

HOUSINGLAB

A laboratory for collaborative innovation
in urban housing

LIAT ROGEL

Supervisor: Prof. Anna Meroni
Counter advisor: Prof. Pelle Ehn
Chair of the Doctoral Program:
Prof. Francesco Trabuco



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ABSTRACT

This dissertation tells the story of HousingLab: a laboratory for collaborative innovation in urban housing. HousingLab was born out of the idea that urban renewal towards a sustainable lifestyle may occur through the innovation of urban dwellings and their transformation into collaborative welfare hubs and places. I will explain the theoretical background through literature and case study analysis. Most of all I will describe activities made in the field of co-housing in the last four years: The creation of a European Network on the topic of collaborative housing, a coaching program for prospective co-housers and online social networking tool for a large dwelling. The service model of HousingLab is explained in the last part of the dissertation based on the results from the research and the field activities.

ACKNOWLEDGMENTS

This work would not be possible without the contribution of so many people. First, people I work with and from whom I learn: Anna Meroni for giving me the freedom to work on my topics of interest and to carry on projects, and for teaching me about service design and visionary creative thinking. Ezio Manzini for years of inspiration and so many intelligent words, very often ahead of their time. Daria, Marta and Chiara for being there constantly and finding the joy of working together. Davide Fassi who opened my eyes about how active and productive teaching can be. Tuuli Mattelmäki for a short, yet very important time spent together.

Michael LaFond for introducing me to the magic world of Berlin's collaborative housing, and for the Experimentcity Network. I would like to thank everyone involved in the Experimentcity project and in particular way to Dick Urban Vestbro.

The Experimentcity Milan meeting could not have been the same without the help of Chiara Gambarana.

The people directly involved in my actions: all my neighbors in via Scarsellini 17, without them and their wish to collaborate and innovate, none of this project would have been so interesting. A special thank to Alessandro Vitale who was there with me (or I was with him) in the “pre” phases. To Graziella Antoniotti for her support both in Scarsellini and for the Experimentcity project, and for her immediate understanding of the community potential.

To Anna and Emanuele for putting together the group “vicini per casa” and for holding on for so long in the process. Together with them I would like to thank Paola and Uccio and the whole group of “vicini per casa”.

Carlo for always being there and for the constant support and believing in me. For my girls Noa and Maya who teach me about life more than anyone else ever did.

Thank you all.

PROLOGUE

The reasons for this research

This research describes a new model for a living-lab for housing: HousingLab. I began to work on housing and their collaborative aspects after realizing how much potential collaborative services have in improving our everyday life in an urban environment. I realized that those services often need proximity (between people) and that this proximity is to be found in urban dwellings. The same urban dwellings that are well known for being places of isolation and segregation could become urban welfare hubs. I discovered this was not a new idea at all and was asking myself how come collaborative housing forms are not so common. There began my trip through existing best practices, meeting with international experts, many books and articles and mostly people living in the city that joined me on that trip and shared their experiences with me. My design

background has brought me to explorations of co-creation with and for citizens. I was curious how design can infiltrate in the housing field, not only in terms of interiors and product design, but also by improving housing qualities and experiences through relationships and collaborations.

Context

The city is a wonderful place to live in. The density of people makes it rich and diverse. The development and growth of smart cities is very similar to the growth of the brain through evolutionary phases; it evolves, not only grows, it becomes more complex and exiting. The outcome and the source of a smart development is a collective intelligence: a kind of smartness made from networks and connections. Absurdly, the design of city dwellings to host so many diverse people and cultures remains traditional and old; it does not take advantage of the great potential of the social capital that will be brought-in when people will move into the house. The house remains home for individualism and isolation, a castle of privacy and security that ignores its surrounding.

Why is it? Bottom-up and Top down barriers are holding back a new way of thinking about the house. From the top-down: public administrations, private constructors, cooperative consortiums and others fear to make radical innovation in housing design. They often poorly understand the overall benefits of collaborative housing, and most of all, they do not think of the long term benefits. From the bottom up (citizens, groups of citizens) there is not enough information and availability of best practices, hence it is difficult to understand the process to take and the idea itself. The thought about losing a part of privacy is very frequent in not wanting to approach collaborative housing.

HOW COULD WE ENCOURAGE RADICAL, COLLABORATIVE AND OPEN INNOVATION IN HOUSING?

Hypothesis

The hypothesis brought by my thesis is that there is a need for a special form of laboratory in cities in order to bring innovation to the housing field. The laboratory should be able to apply change management methods and co-design tools in order to create and enable a community of people towards changing the concept of housing. It will be a living lab for housing where people, assisted by designers and architects will be able to improve their existing buildings, and better design their new ones. It is a place for private and public constructors to get a coaching plan towards the creation of new housing models.

Methodology

I chose a participatory action research (PAR) to be the main leading line of my activities. This has meant that together with an overall understanding of the literature and the theoretical background, I have developed several actions that were important for understanding the main features of HousingLab. The differences in context, culture and time factors, made me decide to operate in small-scale experiments verifying the hypothesis constantly. Also, since user participation is one of the main issues to evolve in housing innovation, using PAR I am able to test this point right away since community participation is one of the methodology basics. The actions were used for the development of the design project and of this written final dissertation. The different actions I have implemented had the following aim:

Experimentcity Europe	Vicini per Casa	Scarsellini – vicini più vicini
<ul style="list-style-type: none"> • Define the area of interest. • Verify the topic relevancy and the use of a European network of support. • Verify the local interest • Create a local network of experts. 	<ul style="list-style-type: none"> • Verify if a coaching program can assist a group bring their dream project to reality. • Understand what are the steps needed and which tools to use. 	<ul style="list-style-type: none"> • Explore the use of digital tools for the creation of an active community. • Understand of pre-housing intervention are useful for the community life. • Explore both top down and bottom up interventions.

Results

The results from the first actions were mostly a confirmation of the need for a living-lab in housing. This has come from the confrontation with other stakeholders. This action has also made available many best practices from which to learn. The second and the third actions were more specifically a prototype of actions that HousingLab can create in the future. 'Vicini per Casa' created a model for a specific tool for coaching groups, with sub-tools for each step of the way. Scarsellini is a specific tool and process for enhancing community in new buildings.

The specific results from all actions has brought to the design of HousingLab:

HousingLab is an innovative service design laboratory for housing. It is offering research and experimentation for the development of sustainable housing across 3 main areas: information, coaching and small-scale experiments. The HousingLab structure aims at working with all stakeholders on a local scale by involving them in different initiatives. This participative community centered approach applies the principles expressed by the change management theories throughout the activities of the laboratory. HousingLab is thought as a living lab, a physical space supported by a virtual one that could be recognized as a collaborative environment for innovation in housing. In the last part of my

dissertation I describe the service model, the offering map and the scenarios for the implementation of such Lab.

1. CITY, COMMUNITY, HOUSING.

I begin with three words full of meanings and connotations, three words that can be used in so many different blends. I will explain how are they of interest to me, to my research and project and in what way do I like to see them combined. In the image below you can see the overlap of these arguments and the sub-concept I use as lenses to see through the big picture. Through this introduction I will explore how communities built around urban housing can improve modern cities.



1.1 HOW CITIES GROW

In 2009, Mark Changizi published a paper entitled: “Common Scaling Laws for City Highway Systems and the Mammalian Neocortex”,¹ confronting the human brain to the city in sense of how their complexity increases as they grow. According to Changizi, cities are organized like brains, and the evolution of cities mirrors the evolution of human and animal brains. As species evolve, their brain becomes more complex, influencing connectivity. So it is not simply growing in size for the brain to make someone smarter, but it is to make changes in structure and organisation. “When scaling up in size and function, both cities and brains seem to follow similar empirical laws,” Changizi said. “They have to efficiently maintain a fixed level of connectedness, independent of the physical size of the brain or city, in order to work properly.”² In this study the highways and the way they connect the city with the external world are confronted in different cities, reflecting on the way those cities function. How smart they are, if you wish. As with brains, interconnectedness is also a critical component of the overall function of cities, Changizi said. One couldn’t put together three copies of Seattle (surface area of 83.9 sq. miles) and expect the result to have the same interconnectedness and efficiency as Chicago (surface area of 227.1 sq. miles). There would be too many highways with too few exits and lanes that are too narrow. This connection between the city and something so much related to our human nature is not casual. The city is connected with the human race, with how each and every one of us develops. The human factor behind the need of certain infrastructures is what makes of Changizi’s article so attractive. We all see ourselves as physically connected to the city we live in. How smart is our city influences our everyday life activities, our routine, our family life, our leisure and fatigues.

When I write “WE”, I mean more than a half of global population. UN statistics shows that in 2011 77% of the population in developed countries and 51% world

¹ Information about the article and the complete version to download here: <http://blogs.forbes.com/markchangizi/>.

² press release about changizi’s article with interview: <http://news.rpi.edu/update.do>

population reside in cities. Prospective hypothesis are, these numbers will grow as time go by and assuming that in 2050 6,252,175,000 people will live in cities global

This is WE. And if talking about cities mean talking about numbers so big, it means tackling a significant issue. Taking care of the city means taking care of many people. The common image of the growing city, however, is far from being ideal. One of the main critiques about the city, that focuses on the human aspects of it is a central point is Jacob's book from 1961 "the death and life of great American cities"³. In her book Jacobs makes critiques to the modernist way of city planning. In particular way Jacobs talks against Le Corbusier's concept of the "Radiant City" that was used for urban renewal beginning from 1950. In Corbusier's concept the city functions must be separated in order to reach harmony. Those segregated activities would be then linked (though also physically isolated) by super-highways set in wide parkland landscaping. In Jacobs view, the segregation is what is killing the most important part of a human city because it "tore apart the traditional multi-activity street and densely populated neighborhood that Jacobs saw as the bedrock of urban living"⁴.

³ Jane Jacobs , The Death and Life of Great American Cities. New York: Random House, 1961.

⁴ Stephen Ward, Jane Jacobs: Critic of the modernist approach to urban planning who believed that cities were places for people. June 3rd 2006. <http://www.independent.co.uk/news/obituaries/jane-jacobs-480896.html>

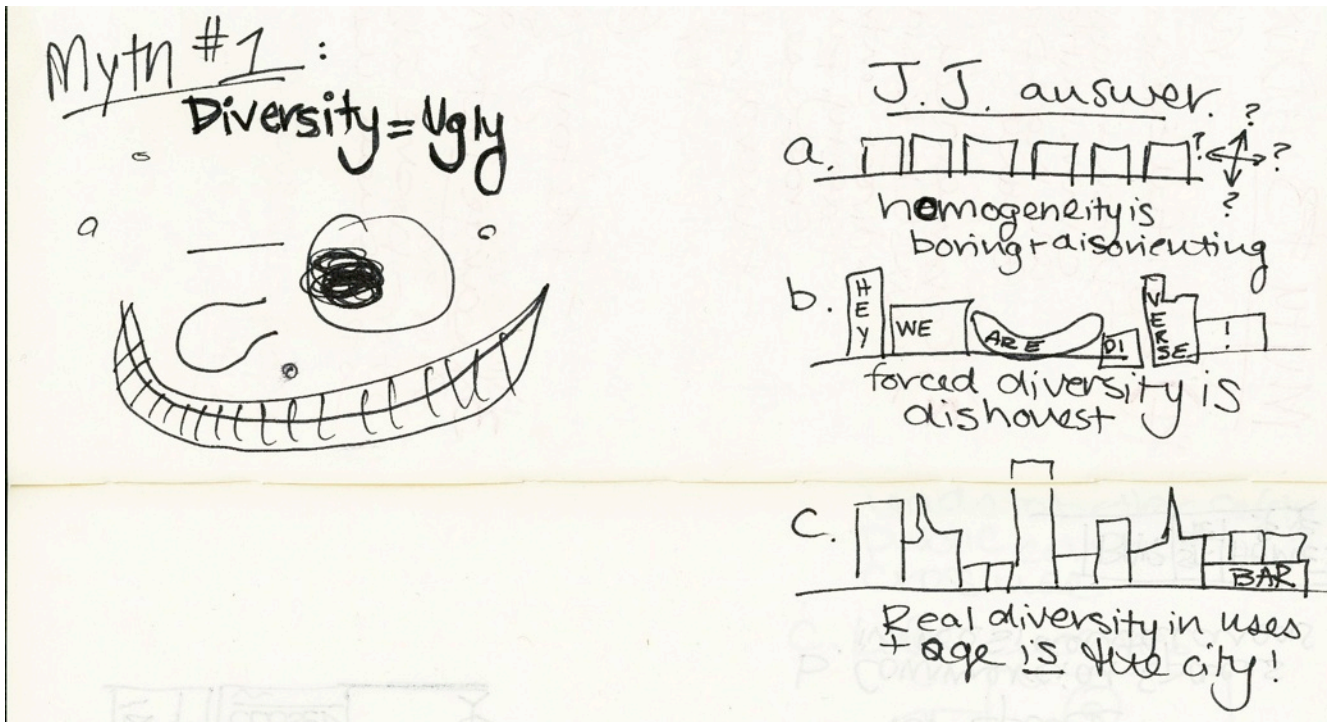


Figure 1: Firth myth on diversity according to Jacobs

Jacobs thought of the multi-layer complexity of the city, as it's better aspect just as Changizi described the evolution of the city in the creation of more complex space with different connected functions. Jacobs speaks about community and about how communities' can exist or not in cities. In a much more recent interview with Jacobs, in 1990, considering the development and changes that happened in 30 years Jacobs still emphasizes the importance of density and how this density that often is perceived as negative can actually be the key for a more sustainable growth of the city. The urban density is a concentration of social capital. It brings people to find creative and collaborative solutions in ways that were difficult to imagine only few years back⁵. For her, the density and the diversity of the city influence the possibility of having or not, active and motivated communities. So, we could say that the planning of the city, to go towards urban planning that fits people's need should be human centered or community centered (see also part 1.2.4). Andrès Jaque, one of the most active architects in Europe is interested in the last years in mapping and understanding people's behaviours in the

⁵ Steve, P. Interview with Jane Jacobs. LOS ANGELES TIMES October 12, 1997. <http://articles.latimes.com/1997/oct/12/opinion/op-41978#.Tstnp23VipE.email>

city before looking at traditional street maps. Urbanism, he says, is the experience citizens have in the city. The way they take from home to work, where they stop for the grocery and who they invite over for dinner. All of these are elements of urbanism and they are not less complex than the traditional elements one will look at in architecture or urban planning. In January 2013 Jaque conducted a workshop in Tel Aviv entitled: "Architecture as rendered society". In this workshop he discusses the importance of architecture influence on the society and vice versa. "It is important then, when discussing architecture we can criticize not only the style of it, if it is beautiful or not but also what it means for the society. What it make people do. So, what I mean by that is that we shall think what type of society we want and make it happen through architecture, through the diversity of functions and population" ⁶. Jaque's maps, like the ones of the Situationist movement before him, see the city as a non-static space where shared space depends on people's movement. Mapping in the digital era moreover, is much simpler. Geo-localization has become so easy with tools we use every day, so it is not surprising to find old ideas come back to the surface with a modern twist.

⁶ Interview with the architect in "haaretz" news paper. <http://www.haaretz.co.il/gallery/architecture/1.1903915>



Figure 2: Fray foam home by andres jaque

The discussion about city planning and requalification of cities has become more and more urgent as global population is concentrating in urban areas. How the city grows, or better, how it evolves? Could it evolve without catastrophic consequences? Sustainability issues are urgent and it is clear more than ever how the way people live, their lifestyle is of a great influence. In this chapter I will discuss the meaning of sustainable city and go deep into social sustainability that is essential for understanding the potential innovation in housing. Finally I will introduce the design discipline, and in particular, service design discipline as an actor in urban planning.

1.1.1 Creative sustainable cities: the need for a more sustainable city and what creativity has to do with it.

“I think that the big open secret about sustainability work and innovation is not how bad things are. The real secret is how good things can get. There’s more and more evidence that many of the changes we need to make not only can be done but would vastly improve our lives”⁷.

⁷ <http://changeobserver.designobserver.com/feature/alex-steffen-worldchanging-ii/25318/>

This is a phrase by Alex Steffen. In 2003, Alex Steffen co-founded the website Worldchanging to provide news and informed solutions to environmental threats. On this web-site ideas tools and models were collected that, if adapted largely can really make a change in our world. In a TED talk⁸ of 2005, just before publishing the book based on that internet site, Steffen describes the disaster of our unsustainable future as unthinkable and the solution to it as unimaginable. "My beat is looking for ways to create a future which is sustainable, dynamic, prosperous and fair -- a future which is both bright and green. WorldChanging was based on the premise that such a future is not a distant possibility, but a growing reality. We sought to connect worldchanging people with the tools, models and ideas for building it." Worldchanging is one example of many platforms collecting best creative practices that can make our life more sustainable through everyone's creativity. It is one of the many signs of the creative sustainable city and it includes its two most important aspects:

- Creativity is not only related to the arts but to every aspect of our life.
- Creative sustainability not only regards the citizens and the society but also comes from them.

These two aspects are explored here under.

I would like, however, to take a step back to understand the use of the word sustainability: The big talk about sustainability as I refer to here begins in the 1980'. The Brundtland Commission of the United Nations defined sustainable development as:

*“development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”*⁹

⁸ http://www.ted.com/talks/alex_steffen_sees_a_sustainable_future.html

⁹ United Nations. 1987. "Report of the World Commission on Environment and Development." General Assembly Resolution 42/187, 11 December 1987. Retrieved: 2007-04-12

It has a lot to do with the quantity of natural resources we use and the overall consumption related to our lifestyle. In 1992, William Rees published a paper that introduced a new-old definition to the everyday conversation about sustainability: Ecological footprint¹⁰. The paper, 'Ecological footprints and appropriated carrying capacity: what urban economics leaves out', explores and explains this new measurement tool. Ecological footprint analysis compares human demands on nature with the biosphere's ability to regenerate resources and provide services. It does this by assessing the biologically productive land and marine area required to produce the resources a population consumes and absorb the corresponding waste, using prevailing technology. In other words, Rees's definition to sustainability would be that all human populations would be able to live within their own personal carrying capacities. However, he explains "since no region exist as an independent unit, the reality is that the populations of all urban regions and many whole nations already exceed their territorial carrying capacity and depend on trade for survival". So, the bottom line is that the way we live is unsustainable. Sustainability has been termed on three main levels: the Social one, the economical one and the environmental one. At the 2005 World Summit on Social Development it was noted that for sustainability to take place, the reconciliation of environmental, social equity and economic demands – was required¹¹. Cities have always found their way into the discussion. Clearly, as we have seen before, many people concentrate in the urban areas creating big deficits and consuming much more than we can afford.

*"It is in cities that our biggest challenges are to be faced – inequality, poverty, crime, violence, environmental degradation, exploitation, corruption. These all thrive in cities as much as learning and culture and in many modern cities alongside one another"*¹².

¹⁰ Rees, William E. (October 1992). "Ecological footprints and appropriated carrying capacity: what urban economics leaves out". *Environment and Urbanisation* 4 (2): 121–130

¹¹ [United Nations General Assembly](#) (2005). [2005 World Summit Outcome](#), Resolution A/60/1, adopted by the General Assembly on 15 September 2005. Retrieved on: 2009-02-17.

¹² Kahn, L., Ali, R., Buonfino, A., Leadbeater, C., & Mulgan, G. 2009. Breakthrough Cities. How cities can mobilise creativity and knowledge to tackle compelling social challenges, British Council, retrieved from <http://creativecities.britishcouncil.org>

On the other hand cities, since their creations were also considered places where culture and knowledge come together. Where beyond the number of people and the quantity of energy they consume there is also a great deal of social capital concentration. The creative city and the creative class that developed in the city are often described as those that can bring change into this development and open up new sustainable paths. Landry, which introduced the term creative city¹³, in a later article from 2010¹⁴ says that :

“The essence of creativity is its multifaceted resourcefulness, its problem solving capacity and ability to generate opportunities. It works by taking a 360% perspective, by bringing together the often disconnected or by looking at things afresh. Most creative ideas and projects require people to physically connect and communicate”. Landry argues that city planners as well as city governments should aim at *“creating places to stimulate innovation”* and that this is the *“central challenge for the urban development community”*.

