relational device becomes a self-reflective moment of the research itself.

Undertaking a process of clarifying what a relational device is, means to continue investigating both the role and effectiveness of design guesswork and of built experiments, improving the ability to read and record the agency of the space and the documents produced. These are new starting questions to continue reflecting on the architectural design's ability to be an essential step in activating marginal territories.

By telling the story of what I have experienced, I tried to exemplify a possible research method and design in which I'm finding clues of efficiency. The thesis has the ambition of being a dialogue tool with those interested in the efficacy of architectural design and marginal contexts. I'd like to carry out a comparison inside and outside the academy, starting from those I have met in recent years.



# References

In my wanderings among heterogeneous readings, some texts in these years have never left my desk. I went back to reread the pages of these texts all those times when it was not clear to me the direction in which to turn the gaze of my observations.

Armando, Alessandro and Giovanni Durbiano. 2017. *Teoria del progetto architettonico. Dai disegni agli effetti.* Roma: Carocci editore.

Awan, Nishat, Tatiana Schneider and Jeremy Till. 2011. *Spatial Agency: Other Ways of Doing Architecture*. Taylor & Francis Ltd

De Carlo, Giancarlo. 2013, L'architettura della partecipazione, ed. Sara Marini. Macerata: Quodlibet

Ferraris, Maurizio. 2009. Documentalità. Perchè è necessario lasciar tracce. Roma-Bari: Laterza

Gregotti Vittorio. 2014. Il possibile necessario. Milano: Bompiani.

Hirschman, Albert O. 1994. *Passaggi di frontiera. Il luoghi e le idee di un percorso di vita.* ed. Donzelli, Carmine et.al. Roma: Donzelli Editore.

Infussi, Francesco. 2007. "Fenomenologia del progetto mite: per una pratica progettuale inclusiva della diversità". in Lanzani, Arturo and Moroni Stefano *Città ed azione pubblica. Riformismo al plurale.* Roma: Carocci.

Ingold, Tim. 2013. *Making: Anthropology, Archeology, Art and Architecture.* London and New York: Routledge (it. tr. *Making: Antropologia, Archeologia, arte e architettura.* Milano: Raffaello Cortina Editore. 2019).

Jullien, Francois. 1996. *Traité de l'efficacité*. Paris: Grasset & Fasquelle. (it. Tans., 1998, *Trattato dell'efficacia*. Torino: Enaudi).

Magnani, Carlo (curator). 2017. "Architecture Design Theory" in Ardeth vol.1 fall.

Maldonado, Tomas. 1970. La speranza progettuale. Enaudi: Torino.

Morin, Edgard. 1999. La tête bien faite. Repenser la réform, réformer la pensée. Paris:Seuil (it. trans., 2000, La testa ben fatta). Riforma dell'insegnamento e riforma del pensiero. Milano: Raffaello Cortina).

Schoen, Donald A. 1983. The ReflexivevPractioner. New York: Basic Books. (it. trans. Il professionista riflessivo. Per una nuova epistemologia della pratica professionale. Bari:Dedalo, 1993).

Palermo, Pier Carlo. 2009. I limiti del possibile. Governo del territorio e qualità dello sviluppo. Roma: Donzelli editore.

Pasqui, Gabriele. 2018. La città, i saperi, le pratiche. Roma: Donzelli Editore.

Till, Jeremy. 2009. Architecture Depends. Cambridge, Mass.: MIT Press.

As said, the texts consulted in these years are very heterogeneous, following the structure of research that proceeds through different but strongly correlated levels, the bibliography reflects this articulation. The bibliography is also conceived as an open archive with the evolution of future research. The transversality of some texts has led to their return to different lists.

### **Terms of the Research**

A+T no. 38, autumn 2011, "Strategy and tactics in public space".

Armando, Alessandro and Giovanni Durbiano. 2017. Teoria del progetto architettonico. Dai disegni agli effetti. Roma: Carocci.

Awan, Nishat, Tatiana Schneider and Jeremy Till. 2011. Spatial Agency: Other Ways of Doing Architecture. Taylor & Francis Ltd

Barazzetta, Giulio. 2016. "Che fare", in Backstage. L'architettura come lavoro concreto, ed. Forencia Andreola, Mauro Sullam and Riccardo M. Villa. Milano: FrancoAngeli.

Barbieri, Pepe. 2017. "Contesti in Volo" in Ardeth vol.1: 125-136.

Balducci, Alessandro. 2019. "Dai territori più fragili la sfida ai populismi", in Corriere della Sera - Buone notizie n.13, 26 March 2019.

Bauman, Zygmund. 2004. Wasted Lives: Modernity and Its Outcasts. Cambridge: Polity Press.

Bauman Zygmund. 2016. Scrivere il future. Roma: Castelvecchi.

Bianchetti, Cristina. 2016. Spazi che contano. Il progetto urbanistico in epoca neo-liberale. Roma: Donzelli editore.

Biraghi, Marco. 2019. L'architetto come intellettuale. Torino: Einaudi.

Blundell Jones, P., Petrescu, Doina and Jeremy Till, (eds) .2005. Architecture and Participation, London: Spon Press.

Bricocoli, Massimo. 2008. "Non di solo locale. Riflessioni sulle politiche di quartieri in Italia", in Territorio 46: 109-113.

Borasi, Giovanna, ed. 2015, The Other Architect: Another Way of Building Architecture, Montreal: Spector Books & Canadian Centre for Architecture.

Branzi, Andrea. 2006. Modernità debole e diffusa. Il mondo e il progetto all'inizio del XXI secolo. Milano: Skira.

Caralanotti, Cristina. 2020. Contemporary Architects Groups and Collectives. Designing changes in Architecture and Urban Design Professional Practice. Doctoral dissertation, Politecnico di Milano.

Chipperfield, David, Long, Kieran and Shumi Bose. 2012. Common Ground. A Critical Reader Venice Biennale of Architecture 2012. Segrate: Rizzoli.

Chipperfield, David. 2018. "David Chipperfield: Architecture is in a sort of crisis" in Financial Times 4 May 2018.

Chipperfield, David. 2020. "A question of scale" in Domus no. 1051 Nobember 2020.

Cognetti, Francesca. 2014. "What Forms of Participation Today? Forms, Pressures, Competences", in Practices of Reappropriation, ed.Carlo Cellamare and Francesca Cognetti. Roma-Milano: Planum Publisher.

Cognetti, Francesca and Liliana Padovani. 2018. Perchè (ancora) i quartieri pubblici. Un laboratorio di politiche per la casa. Milano: Franco angeli - Collana del DAStU. Politecnico di Milano.

Corboz, André. 1983. "Le Territoire comme palimpseste", in Diogène 121 (it. trad. "Il territorio come palimpsesto". *Casabella* 516, sett. 1985: 22-27)

Cuff, Dana 2001. Architecture: the Story od a Practice. Cambridge, Mass.: MIT Press.

Dardot, Pierre and Christian Laval. 2010. La nouvelle raison du monde: essai sur la société néoliberale. Paris: Le Découverte. (it. tr. La nuova ragione del mondo. Criticità della razionalità neoliberista. Roma: DeriveApprodi, 2013.)

De Carlo, Giancarlo. 1992. Gli spiriti dell'architettura. Roma: Editori Riuniti.

De Carlo, Giancarlo. 2013. L'architettura della partecipazione, ed Sara Marini. Macerata: Quodlibet

Deleuze, Gilles and Foucault, Michel. 1972. "Les intellectuels et le pouvoir", in L'Arc n.49: 3-10 (it. tr. "Gli intellettuali e Il potere. Conversazione tra Michel Foucault e Gilled Deleuze", in *Foucault, Michel. 1977. Microfisica del potere. Interventi politici.* Torino: Einaudi. 107-118.

Di Franco, Andrea. 2012, Il progetto di architettura. Santarcangelo di Romagna (Rn): Maggioli.

Di Franco, Andrea. 2016. Conversazioni con Luigi Snozzi. Santarcangelo di Romagna: Maggioli editore.

Di Franco, Andrea. 2018. "Roma Opera Aperta: l'architettura della metropoli", in *Topografie Operative. Ricerche, letture e progetti per l'area metropolitana di Roma*, ed. Di Franco, Andrea et al. Santarcangelo di Romagna: Maggioli editore.