Creative Cities is also the name of a British Council project, set up in 2008 following Landry's idea. The project was developed in 15 countries across Europe. It provides a platform and a toolkit that can be used by individuals and organizations wherever they may be. Creative cities, according to the project organizers, are successful cities. *“They succeed culturally, economically, socially and environmentally. They are good places to live: they attract talented people, who attract investment and create jobs. By finding innovative solutions to the problems such as crime, traffic congestion, they make life better for citizens”*. In this project good ideas and visions were collected in a first phase. Then networks were created around them and special tools and methods were developed to sustain and implement the good ideas. This project has encouraged a new way of thinking the creative city. Not only creative by increasing the cultural aspects and involving people from what Florida would call “the creative class”, but also creative in all aspects of life. This is the first important aspect of urban sustainable creativity: Creativity is not only related to the arts but to every aspect of our life. Approaching everyday life

¹³ LANDRY, C. (2000). The Creative City. A Toolkit for Urban Innovators. London, UK: Earthscan;

¹⁴ <http://www.labkultur.tv/en/blog/creativity-crossroads>

problems through creativity and expand creativity beyond its cultural connotations, means tackling housing, mobility and health for example, from a new perspective. Let's take for example Rio's mobility problems. Eduardo Paes, in a talk he gave in 2012¹⁵, explains how public transportation was improved with a creative touch. With the Olympic games on their way, the city council has decided that major intervention on the city mobility was needed. Until now, only 18% of the city movements were done by high capacity transportation network, causing many traffic conjunction and air pollution. It was decided that the building of an underground service or even light trains was too expensive. The solution that came about from the ITDP, was "bus rapid transit" (BRT). "BRT is an innovative mass transit system that combines the efficiencies and quality of metros with the flexibility and relative low cost of buses, while offering significant environmental benefits"¹⁶. Normal buses are transformed into wagons by changing the inner settings. Dedicated lanes are created in the street and stations, very much similar to metro stations are built on the bus's path. This has shown to be not only a creative use of existing resources but also achieve comparable levels of speed, capacity, and passenger comfort and convenience as rail-based systems. In fact, it is assumed that by the end of the project 63% of movements will be done by public transport. Enlarging creativity to all aspects of life is not the only change in the view of what creative cities are. There is also a big change regarding of where change comes from, the second aspect: Creative sustainability not only regards the citizens and the society but also comes from them. In "breakthrough cities"¹⁷, one of the written outcomes from the project creative city, the authors say: "Top-down city planning all too often extinguishes vernacular, everyday innovation or drives it underground. All too often the places created by these top-down plans sap the spirit, suck out hope and ambition, wreck community and family bonds, and draw in apathy and nihilism in their stead". Going back to Jacobs If the city is first of all a

¹⁵ http://www.ted.com/talks/eduardo_paes_the_4_commandments_of_cities.html

¹⁶ <http://www.itdp.org/what-we-do/public-transport/> and

http://www.epa.gov/jius/projects/rio_de_janeiro/rio_bus_rapid_transit.html

¹⁷ see note 13

place for people and urban planning should be more than anything else encouraging societies, then creativity must go back to the hands of everyone. What would have been more difficult when Jacobs wrote her first book is becoming more and more feasible as technology is evolving and connectivity is eased. *“This broader idea of creativity is more social, cumulative and collaborative than the traditional idea that creativity comes from a spark of individual genius. And this broader idea of creativity applies to activities that are not widely seen as worthy of creativity: waste disposal, health provision, housing and transport”*¹⁸.

We have seen how sustainability of the cities is an urgent matter and how the big numbers of the city are not only a reason for action but also means of action. The social part of sustainability, if developed well can influence both environmental and economic issues. The opportunity of opening up innovation processes and put them; through guided process in the hand of citizens is a great step towards urban social sustainability.

¹⁸ Leadbeater, C. 2008, What make cities creative, British Council: Creative Cities Workshop Warsaw, March 2008. Retrieved 20/06/13: http://creativecities.britishcouncil.org/files/data/kb/cc__charlie_leadbeater_think_piece.pdf



1.1.2 Urban social sustainability and social innovation

Sustainability in urban areas is often addressed by mainstream debates as related to pollution, poverty or poor urban planning and approached with solutions towards environmental and economic sustainability. Thus, when talking about urban sustainability, the debate tends to be partial and emphasize mostly technological ways to reduce air pollution, to build energy-efficient houses, or to promote renewable energy for daily uses. There is however a strong need to think about sustainability in a more holistic way, and broaden the scope of discourses towards social aspects of sustainability. Social sustainability, which has started gaining recognition in recent years as a fundamental component of sustainable development¹⁹ is concerned with using available human

¹⁹ Colantonio, A. and Dixon, T. 2009. Measuring Socially Sustainable Urban Regeneration in Europe, Oxford Brookes University: Oxford Institute for Sustainable Development

resources in order to achieve equity and well-being for the whole society²⁰. The term social sustainability has not been as well defined as environmental and economic sustainability. Social well being as a resource to live behind us for the next generations is not as easy to describe. While measurable aspects can be achieved for energy consumption or economical factors, it is not as possible to measure social sustainability as it focuses on individuals' behaviors, attitude and actions. Nevertheless, the importance of social sustainability and research on the topic is shown by the development of many research centers around the world like Oxford Institute for Sustainable Development²¹, Sustainable Europe Research Institute²² or the Institute for Sustainable Futures²³, University of Technology Sydney. Some definitions of social sustainability can be found in the previous studies:

“Development (and/or growth) that is compatible with harmonious evolution of civil society, fostering an environment conducive to the compatible cohabitation of culturally and socially diverse groups while at the same time encouraging social integration, with improvements in the quality of life for all segments of the population”(Polese and Stren, 2000, cited in Colantonio, et al. 2009)

“...a quality of societies. It signifies the nature-society relationships, mediated by work, as well as relationships within the society. Social sustainability is given, if work within a society and the related institutional arrangements satisfy an extended set of human needs [and] are shaped in a way that nature and its reproductive capabilities are preserved over a long period of time and the normative claims of social justice, human dignity and participation are fulfilled.” (Littig and Grießler, 2005: cited in Colantonio, et al. 2009)

²⁰ Cho E, Rogel L (2013). Urban social sustainability through the web. Using ICTs to build a community for prospective neighbors. ICT4S conference. Proceedings. ETH Institutional Repository: Zurich

²¹ <http://oisd.brookes.ac.uk/>

²² <http://seri.at/>

²³ <http://www.isf.uts.edu.au/>

“Social sustainability concerns how individuals, communities and societies live with each other and set out to achieve the objectives of development models which they have chosen for themselves, also taking into account the physical boundaries of their places and planet earth as a whole.” (Colantonio, et al., 2009)

Common social sustainability principals²⁴ are:

Equity - the community provides equitable opportunities and outcomes for all its members, particularly the poorest and most vulnerable members of the community

Diversity - the community promotes and encourages diversity

Interconnected/Social cohesions - the community provides processes, systems and structures that promote connectedness within and outside the community at the formal, informal and institutional level

Quality of life - the community ensures that basic needs are met and fosters a good quality of life for all members at the individual, group and community level (e.g. health, housing, education, employment, safety)

Democracy and governance - the community provides democratic processes and open and accountable governance structures.

Maturity - the individual accept the responsibility of consistent growth and improvement through broader social attributes (e.g. communication styles, behavioral patterns, indirect education and philosophical explorations)

For the urban environment to become socially sustainable local governments should include in their agenda actions that include effecting all the above cited principles. Since the people that personally experience one or more of the difficulties that urban regions offer, solutions should also be able and flourish from the bottom up. Many people do invent, everyday, creative solutions to their daily problems, but for those to

²⁴ <http://www.wacoss.org.au/home.aspx>

really impact the city, they should meet an open ear from some bigger organization or institute. Mulgan calls those two actors the bees and the trees.

“As a rule, the bees have energy and ideas but little capacity to put them into effect, while the trees have power and money, but find it harder to think fresh thoughts. Successful change happens when the two come together, when the bees pollinate the trees, and ideas that may have been born over a mug of tea, turn into formal programs and policies”²⁵.

In other words, when the birds and the trees meet they produce social innovation.

1.1.2.1 social innovation: from ideas to a new form of economy

The young foundation defines social innovations as:

“innovations that are social both in their ends and in their means. Specifically, we define social innovations as new ideas (products, services and models) that simultaneously meet social needs (more effectively than alternatives) and create new social relationships or collaborations. In other words they are innovations that are both good for society and enhance society’s capacity to act”²⁶.

Manzini defines it in a rather similar way:

“The term social innovation refers to changes in the way individuals or communities act to solve a problem or to generate new opportunities. These innovations are driven more by changes in behavior than by changes in technology or the market and they typically emerge from bottom-up rather than top-down processes”²⁷.

Social innovation has gained a lot of attention since the unimaginable solutions as Alex Steffen described them, were actually not only imagined but also implemented by the people themselves. This was made possible because of the historical moment we are living. Information and communication technologies have developed so quickly, letting

²⁵ Social Pioneers, Guardian insert: 18.03.09 Society Guardian Breaking new ground in public services

²⁶ Robin Murray, Julia Caulier-Grice, Geoff Mulgan. (2010) The open book of social innovation, ways to design develop and grow social innovation. NESTA, UK.

²⁷ Manzini, E., Jegou, F.(2008), Collaborative services Social innovation and design for sustainability, Polidesign. Milano

networks create easily and collaboration made possible. The accessibility of a large number of people to knowledge and ideas that comes from bottom up has made it possible for these ideas to get out there and make a difference. Not only do the birds meet trees more easily but also, they are also capable of spreading their work in ways that just few years back we could not think of. Social innovation is on the base of a new kind of economy that can be described as " social economy"²⁸. The young foundation distinguish some elements of this new form:

- The intensive use of distributed networks to sustain and manage relationships, helped by broadband, mobile and other means of communication.
- Blurred boundaries between production and consumption.
- An emphasis on collaboration and on repeated interactions, care and maintenance rather than one-off consumption.
- A strong role for values and missions.

The growth of the social economy is not only economical growth; it is a growth of well-being. The social economy growth in our cities is the one that should improve each citizen's daily life. Services of education, health, mobility and housing should be designed. Starting and developing on social innovation, those services can change the shape of the city. Service design is a relatively new discipline that is becoming more and more important for sustainable city development. To give a better view on the discipline and on how design can and should effect urban development, I would like to talk first about sustainable design and then on how service design and in particular, collaborative services design can really make a difference.

²⁸ Murray (2009) Danger and opportunity. Crisis and the new social economy, NESTA; UK

1.1.3 Design and urban sustainable development

1.1.3.1 Sustainable design and design ethics

The design discipline was always related to innovation by creativity. Design has been there to ensure form and function were attractive enough for people to use and buy, and well thought of in a technological and economical way for companies to produce. Some product designs have really made a change in society. If you think about it, design is wherever we look. In every time and place in our daily life environments and objects that were designed surround us. Clearly this mean design has a big influence on the way we live. The design of an object, like a cellphone, for example, will determine the way we use it. Do we understand how it functions? Can we use all of its functions? Can we invent our own uses? If the design is good, this cell phone will not only give us a world of communication opportunities, but these opportunities will be there for the user weather he is a young boy or an old man. Making people communicate daily with simplicity and with everlasting options depends on design. Design has changed the society with many meaningful objects ad products. Going back to the cell phone example, just think about the behavioral change caused to us by the use of this object. Think about the way we let ourselves cancel or postpone meetings on the last moment. Think about new rules that had to be made in theaters, trains and even cafés to adapt to this new use. Think about smartphones and how they change they way we move and navigate. On the amount of information we can have with us regularly, daily, constantly. Put together hardware and software design and you get apps like Around-me, allowing you, not only to navigate your way through the city, but also find services around you like a pharmacy, a restaurant or a grocery shop. I will go more on depth to the way those tools are using input coming from the users themselves in part 2.4. Design can change the way we live. In a matter of act, Design had a lot of impact on our non-sustainable lifestyle. One cannot ignore the role design has in our consumerism culture. The consumption society in which we live in, the quantity of things we own and throw away has a lot to do with design. Not only clothing fashion changes more then 4 seasons a year, but also objects like furniture and

computer go out of season. Hamilton²⁹ argues that today, people consume materialistic goods in extreme quantities when compared to previous production based societies. Rather than consuming goods based upon need or usefulness, people today consume unnecessary items in order to create a personal identity. Hamilton believes that consumerism manifests a superficial feeling of independence and leaves people with a psychological void in their lives. Hamilton says that in the past, the social group to which a person belonged to define their identity, and buying objects that were considered a luxury was something reserved only for the rich. He believes that today, the markets provides these luxuries to people of all classes, thus diminishing its value. He explains this when he writes: *“cultural reproduction, although retaining a degree of autonomous development, is now inseparable from the market”*. This era of consumption has brought to the end of our world’s carrying capacity. And is, certainly one of main reasons that people in developed countries has such an exaggerated ecological footprint. The search for identity in products and goods confronted with the identity one finds in social groups or communities is very important to understand how the city future development could be based exactly on rebuilding social ties as I will explore in the next chapter. Back to the role of design: Manzini, referring to the idea of well being related to the initial era of design, after the industrial revolution, argues that design brought well being by the *“promise of democratisation of access to products which reduce fatigue, leave more free time and extend the opportunities for individual choice - in short, which increase individual freedom”*³⁰

Design, as Tim Brown³¹ puts it, should get use to think bigger. Design history begins with creating useful meaningful objects. Take for example the washing machine: The technical development of the washing machine³² is firmly related to women.

²⁹ Hamilton (2010), Consumerism, self-creation and prospects for a new ecological consciousness. Journal of Cleaner Production, Volume 18, Issue 6, April 2010, Pages 571–575

³⁰ Manzini (2006) Design, ethics and sustainability : Guidelines for a transition phase. Ethics design: design ethics and humanism. working paper, Nantes June.

³¹ http://www.ted.com/talks/tim_brown_urges_designers_to_think_big.html

³² Information taken mainly from: La lavatrice di quynh delaunay in: Nacci (A cura di) oggetti d’uso quotidiano. 1998, Marsiglio Editori, Venezia.

Mechanically, the first machines that were produced imitated women's work. There were separate machines for each action. The combination of those actions into one machine and the improvement of this machine in terms of function and costs have led to its integration in every house. For women, washing clothes was a very exhausting work that was energy and time consuming. To improve and make the work more efficient, women cooperatives or spontaneous groups were created to divide tasks and wash together. The liberation from such work meant taking a crucial step towards woman emancipation and a great pass towards equity for woman. Design, in this case, beginning from a concrete need had a great ethical role. Woman image, as we well know it from American publicity and commercials has changed radically thanks to those inventions and to their design. A new image of well-being was created that put products in the center, products that free us. However this product based freedom, soon have seen well being related to the simple possession of objects and not the use one made from it. People, as Hamilton argues will soon connect their personal identity and the general idea of happiness to the quantity of things they own. Since, as explained above, this type of well being is not sustainable and we cannot consume as much as we consume now, but still we look for a good quality of life in the city that includes personal well-being, how could design be part of this process? What would sustainable design be?

Unfortunately the common image of sustainable design in the main design fairs and publications is still of recycled brown color and integrated some plants and birds. If it is made from something we would have thrown away, if it is recycled, if it is brown, it is sustainable. I would really like to go beyond that image. Design has much more to offer than this scenario. Somewhere in my third year of industrial design studies I took a course about design and the environment. This course has completely changed the way I thought about design. The environmental aspects of a product were, for the first time, integrated into the design matrix. To explain myself better: for the first time in order to choose a certain material to use in an object, beyond the cost, the technology available,

the aesthetics we had to integrate the environmental impact. This would mean that if not balanced; we had to either change the material we thought of or the design of the object. I learned why aluminum is perfectly fine for a car but a stupidity to use for a library. But the most important thing I learned was that sometimes, there are no answers to environmental questions when it comes to certain objects. And that we, as designers, should ask ourselves: should we really invest a lot of time in making ecological cars or should we ask ourselves if there is something better than a car. Lets say, something that can carry more people and be more efficient and economic? This shift in the way of thinking has led me to choose my specialization in "service design". Services, it seemed could be the answer for how design can be more sustainable

1.1.3.2 Service design and collaborative services

Services have a lot of impact on our quality of life. But services have also an ever-growing role on the market growth.

*"The growing role of services depends on several factors, among which the higher consumer and business demand, the increase of outsourcing, the greater use of ICT and the growth of the competitive pressure and globalization caused by the recent regulatory reforms of service markets and reduction of trade international barriers"*³³.

Services in the city change the way ones live. Services for education, health, mobility, housing etc can be designed in order to really respond to people's need in city and in order to change the way people behave towards a more sustainable lifestyle and a better quality of life for the community and the individual.

"PSS (product service system) has helped to show that service-oriented solutions are potentially better in addressing environmental concerns than approaches that focus on the product when combined with dimensions of localisation (Walker 2009), shared strategies and

³³ Maffei S., Mager B. and Sangiorgi D., Innovation through Service Design. From Research and Theory to a Network of Practice. A users' driven perspective, Joining Forces Conference, 21-23 September, Helsinki, 2005

*changes in consumption behaviours (Tukker and Tischner 2006, Marchand and Walker 2008), community engagement (Meroni 2007) or lightness (Thackara 2005)*³⁴.

In other words, services can have a great impact on the urban development, if the local culture is taken into consideration and the local people participate in the design of the service and sometimes even in its implementation. The designer role, therefore is going beyond the new “service design” into design for services and from sustainable design to design for sustainability. Meroni and Sangiorgi argue:

*“Design for services has, since its origins, considered the role and presence of users in the service delivery process as its main focus. Design for services generally conceives users as a resource rather than a burden or a problem. Besides being a source of insights and ideas, users have been engaged in design processes to generate more desirable and usable solutions, and to explore new collaborative service models”*³⁵.

It is clear that the designer role is changing as the “users” become more active and take upon themselves parts of the design. Following Manzini’s idea of design for sustainability, the designer role should change in two steps: First, the departure point should be social innovation for then using ones specific skills and abilities to explore and propose new directions for products and services. The second step is to consider themselves part of the community with whom they are collaborating – to be and act as experts participating, peer to peer, with the other members of the community in the generation of promising endeavors, and the evolution of these cases toward more efficient and accessible systems³⁶. I will discuss the role of design and in particular participatory and co design in the next part. (1.2.4)

³⁴ Meroni, A. & Sangiorgi, D. (2011) Design for services. Farnham: Gower.

³⁵ See note 35

³⁶ Manzini, E, S Walker, and B Wylant. 2008. *Enabling Solutions for Sustainable Living: A Workshop*. University of Calgary Press. <http://books.google.it/books?id=kN81m9Xsbq4C>.



KIDS CLOTHING CHAIN
 childrens clothing passing from one kid to another
 boxes based on sets of clothes are exchanged in the neighbourhood
 clothing is maintained and progressively renewed by each participating family

Figure 3: kids clothing chain, a collaborative idea from the publication: "collaborative services" (see in text)

Collaborative services

To add complexity (and therefore evolve!), many services that are particularly interesting and successful these days, see the role of what use to be the "final user" change. Not only is the user involved in the design of the service, but also he/she is not only the user anymore. In collaborative services the final user role and the service provider role blare to achieve a service that is (its function) based on the collaboration between many stakeholders. This collaboration aims at both improving the service features and improving the sustainability aspects of the service. The future of business is sharing, says Lisa Gansky in her book "the Mesh"³⁷. The book, as well as the online inventory, collects examples of economically successful services based on sharing, on collaboration. Probably the most known example is related to mobility. RelayRides, a peer-to-peer car-sharing service (<https://relayrides.com>) connects people who need a car with vehicle owners in their neighborhoods. This ICT-based service that launched in two

³⁷ Gansky, L. 2012. The Mesh: Why the Future of Business Is Sharing. Penguin Group USA.
<http://books.google.it/books?id=6L6XkgEACAAJ>.

cities in 2010 has grown to operate nationwide in the United States, including cities like San Francisco, New York, and Boston. (data accessed in June, 2012) Car owners can make money by renting out their car otherwise sitting idle in parking lots, and renters can save money by paying per use of car, instead of paying all the cost of owning a car. In recent years, similar type of neighborhood car-sharing services has been growing; such as Whipcar, (<http://www.whipcar.com>) in UK, Buzzcar in France, (<http://www.buzzcar.com>), Snappcar in the Netherlands (<http://www.snappcar.nl>), Tamyca in Germany (<http://www.tamyca.de>), Getaround (<http://www.getaround.com>) in the United States, a recent start-up JustShareIt (www.justshareit.com), and campus-based service Wheelz (<http://www.wheelz.com>) operating at Stanford University, UC Berkeley, UCLA³⁸.