Donolo, Carlo and Franco Fichera. 1988. La via dell'innovazione. Forme e limiti della razionalità politica. Milano: Feltrinelli.

Donzelot, Jean. 2008. "Il neoliberismo sociale", in Territorio 46: 89-92.

Emery Nicola. 2010. Progettare, costruire, curare. Bellinzona: Edizioni Casagrande

Fareri, Paolo. 2009. Rallentare: Il disegno delle politiche urbane. ed. Marianna Giraudo. Milan: FrancoAngeli.

Ferraris, Maurizio. 2009. Documentalità. Perchè è necessario lasciar tracce. Roma-Bari: Laterza

Frichot, Hélène. 2017. "A Creative Ecology of Practice for Thinking Architecture". in Ardeth vol. 1: 139-149.

Ghel, J. 1971. Life Between Buildings: Using Public Space. (it. tran. Vita in città. Spazio urbano e relazioni sociali ed. Antonio Borghi Santarcanelo di Romagna: Maggioli, 2012)

Goodbun, J., et al. 2015. The Design of Scarcity. Moscow: Strelka Press.

Gregotti Vittorio. 1984. "Modificazione", in Casabella 498-499, gennaio-febbraio.

Gregotti, Vittorio. 2008. Contro la fine dell'architettura. Torino: Einaudi.

Gregotti Vittorio. 2010. Tre forme di architettura mancata. Torino: Einaudi.

Gregotti Vittorio. 2014. Il possibile necessario. Milano: Bompiani.

Gribat, Nina and Sandra Meireis. 2017. "A critique of the new 'social architecture' debate". City, 21:6, 779-788.

Guadalupi, Camilla. 2019. Undisciplined expertise. Reflections on an emerging profession within Tactical Urbanism, Doctoral dissertation, Torino, Politecnico di Torino.

Hirschman, Albert O. 1994. Passaggi di frontiera. I luoghi e le idea di un percorso di vita. (Carmine Donzelli, Marta Petrusewicz e Claudia Rusconi - eds). Roma: Donzelli

Hirsschman, Albert O. 2015. The Essential Hirschman. Jeremy Adelman (eds). Prineceton University Press.

Illich, Ivan. 1977. Disabling Profession. London: Marion Boyars.

Infussi, Francesco. 2007. "Sguardi urbani e qualità contestuali nella progettazione dell'edilizia sociale pubblica", in *L'abitazione Sociale*, ed. Cristina Bergo e Raffaele Pugliese. Milano: Unicopli.

Infussi, Francesco and Lorenzo Fabian. 2012. "Abitare a Milano. Un'esperienza di comunicazione tra differenti momenti della progettazione", in *Città pubblica. Politiche abitative e progetto*. Provincia di Pordenone.

Ingold, Tim. 2013. Making: Anthropology, Archeology, Art and Architecture. London and New York: Routledge (it. tr. Making: Antropologia, Archeologia, arte e architettura. Milano: Raffaello Cortina Editore. 2019).

Jacobs, Jana and Peter Merriman. 2011. "Practising architecture", in Social & Cultural Geography, 12 (3), 211-222.

Jullien, Francois. 1996. Traité de l'efficacité. Paris: Grasset & Fasquelle. (it. Tans., 1998, Trattato dell'efficacia. Torino: Enaudi).

La Cecla, Franco. 2008. Contro l'architettura. Torino: Bollati Boringhieri.

Latour, Bruno. 1991. We have Never Been Modern. Cambridge, Ma: Harvard University Press.

Latour, Bruno. 1998. "On recalling ANT". In *Actor Network and After* . ed. John Lawand and John Hassard. Oxford: Blackwell Publishers, 15-25.

Latour, Bruno. 2005. Reassembling the Social: An Introduction to Actor-Network Theory. Oxford-New York: Oxford University Press.

Lydon, Mike and Anthony Garcia. 2015. Tactical Urbanism. Short-term Action for Long-term Change. Washington: Island Press.

Magnani, Carlo (curator). 2017. "Architecture Design Theory" in Ardeth vol.1 fall.

Maldonado, Tomas. 1970. La speranza progettuale. Enaudi: Torino.

Morin, Edgard. 1999. La tête bien faite. Repenser la réform, réformer la pensée. Paris:Seuil (it. trans., 2000, La testa ben fatta. Riforma dell'insegnamento e riforma del pensiero. Milano: Raffaello Cortina)

Palermo, Pier Carlo. 2007. "Architettura e società". in *Architettura e Politica* ed. Piva, Antonio, Francesca Bonicalzi and Pierfranco Galliani. Roma: Gangemi.

Palermo, Pier Carlo. 2009. I limiti del possibile. Governo del territorio e qualità dello sviluppo. Roma: Donzelli editore.

Pasqui, Gabriele. 2018. La città, i saperi, le pratiche. Roma: Donzelli Editore.

Pepe, Giuseppe. 2018. Storie dal presente dell'urbanistica olandese. Amsterdam "Spontaneous City"? Doctoral dissertation, IUAV Venezia.

Ratti, Carlo. 2014. Architettura Open Source. Verso una progettazione aperta. Einaudi: Torino.

Richards, J.M., Peter Blake and Giancarlo De Carlo. 1973. L'architettura degli anni settanta. Milano: Il Saggiatore.

Rittel, Horst W.J. and Melvin M. Webber. 1973. "Dilemmas in a general theory of planning", in Policy sciences. 4 (2), 155-169.

Rorty, Richard. 1979. Philosophy and the Mirror of Nature. Princeton, NJ: Princeton University Press. (it. trans. La filosofia e lo specchio della natura. Milano: Bompiani, 1986)

Schoen, Donald A. 1983. The ReflexivevPractioner. New York: Basic Books. (it. trans. Il professionista riflessivo. Per una nuova epistemologia della pratica professionale. Bari:Dedalo, 1993).

Secchi, Bernardo. 1984. "Le condizioni sono cambiate". Casabella 498-499: 12-15.

Secchi, Bernardo. 2013. La città dei ricchi e la città dei poveri. Roma-Bari: Laterza.

Secchi, Bernardo. 2015. Il Futuro si costruisce giorno per giorno. Riflessioni su spazio, società e progetto. ed. Giulia Fini. Roma: Donzelli.

Sennet, Richard. 2018. Building and Dwelling: Ethics for the City. London: Penguin Books. (it. tr. Costruire e abitare. Etica per la città. Milano: Feltrinelli. 2020).

Silber, John. 2007. Architecture of the Absurd: How "genius" Disfigured a Practical Art. Quantuck Lane Press

Soja Edward. W. 2010. Seeking for spatial justice. Minneapolis: University of Minnesota Press.

Stangers, Isabelle. 2005. "Introductory Notes on an Ecology of Practices". *Cultural Studies Review* [online], 1 (11), 183-196 [accessed 14 September 2017].

Stangers, Isabelle. 2014. "Speculative Philosophy and the Art of Dramatization". In The Allure of Things: Process and Object in Contmporary Philosophy. Londono: Bloomsbury

Stickells, L. 2011. "The Right To The City: Rethinking Architecture's Social Significance", Architectural Theory Review, 16 (3), 213-227

TAMassociati, ed. 2016. Taking care - padiglione Italia biennale architettura 2016. Progettare per il bene comune. Becco Giallo.

Till, Jeremy. 2007. "Three Myths and One Model", in Building Material 17: 4-10.

Till, Jeremy. 2009. Architecture Depends. Cambridge, Mass.: MIT Press.

Till, Jeremy. 2014. "Scarcity and Agency", in Journal of Architectural Education 68 (1), 9-11.

Venturi, Paolo and Flaviano Zandonai. 2016. Imprese ibride. Modelli d'innovazione sociale per rigenerare valore. Milano: Egea.

Venturi, Paolo and Flaviano Zandonai. 2019. Dove. La dimensione di luogo che ricompone impresa e società. Milano: Egea.

Ward, Colin. 2016. Architettura del Dissenso. Forme e pratiche alternative dello spazio urbano. Ed. Giacomo Borella. Milano: Elèuthera.