Collaborative services is also the name of a publication made by our research unit in the Politecnico di Milano in 2008. In the book, beginning from a collection of spontaneous activities by creative communities the authors create several scenarios for future collaborative services. In the years after this publication many collaborative services were born, mostly facilitated by the diffusion of ICT's. In the next part I will explore the diffusion of such communities, beginning from the growing need to recreate urban social ties.

³⁸ Cho E, Rogel L (2013). Urban social sustainability through the web. Using ICTs to build a community for prospective neighbors. ICT4S conference. Proceedings. ETH Institutional Repository: Zurich



1.2 URBAN COMMUNITIES

Aristotle wrote about the city in his work 'Politics'. He considered the city to be a natural community and to be prior in importance to the family that in turn is prior to the individual, "*for the whole must of necessity be prior to the part*" (Politics 1253a 19-24). Plato describes in his 'the republic' (Books V- VI) how stable population is achieved through eugenics and social cohesion is projected to be high because familial links are extended towards everyone in the City. It is incredible to realize that words such as social cohesion, human relationships, community and wellbeing are constantly appearing in writings about the city until the early 20th century. Now, these words are usually appearing in negative, to say that they are missing. Instead we find the words: social exclusion, alienation, segregation and loneliness. In the second half of the twentieth century many critiques related to urban planning were focused on the loss of community. I have already written about Jacobs and her criticizing modern urban planning in creating segregated flat cities rather than complex and dense. In his first book, just few years after the publication of Jacob's book³⁹ "the death and life of great American

³⁹ JAKOBS, J., (1961) The Death and Life of Great American Cities, Random House, New York

cities”, The young Richard Sennet⁴⁰ writes about the Crisis of the city. He introduces an idea that diverse from the idea of Jakobs. Jakobs, he says, is nostalgic about the past and the relationships between people in small towns; she tends to suggest a restoration of past conditions. Sennet propose we can not think that the past can give us elements to improve our present city problems, as the solutions we want must be adapted to an affluent, technological era. The answer is probably to be found between these two arguments, or maybe actually they are not so far away from each other to begin with. They are both concluding with a need for community and the will to re-reach some values that are lost in modern urban planning like mutual aid and conviviality. In the next paragraphs I will put some light on this need for community, and see how it affects the city development. I will then explore the societal changes and how they affect the collective. Subsequently I will explore different types of communities and in particular creative communities. Finally I will go back to design and the design role in the creation and the development of collaborative solutions.

1.2.1 Community definitions and types

Giving a definition to a community is complex. The reason is partially because of the changes this word has had throughout time, but also it’s use in so many different disciplines. To begin, it might be useful to look at one definition from the World English Dictionary:

–noun, plural -ties.

1. a social group of any size whose members reside in a specific locality, share government, and often have a common cultural and historical heritage.

⁴⁰ Sennett, R. (1971): *The Uses Of Disorder: Personal Identity & City Life*, New York. W.W. Norton.

2. a locality inhabited by such a group.
3. a social, religious, occupational, or other group sharing common characteristics or interests and perceived or perceiving itself as distinct in some respect from the larger society within which it exists (usually preceded by the): the business community; the community of scholars.
4. a group of associated nations sharing common interests or a common heritage: the community of Western Europe.
5. Ecclesiastical. a group of men or women leading a common life according to a rule.
6. Ecology . an assemblage of interacting populations occupying a given area.
7. Joint possession, enjoyment, liability, etc.: community of property.
8. Similar character; agreement; identity: community of interests.
9. The community, the public; society: the needs of the community.

It is clear already how complex is this word. The classical definition is incorporates three essential characteristics: social interaction, shared ties and common geographical location, but implies other attributes such as, human scale, belonging, obligation, gemeinschaft etc.⁴¹ Contemporary usage has broadened to include abstract associations (eg. scientific community, gay community) and to accommodate contemporary phenomena such as virtual community.

The different disciplines give the community also its different typologies. Among others we know of

⁴¹ Hillery, G. A. (1995) "definition of community: areas of agreement". Rural sociology 20: 111-123).

- Intentional communities
- Communities of interest
- Geographic communities
- Communities of culture
- Sustainable communities
- Creative communities
- Virtual communities

In their discussions of the construct of Psychological Sense of Community, McMillan & Chavis⁴² prefer the abbreviated label "Sense of Community," and provide the following one-sentence definition:

"Sense of Community is a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together. "

McMillan & Chavis propose that Sense of Community is composed of four elements:

- 1) Membership
- 2) Influence
- 3) Integration and fulfillment of need
- 4) Shared emotional connection.

Sense of community is often missing in people living in big cities, and is one of the motors for creative communities to grow.

- i) The need of community in the city

⁴² Chavis, D.M., Hogge, J.H., McMillan, D.W., & Wandersman, A. (1986). Sense of community through Brunswick's lens: A first look. *Journal of Community Psychology*, 14(1), 24-40.

More and more frequently we hear of urban loneliness. There is this image of people locked in their own apartments surrounded by many, but not knowing the names of those who live above or below. There is no way to imagine going for a coffee at our neighbors house or ask for a little 'sugar. Books such as "bowling alone"⁴³ tell the decline of society and the loss of the sense of community. These authors argue that practices that usually were group based, such as those going to play bowling in America are disappearing hand in hand with the development of the city. Putnam demonstrates that the decline of bowling leagues is illustrative of a more general decline in community — from participation in politics and religion to civic and social clubs, reading groups, PTAs, unions, and the like. Many consider the decline of community in the introduction of the postindustrial era. The transformation from small scale and concentrated rural settlements to the urbanized industrial ones, has its effect on the citizens. "The development of modern industrialized society, however, sent these traditional community forms into decline. Modern life, it is claimed, was characterized not by small-scale local existence, but by large-scale urban agglomerations, in which life became increasingly anonymous. Under the impact of social and cultural change, people became increasingly individualized, and so less connected to a wider sphere of intimate social relations"⁴⁴ The modern 'loss of community' was enshrined in Ferdinand Tönnies known distinction between pre-modern *Gemeinschaft* (community) and modern *Gesellschaft* (society). It seemed at the time that the big promise of the city to be a place of culture and fruitful interactions has failed; it became an insecure space where crime rules, where basic communication between people is missing and where spaces are no longer used as meeting places. Hence the loss of the public space, of spontaneous encounter and the joy of togetherness. Definitely most of the literature with such an emphasis on community

⁴³ *Bowling Alone: The Collapse and Revival of American Community*. by Robert D. Putnam. (New York: Simon & Schuster, 2000)

⁴⁴ Yar Majid, 'Community': Past, Present, and Future, <http://www.whb.co.uk/socialissues/vol2my.htm>

lost is coming from the USA. The structure itself of the new cities there made it so that natural public spaces as they can be seen in European countries (the main square of the city) do not exist to begin with. However, the feeling of losing the sense of community and the minor use of existing public spaces is shown also in Europe. Today, when the passage from rural to urban cannot be anymore the reason for not being able to act as groups, when cities had the time to be re-planned and rethought of, what are still the reasons for community decline? Putnam, for example, names four possible suspects: the pressures of time and money; problems associated with mobility and urban sprawl; technology; mass media; and generational influences. Putnam studies the suspects and for each one finds plausible and non-plausible faults. For example the time issue: it is not true that now we work harder and have less time to invest in our community, so it is more about the way we work or divide our days. We certainly not have more severe money issues and mobility has improved greatly in terms of time and cost. Putnam decides to concentrate on the last suspect, the generational one. The generational difference can also be seen in the kibbutz in Israel. The founders of most of the kibbutzim had their ideas based on strong ideology of socialism and solidarity. There was an actual need for this type of settlements as Israel was to be built and people needed all the time they could have to work the land. Family care was then made of group in order to free parents. So did food, laundry, and basically everything that could have been made more efficient by making it together. The second kibbutz generation, the one that grew in 'children houses' and was separated from their parents as soon as they were born did not have the same urgency to continue with this type of living. The communal life and the equal division of money did not anymore seem to have a lot of sense. This second generation wanted something more than working the land. They wanted to go outside and study, have their own personal identity, not by all means related to the kibbutz. Together with the general development and historical changes, this has finally caused the privatization of most of the kibbutzim. The third generation, the

one born outside the kibbutz with parents that were not so generous in saying positive things about sharing and communal living are now seeking new ways of living. The third generation, is building now 'kibbutz in the city' and other forms of urban communal living. This is also in line with the general sharing economy movement and the mesh. So, as Sennet puts it in his book, the idea is not to go back to the "good old times". The "good old times" were not actually so good. No one wants to go back to second world war only because there was solidarity between people and communities were acting like ones because it was the only thing they could do at the moment. Going back to living like in a village? The image of the village like "the good old times" is another one that is only a myth. People lived close to each other and shared more contact points. This does not mean they had were actually happier or their families healthier. I don't think we really want to travel time and I don't believe we would all rather live in villages. I think we live in wonderful moment where an environmental crisis; our huge ecological footprint and its possible and probable disastrous consequences is meeting a technological opportunity of creating connection and facilitating the act of sharing. We have the opportunity of having a sense of community but also actually participating in the community activities in ways that are still developing. If we get creative, this combination between the two can really make a difference. Various signs of this new era of collaboration already tick and spread. A number of initiatives and behaviors that "say" we haven't lost our sense of community. People who get together to create new ways of living and being in the city, often assisted by the new opportunities offered by icts. Jenny Senior, in her article "alone together" talks about New York. She says it's true that on paper NY is the city that has a majority of single households. So it may seem like a city of people living alone, but in reality this fact makes it a great meeting place for single people. New York, she says, offers many opportunities for "weak relationship" (similar to those that we create online) that then develop the strongest and important. a haven for singles, in fact. Single member households are part of some great demographical

changes that we see in the past years. I would like to take them in exam and see how they create new types of families.

1.2.1.1 New families

What is a family? One thing I like to do is to Google the word family in the images search. The first images you get are of a laughing 4-member family. There is a father, a mother, a girl and boy. Probably they stand in front of a single house, with green grass. This is the common image of family, not only in the Google search but also in our heads and in the minds of those who plan our cities and houses. The definitions for families, or family nuclear vary significantly in time. The Oxford English Dictionary has a reference to the term from 1924; the term nuclear is used in its general meaning referring to a central entity or "nucleus" around which others collect. In its most common usage, the term nuclear family refers to a household consisting of a father, a mother and their children all in one household dwelling. George Murdock also describes the term in this way:

“The family is a social group characterized by common residence, economic cooperation and reproduction. It contains adults of both sexes, at least two of whom maintain a socially approved sexual relationship, and one or more children, own or adopted, of the sexually cohabiting adults”⁴⁵.

It is clear that this term is not corresponding to the majority of cases in our world today, in fact Family arrangements in the United States, for example, have become more diverse with no particular household arrangement representing half of the United States population. Married couple without children, singles, extended families or complex families are more and more frequent. These changes in family types are happening thanks to two main reasons: the demographic changes and the life style changes, especially related to the way we work. The

⁴⁵ Murdock, George Peter (1965) [1949]. Social Structure. New York: Free Press.

world is in the middle of a historically first-time demographic transition that is having, and will continue to have, profound effects on the size and age structure of its population. Before 1900, world population growth was slow, the age structure of the population was broadly constant, and relatively few people lived beyond age 65. This began to change during the first half of the twentieth century as rising life expectancy boosted population growth, although initially there was little change in the age structure of the population. The second half of the twentieth century saw the start of another phase in this transition. Fertility rates declined dramatically—by almost one-half—causing population growth to slow, the share of the young in the population to decline, and the share of the elderly to increase. The share of the working-age population, however, changed little⁴⁶. The job market is less stable, in terms of time and places. Contracts are typically shorter and due to easier communication between countries, big firms have many sites worldwide, which means, not only traveling for work but also working abroad for medium-long periods. Women constitute 40 per cent of the world's labor force. From 1991 to 2005, the global female workforce increased from below 1 billion to 1.22 billion, mainly as a result of growth in the developing world. This represents 52.5 per cent of women of working age. Although the labor force participation of women has increased, women continue to be disproportionately involved in housework and care work. Of the women in the labor force, employment of women aged between 25 and 54 years increased, while that of younger women fell mainly as a result of increases in the numbers engaged in education⁴⁷. These changes are bringing about a revolution of daily life. No wonder, people are looking to find new kinds of relationships that will allow them to cope with a new family structure or its absence, with the difficulties of instability or with growing old alone. People put their forces together to cope with everyday life and to make their living more

⁴⁶ BATINI N, CALLEN T, AND MCKIBBIN W (2006)., The Global Impact of Demographic Change, IMF Working Paper. <http://www.imf.org/external/pubs/ft/wp/2006/wp0609.pdf>

⁴⁷ International labour office, <http://www.ilo.org>

sustainable. They organize themselves self help centers, buying groups, community gardens and even plan whole neighborhoods.

1.2.2 Creative communities and collective intelligence

Creative communities are the kind of communities that are created by people in front of their actual need. Those needs resulting from the demographical changes and from changes in our work patterns combined with the understanding of an overall need for more sustainable lifestyles. Those communities are creative in a sense that they tackle everyday life difficulties with original ideas based on the collaboration between people and on people's participation.

“Those who put them forward are sometimes enthusiastic dreamers, and sometimes simply individuals motivated by practical urgency, but they are always satisfied with their own initiative and moved to untiring, incessant activity. From outside, such industriousness appears incredibly demanding, and often it is so”⁴⁸.

Meroni argues that through the research done on creative communities it was shown that for many of the active people in those communities the result is as important as the process; the collaboration itself between people, is already part of the success. The relationships created in those communities do not come to replace the family or friends in affective ways. They might arise because of the lack of proximity to relatives but they do not tend to create the same family dynamics. They are born and continue being since there is a concrete idea behind their action, a concrete problem to be solved, a real opportunity to be taken. Those communities tackle the issues of healthcare, mobility, housing, food and more.

I opened the first part about the city with an article explaining the similarity of city growth and human man growth. To be smart, the city growth should be like an evolution of the brain and not like a multiplication of it. Here, in the creative

⁴⁸ MERONI A., (2007), Creative Communities, Edizioni Poli.Design, Milano, Italy;

communities there is another aspect of the smart city: the importance of a collective intelligence. Pierre Levy in his book *Collective Intelligence: Mankind's Emerging World in Cyberspace* ⁴⁹, speaks about a new kind of economy, the economy of collective intelligence. In this economy the production of products and services serves to enrich Human beings. For example increase individual and group competences, enhance socialization and mutual gratitude, offer tools for autonomy, create diversity, offer a variety of gratification choices. It is focused on personal well-being by working from collective actions. Levy's book was written in 1994. It was certainly anticipating what we see is happening today also thanks to the diffusion and development of ICT's. on its base, there is the understanding that to grow, there is a need for the collective. There is a need for community. Our communities, and especially our creative communities, are very much reinforced by the new communication technology. Those technologies allow facilitating connections and improving interactions. Doing this they contribute to the growth of the sharing economy (or the collective intelligence economy). It is not technology alone though. Service design has a lot to do with the development of spontaneous initiatives to the creation of large scale creative services. But also service design alone is not enough; if those services would to be sustainable in a way that they really meet people's need and represents results coming from bottom up then design has to gain a more participatory approach. The question asked was how to increase the number of people in those creative communities? How to make them more accessible to people that might be afraid of how it will affect their personal time and their busy schedules? There is an understanding in the design world of the role of design within those communities. We have seen before the steps suggested by Manzini to designers in order to go towards design for sustainability. One of the steps was designing for and with the "users". Co-design, participatory design and community centered design are all approaches

⁴⁹ Levy, Pierre (1994) *L'intelligence collective. Pour une anthropologie du cyberspace*, Paris, La Découverte.

that go in that direction. I would like to briefly give some notions about each one.

1.2.3 Community centered design and co-design

In the traditional, product oriented design approach, the process of design was described often by the following phases: a) pre production, consisting on analysis and research, b) during the production: development and testing, c) post-production: implementation and evaluation. The pre-production phase is the one where end-users began to be involved. The idea was to understand better user behavior or use of certain tools in order to develop a product more suitable for the user's need. Initially this was made by surveys, interviews and then also observation. Once the designers understood the user they moved on to the next steps. "Kitchen stories" is a Swedish-Norwegian movie from 2003 directed by Bent Hamer. It is based on real experience in post second world war times in Sweden where scientists tried to improve the work of women in the kitchen. The story tells that every year, an average housewife walks the equivalent number of miles as the distance between Stockholm and Congo, while preparing her family meals. So the Home Research Institute sent out eighteen observers to a rural district of Norway to map out the kitchen routines of single men. The researchers were on twenty-four-hour call, and sat in special strategically placed chairs in each kitchen. Furthermore, under no circumstances were the researchers to be spoken to, or included in the kitchen activities (IMDB). The idea was that the observation should be as pure as possible, as if the observer was non-visible. During the movie, the story on one household is told where the basic rules of observation are broken. It is impossible for the observed person to ignore completely the presence of a stranger in his kitchen day and night. This creates a series of conflicts that eventually bring the observer to break the rules and to create actual contact with the observed. Beyond being a well-made funny movie, it also tells something about the idea of begin able, or not to observe another human being without that influencing the way they act in that precise moment. This exact reason is one of the

reasons that brought to a crisis in the model of passive understanding and observation of the user. Other reasons are related to the fact that some activities, even if they might seem unreasonable or non logic to the outside, have a lot of rational for the single person. To really understand behaviors, one should interact with the user or let the user tell its own story in a constructive way. The second step after involving the user in order to understand better her needs is to involve the user in the design process. Let the user express ideas and opportunities rather than just problems and difficulties. Co-design, as intended by Sanders and Stappers⁵⁰ (2008) indicate collective creativity as it is applied across the whole span of a design process. Participatory design is not much different; this name was used before the name co-design to describe similar collective activities. It was used a lot in the northern European countries. Ehn defines⁵¹

“Participatory design is characterized as an approach to involve users in the design and, as suggested by Redström, in the design process encounter ‘use-before-use’. Participatory design is seen as a way to meet the unattainable design challenge of fully anticipating, or envisioning, use before actual use, takes place in people’s life-worlds”.

Involving the user in the design activities is often challenging: end-users usually do not have the capabilities of designing. Not everyone can draw or understand a technical drawing, for example. This is the reason many tools are thought of to facilitate this work. www.servicedesigntools.org⁵² is the result of the research activity done by Roberta Tassi during her graduation thesis, further developed within the framework of the cooperation between DensityDesign research group at INDACO Department - Politecnico di Milano and DARC - the Research & Consulting Center of Domus Academy. Some co-design tools are described on that platform. Tassi suggests “The designers should provide ways for

⁵⁰ Sanders, E., & Stappers, P. J. (2008). Co-creation and the New Landscapes of Design. *CoDesign*, 4(1), pp. 5-18.

⁵¹ Ehn, Pelle. (2008). Participation in design things. *Proceedings of Participatory Design Conference (PDC)*, Bloomington, Indiana, USA.