Yaneva, Albena. 2009. Mabe by Office for Metropolitan Architecture: An Ethnography of Design, Rotterdam: 010 Publischers.

Yaneva, Albena, 2012. Mapping Controversies in architecture. Farnham: Ashgate.

Yaneva, Albena, 2017. Five Ways to Make Architecture Politica. London: Bloomsbury Academic.

## **Investigation by Opportunities**

#### PRISON ARCHITECTURE

AA.VV. 2016. Gli Stati Generali dell'esecuzione penale. Visti dall'Osservatorio Carcere dell'Unione delle Camere Penali Italiane. Pacini Giuridica.

Castellano, Lucia and Donatella Stasio. 2009. Diritti e castighi: storie di umanità cancellata in carcere. Milano: Il Saggiatore

Caravatti, Emilio. 2015. "Tempo e spazio della detenzione". in Prigione, architettura e tempo della detenzione, ed. Santangelo Marella. Siracusa: LetteraVentidue.

Corleone, Franco. 2011. "Risorgere dalle macerie del carcere" in *Il corpo e lo spazio della pena*, ed.by Anastasia Salvatore, Franco Corleone and Luca Zevi, op.cit.

Di Franco, Andrea. 2014. "Architettura come progetto di libertà", in L'architettura penitenziaria oltre il muro, Alberto Mariotti. Santarcangelo di Romagna: Maggioli. pp. 7-17.

Di Franco Andera, Christian Gerardi e Nicola Guerrieri, ed. 2018. La città oltre il muro. Progetti per la seconda casa di reclusione di Milano-Bollate. Santarcangelo di Romagna: Maggioli editore.

Foucault, Michel. 1977. Discipline and Punish: The Birth of the Prison. Harmondsworth: Penguin.

Foucault, Michel. 1984. "Des espaces autres" Conférence au Cercle d'études architecturales, 14 mars 1967, in Architecture, Mouvement, Continuité, no 5: 46-49 (it. tr. Spazi Altri. I luoghi delle eterotopie, ed. Salvo Vaccaro. Milano-Udine: Mimesis Edizioni.

Fondazione Michelucci. 1983. Carcere e città - La nuova città, n. 1, La nuova Italia

Grande, Mariafrancesca and Maria Assunta Serenari. 2002. In-out: alla ricerca delle buone prassi, Formazione e lavoro nel carcere del 2000. Milano: FrancoAngeli.

Goffman, Erving. 1961. Asylums: Essays on the social situations of mental patients and other inmates. Oxford: Doubleday (Anchor).

Lenci, Sergio. 1976, "Tipologie dell'edilizia carceraria", in *Carcere e società*, ed. Cappelletto, Marco and Anna Lombroso. Venezia: Marsilio.

Lenci, Ruggero, ed. 2000. Sergio Lenci. L'opera architettonica 1950-2000. Roma: Diagonale.

Magnaghi, Alberto. 2014. Un'idea di libertà, S. Vittore'70 - Rebibbia '82. Roma: DeriveApprodi

Marcetti, Corrado. 2011. "L'architettura penitenziaria dopo la riforma" in Il corpo e lo spazio della pena ed. Anastasia Salvatore, Franco Corleone and Luca Zevi, op.cit.

Mariotti, Aberto. 2014. L'architettura penitenziaria oltre il muro. Santarcangelo di Romagna: Maggioli

Massarente, Alessandro. 2013. "Carcere e architettura: alcune voci del coro", in Voci e maschere della pena, ed. Corleone, Franco and Andrea Pugiotto, op.cit.

Michelucci, Giancarlo. 1994. "L'architettura delle prigioni", in *Immagini dal carcere*, Ministero di Grazie e Giustizia, Dipartimento dell'Amministrazione Penitenziaria

Moran, Dominuque and Yvonne Jewkes. (2015). "Linking the carceral and the punitive State: A review of research on prison architecture, design, technology and the lived experience of carceral space". *Annales de géographie*, 702-703(2), 163-184.

Naldi, Alessandra and Andrea Molteni. 2002. "Le risorse occupazionali dei territori circostanti le case di reclusione dell'area milanese". Agenzia di solidarietà per il Lavoro

Palma, Mauro. 2011. "Due modelli a confronto: il carcere responsabilizzante e il carcere paternalista", in *Il corpo e lo spazio della pena*, ed. Anastasia Salvatore, Franco Corleone and Luca Zevi, op.cit.

Palma, Mauro. 2017. "Architettura e tempo della detenzione", in In prigione, architettura e tempo della detenzione, ed. Marella Santangelo, op.cit.

Paez, Roger. (2014). Critical prison design: Mas d'Enric penitentiary by AiB arquitectes + Estudi PSP Arquitectura. Barcelona: Actar.

Perović, Vasa, Fikfak, Alenka, Kosanović, Saja and Mia Crnič. (2015). The contemporary model of prison architecture : spatial response to the re-socialization programme. *Spatium*, 34, 27–34.

Pugiotto, Andrea. 2013. "Progettare lo spazio della pena: il fatto, il non fatto, il mal fatto", in *Voci e maschere della pena*, ed. by Corleone, Franco and Andrea Pugiotto, op.cit.

Santangelo, Marella, ed. 2017. In prigione, architettura e tempo della detenzione. Siracusa: LetteraVentidue.

Sarzotti, Claudio. 2014. "Oltre i tre metri quadri. Undicesimo rapporto sulle condizioni di detenzione in Italia", in Antigone, n. 2

Vaudetti, Marco. 2017. "Spazi violenti, Un'esperienza di collaborazione tra istituzione universitaria e carcere", in *In prigione, architettura e tempo della detenzione* ed. Marella Santangelo, op.cit.

Polidoro, Riccardo. 2016. "Gli Stati Generali dell'Esecuzione Penale", in Gli Stati Generali dell'esecuzione della pena visti dall'Osservatorio Carcere dell'Unione delle Camere Penali Italiane, op.cit.

### WEST ROAD PROJECT

Angelini R., D'Onofrio R.. 2015. Comunicazione e partecipazione per il governo del territorio. Milano: Franco Angeli

Awan, Nishat, Tatjana Schneider and Jeremy Till. 2011. Spatial Agency. Other Ways of Doing Architecture. Abingdon: Routledge.

Bianchetti, Cristina. 2011. Il Novecento è davvero finito : considerazioni sull'urbanistica. Roma: Donizzelli.

Bianchetti, Cristina. 2016. Spazi che contano : il progetto urbanistico in epoca neo-liberale. Roma: Donizzelli.

Castells, Manuel. 1989. The Space of Flows, in The Informational City. Oxford: Blackwell Publishers.

Cellamare, Carlo. 2011. Progettualità dell'agire urbano. Processi e pratiche urbane. Roma: Carocci.

Choay, Francoise. 1973. La città. Utopie e realtà. Torino: Einaudi.

Givoni M., Macmillen J., Banister D. and Feitelson E., 2013, "From policy measures to policy packages", *Transport Reviews* 33, 1-20 Infussi, Francesco (eds). 2011. *Dal recinto al territorio. Milano, esplorazioni nella città pubblica.* Milano: Bruno Mondadori.

Kaufmann, Henri 2014. Retour sur la ville: motilité et transformations urbaines. Lausanne: PPUR.

LaboratorioCittàPubblica, aa.vv. 2010. Città Pubbliche. Linee guida per la riqualificazione urbana. Milano:Bruno Mondadori.

Lefebvre, Henri. 1991. The production of space. Oxford: Blackwell.

Lynch, Kevin. 1981. A theory of good city form. Cambridge, MA: MIT Press.

Ostanel, Elena and Adriano Cancellieri. 2014. "Ri-pubblicizzare la città: pratiche spaziali, culture e istituzioni", in Terriorio n.68. pp. 46-49.

Petrillo, Agostino. 2018. La periferia nuova. Disuguaglianza, spazi, città. Milano: Franco Angeli.