⁵² <http://www.servicedesigntools.org>

people to engage with each other as well as instruments to communicate, be creative, share insights and envision their own ideas. The co-design activities can support different levels of participation, from situation in which the external figures are involved just in specific moments to situations in which they take part to the entire process, building up the service together with the designers". Some of the tools include: Design games, Lego Serious play, Story telling. Many tool include gaming and using theater techniques in order to simulate future situations and therefor "prototype" possible solutions. Beyond the single user, another approach should be adopted: community centered design. Not only the single member is considered but also groups of members as a whole. A community view of a certain difficulty should be considered and future views should be created that represent the whole. The participation of the community in the design of their own building or neighborhoods can influence not only the way the buildings will physically result, but also (and most of all) its social sustainability on a long term. Wanting to reach a more sustainable life style, based on the collaboration between the habitants, there can be a shift from the involvement of the residence in the planning phase only, to their contribution in creating a collaborative way of living. By this I mean sharing spaces and activities when actually living together. I will discuss the importance of community design in housing in chapter two. The next and last section of the introduction touches the aspects of urban housing and their potential in becoming city welfare hubs. This, starting form blurring the differences between private and public spaces, that as we can see continue to change all the way though housing history.

people spend most of their earnings on the house (approx. 30% of the income in USA and Europe). The concept of the house and the home as we know it today has changed radically in modern times. Most people in developed countries perceive the home as a private space. A place separated from the outside public space and where people can also find inner private rooms to isolate themselves from others. Housing in Europe in the middle ages had basically no private spaces. The same spaces were used for living, working and sleeping. The concept of the bedroom in fact, is rather new. If you ask people what is the most private space in their house they are likely to answer the bedroom or the bathroom. Both of the rooms are new concepts that were integrated into houses mainly after the world wars⁵⁴. When we think about the home we think about a place that hosts one or more members of the household, divided into rooms that have specific purposes. In his book “species of spaces”⁵⁵ Perec describes the apartment as a together of rooms where people do various activities. He describes the use of the house by the people living in it putting an emphasis on the single rooms. By doing that, he creates a caricature of the house uses. He also asks if it is really necessary that the rooms would be divided by the activities and not by other means. In his ironic way, Perec draws conclusions on the apartment:

“two elementary conclusions may be drawn that I offer by way of definitions

1. every apartment consists of a variable but finite number of rooms

2. each room has a particular function “

Those rooms, so much isolated and specialized are pretty new. In fact, the corridor that allows rooms to have a single entrance is an invention from about 100 years.

⁵⁴ Worsley, Lucy. History of the Home. http://www.bbc.co.uk/history/british/middle_ages/history_of_home.shtml retrieved 06.03.2013

⁵⁵ Perec, G. (1999) Species of Spaces and Other Pieces. Trans. John Sturrock. London: Penguin Books

Until then, rooms were connected and had often two doors. Therefore passing inside a room just to reach another one was a normal thing to do. Corridors

“were developed as a tool to separate different groups of people – the servants – from the served, the jailed from the jailors, and workers from distractors. By separating circulation from destination, they increased the efficiency through which people could move through buildings, while at the same time turning rooms into a series of dead ends”

⁵⁶.

The house quickly became a private space where one can decide to not come and interact with the other people inside. Some rooms remain “common” like the kitchen, the bathroom or the living room. Nevertheless, more and more often the bedroom in modern houses includes a private bathroom and a TV. This makes the occasions for encounter inside the house even less frequent. The house is the institution of our age of abundance. If we have seen before how what we own is shaping our personal identity, where we live, is the space where all of those are collected and exhibited. Our personal identity is reflected in our homes. The house is full with furniture, objects of use and decoration that personalize it and give it (and the people live in it) a unique image. In his book ‘dell’abitare’, Maurizio Vitta⁵⁷ writes: *“A house narrate the resident, it draws its figure, it represents the resident in front of others and for others in the extent to which it is put into shape by those who live it.”*

The house and the home are of great importance to the modern western society. The separation from the outside, from the public sphere is probably what makes it so important. This is also relatively new. In many cultures, still the house is not a limit of proximity. People in Mongolia, for example will open the door of a tent any

⁵⁶ Jusczyk, Tad. Consider the corridor: lessons from architectural history. <http://inside.shepleybulfinch.com/2011/02/consider-the-corridor-lessons-from-architectural-history/> retrieved 06.03.2012

⁵⁷ VITTA, M. (2008) Dell’abitare. Corpi spazi oggetti immagini, Einaudi, Torino.

time they want just to look inside and see who is in there. The living tent has is by no means a separation. It is a shelter from the elements but not a barrier for other people. In the same way, the Mongolian tents are big living spaces that include all activities of everyday life. Only few families have their kitchen separated from the rest of the house. Private activities, like sexual relationships are actually happening outside the tent in the privacy of the dark night. So, the house is a lot about balancing private and public space. This depends critically on different cultures. In his book, 'The Hidden Dimension', Edward T. Hall⁵⁸ introduces for the first time the following dimensions of spaces:

- Intimate space: the closest "bubble" of space surrounding a person. Entry into this space is acceptable only for the closest friends and intimates.
- Personal space: the region surrounding a person, which they regard as psychologically theirs. Most people value their personal space and feel discomfort, anger, or anxiety when their personal space is encroached
- Social space—the spaces in which people feel comfortable conducting routine social interactions with acquaintances as well as strangers.
- Public space—the area of space beyond which people will perceive interactions as impersonal and relatively anonymous.

In western countries one may say that the house is hosting intimate and personal spaces mostly. The bedroom and the bathroom particularly address the intimate dimension. The rest of the house, where there is contact with other family members can be called personal space. The living room and the kitchen may become social places when hosting friends. Hall explains how, for examples, the American children are growing with the idea of having their own personal bedroom. (Or at least a space dedicated to them only, in the house). This creates for them a certain dependency on the private space as they grow. Working spaces

⁵⁸ Hall.E.T (1996) The hidden Dimention. Garden city: ney work. Anchor.

for adults will allow people separate intimate spaces. In the UK, on the contrary, children grow up in a nursery, the children room. They share the space with their siblings and consider it as personal space. In the British culture, it is shown how work places are often open and people are used to working in social and public spaces. The space influences us, and the way we perceive space influences the design of housing. City housing situation is delicate. Urban dwellings are the answer for the large amount of people that slowly gather in cities. Those put together many apartments in order to use a given area to create enough space for many people. People have to share a lot of space and live next to each other without intruding the intimate and personal space. Many spaces around the house are social spaces like the stairs, the sidewalk or the square. Social relationships with neighbors often happen in those spaces rather than in one's house. I might meet my neighbor in the local shop every day and have a small chat and never invite her over to my house. The children may play in the local playground and create a friendship without visiting one's house. If social relationships and sense of community are important for one's well being in the city, those social spaces of interaction should be of great importance. Not only they allow people to meet but they are also recourse in terms of services.

1.3.1 Housing as urban welfare hubs

Putting the house in the middle of the welfare system is hardly a new idea. The structure of city housing makes it easier to implement services. When many people share the same roof, one can easily imagine they can also share a series of services fitting their needs. This idea was described by the Utopians in different periods. Thomas More, the author of the book 'Utopia' who gave the movement its name, described neighborhood groups with common dining rooms and leisure facilities. Some models in northern Europe were built and tested in the beginning of the 20th century and are probably the root of collaborative housing forms.

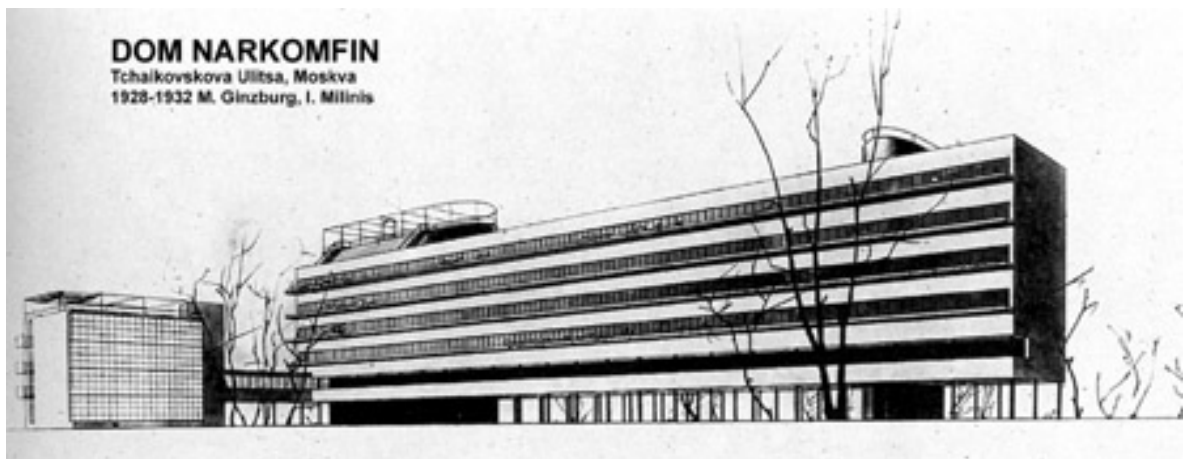


Figure 4: The Narkomfin Building prospect

In Russia, in the late 1920, together with the advocacy to a more communal lifestyle, there was a shift towards offering spaces for greater individual freedom. Architects proposed some changes in the type of communal housing; they maintain the idea of needing communal areas and services but allow some freedom and privacy as well. This is the case of Narkomfin building designed by the Association of Contemporary Architects, addressed by Moisei Ginzburg and Ignaty Milinis. It is a clear example of Russian Constructivism, a first prototype of this new paradigm "transitional" of collective life. In Narkomfin, Ginzburg, broke with traditional forms of construction, spatial composition and architecture of the complex and show the radical search for a new contemporary apartment blocks. The building would become a prototype of the modern apartment blocks and housing estates throughout Europe. The building offered about 50 living units composed of 4 buildings: a dining room (with pre-cooked food), gym, solarium, gardens, daycare service. The block of services are only half finished and the building of the kindergarten was never built. A library, a two-level garden on the roof and a solarium with recreation areas together with shared kitchen and communal dining hall were completed.

Ginsburg's nephew writes about the buiding:

“the Narkomfin building was supposed to be a new type of house that would be transitional between the traditional family dwelling and the new communal way of living. At the same time, however, even the more traditional apartments here are very unusual. They resemble mini-cottages arranged along a corridor as if along an internal street. In spite of their small size, the F-type units seem larger as a result of the alternation of one- and one-and-a-half-height storeys. the upper corridor was not just an element in the house’s system of communications; it also served as a recreational space. Also recreational were the open first storey and the usable roof. All in all, the house had a wide range of public spaces linking it with its surroundings. The communal block, linked to the residential part by a second-storey passageway, and the small laundry building, approached by a special path leading through the park, made up a miniature ensemble consisting of three laconic structures”⁵⁹.

Narkomfin was the first fully realised building constructed to the five principles of Le Corbusier and Bauhaus professor Hinnerk Scheper worked on the colour scheme. Le Corbusier acknowledged the influence Narkomfin had on him and his Unité des Habitation (1946-1952) in Marseille, is seen as the continuation of ideas first realised by Ginzburg.

Actually the idea of the building and the fact the building (and architecture) could have an impact on the way people live, turned out to be a failure. "As a building it was designed to physically change a way of life. Ultimately, the course of political events had more impact upon the Narkomfin than it ever could have had over its inhabitants. It’s early ambitions to be the architectural engine of social reform in revolutionary Russia were so radical that they were abandoned almost as soon as the building was complete, when political pragmatism invariably set in". This is a first point that is very interesting: building and architecture alone cannot influence the inhabitants without the right political or social support. After many years of abundant state with various projects that failed Alexei Ginzburg, grandson

⁵⁹ http://www.international.icomos.org/risk/2007/pdf/Soviet_Heritage_35_V-5_Ginzburg.pdf. Retrieved: 20.04.2013

of the building's designer, has led the effort to preserve the building. In 2008 an exhibition titled Narkomfin House and its Importance was hosted in the Schusev State Museum of Architecture. Additionally, plans were announced for the Narkomfin building to be converted into a boutique hotel by real estate developers MIAN. In January 2009 it was reported that these plans had been delayed as a result of changed economic conditions. In the mean time and today the building is squatted by young artists. This occupation represents an interesting trend today of return to the use of communal areas in order to permit creative and artistic work.

The “central kitchen idea” and “the family hotel” in Sweden are also part of the experiments of dwellings with integrated services: Those were related with the functionalist approach; Louis Sullivan, probably the most known for this idea, was striving for "honest" approaches to building design that focused on functional efficiency. Functionalist architects believed that the ways buildings are used and the types of materials available should determine the design. This included a complex look on the community of people living in certain buildings. Not only were the buildings designed with “simple and clean” forms but they also included



Figure 5: Sven Markelius' kollektivhus vid John Ericssonsgatan 6. Picture from: http://commons.wikimedia.org/wiki/File:Kollektivhus_Markelius_1.jpg

dedicated spaces for future scenarios of collective use.

“In Sweden - as in other European countries - functionalist architects regarded housing with collective services as a logical expression of modernization. The word "collective housing unit" ("kollektivhus" in Swedish) seems to have been introduced by the functionalists. In Sweden the idea was mainly developed by Sven Markelius, architect (later professor) and Alva Myrdal, social reformer (later minister and UN peace negotiator). For them collective housing was not only an instrument to "collectivize the maid" as in earlier experiments, but rather to enable women to combine house work and paid employment outside the home”⁶⁰.

Alva Myrdal wrote⁶¹: *“Urban housing, where twenty families each in their own apartment cook their own meat-balls, where a lot of young children are shut in, each in his or her own little room – doesn’t this cry for an overall planning, for a collective solution?!”*

She saw the need and the potential in urban dwellings and the kitchen was a starting point together with a place for children to socialize. Cooking remains one of the main activities for women to manage beyond their work; to offer quality dishes for the whole family the women in the early 20 had to think about going out for grocery, preparing and washing. This became difficult as more and more women went to work in the morning and got back home just in time for dinner. On the other hand, as families were shrinking, children alone in their houses were isolated and did not cultivate social relationships. This is the reason for the first collective houses in Sweden to concentrate on food and children. The first functionalist collective housing unit in Sweden was built in 1935 at John Ericssonsgatan 6 in Stockholm. It was designed by Sven Markelius, who lived there himself for many years. In this design, three clusters of long, ten-story slabs including separate

⁶⁰ Vestbro, D. From Central kitchen to community co-operation- Development of Collective Housing in Sweden. Open House International Vol 17, No 2 (1992) p 30-38. http://www.infra.kth.se/bba/PDF/Dick_Openhouse.pdf, retrieved: 24.05.2013

⁶¹ Myrdal, A. (1932) Kollektiv bostadsform. Tiden 1932, 601-608.

communal dining facilities were arranged in an open landscape. Each building group was a thinly disguised version of Russian collective housing experiments of the late 1920's such as the Narkmofin building in Moscow. In fact, when the project was exhibited at the time it was branded a "Russian" idea. However, undaunted by the negative reaction, Markelius and Alva Myrdal continued to investigate collective housing notions and especially the idea that housing should incorporate childcare facilities and communal kitchens⁶². The kindergarten, founded according to Alva Myrdal's theories, was the first one in Sweden where modern educational methods were applied. One had the choice to eat in the ground floor restaurant or have the meals deliver up through small elevators. Thus, housewives did not have to plan for meals until they returned back from their work in the evening. In all of those solutions though, services were offered to the family to ease its daily life and especially women life. Really managing the collective services y themselves is an evolution of those forms⁶³. Collaborative housing forms in Sweden will be discussed in the next chapter.

⁶² http://housingprototypes.org/project?File_No=SWE004. Retrieved 26.06.2013

⁶³ VESTBRO, D, (2010) Concepts and terminology, in Living together – Cohousing Ideas and Realities Around the World, Proceedings from the international collaborative housing conference in Stockholm 5–9 May 2010.



Figure 6: Kowloon Peak "Aria", hong Kong

In many cities in Asia, high buildings are the only option for keeping prices down. High buildings design is often rather challenging. To maintain decent construction costs, the design is standardized. As the building becomes bigger, this standardization results in huge anonymous shapes. Some architecture firms are taking this challenge and make new designs for skyscrapers. This design not only includes the shape of the building and its skyline, but also services and common spaces for those who will live there. There is, as seen before, a future thought about how people in those buildings could enjoy the fact that they share space with many others. The new form of "full service tower buildings" could not be called affordable housing, but they do fit the middle class. These might represent good ideas to begin and develop future scenarios also for low-income families. Residential buildings where services are integrated are very frequent in Hong Kong (HK). Land prices in HK are high and the buildings are taking advantage of the height. Those towers host such a big number of people that live

in relatively small apartments, so the integration of certain services allows a better lifestyle. In fact, we are not talking anymore on managing everyday life but on gaining some luxury services in the building "island". This does not make it less interesting. The integrating of those services creates, again a redefinition of public and private and offers new spaces for social encounter. The special thing about this newly developed type of residential tower, everything is vertically building. So the recreation (private-public) space like the park or jogging path has been built on the 37th Floor of the tower. It's therefore named "SKY promenade" (Aria Project). Another example is the 'SKY swimming pool' in one of the residential tower located at the West Kowloon District of HK. The luxury Aria project in Fung Shing Street, Kowloon Peak Hong-Kong, developed by Sun Hung Kai Properties, are 5 towers hosting 723 living units on 39 floors. The clubhouse occupies more than 8400 mq of space spread over six stories:

2 floor: 25m Indoor Swimming Pool , 28m Outdoor Swimming Pool, Poolside Deck, The SPA, Beauty Corner, Music Room, iZone, The Library, Reading Room, Snooker Room, Activity Room, iLounge, The Cafe etc.

3 floor: Liuli Crystal Garden, Children Play Area, Summer View Pavilion, Lumiere Avenue, Sunset Lounge, The Fountain etc.

37 floor: 340m Sky Promenade, Sky Gym, Golf Putting Green, Chess Garden, Sky Deck, Swinging Romance.

38 floor: Gourmet Place, The Grand Banquet Room, The Great Room, Grand Piano Lounge, Panorama Terrace, The Lobby.

39 floor: The Wine Cellar, Wine Bar, Private Yoga & Areobic Room, Gymnasium, Sky Lobby.

Clubhouse Roof: Sky Barbecue Terrace, Sky Galleria, Sub-Zero@The Peak, The Peak Lounge, The Chef Corner.

The first examples, from Russia and Sweden, were based on very strong ideas behind the society and women role in the society. The solutions given, however did not last long; In Sweden keeping those services as they were resulted rather expensive. In Russia, the private spaces were still too small and did not fit anymore to people's requests. Club houses are rising but are not an answer for many people due to their expensive value. The evolution of these forms and their potential in becoming more frequent forms of living depends in my view on a shift towards collaboration. In other words the services integrated to the house should be collaborative services. As seen in parts 1.1 and 1.2, the sharing economy is growing. People with financial difficulties are moving towards alternative economies that imply putting their own time and energy to it. Collaborative services are very much related to the proximity between people. In order to share tools and time people must live next to each other. This makes urban dwellings perfect for those services. The combination between living units and collaborative housing create what can be called collaborative housing. In the next chapter I will concentrate on collaborative housing and give some examples from the world to explain their diversity.

2. COLLABORATIVE HOUSING

Collaboration may be the key towards innovative forms of housing as welfare hubs. This collaboration between people may happen before living together (for the design and construction of the house) and/or after moving in. either way, this collaboration may enrich people's everyday life with social relationships, shared activities and efficient time and energy use.



Going back to the idea that people should participate in the design of their own solutions, urban participatory planning comes in mind. The idea of participation is not new: part of it were introduced in the UK already in the beginning of the twenties century. Towards the end of the XX century, there was more than one architect who brought this idea into practice. Maybe one of the best known in Italy is Giancarlo De Carlo, and his work in Terni in particular. De Carlo saw architecture as a consensus-based activity. His designs are generated as an expression of the forces that operate in a given context including human, physical, cultural, and, historical forces. De Carlo's interventions in the form of new buildings and renovations have been carefully inserted into the built fabric and pay close attention to the social life of the town. De Carlo's participatory process consisted of three phases:

1. Problem-definition or discovery of the needs of the inhabitants;
2. Formulation of a hypothesis or development of a design proposal;
3. Analysis of the use or evaluation of the results.

Renzo Piano held another important experience in Italy: he conducted a known workshop with the citizens of Otranto for the renovation of many houses. His process remains an inspiration for participatory projects today. In the late 1990 the European commission puts participation in urban planning as part of its agenda, allowing in this way to integrate to many other projects. In parallel, many independent groups in different countries decided to create their own process by creating cooperatives and building their own houses. Sharing the planning process usually builds already a community. When a community plans its own neighborhood or its own building, the single members stop thinking of this living solution as the sum of the living units, but as a whole. Hence a community centered design approach is taking place. Collaboration between people can also happen when people already live together. This may happen through common activities and often the use of shared rooms and facilities. In the following paragraphs I will describe best practices of collaborative housing and give

my own map of collaborative housing forms. In the map, 4 elements are rising: common spaces, Collaboration, Social composition and openness to the surroundings. These four will be described in details in the different chapters of this part.



Figure 7: a workshop conducted by Renzo Piano in Otranto

2.1 BEST PRACTICES AND DIVERSITY: FROM BERLIN TO A GENERAL VIEW.

To better explain what are collaborative housing, one should acknowledge the richness of diversity. When I began with exploring the area of collaborative housing I was living in Berlin. There, I began exploring different types of collaborative housing forms. I collected four case studies in particular that represent different categories present in Berlin. Berlin is a good place to begin with. It has a particular history of housing that makes it a fertile ground for new experiment. Even if not the very well known for its history in collaborative housing forms as Denmark or Sweden may be, it has a lot to teach about housing politics and bottom up initiatives. Some moments during history were important for this development:

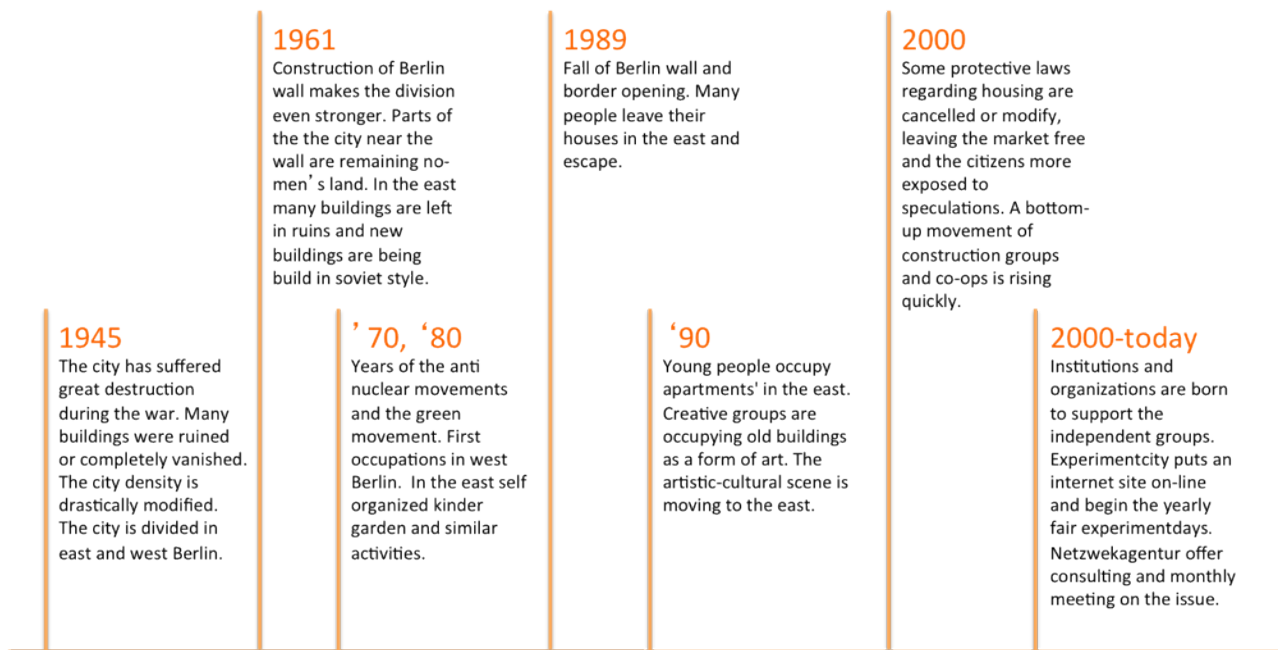


Figure 8: important moments for housing development in Berlin

The different cases I learned about are:

1. *Hausprojekt Zorrow, Grüntaler Str. 38 Berlin.*
2. *Baugruppe: Living in urban units, Schönholzerstr. 13/14 Berlin, Project by Deimel Oelschläger Architekten, Berlin.*

3. *Lichte Weiten, Wönnichstraße 104, Berlin*
4. *Complex housing: ufa fabrik, Viktoriastr. 10-18 Berlin*

For each house there is a visualization of the situation with some indicators about the position in town, the type of contract, the number of people and the focus.



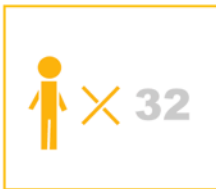
location



rent



property



number of people



community life



multi generational



garden



ecological building



Cultural activities



SLEEPING



SOCIALIZING



WASHING



COOKING



CLEANING



GARDEN

Figure 9: map of icons for the case study cards

Hausprojekt Zorrow
Grüntaler Str. 38 Berlin

*“There is a lot of loneliness in the world.
everyone should live in a WG ”*



This house belongs to Berlin's squatting scene of the '80. The specific house was never squatted but the people who started it lived and were kicked out from another house. They found this ruined house in Wedding area next to checkpoint Bornholmer str. Through the GESUBAU organisation they had a contract and with a financial help from the senate they renovated the house themselves.

Today there are about 25 people living in the house. There are 3 families and 3 shared apartments (WG). Each member has its own room and everything else is shared. The bigger group buys basic food and cleaning material together. Every small group has common money for groceries. The rent depends on the income and the dimensions of the room.

The bigger group shares an extra kitchen connected to the garden, the garden and several workshops.

- ★ Communal living
- ★ Social rent system
- ★ Historical background



Hausprojekt Zorrow, Grüntaler Str. 38 Berlin.

This house belongs to Berlin's squatting scene of the '80. The specific house was never squatted but the people who started it lived and were kicked out from another house. They found this ruined house in Wedding area next to checkpoint Bornholmer str.

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Living in urban units
Schönholzerstr. 13/14 Berlin

*“We chose to abandoned the urban anonymity
by building and living together”*



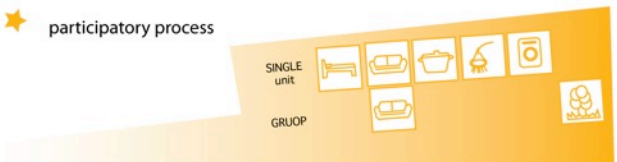
When you walk through Schönholzerstr you can easily recognise this house due to its shutters which are not at all common in Berlin. In fact, this is the first passive building in Berlin. Passive solar buildings aim to maintain interior thermal comfort throughout the sun's daily and annual cycles whilst reducing the requirement for active heating and cooling systems.

A group of young and old people created this barrier free house. The group bought the space in 2006 and moved to the house in 2009. Some of the apartment are privately bought and some as a cooperative.

Every apartment is designed with the people who are now living in it and there is no one apartment similar to the other. The group met every 2 weeks for about 2 years to make all the common decisions. They have a common garden with a small room attached to it and a toilette, as well as a common roof terrace.

Project by Deimel Oelschläger Architekten, Berlin

- ★ Multigenerational living
- ★ Passive building
- ★ participatory process



Baugruppe: Living in urban units, Schönholzerstr. 13/14 Berlin, Project by Deimel Oelschläger Architekten, Berlin.

When you walk through Schönholzerstr you can easily recognize this house due to its shutters which are not at all common in Berlin. In fact, this is the first passive building in Berlin. Passive solar buildings aim to maintain interior thermal comfort throughout the sun's daily and annual cycles whilst reducing the requirement for active heating and cooling systems. A group of young and old people created this barrier free house. The group bought the space in 2006 and moved to the house in 2009. Some of the apartment are privately bought and some as a cooperative. Every apartment is designed with the people who are now living in it and there is no one apartment similar to the other. The group met every 2 weeks for about 2 years to make all the common decisions. They have a shared garden with a small room attached to it and a toilette, as well as a common roof terrace.

"Self-determined and not alone"



"Self-determined and not alone" is the motto of the **multi-generational community housing** project LICHTWEITEN. Children, young and older people live in this house since early 2009. The community members are socially involved with each other and with the surrounding neighbourhood.

The house was built with **high quality ecological standard** that includes solar panels, an extremely efficient heating system and an independent water system enabling the use of rain water and recycled water. The **garden is open to the neighborhood** and hosts an area of vegetable-gardens that are used by the community members and people from the area who desire to grow their own vegetables.

The residents administrate the house and they are responsible for the building and the garden as well as for planning open initiatives. Every single or family has a complete apartment (excluding washing machine which is shared). The community shares **one extra apartment** connected to the garden. In this apartment there is a kitchen a living room used for meetings and two rooms for different uses.

- ★ Multigenerational living
- ★ Community garden open to the neighbourhood
- ★ Ecological building



Lichte Weiten, Wönnichstraße 104, Berlin

"Self-determined and not alone" is the motto of the multi-generational community housing project LICHTWEITEN. Children, young and older people live in this house since early 2009. The community members are socially involved with each other and with the surrounding neighborhood. The house was built with high quality ecological standard that includes solar panels, an extremely efficient heating system and an independent water system enabling the use of rain water and recycled water. The garden is open to the neighborhood and hosts an area of vegetable-gardens that are used by the community members and people from the area who desire to grow their own vegetables. The residents administrate the house and they are responsible for the building and the garden as well as for planning open initiatives. Every single or family has a complete apartment (excluding washing machine which is shared). The community shares one extra apartment connected to the garden. In this apartment there is a kitchen a living room used for meetings and two rooms for different uses.

ufa fabrik
Viktoriastr. 10-18 Berlin

“an ever increasing range of cultural, social and ecological projects”



By many standards the UFA-Fabrik is the most successful project with respect to locally integrated development to emerge out of the experimental West Berlin alternative culture, if not one of the most interesting and successful

projects at the European and international levels. Here a cooperative residential community of about 30 - and altogether about 150 co-workers - manages an ever increasing range of cultural, social and ecological projects.

Among the UFA-Fabrik demonstrations are co-generation systems and renewable energy production, including one of Berlin's largest solar energy systems, local re-use of rainwater, greening of buildings, a natural foods store and organic bakery, the Solar Creperie as well as an alternative school, a children's farm, one of Europe's most successful internet communications initiatives (netd@ys), and a neighborhood self-help center which reaches out to and involves families, youth, immigrants and disadvantaged people among others.

★ Cultural Center open to the city

★ Services for the neighbourhood

★ Ecological building and Energy production

SINGLE

GRUOP

unit

GRUOP

Complex housing: ufa fabrik, Viktoriastr. 10-18 Berlin

By many standards the UFA-Fabrik is the most successful project with respect to locally integrated development to emerge out of the experimental West Berlin alternative culture, if not one of the most interesting and successful projects at the European and international levels. Here a cooperative residential community of about 30 - and altogether about 150 co-workers - manages an ever increasing range of cultural, social and ecological projects. Among the UFA-Fabrik demonstrations are co-generation systems and renewable energy production, including one of Berlin's largest solar energy systems, local re-use of rainwater, greening of buildings, a natural foods store and organic bakery, the Solar Creperie as well as an alternative school, a children's farm, one of Europe's most successful internet communications initiatives (netd@ys), and a neighborhood self-help center which reaches out to and involves families, youth, immigrants and disadvantaged people among others.

I believe these examples from Berlin will represent different types of collaborative housing. They could be resumed in four main categories:

1. **Communes or other ideological and social collective housing:** A commune is an intentional community of people living together, sharing common interests, property, possessions, resources, and, in some communes, work and income. In addition to the communal economy, consensus decision-making, non-hierarchical structures and ecological living have become important core principles for many communes. The people living in communes may have more or less spaces and resources shared. For example: some may have complete apartments and others just rooms. Some may share income and some not. In all cases though, there is an ideological line that unites the people living there. This may be related to a religion or a belief. But it might also be part of a social project.

2. **Cohousing:** Cohousing is known to be originated in Scandinavia in the 60s, and it is especially prevalent today in Denmark, Sweden, Holland, England and the USA. The cohousing communities combine the autonomy of private dwellings with the advantages of services, resources and shared spaces (micro-nurseries, laboratories for DIY, car-sharing, gyms, guest rooms, gardens so on.) with benefits in both social and environmental terms. They typically consist of a settlement of 20-40 housing units for families and singles. Participatory planning may or may not occur. When it does, it covers both the construction project itself and the community project: what and how to share, how to manage services and common areas.

3. **Construction cooperatives/collectives.** Building co-operatives are co-operative housing corporations where individuals or families work together to directly construct their own homes in a cooperative fashion. Members of this type of co-operative purchase building materials in bulk and co-operate with other members of the co-op during the construction phase of the co-operative. Once the housing has been completed

the members usually own their homes directly. In some cases, roads, parkland and community facilities continue to be owned by the co-operative.

4. Complex collaborative housing with commercial elements: These might be seen as “small villages” inside the town. The ufa – fabrik, for example is not only a housing complex, but it also offers shops, cultural center and an educational one to the whole neighborhood. These solutions are based on the families that manage (and often build) the house, but they offer spaces that are completely public.

To those I would like to add:

5. Temporary housing solutions for specific people: These offer accommodation for some time (days, weeks or some years) to a specific population. Here you can find for example: Student’s residency, hostels, elderly partially assisted housing. It is important that there is a collaborative atmosphere and not only the sharing of spaces.

The best practices, as brought above, have many differences, but they all have some advantages in common:

- They consist on recovering a lost social dimension of mutual aid and a sense of community, contrasting exclusion and reducing the stress and complexity of life in modern society.
- The sharing of goods and services allows a considerable saving of energy and costs, facilitating the management of daily activities and generating a more sustainable lifestyle.
- Involving people in designing their own solution creates a variety of housing options, enlarging diversity and fitting all types of families.
- Co-design of common spaces facilitates the development of relationships in the neighborhood and increases the sense of belonging to a community, maintaining at the same time the individuality of one’s dwelling.

2.2 DEFINITIONS

There is an on-going discussion about the correct way to define collaborative housing and to put all those best practices under one umbrella term. The Experimentcity project, described in the part 5.1.1 has allowed me to meet and discuss collaborative housing with many people from around Europe. The expression “collaborative housing”, however, was not completely shared by all the members. Dick Urban Vestbro, one of the

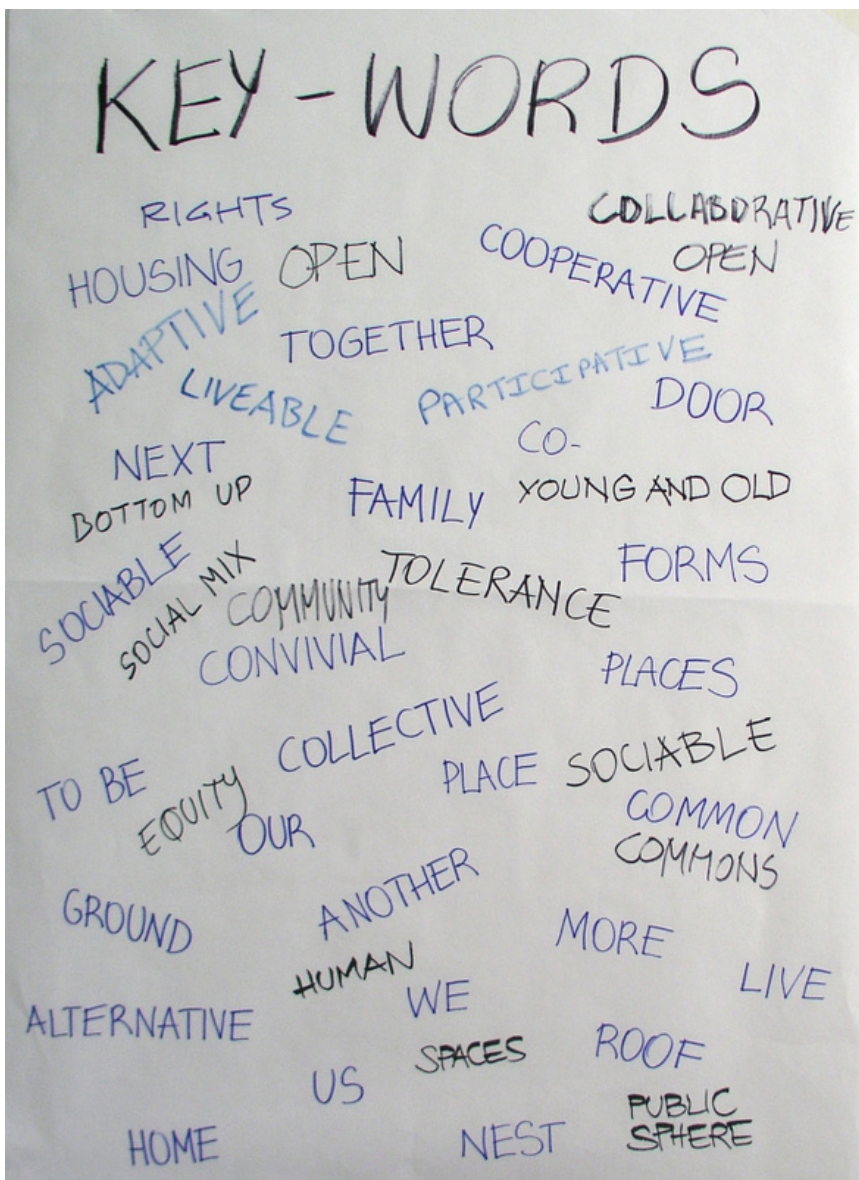


Figure 10: some key-words discussed during a meeting with housing experts in Milan

experts on the topic, argued in one of our discussions⁶⁴:

“I want to point out some difficulties attached to the concept ‘collaborative housing’. It is not houses that collaborate, but people. One working group in Stockholm suggested that ‘collaborative housing’ should be used for housing designed to promote resident collaboration. That is fine, but this definition is different from projects resulting from collaborative efforts during the planning and building stage. It is quite possible to have good neighborly collaboration without any participation of residents-to-be in the planning and building process (as in most Swedish examples). Do we want to include both types of collaboration when we refer to collaborative housing? Furthermore, it is possible to have projects designed for collaboration where residents do not collaborate in practice, and the other way round. I think that housing projects designed for collaboration can be called ‘collaborative housing’ but I am uncertain about the opposite (conventional housing projects where people happen to collaborate without specially designed common spaces). The analysis in my paper in the Stockholm conference book leads me to conclude that ‘cohousing’ is the wider concept. It should be defined as housing with shared spaces and common facilities. It is possible to have common spaces without much of collaboration. Such buildings should be called ‘cohousing’. Resident collaboration could be an added value, i.e. ‘collaborative housing’ is to be seen as part of ‘cohousing’. An advantage with ‘cohousing’ is that it may refer to COllaborative housing, COoperative housing, COmmunal housing or COllective housing – a good sign of being a wide concept. One may use ‘collaborative housing’ when emphasizing resident collaboration, ‘communal housing’ when emphasizing the sense of community and ‘collective housing’ when emphasizing the collective organization of facilities. Will give an overview of different definitions and will explain my own. The definition includes four important variables: common spaces, collaboration, social composition and interaction with the surroundings. These four distributed as in the following figure, make different areas of housing”.

The discussion never ended, as, Dick’s proposal to use the term “cohousing” was also difficult. As Michael LaFond, founder of id22 and the Experimentcity answered:

⁶⁴ This material was collected from an online discussion on the project Blog.