Secchi, Bernardo. 2011. "La nuova questione urbana: ambiente, mobilità e disuguaglianze sociale". CROIS vol1. 89-99

Secchi, Bernardo. 2013. La città dei ricchi e la città dei poveri. Roma-Bari: Laterza

Sheller, Mimi. 2018. Mobility Justice: the politics of movement in an age of extremes. Verso Books

Soja, Edward. 2010. Seeking Spatial Justice: An innovative new way of understanding and changing the unjust geographies in which we live. Minneapolis: University of Minnesotta Press.

### **Tools for the Possible**

Agamben, Giorgio. 2006. Che cos'è un dispositivo? Roma: Nottetempo.

Awan, Nishat, Tatjana Schneider and Jeremy Till. 2011. Spatial Agency. Other Ways of Doing Architecture. Abingdon: Routledge.

Amirante, Roberta. 2018. Il progetto come prodotto di ricerca. Siracusa: Letteraventidue.

Anvur, ed. 2014. La terza missione nelle università e negli enti di ricerca italiani.

Bauman Zygmund. 2016. Scrivere il futuro. Roma: Castelvecchi

Bell, Brayan. 2008. "Expanding Design Toward Greater Relevance", in *Expanding Architecture: Design as Activism*, ed. Bryan Bell and Katie Wakeford, xx-xx. Melbourne: Metropolis Books.

Bianchetti, Cristina. 2020. Corpi tra spazio e progetto. Sesto San Giovanni: Mimesis Edizioni.

Cognetti, Francesca and Beatrice De Carli (eds). 2013. "Città/Università . Esperienze di impegno civico", in Territorio no.66:16-22.

Cognetti, Francesca. 2014. "What Forms of Participation Today? Forms, Pressures, Competences", in *Practices of Reappropration*, ed.Carlo Cellamare and Francesca Cognetti. Roma-Milano: Planum Publisher.

Crosta, Pier Luigi. 2010. Pratiche. Il territorio "è l'uso che se ne fa". Milano: FrancoAngeli.

De Bono, Edward. 1970. Lateral Thinking. Creativity step by step. New York: Harper Colophon Books.

Deleuze, Gilles. 1988. "Qu'est-ce qu'un dispositive?" in Michel Foucault. Rencontre internationale, Paris, 9, 10, 11 janvier 1988. Paris: Le Seuil (tr. it.: Che cos'è un dispositivo? Napoli: Cronopio, 2002).

Di Franco, Andrea. 2012. Il progetto di architettura. Santarcangelo di Romagna: Maggioli Editore

Di Franco, Andrea. 2018. "Roma Opera Aperta: l'architettura della metropoli", in *Topografie Operative. Ricerche, letture e progetti per l'area metropolitana di Roma*, ed. Andrea Di Franco, Lorenzo Giacomini, Carolina Medici, Alessandro Raffa, Claudia Zanda and Fabrizio Zanni, 11-23. Santarcangelo di Romagna: Maggioli Editore.

Duderstat, James. 2000. A University for the 21st Century. Ann Arbor: University of Michigan Press.

Eco, Umberto and Thomas Sebeok, ed. 1983. Il Segno Dei Tre: Holmes, Dupin, Peirce. Milano: Bompiani.

Frichot, Hélène. 2017. "A Creative Ecology of Practice for Thinking Architecture", in Ardeth no.1/2017: 139-149.

Ferraris, Maurizio. 2009. Documentalità. Perchè è necessario lasciar tracce. Roma-Bari: Laterza

Foucault, Michel. 1980 "The Confession of the Flesh" [Interview, 1977], in Power/Knowledge: Selected Interviews and Other Writings, ed. Colin Gordon. New York, NY: Pantheon Books, pp. 194-228.

Hirschman, Albert O. 1994. Passaggi di frontiera. I luoghi e le idea di un percorso di vita. (Carmine Donzelli, Marta Petrusewicz e Claudia Rusconi - eds). Roma: Donzelli

Hirsschman, Albert O. 2015. The Essential Hirschman. Jeremy Adelman (eds). Prineceton University Press.

Infussi, Francesco. 2008. "Progetti per decidere:velocità, forme e scopi", in Urbanistica no. 136, MAy-Augost 2008: 54-56.