“Dick is correct about the universal nature of the word “co”. At the same time, the term co-housing has been used for about twenty years already in the US, thanks to McAmant and Durrett, and refers to a specific form of community housing. A similar concept is being developed now in Italy, and even in Sweden Co Housing seems to refer to a specific model. With the Experimentcity Europe platform we definitely want to include a diversity of housing forms, from rental to ownership, from legal to sometimes illegal, from social to ecological to cultural expression of self-organized housing. The term collaborative refers to people working together to design, build and manage community-oriented housing. The term is quite good as an umbrella term – but is somewhat academic and removed from most peoples immediate lives”.

Another term that was proposed during our meetings was: Convivial Housing. Here are some thoughts around it:

Michael LaFond: *“I have to say I am most excited about the term convivial. This brings in a personal and emotional dimension and suggests human qualities we seem to be searching for and wanting to support”.*

Romain Nimod: *“Convivial housing! First, It combines saxon and latin languages. No Chinese, but it’s a start! Convivial come from latin : con vivere. Live with. It’s question of the way of living together”.*

Dick Urban: *“Convivial... It is the first time I see this concept in relation to housing. According to my dictionary ‘convivial’ means something with socializing character, even ‘party-like’. That could fit for housing with common spaces and shared facilities. A problem with the concept is, however, that it has no base in research or in practice”.*

During the meeting of the Experimentcity in Milan we held a workshop talking again about that definition never coming to conclusion. Therefore, it was agreed to not agree and to call it in each country in the best way. For me, it was an occasion to create a map, rather than a definition, explaining what are the examples of housing that can be included under my definition of collaborative housing.

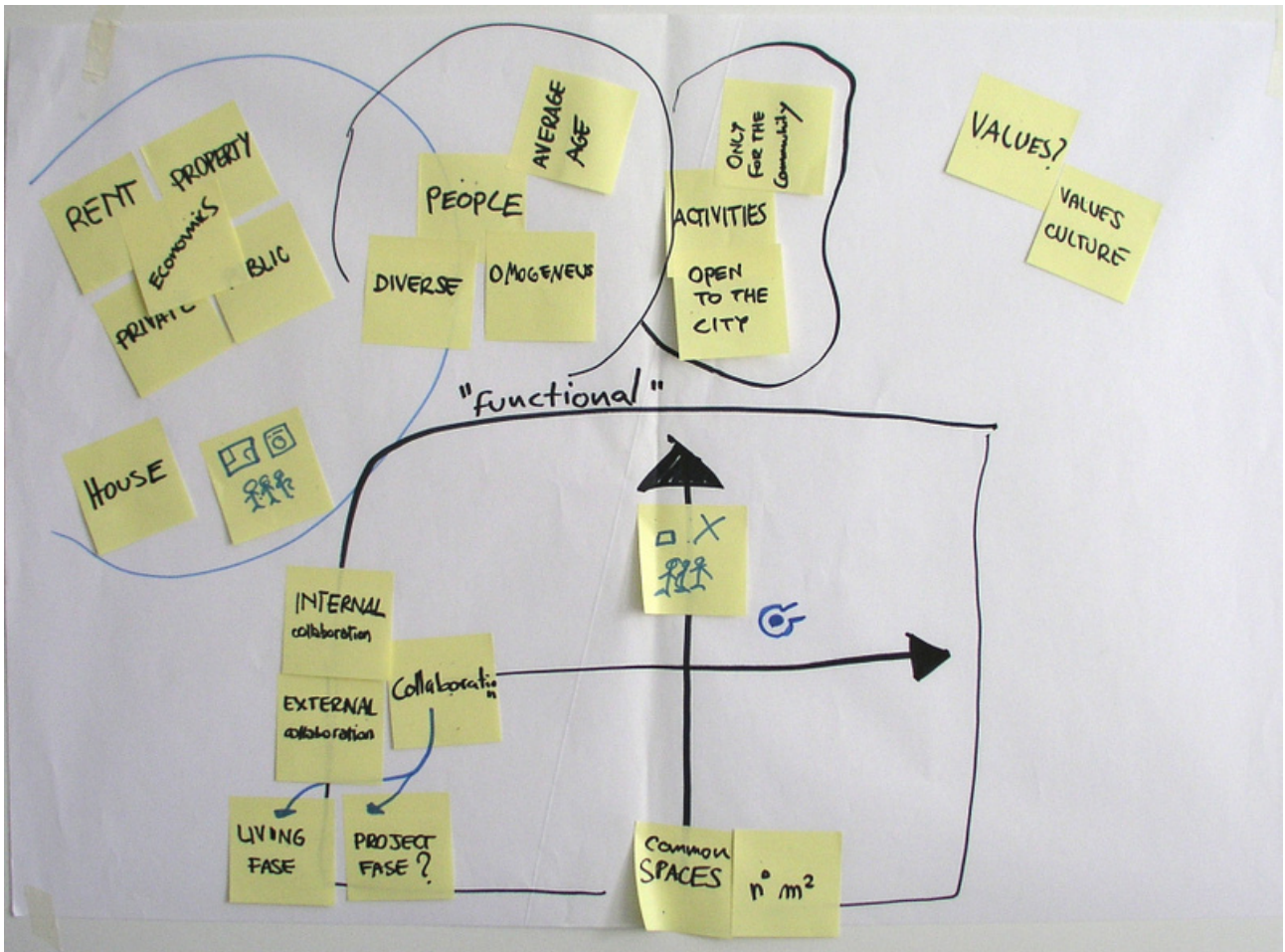


Figure 11: first discussion about new mapping for collaborative housing

This map was developed together with other member's of the network. This map includes four main elements: the collaboration between people, shared spaces, openness to the surroundings and the social composition of the community. (All of those are explained better, here under).

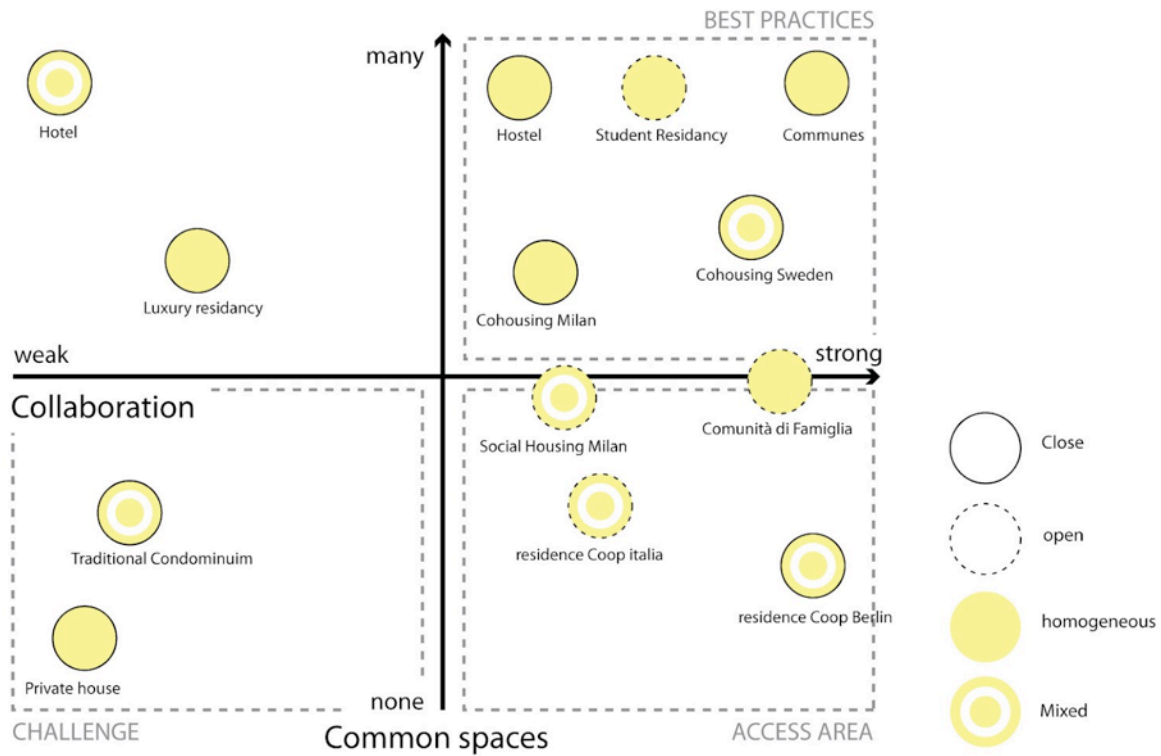


Figure 12: a map for collaborative housing

The best practices and other forms of collaborative housing are position in the map and therefor:

On the top right, the best practices. Where collaboration happens in appropriately designed spaces;

On the bottom right, collaborative solutions based on community participation without necessarily having a designed shared spaces for those collaborations.

On the top left, solutions where people are not interested in collaborating even if they share many space. For example luxury buildings with integrated services. Others are houses where common spaces were designed but are not used, like in some cooperatives in Italy. These cannot be called collaborative housing.

On the bottom left, solutions that have no shared spaces and no collaboration: these are not collaborative and are the biggest challenge of all since they are the most common solutions today.

2.2.1 Common spaces

Common spaces are one of the elements that often seem to define CH. The common spaces are of different types and host different functions. In this part I will discuss the private-public perception of spaces and explain how common spaces design can encourage collaboration. In the US, for example, cohousing solutions include a common house:



Figure 13: The common house dining room of Oakcreek Cohousing

“The common house is the social center of a community, with a large dining room and kitchen, lounge, recreational facilities, children’s spaces, and frequently a guest room, workshop and laundry room. Communities usually serve optional group meals in the common house at least

two or three times a week. The need for community members to take care of common property builds a sense of working together, trust and support⁶⁵.

In Sweden and Denmark, the common house is also usual for cohousing. In Italy, the first cohousing experiences saw the common spaces distributed in the building and not concentrated as one house. In case of other social housing common spaces often include also commercial spaces, managed by local associations. Other types of common spaces are outside spaces like an inner yard, a garden or a terrace. In Italy it is common to have “meetings rooms” in big housing complexes. In other types of collaborative housing like students houses or hostels, people share the kitchen and often the bathroom as well, having to themselves only the bedroom.

Why are those shared spaces so important for collaborative housing? Shared space, as I already wrote about in the part dedicated to housing is not a new idea. People had a lot of shared space and only a little of private one until world war two. The fact that people are rediscovering shared spaces now, as part of their wish to have a greater sense of community, makes it possible to create new housing solution that offer spaces for collaboration.

2.2.1.1 Blurring private and public

When talking about collaborative housing we can talk about a personal sphere (ours, and our family) the community sphere (the people that share the house) and the public sphere (the neighborhood). Spaces for collaboration are often spaces that we take out of our personal sphere and put into the community or the public one. This does not mean that we don't keep on having this space. For example: in a cohousing we share a kitchen but we also have a kitchen in our apartment. Usually, more living spaces are in the community sphere if the group is a very specific one like students (in student residences), elderly (in assistant residency) or young travelers (in a hostel). Clearly, having more shared

⁶⁵ What is Cohousing? <http://www.altaircohousing.org/node/4>, retrieved 20.06.2013

space and less of a private one allows the housing to be more affordable. The difference between those spaces is not so much who owns them but how much privacy is one entitled to in a certain space. This, clearly changes a lot between cultures. Take for example the Sauna. In some northern countries, going to the sauna naked is rather a social activity. Many cohousing in northern countries choose to share a sauna. A similar activity in the USA would never be accepted as one of the community.

The table below shows a division of collaborative housing by the type and the size of space shared. On the left side are housing solutions that maintain autonomous units and add to them common facilities. On the right hand private rooms with communal settings.

Communal housing in Belgium (Flanders) woongemeenschap (B, NL), samenhuizen (B-FL), habitat collectif (B-W), collaborative community (UK, US), wohnprojekt (D)			
autonomous units and common facilities		private room(s) within a communal setting	
few common facilities: garden, garages, laundry, and eventually club house, workshop, ...	extensive common facilities: garden, garages, laundry, but also dining room, kitchen, lounge, kids room, workshop, hobby, workshop, guestroom	household chores partly shared usually 3 to 8 units meals often shared	household chores all shared usually more than 8 units most of the meals shared
Centraal wonen (B-FL, NL) habitat groupé (B-W), self-developed condominium (US), atrium-siedlung (D), baugruppe (D), ... two units : kangoeroewonen (B, NL), maison kangourou (B, FR) duo-wonen (NL), homeshare (US),	Cohousing cohousing (B, UK, US) centraal wonen (NL), co-voisinage (FR), boffaelleskaeber (DK) , cohabitat (CA), kollektivhus (S), boligbyggelag (N) kibbutz (ISR), ...	Woongroep (B, NL) 'friends-wonen' (B), co-location (B-W, F), share house (US), wohngruppe(D) temporary : Gemeenschapshuis (B-FL) student coop (US)	Leefgemeenschap (B, NL) commune (B, UK, US), communauté (B, F), ...
← less		more →	
degree of communal sharing (spaces, facilities, activities, ...)			

Figure 14: Table presented by Luk JonckheereL

The degree of communal sharing is increasing as you go from left to right. This is certainly true for what regards spaces and facilities sharing, but actually the activities

shared are not so much depending on the space. So I do not agree completely with the proposed table. Collaborative housing can also have no shared spaces and still be called in this way. That said, space design has a lot to do with facilitating collaboration between people.

2.2.1.2 Spaces that encourage collaboration

The existence of spaces that are of everyone is a first step toward an easy collaboration. Very often activities that involve many people will not happen in a regular apartment. It is much easier to organize a dinner, a party or the projection of a movie in a room that can offer a big kitchen, many sitting places and a projector. But it is not only about the physical objects and the quality of the room, it is also about the fact that it is not a private space for anyone. There is no fear of invading the private sphere. The common rooms are of the community and are in the community sphere. So the first step is the creation of spaces in the community sphere that are helpful or useful for people. The design of a space may indeed encourage collaboration and cooperation between people. In the creative world this notion was used to design dedicated spaces for people to meet in and to come up with good idea. It is a different point of view from traditional companies where the socialization between workers would probably be a waste of time. In the innovation field, it has shown the opposite. In order to encourage that open innovation, socializing spaces should be thought of and well designed. What make people collaborate? First of all they have to find the occasion to meet. Then, the space they meet in should be pleasurable enough to make them stay longer. Other aspects are depending on the goal of the collaboration. One of the most famous examples for design for collaboration are pixar's headquarter offices. Steve Jobs has described his scenario as a place that "promoted encounters and unplanned collaborations." The idea in this building, for example was that people will be, in some way constrained to pass through a big living-room like hall. Initially, the restrooms were positioned ONLY in this area, so it was probable that people from all the departments would pass through there and they may then be encouraged to stop and chat. This is, according to jobs the secret for

innovation. From that last example it comes out clear that a certain attention to how you design spaces may influence the existence of a collaborative atmosphere. But it is not the only factor. Collaboration, the second half of the map is complex to achieve. Often, the right space design must be combined with precise political decisions and a process towards change.

2.2.2 Collaboration

Collaboration is in the heart of CH. To take a step back, I will describe motivations for collaboration generally and explore the ways we use for collaborating. In particular I will talk about on-line collaboration and how it has change the way we see collaboration today. Finally I will talk about enabling collaboration by design and will give concrete examples for that.



Figure 15: a moment of collaboration, assembling furniture in Scarsellini (see chapter 4)

2.2.2.1 Why we collaborate (or not)

Collaboration between people is clearly the heart of CH. Shared facilities and spaces are simply not enough in order to transform the house into a welfare hub. As already seen in the examples before, luxury residential places offer a lot in terms of spaces but they do not necessarily enhance relationship between people. If the reconstruction of ties and a feeling of the community is one of the goals of CH, then one should ask, how do we make people collaborate? The design of the shared space and the facilitation of collaboration by the space, as seen in the upper paragraph is helpful, but it is not a guarantee. One important answer to why people should collaborate arrive from the game theory. In particular way from the prisoner dilemma as it is described here:

Two members of a criminal gang are arrested and imprisoned. Each prisoner is in solitary confinement with no means of speaking to or exchanging messages with the other. The police admit they don't have enough evidence to convict the pair on the principal charge. They plan to sentence both to a year in prison on a lesser charge. Simultaneously, the police offer each prisoner a Faustian bargain. If he testifies against his partner, he will go free while the partner will get three years in prison on the main charge. Oh, yes, there is a catch ... If both prisoners testify against each other, both will be sentenced to two years in jail. In this classic version of the game, collaboration is dominated by betrayal; if the other prisoner chooses to stay silent, then betraying them gives a better reward (no sentence instead of one year), and if the other prisoner chooses to betray then betraying them also gives a better reward (two years instead of three). Because betrayal always rewards more than cooperation, rational self-interested prisoners would betray their counterparts, and the only possible outcome for two rational self-interested prisoners is for them to betray each other. The interesting part of this result is that pursuing individual reward logically leads the prisoners to both betray, but they would get a better reward if they both cooperated with each other to stay silent. In reality, humans display a systematic bias towards cooperative behavior in this and similar games, much more so than predicted by simple models of "rational" self-interested

action. From this, one can understand how the collaboration between the two prisoners is the best way to get out. However, and it's a big HOWEVER, most people will not chose the collaborative way as a first choice. This is not good news, for collaborative housing. Does it mean we are non-collaborative as a default? And here we go back to the introduction point and to xxx thesis: we become less and less collaborative as time goes by.

2.2.2.2 Ways to collaborate (on and off-line)

For what regards housing, the collaboration is even less frequent. Participation and involvement of people in their own house, for its construction or for communal living is not so common. In the best practices described below people collaborate through face-to-face meeting in deciding about their future house. They might also meet only once moved in and collaborate in the shared spaces. In some cases, like in Swedish cohousing, collaboration is part of the housing contract. When a person gets an apartment assigned in cohousing the sign they will be part of a cooking group. This mean they will have to cook for everyone else about 3 times a month. They have no obligation of eating together, but they cool in order to keep the shared meals working. In other cases, the obligation to collaborate comes from the lacking of certain spaces. For example, if the group is sharing a kitchen, like in certain communes, or in a student residency, then the communal kitchen is more likely to become a space for collaboration. Groups that collaborate for building the house usually do that for having maximum control over t and for keeping the costs down. Collaboration comes also from the basic human need of doing things together. This may disappear in many situations, but when people feel secure and surrounded by other people who are looking for contact they will be more open for collaboration for the joy of it. On-line collaboration that gives people the possibility to be a bit "hidden" behind the screen and make a first scan of where and with whom they would like to collaborate is very pertinent for housing as well. Think for example of temporary solutions like hospitality club or couch surfing. People get to know each other through the web and this encourages them to spend some time together,

sharing the house and enjoying dinners and going out together. More and more, on-line collaboration is integrated into participatory process in housing. For example, for construction cooperatives, the digital tools are great for sharing document and putting some of the discussion on the net before meeting. It is also an opportunity for giving people a look into the construction site by uploading movies and videos.

2.2.3 Social composition



Figure 16: similar people, like young families, might find more ways to collaborate

The group of people living in the same building might influence the way they collaborate. Groups of people who are similar: students, elderly, parents and so on, may find more reasons to collaborate and have similar lifestyles. However some needs may not be solved and some groups are too busy to dedicating a lot of time to doing things together. Social mix allows creating interesting social combinations that work nicely making people collaborate in a way more similar to a big family.

2.2.3.1 Similar people collaborate more (?)

Spontaneous collaboration, the one that comes from the simple wish to get in contact, happens more easily between people who are alike. Probably one of the best examples is the fact that young families with children often feel for the first time the need to know other families with same aged children. The presence of children makes these families more similar. The kids have similar attitudes and their routine is often comparable. Another example are students: students find themselves on a certain point out of their parents' house, having to deal with a new place, studying in university and so on. Student residency makes it easier for them to study, cook and enjoy their time together. If so, should collaborative housing be composed by homogenous communities? CH that includes only people from a certain "type" may be an invitation for the creation of a very close and segregated community. Also, the division between classes and the impossibility to include people with disadvantages of economical or social type, are taking the basic idea of collaborative housing out of its way. In fact, hand in hand with homogenous building we see the development of multi-generational CH, or even a more complex idea of a social mix.