Ingold, Tim. 2013. Making: Anthropology, Archeology, Art and Architecture. London and New York: Routledge (it. tr. Making: Antropologia, Archeologia, arte e architettura. Milano: Raffaello Cortina Editore. 2019).

Jullien, Francois. 1996. Traité de l'efficacité. Paris: Grasset & Fasquelle. (it. tr., Trattato dell'efficacia. Torino: Enaudi. 1998).

Khun, Thomas. 1977. The essential tension. Selected studies in scientific tradition and change. Chicago: Chicago University Press. (it. tr. La tensione essenziale e altri saggi. Torino: Einaudi 2006).

Laino, Giovanni (eds). 2019. Quinto Rapporto sulle città Urban@it. Politiche urbane per le periferie. Roma:il Mulino.

Laino, Giovanni. 2019. "Quale cultura del progetto nella grande trasformazione?" In *Il progetto di architettura come intersezioni di saperi. Per una nozione rinnovata di Patrimonio*, ed. Alberto Calderoni, Bruna Di Palma, Antonio Nitti e Gaspare Oliva, pp pp. Atti del VIII Forum ProArch. Levi-Strauss, Claude. 1962. Le pensée Sauvage. Paris: Librairie Plon. (en. tr. *The Sevage Mind*. London: Weidenfeld and Nicolson. 1966). Lindblom, Charles E. and David K. Cohen, *Usable Knowledge: Social Science and Social Problem Solving*. London: Yale University Press. Lynch, K. 1981. A theory of good city form. Cambridge, MA: MIT Press.

Macchi Cassia, Cesare and Ugo Ischia. 2008. Architettura e territorio. Una ricerca attraverso il progetto. Udine: Forum Editrice.

Maldonado, Tomas. 1970. La speranza progettuale. Enaudi: Torino.

Maldonado, Tomas. 2010. Arte e artefatti: intervista di H. U. Obrist. Milano: Feltrinelli.

Menu, Flavien. 2018. New Commons for Europe. Leipzig: Spector Books.

Morin, Edgard. 1990. Introduction à la penseé complex. Paris: Editions Seuil (it. tr., Introduzione al pensiero complesso. Milano: Sperling & Kupfer, 1993).

Ostanel, Elena and Adriano Cancellieri. 2014. "Ri-pubblicizzare la città: pratiche spaziali, culture e istituzioni", in *Terriorio* n.68. pp. 46-49.

Petrescu, Doina, Chiles, Prue and 'The Agency'. 2009. "Agency: Alternative practices and alternative worlds", in Architectural Research Quarterly, no.13(2): 109-111.

Pasqui, Gabriele. 2018. La città, i saperi, le pratiche. Roma: Donzelli editore.

Sen, Amartya K. 1982. Choice, Welfare and Measurement. Oxford: Basil Blackwell.

Sennet, Richard. 2018. Building and Dwelling: Ethics for the City. London: Penguin Books. (it. tr. Costruire e abitare. Etica per la città. Milano: Feltrinelli. 2020).

Spuybroek, Lars. 2011. The Sympathy of Thinghs: Ruskin and the Ecology of Design. Rotterdam: V2\_Publishing.

Staeheli, Lynn A, Don Mitchell, and Caroline R Nagel. "Making Publics: Immigrants, Regimes of Publicity and Entry to 'The Public'". Environment and Planning D: Society and Space 27, no. 4 (August 2009): 633–48.

Star, Susan Leigh, and James R. Griesemer. "Institutional Ecology, `Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39". Social Studies of Science 19, no. 3 (August 1989): 387-420.

Stangers, Isabelle. 2005. "Introductory Notes on an Ecology of Practices". *Cultural Studies Review* [online], 1 (11), 183-196 [accessed 14 September 2017].

Till, Jeremy. 2013. Architecture Depends. Cambridge, Mass.: MIT Press.

### Thanks

This work is indebted to the contribution, explicit and implicit, of the many friends and colleagues with whom for years we share curiosity, interests and time between successes and failures. Even if I don't name them here, I thank all one by one.

I thank the Faculty Board of the AUID Phd Program and of all professor who have generously dedicated their time and useful advice to me.

A special thanks to Marina and Anna who have patiently supported and supported me, together with Mariarosa and Paola.