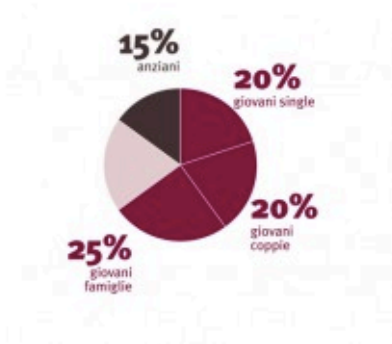
2.2.3.2 Social mix

The idea of the social mix comes mostly from social housing initiatives. Originally, public housing was dedicated only to people with very difficult economical conditions. This has created poverty ghettos and poor neighborhoods that people wanted to leave only. The sense of belonging or the care for the place were never there, as the solution was for those who couldn't afford other places. Their idea of a better future was certainly out of that place. The idea of new social housing and in many CH is to include people from very different economical and social ranges. The idea of the social mix implies one should also integrate a process of facilitation and the right tools and services. The social housing foundation⁶⁶ in Milan makes the following consideration:

⁶⁶ A social housing programme. <http://www.fhs.it/allegati/201109291642210.PHS.pdf>, retrieved 20.06.2013

“The social mix must be accompanied by a functional mix incorporating a variety of services into the residential context, contributing to improving the quality of life and ensuring services in the territory, oriented especially to help the most vulnerable. The development of a sense of identity and membership in the place where one lives is considered to be one of the most critical elements in providing incentives for active participation in community life, transforming the residents from simple beneficiaries of a service into active players in the determination of the quality of their condition and their context”

HOME - CANDIDATURE - A CHI È RIVOLTO



Il progetto è rivolto a tutti ma in particolar modo è stato pensato per ospitare differenti stili di vita e modi di abitare dei giovani: da quelli di adulti soli, con eventuali opportunità anche di coabitazione e condivisione degli spazi, a quelli di giovani coppie di nuova formazione, alle famiglie con bambini, ivi comprese quelle monogenitoriali.

- **GIOVANI SINGLE** (età non superiore ai 35 anni)
- **GIOVANI COPPIE** (almeno uno di età non superiore a 35 anni)
- **FAMIGLIE GIOVANI** (almeno uno di età non superiore a 35 anni)
- **ANZIANI** (età superiore ai 65 anni)



Inoltre gli alloggi verranno assegnati a nuclei familiari costituiti da una persona sola, eventualmente con uno o più minori a carico, senza limiti di età.

Figure 17: The right mix for Cenni project by FHS

2.2.4 Interaction with the surroundings

The house cannot be seen as separate from the neighborhood or the city. The relationship that CH can have with their surroundings is important for better using their potential in improving everyday daily life. In this case the vision of private spaces becoming not only collective but public will be explained. In particular I will give some insights from projects regarding the use of public space by communities. On the other hand I will discuss gated communities and gentrification, as these are critical issues that should not be ignored when talking about CH.

2.2.4.1 Relationship with the neighborhood.

In general, housing cannot be thought of separately from the urban surroundings. Collaborative housing that include some spaces that blur private and public can become a real resource for a given neighborhoods. In the previous best practices it was clear how this is possible by offering spaces that are commercial like a shop, a theater etc. It is also possible to open up the garden. But inviting people inside a space that is perceived as private is not so easy: in 2012 we held a workshop in the Politecnico di Milano to see how it would be possible to encourage people to come in the Bovisa campus. Bovisa is an ex-industrial district. In the second half of the XX century it has been a subject of great change due to the removal of almost all the industries. The district was left with many abandoned areas that were soon to become a problem for the residences as they attracted homeless people, drug dealers etc. The quarter has lost its main reason of existence and did not initially transformed into a suitable residential area with appropriate public spaces. The population has become more and more mixed as immigrants came to the district. Various projects of re-construction of the area slowly began and the biggest one was the creation of two university campuses for the Politecnico di Milano. Milano Bovisa Durando and Milano Bovisa La Masa are the two main campuses in the Bovisa district. The arrival of Politecnico di Milano in Bovisa area changed the district again, bringing in it young students and commercial activities related to them. The new life of the neighborhood has indeed brought to an improvement of public transportation and

the building of new residential areas, but public spaces like green areas or equipped squares are still missing. The Milano Bovisa Durando campus, hosting the School of Design, was built by the end of the 90s on the grounds of "Ceretti & Tanfani", a historical company producing cable railways and which made Bovisa a working class district. The place is part of this historical memory of the inhabitants. It is today a green space hosting sitting places as well as a cafe. In spring and summer time many students sit outside, enjoy the sun doing outdoor activities. It is an hidden public space since no one beside the university community uses it as such. The campus remains an "island for students" and most of the people who once knew the place as a former industry did not even have the chance to see how it has transformed. The two types of 'users' (university community and the permanent citizens) have very few contact points in common. The potential of improvement the campus could have offered is huge, but unfortunately it did not fulfill. Could this hidden space be opened up by the university community (students/designers/staff) to create extra space for the everyday life of permanent residents? 42 international students joined this workshop as part of their studying course in product service system design. They produced 6 toolkits:

- "C'è giardino per tutti/There's a garden for one more": to create a urban garden for the area, in the green spaces of the campus. (figure 18)
- "Il mio taccuino/My notebook": to introduce the natural part of the campus to children through collecting leaves, drawing and using the "frottage" technique.
- "Piccoli cuochi/Little cooks": to apply the design process to cooking according to Enzo Mari's theories, involving children.
- "Poli-tour": to discover the past and present of the campus, through some traces left by the ex- factory "Ceretti&Tanfani" and discovering the facilities of Politecnico di Milano
- "Peter e Gisella": to reclaim the public space through light sport activities linked to campus areas



Figure 18: a moment of interaction in "c'è spazio per tutti" 2011

200 people entered the campus on that day and the general feedback was positive. Feedback was collected by interviews, surveys and active observation on the day of the event. The surveys/interviews asked mainly:

- if people can see them selves coming more frequently to the campus for using it for their own activities or enjoying offered activities
- their opinion about the one day event and the single activities
- their wishes for future events in the campus

Active observation, including picture taking and filming was important for understanding different behaviors. The students understood immediately if there was something to modify in their project and some of them did it on the same day to have immediate results. Others took note for a future design of the project.

The overall results of the research have shown:

Interest by the people to discover the campus as it is today. Lot of people have known the place in it former use and during this event had the chance to see it for the first time as a university campus. Elderly people were very keen on seeing the transformation and tell the student about what use to be there before with a deep wish to strengthen the memory

- Understanding by the people of the new opportunities of the space (how they can use them). Entering the campus and participating in the initiative made people understand how they can normally use place. Many people showed interest in coming there with children to enjoy the green or ride the bicycle as the space is well protected. Also people involved on local associations were interested in initiating their own activities in the space. A group of neighbors from the same building was interested in maintaining the vegetable garden and creating a new green space for the neighborhood as they do not own one themselves.

A better understanding of the local context by the university community. The event let the university community know more about the context (and not only the confined places where they have lessons)

Generating new economic dynamics among local shops, citizens and students. The fund raising made by the students among the local commercial activities allowed them to get acquaintance about economic (and not only social) potential of the event. Those who understood the potential of collaborating with university showed great interest and availability and connections were made also for future projects.

Limited time of the event. 3.5 hours were a limited time for an event. From one side it allowed us to have a good level of results and tests but it could have

been longer and lasted for the whole day so to get in touch not only with the “morning” user of the area but also with the “afternoon/evening” ones.

Campus boundaries. Politecnico di Milano campus has physical gates that are perceived by citizens as a barrier. It is something that during the event create some problems since even if they were open and advertised as entrances they were still perceived as a limit to accessibility.

This workshop and its results were very useful to me for the further development of spaces in CH that could be open to the surroundings. Closing totally those building could lead to either offering an interesting solution to only very few people, or to even create some risky situations like gated communities. The other risk is to become or being seen as a gentrifier and there for get rejections from people that live in the neighborhood for a long time.

2.2.4.2 Gated communities

A gated community is a form of residential community or housing estate containing strictly controlled entrances for pedestrians, bicycles, and automobiles, and often characterized by a closed perimeter of walls and fences. The presence of shared amenities and services are the reason for having to discuss them while discussing CH. For smaller communities the shared spaces may be only a park or other common area. For larger communities, it may be possible for residents to stay within the community for most day-to-day activities. Given that gated communities are spatially a type of enclave, Setha M. Low, among other anthropologists, has argued that they have a negative effect on the overall social capital of the broader community outside the gated community.[1] Some gated communities, usually called guard-gated communities, are staffed by private security guards and are often home to high-value properties, and/or are set up as retirement villages. Some gated communities are secure enough to resemble fortresses and are intended as such.

This is a description of a gated community in the UK: *“Once you've been signed in and got past the gates and the security guards, you're in a totally different world to the streets you've just left behind. Bow Quarter is peaceful, quiet, litter and graffiti-free and, of course, feels totally safe. It stands in stark contrast to the noise, bustle and social mix found on the Bow Road at the end of the street. Behind the gates, the complex has its own gym (complete with swimming pool, whirlpool bath and sauna), supermarket, bar, restaurant, postal box and decked communal areas”*⁶⁷.

Gated communities might seem at a first glance as sustainable and collaborative neighborhoods. They might be extremely careful for environment friendly issues and have in their construction innovative forms of eco-architecture. They might have many shared amenities that is able to encourage a more collaborative life style. In truth, these

⁶⁷ <http://news.bbc.co.uk/2/hi/programmes/if/3513980.stm>, retrieved: 25.06.2013

communities are based on the wish to be separated and segregated from the rest of the city. It is presumed to be a secure place where people find other people who are a like. This separation from the rest of the surroundings is often also the reason that gated communities are not as safe as their habitants would like to think. They attract more external and internal crime because of the image they have in a certain neighborhood.

2.2.4.3 Gentrification

“Gentrification is a general term for the arrival of wealthier people in an existing urban district, a related increase in rents and property values, and changes in the district's character and culture. The term is often used negatively, suggesting the displacement of poor communities by rich outsiders. But the effects of gentrification are complex and contradictory, and its real impact varies⁶⁸”

Very similar to the question if the community inside the house should be a mix or not, is also the question about the neighborhood. Very often, CH are brought inside a “difficult” neighborhood with the good intent to make change in the latter. Or, the people in the CH community, from the middle class decide to go into a low-income neighborhood because it is what they can afford and they believe they have the power to bring change. This is true, and in the last years in cities like New York or Berlin poor neighborhood completely changed by the introduction of the middle-creative classes. This has improved the area and created a safer space for everyone. Only that, by doing this, the poor people could not afford anymore the living in the area and had to leave - hence the area is gentrified. Is it the fault of those people coming to the neighborhood? Should they feel guilty about that? Sharon Zuckin⁶⁹, Professor of Sociology at Brooklyn College and Professor of Sociology at the CUNY Graduate Center sustains that there are two steps to control gentrification without preventing people to move into poor neighborhoods:

⁶⁸ Grant, B. What is Gentrification. http://www.pbs.org/pov/flagwars/special_gentrification.php#.UZy49oLLe0A, retrieved: 25.06.13

⁶⁹ Zuckin in an interview reported here: <http://bigthink.com/videos/the-slippery-ethics-of-gentrifying>, retrieved 25.06.13

“The first step is to be aware of the cultural power that people have: on a personal level, a lot of urban dwellers live this contradiction even if they are not personally responsible for displacing a family or a tenant from a single-room occupancy hotel but it’s true that we with our consumers tastes are responsible for knocking out a lot of the old and bringing in a lot of the new. Also with the amount of rent or the amount of money we can pay to buy an apartment, we may be displacing people who don’t have that kind of money.

Right to stay in the apartments or the houses that they have. This is as true of people whose mortgages are being foreclosed, as it is true of tenants whose apartment complexes or tenant or apartment houses have been bought by big investment companies that thought they were going to make a killing on these places and raise the rent but are now foreclosing on their mortgages. There have to be actions by the state, zoning laws, protections, encouragements for small businesses and long-time residents. Don’t forget people who have been in the city for a couple of years are on the way to becoming long-time residents”.

2.3 CRITICISMS IN COLLABORATIVE HOUSING

Collaborative housing forms have some critical aspects and criticism that should be tackled. I sustain that some of it is only perceived until people get to know better CH forms. Those are the main entrance barriers we find in the process and that I will discuss in the next paragraph. Others are more concrete and have to do with the social class of people living in collaborative housing, the process they use and the ideology that brings them to this point.

2.3.1 Too much liberty, too less liberty

The liberty to choose during the construction process and during co-living is one of the main elements of collaborative housing. People, participate in all decision-making steps and have a say in what regards the building and its rules. This liberty is certainly one of the good aspects of CH and what makes many people join-in on such projects. It is however influencing the lens of the process, its efficacy and maybe, in a way, the happiness of people from the final result. One may think that if a person chooses everything then it makes him happier. But is it really so? First of all, here is a group to decide and not a single person. In a group decision there is always someone that makes a compromise. Even when groups choose by consensus, still, usually someone takes a step back from its personal desires. Second: there are some theories showing that more often we are happy when given a certain situation. We know that we cannot influence it and therefor produce what ... calls "synthetic happiness". In his studies he shows how people feel happy about things even if it wasn't their choice. It is the typical case when you expect something to happen and when it does not happen you say: " well, I am actually better off this way". ... Sustains that this is not something we just say to make ourselves feel better, but that we actually feel better about it. Synthetic happiness is the one that happens when we DON'T get what we want. Since we believe the "real happiness" (that happens when we do get what we want) is more important we tend to think it is better to choose and decide for ourselves all the time. Francesca, an old women living in the first cohousing in Milan told me that in the participatory process of deciding what will be in

the shared areas, many people proposed a swimming pool. She was absolutely against it: It felt like something belonging to a luxury house. It felt like it was a lot of money that might have been invested differently. She voted against it and she lost. The swimming pool was built and only a short time after that, Francesca told me how happy she was of losing that vote. Having a swimming pool has allowed her to spend the summer in Milan and enjoy the house even in the hottest days. That meant not only a personal well-being but actually saving money on going elsewhere in summer. The process of choosing and deciding everything together is long and full with conflict. It is useful for each member for appreciating the difficulty of the process, of understanding its complexity and finally be happy for making a shared decision. However, I believe the process should be balanced. The professionals dealing with the project should make it so that people can choose between a restricted list and not from everything that is available. Some choices should be made by the professional and communicated to the group. The group can comment and also modify parts of the solution, they should be informed and in control, but a total liberty of choice does not mean a total feeling of happiness.

The other side of liberty, too less liberty is more of a perceived feeling. CH often seem to be like places that take away the liberty of people of having their own spaces and their own personal view of things. It seems as though when choosing to live in a CH one loses the personal identity and becomes a community rather than individuals together. This aspect is clearly very much dependent on cultural qualities. In some cultures, eating and cooking together is very natural and would not seem like a threat to an individual. In some cultures children sleep together and are being taken care of as a group, in others children get their own space and time. In countries that have a communist past, people tend to step away from collaborative solutions, seeing in having a big private house as a sign of freedom from a non-wanted form of government. In most western countries, CH forms are still being strongly connected to an ideology of the Commune where people share everything including their economical income. Even if some CH still have a connection to those forms of living, most of them are not. Think

about cohousing: in cohousing people own or rent complete apartments but share other common spaces. Think about construction cooperatives where people get together mostly because they want to control the quality of construction and keep costs down. Think about hostels and students residences. None of those bring people together from a great ideological wish to share and put in common everything they have. Most of them are efficient and clever forms of sharing that makes the most of the "group power. The image however is hard to modify. Most people fear of having too much relationship with neighbors. Now, to say that there are CH forms where people do not come in contact with neighbors would be false. Part of the definition is the collaboration among people. There is though freedom of choosing the quantity of collaboration and the possibility to enjoy both individual and shared spaces. The trick is to communicate it well enough and created diverse solutions that could fit the needs of as many people possible. Another important thing is to ease collaboration and make it lighter.

2.3.2 Time consuming of a time saver?

As already said, the process of collaborative is time consuming. No process of real participation can ignore the need for people to dedicate time and energy to it. What about the co-living phase? Do people save time or have, again, to dedicate more time to activities when they finally live next to each-other? Most people perceive co-living as time consuming: " I have to cook for many people" " I have to be responsible for the garden" "I have to organize parties with my neighbors". This is a real issue in housing. It becomes particular true when the community is small and the people that are constantly active are only few. That would mean that those people take upon themselves more then they would in a traditional housing situation. Clearly they do that because they earn something else, they earn quality. However, even the more convinced people get tired often and after some time understands they do not manage doing EVERYTHING. How can this be solved or how it is already solved in some places? The simple answer is the liberty to do or not do. If people are engaged in certain activities and dedicate time they should find a personal interest to it. For example: if I care about organic food and I put my forces into

organizing a purchasing group, this means I really want to have organic food for myself. And so, the effort I do for the whole community comes from a personal need. Someone else in the community will then enjoy the purchasing group without putting too much effort into it. If the various activities are distributed over the community members, the single member is busy with one but "saves" time on another. Often, in communities of 20-30 families people do not reach this balance so quickly. The more complex answer may be much related to design and to management. Take for example the Swedish cohousing method: by management they decided to include a part of their contract to obligate people to participate in cooking for everyone. By doing that, in a community of about 100 families they manage to offer a hot dinner for all residents 4 or 5 times a week. The time a single person puts into it is about 3 times in a month of cooking (and taking care of grocery and cleaning). It is really not much if you consider that in the rest of the day one can simply go to eat with her family without worrying. So here we have a management rule that helps get through the complication of offering meals. Design can come in handy, as a careful design of some activities and services can make participation easier and save time. For example: sharing a car can be complicated but if the service is designed correctly then one may find it as easy as having a personal vehicle. The challenge here is a) simplify processes. B) Communicate well the "earnings" rather than what you have to give.

2.3.3 Welfare hubs or gated communities?

I began the discussion about collaborative housing sustaining that houses can become real urban welfare hubs. How do we make sure that collaborative housing are actually improving the city and are not becoming just another example of a gated (or semi gated) community? Many convinced groups go ahead with their project with the best intentions, but in front of the idea of opening up their house or garden to the neighborhood they stop. Suddenly it is too difficult to think that the precious garden you carefully designed with your friends will become a public propriety. The idea of you having to observe and actively maintain your garden clean begins to be heavy. In fact,

opening up is complicated to everyone, but groups that work together often tend to close up rather than open. The consequences may even lead to the creation of closed communities inside the large communities. People sometimes already have prejudices about construction cooperatives that arrive to their neighborhoods. The challenge here is to work AS SOON AS POSSIBLE with the people in the surroundings, inviting them to see what is going on and to know the project. This bilateral encounters are often the solution for everyone to understand the situation better and go out of mindset that is: us against them.

2.4 RESISTANCE TO CHANGE AND INNOVATION BLOCKS

Collaborative housing experiences are still far away from becoming a main stream. Resistance to changing the traditional way of building and living in houses comes both from the bottom (the future residents) and from the top (public or private constructors) (Table 1).

Bottom up resistance is mainly due to lack of information about the variety of solutions grouped under the name of Collaborative Housing, as well as about the process to follow in order to design a successful project. People do not really know about the options and the variety of collaborative housing. When they do, they often get the vision of popular newspapers that title articles about cohousing as: " back to the commune" or "sharing your home". The advantages of collaborative housing and the opportunities they bring are hidden behind the thought of a great ideological choice. In the era of privacy and segregation, those titles are not serving the good marketing for CH. Further more, even people with an initial openness toward the idea are hindered by not knowing how to work with, and adapt to, a group. They do not know who do go to for help, they do not understand how to approach the process. Some spontaneous groups trying to come up with their own idea of co-living, often do not manage to come across the first difficulties and conflicts on their way.

Top down rejection	Bottom up rejection
Not wanting radical innovation	Difficulty in understanding the new private-public balance
Poor understanding of the overall benefits	Not enough information
No long term thinking	Not enough models to follow

Table 1: botom up and top down resistance to change

The top-down driven barrier involves institutions in the public sector and non-profit organizations (like cooperatives, foundations, etc.), as well as entities in the private sector which do not have a clear and immediate perception of the advantages (in terms of social renewal, market advantage and innovative offer) that such an approach in the housing sector can bring to the whole city. Private constructors try to create new offers only by thinking about the house as a product. They innovate the materials, the shape, the form but they do not go beyond that. They do not offer ways to improve living, nor by thinking of services or a different kind of interior design. Public administration are often confused. Those form are usually somewhere between traditional social housing and luxury buildings. It is not clear for them how to assist and implement those new forms of living. Public administration is also known for not thinking in long term. Since those process are usually long, it is difficult for them to get involved. Breaking this barrier is crucial for housing solutions of this kind to be more widely adopted. Their advantages, as described above, will be far more evident to all actors as soon as best practices have been found for city contexts. Breaking the barriers and finding a way to enhance innovation in the housing field is the main motor of HousingLab. I wil describe the idea and concept of HousingLab in part 4. Before that, I would like to give a general view of the specific context, the city of Milan.

3.MILAN: SPECIFIC CONTEXT

Living together, like it use to be: In Milan, it is still frequent to see a particular type of house that offers many informal meeting spaces. The Lombard Court is a particular architectural housing style in Insubria⁷⁰. The courts are more precisely a set of houses built around a farmyard or courtyard, and which have a single common entrance from the street, through a front door. One might think of an aggregation of rustic country houses, such as farms, but in reality they are typical also in the historical centers of towns and villages of Insubria. There are also more complex courtyard houses, where inside there are narrow alleys, which connect several courtyards, giving the idea of a small private neighborhood with very few inputs from the surrounding streets, a maximum of three or four.



Figure 19: case di ringhiera in Bovisa Picture by Luca Volpe

⁷⁰ Insubria is a historical-geographical region which corresponds to the area inhabited in Classical antiquity by the Insubres. Secondly the name can refer to the Duchy of Milan (1395–1810). Therefore for several centuries this name stood for an area stretching approximately between the Adda river in the East and the Sesia river in the West, and between the San Gottardo Pass in the North and the Po river in the South. Thus it was a synonym of the Milan region and the countryside areas gravitating towards it.

They are concentrated in the provinces of Milan, Varese, Como, Lecco, Lodi and Pavia and at the expense of the name "Lombard-" even in the provinces of Novara and Verbania, areas historically and culturally Insubria or western Lombardy. Court yards houses next to urban centers, especially Milan, loose their original location in agriculture area and are developed as urban dwelling called: " Case di ringhiera" [banisters houses]: divided into blocks and apartments, to which one arrives from an outside balcony: kind of outside corridor all around the building that leads to each private home. In past, the private apartments did not have their own bathroom and WC. There was and external shared WC in the center of the court. Today most of these houses were renovated and offer now complete apartments. These houses are unique in the balance of shared and private spaces they offer. Three or four families have to cross the others in order to get to their entrance door. When one is leaning on the ballauster she can see everyone else in the building and the ground floor courtyard. This has made the courtyard a great playground for children. It is a case of an architectural form of building that design spaces for interaction. People can speak (or shout) at each other, people meet and talk, children play. All thanks to the large quantity of in between passages. This is the same reason for this kind of houses to slowly disappear. Either with strong renovation or with demolishing them and building new one, building in Milan are now extremely careful to privacy issues. 'Case di ringhiera', remains though a way of expressing a typical way of living that "as in the good old days". Even if no one would rather go back to the old days, they represent some missing behaviors in our society: socializing and sharing. When proposing new ways of living in Milan, like cohousing, one cannot be unfamiliar with this type of building in order to make the right balance between nostalgic memories and fears of loosing one's privacy.

Planning and building together: participatory planning for houses and neighbourhoods was carried out in the 1970s by Giancarlo de Carlo and Renzo Piano. In 1979, Renzo Piano and his first wife, Magda Arduino, developed the Neighborhood Workshop, an experiment in participatory design that would travel to old towns in Italy

and help restore crumbling buildings and reinvigorate local building trades. Piano and Arduino designed a crate like structure that could be transported on the back of a truck, then unfolded so its sides became the floors of outdoor rooms. An easily assembled, tent like roof provided shade and protection from rain. Instead of relocating residents during the rehabilitation of their town, the Workshop engaged them in the planning and construction efforts and kept them in their homes. Giancarlo de carlo wrote 'architettura della partecipazione', in 1973. It was one of the main book to reflect upon the involvement of "clients" in the project. De Carlo argued that the truth is that in "order" you find a frustrating boredom of a single decision maker while in "disorder" you find the fantastic fantasy of participation.

“His 1969 lecture and consequent article, Architecture's Public, remains a seminal text on the need for the inclusion of users in the design process and the inherently political role of the architect. De Carlo never separated architecture from politics, he was active in the Italian anti-fascist resistance as well as the post-war Italian anarchist movement, remaining an anti-establishment figure critiquing both architectural practice and academia for their preoccupation with form and glossy images over the social and lived experience. Much of de Carlo's built work is located in Urbino, a small Italian hill town for which he proposed a master plan between 1958-64, which has slowly been implemented over the past forty years. De Carlo's interventions in the form of new buildings and renovations have been carefully inserted into the built fabric and pay close attention to the social life of the town. Combined with his social housing at Terni, an industrial town close to Rome, the built work has provided a foundation for his views on the involvement of users and inhabitants in the design process. The Terni housing was built for workers of Italy's largest steel company and for de Carlo it was not only important to discern the wishes of the future inhabitants but to do so in company time. He insisted that workers be paid for these sessions and that management should not be allowed to attend. The steelworkers and their families were thus involved in each part of the design process with the architect assuming the role of educator and facilitator”⁷¹.

⁷¹ <http://www.spatialagency.net/database/giancarlo.de.carlo>. Retrieved 26.06.2013

Although implemented only in a few cases, their experience has remained a valid model for participatory laboratories, which became a focus of interest again in the 1990s. Cooperative work and cooperative construction are very common all over Italy and especially in the Northern regions. Beginning in the 1800s together with the overall cooperative movement, groups have found ways to build their own homes in a collaborative and economical way, sharing ideas and making decisions together. The formation of cooperatives of this type has as its aim the construction of homes and their distribution to members at cost price. This eliminates the entrepreneur's profit, and enables members to benefit from all the facilitations available to such organizations. Federabitazione, founded in 1954, is the Confcooperative's sector organization for the protection and representation of housing member co-operatives. Federabitazione, within the framework of the general policy guidelines of Confcooperative, outlines sector actions dealing with direction, representation and protection of housing cooperatives. These tasks are implemented through the coordination of territorial sector structures.

In particular, Federabitazione⁷² :

- a) expresses and promotes all activities intended to strengthen or favor the growth and re-qualification of the housing market, in urban contexts which take into consideration the needs of the community;
- b) collaborates, as requested by territorial structures, to favor the promotion of member co-operatives or co-operative participation, identifying opportunities for development, and in preparing coordination strategies in relation to regional housing policy;
- c) promotes, throughout the nation, vocational training initiatives for members, personnel, and the management of member co-operatives,

⁷² from the official site of federabitazione.

<http://www.confcooperative.it/C8/Federabitazione%20English/default.aspx>, retrieved 26.06.2013.

d) promotes, coordinates and directly carries out functions of assistance among the Regional Federations in order to foster the development of housing cooperatives in all Italian Regions, as well as the dissemination of positive experiences among the Regions;

e) provides constant and punctual technical, legal, economic and market information to the member co-operatives;.

It also provides the following services :

* consultancy and assistance to cooperatives in economic, financial, legal and organizational matters;

* search of funding through diverse channels;

* execution and publication of construction experimentation and research;

* promotional activities addressed to special users (the aged, young couples, students, foreigners, etc.).

3.1 PRESENT TRENDS (WITH BEST PRACTICES OVERVIEW)

On November 14, 2005 a opinion poll was launched to explore two relatively unknown dimensions of our daily life and our fancy: living in the city of Milan and the predisposition to adopting a lifestyle more focussed on sharing. The initiative was sustained by Confcooperative - Federabitazione, ANCE and IKEA and over 20 associations (cultural, professional and of interest).

The results of the study (elaborated by GPF associates) have demonstrated that:

- A quarter of Milanese suffer from social solitude and at least 20,000 families are willing to consider co-residence (Co-housing)
- Milan is a city of opportunity, it is much loved and its citizens do not wish to leave it: 43% of the sample is happy to live in this city and 80% is

substantially satisfied with their home (even if it's rented). They identify strongly with their homes, but for 60% of the sample home is an open place not a shelter.

- Of the 3,600 Milanese that replied to the questionnaire 90% denounced the loss of the community and of neighborly relationships and therefore aspire to a life where strong social values (friendship, reciprocity, sharing...) permeate.
- 40% of the sample has never met their next-door neighbors, but 75% would like to offer help and receive help from their neighborhood. Almost 50% of respondents would like to live in a real neighborhood, with a baker, a butcher, a main square and history or at least in an area full of people and events.
- 2,800 families and people declared that they were interested in co-housing. At the top of their co-residence "wish list" were all those services that help one feel better and that help to guarantee a balanced life: a swimming pool, a greenhouse\ vegetable garden, a communal library and a micro nursery school.

In line with the general trend of rising collaborative consumption, many new initiatives have started in Italy. Some examples are the diffusion of organic food purchasing groups, the success of car sharing and bike sharing services and also the Italian on-line platforms or mobile phone applications that move in this direction. (For example: *Marito in affitto*⁷³, or *Milk Please*⁷⁴). Also in the housing field some new experiments are happening, like the first co-housing in Bovisa area⁷⁵, co-housing "numero Zero"⁷⁶ in Turin and more. Here under are best housing practices existing in Milan:

⁷³ <http://www.ilmaritoinaffitto.it/>

⁷⁴ <http://www.milkplease.it/>

⁷⁵ <http://www.cohousing.it/>

⁷⁶ <http://www.cohousingnumerozero.org/>

- Comunità di famiglia: villapizzone

This community of families is located in Milan in a beautiful rural court building. In the end of the 1960s Volpi family was searching for a new way of living, working and raising their five children. They get together with a community of Jesuits and create a new way of living based on working, mutual help and solidarity. In the end of the 1970s they move to Villapizzone and had the building from the owner in exchange of renovating it. Today there are about 6 families, a Jesuits family and an association dealing with psychiatric patients living there. The building was given to the municipality of Milan and it is now the municipality who let the community have the space. They share a common garden and playground, which are also open to the neighborhood. There are also a big kitchen and living room for meetings that are also rented for private parties. The families have complete apartments of their own and conduct a regular family life. All the households put all their earnings in a common account and take what they need from it every month. In 1988 the association comunità in famiglia is born from this community to allow and facilitate the creation of new similar communities in Italy. Today there about 12 similar communities in Italy.



Figure 20: court yard of Villa Pizzone, Milano

- Cooperatives: The ecological house

Fifteen years ago a group of citizens of Milan's Bovisa decided to gather in a cooperative to build a house that would meet the criteria of green building, healthy living in a beautiful and comfortable environment, at prices more than a third lower than those of the market. The building, with its location and its structure, makes the most of solar power, is equipped with a sophisticated central heating system that saves at least 25% and is built with eco-friendly materials. The House also has a new concept of distribution spaces, with wide paths internal and external, in order to promote the socialization of the population and allow for greater access control and is equipped with a common room. Along with the building, which houses 53 apartments, was built a park of 10,000 square meters, open to the public, which acts as a climate regulator but above is a great example of integration between public and private spaces. The Ecological House demonstrates how to combine, through appropriate use of technology and the quality of the design, the needs of contemporary with respect to health and the environment.



Figure 21: "casa Ecologica" in Milan, during a guided visit

- Social housing (FHS)

In Italy, the definition makes reference to the so-called “Alloggio Sociale” specified in the Decree of the Ministry of Infrastructure in concert with the Ministries of Social Solidarity, Family Policy and Youth Policy of 22 April 2008. The Social Lodging definition was introduced partially to ensure that any public allowances in this area would not be considered “state aid” as defined in Articles 87 and 88 of the EC Treaty.

This definition, as well as that proposed by the CECODHAS (The European Liaison Committee for Social Housing), stresses the need for a multidimensional approach to the issue of housing, addressing the real estate components together with social and other intangible components relating to services. Construction projects were thus flanked by programs to support, guide and facilitate community development, with the overarching objective of enhancing the sustainability of local communities. For the purposes of the Social Housing Program, “social housing” thus signifies the set of dwellings and services, actions and instruments addressed to those who are unable to meet their housing needs on the open market for economic reasons or due to a lack of appropriate options on the supply side. The goal of social housing is to improve the conditions of these people by favoring the creation of dignified social and living conditions so that they may not only have access to suitable dwellings, but also to rich and meaningful human relations.

Cohousing.it

Bovisa Urban Village is the first experiment of cohousing in Milan. Thirty-two families live in a beautiful courtyard with a central communal garden, built in an area of a former factory. (The building in fact look like the ex-factory) The homes are attics and lofts with parking space in the underground garage (which becomes the space to do large parties, as he told Simone) and small private gardens, and more there is a swimming pool with sun terrace and a further 140 square meters of meeting space (a room with a kitchen, laundry and ironing, hobby room, storage GAS). In the construction of the building has been paid great attention to environmental sustainability: solar panels, centralized heating systems in low-power, high-performance insulation. The cohouser were accompanied on their journey by the team of Cohousing Ventures and the Department INDIGO they developed for this process ad hoc tools (with reference to the workshop "Tools for moderation and co-design") during the two years of training residential community, the cohouser have come to know, designing the common areas, activities to do together and spread their Charter of cohouser, which summarizes the basic principles of governance and operation of this intergenerational community, formed by young couples, families, but also senior.



Figure 22: The first cohousing, in via Donadoni 12, Milan

4. RESEARCH QUESTION AND HYPOTHESIS

Having seen the advantages and the benefits of collaborative housing towards a creative sustainable city, and having acknowledged the difficulties, barriers and blocks on their way, some questions are rising:

- 1. How to overcome diffidence and manage change towards sustainable innovation in urban housing?*
- 2. How to implement change management in the housing field to create innovation?*

Hypothesis: There is need for a change management process in the housing field to reach innovation. New organizational tools and services should be (co)designed for the success of the process. In particular the organisational tool is in the form of a LivingLab and the tools are from the codesign discipline.



The concept of HousingLab aims at supporting the Collaborative Housing initiatives by operating by small scale experiments in order to achieve a series of exportable methods and tools. To understand better the hypothesis, here is a description of both change management discipline and living labs:

4.1 CHANGE MANAGEMENT

To make people accept change, change management fundamentals can be used. Change management is a structured approach to shifting/transitioning individuals, teams, and organizations from a current state to a desired future state. It is an organizational process aimed at empowering employees to accept and embrace changes in their current business environment (Hiatt, 2006). Following the ADKAR model (Prosci, 1998), there are personal (of each actor) factors that should be approached:

- Awareness of the need to change
- Desire to participate and support the change
- Knowledge on how to change
- Ability to implement required skills and behaviors
- Reinforcement to sustain change

The change is therefore possible if each actor can reach those five elements. But to accept change is only the beginning. We also have to sustain it and keep it going. The last point in the Adkar model as well as Lewins model (1947) suggests: Unfreeze → transformation → refreeze.

The model developed by Kurt Lewin, one of the first models of change management which has interpreted the individual point of view, describing the transition as a three-stage process: 1. Unfreezing: overcoming inertia and dismantling the existing mindset and habits. The natural defense mechanisms triggered by the resistance must be overcome. 2. Transformation: it is characterized by a state of temporary confusion linked

to the transition. We are aware that the previous frame has been questioned but did not have a clear perception of how to replace it. 3. Refreezing: involves the consolidation of the new framework and new habits and their crystallization, bringing individuals to a confidence level with processes similar to that before the change.

Levin's model and the adkar model are very useful in analyzing the situation in housing and understanding how each individual stakeholder should go through each of the phases proposed. Richard Beckhard and David Gleicher develops a Formula of change:

The formula is: $D \times V \times F > R$ where

- D = Dissatisfaction with current situation
- V = Vision for a preferred future as compared to current situation
- F = First steps to do to start the change
- R = natural Resistance to change

So, for any change to occur, all elements needs to be superior to zero or the change will simply not be possible.

The first one, Dissatisfaction, in housing is something that is mostly perceived when related to price. And should be more present for what regards the quality of housing. This is why a vision is essential for making people understand alternatives. The first steps should happen as soon as possible for the change to happen, even if only in part. Like in a prototyping process. Here is why I think that a "living lab" for housing might be the tool in order to implement change management in housing.

4.2 LIVING LABS

Living labs are physical and virtual spaces where people can get involved in order to innovate and experience. McPhee Westerlund and Leminen define living labs as:

"Physical regions or virtual realities, or interaction spaces, in which stakeholders form public-private-people partnerships (4Ps) of companies,

public agencies, universities, users, and other stakeholders, all collaborating for creation, prototyping, validating, and testing of new technologies, services, products, and systems in real-life contexts. They are used for the development of communities for the use of innovation”⁷⁷

This definition is well-fitted to the housing field. More specifically: *“A living lab is an experiential environment where users are immersed in a creative social space for designing and experiencing their own future”* The way people live and the homes they may find themselves in, influence their future. Not everyone has the ability to design and plan homes, but everybody can be given tools that help them to understand better and imagine suitable and innovative future housing solutions. *“Policy makers and citizens can use living labs to design, explore, experience, and refine new policies and regulations in real-life scenarios before they are implemented”*. Going back to top down resistance, this is exactly the aim of HousingLab: to create experiences and prototypes in order to convince and reassure policy makers about their housing choices and orientation.

Living labs were actually created by the architect and academic, William J. Mitchell; Mitchell⁷⁸, based at MIT, was interested in how city dwellers could be involved more actively in urban planning and city design. He explored, in a particular way the integration of technology in the city towards the concept of smart city. *“The ENoLL (European Network of Living Labs) Living Labs recognize, as did Mitchell, that technology, in particular ICT plays a powerful catalytic role in user engagement and most of them are focused on using technology to support user engagement, research novel ways of engaging with users, and communicate findings rapidly and accurately using low-cost, mass- adopted tools such as social networks”*⁷⁹.

⁷⁷ [12] McPhee C, Westerlund M, Leminen S. Editorial: Living Labs: Technology Innovation Management Review. Ottawa: Talent First Network 2012-09; P.3-5.

⁷⁸ Mitchell, W.J.: Me++: the cyborg self and the networked city. MIT Press, Cambridge (2003)

⁷⁹ Mulvenna, M, B Bergvall-Kåreborn, J Wallace, B Galbraith, and S Martin. 2010. “Living Labs as Engagement Models for Innovation.” eChallenges, 2010.

How Living labs actually work centers on methods, processes and services. The methods encompass approaches, tools and techniques that often make use of advanced and innovative application of ICT to create and sustain dialogues with users, for example analysis of system logs or automatically collected behavioral data, ethnographic research, questionnaires, focus groups, and observation⁸⁰.

4.2.1 Existing “living labs” for housing

In the housing field, there is a growing movement of agencies or organizations that take upon theme-selves the role of helping and facilitating the creation of Collaborative Housing forms. These offer information, consultancy and usually create networks between all the interested stakeholders in a specific city. Some examples around Europe are:

Berlin: The main initiative organized by id22 is Experimentcity⁸¹, with the associated annual EXPERIMENTDAYS collaborative housing fair, exhibitions, excursions and workshops. The institute also maintains a participative Internet platform, WOHNPORTAL.berlin, on which new as well as established housing projects can publicize themselves, network and exchange information.

Stockholm: The Swedish National Association Cohousing NOW – in Swedish Kollektivhus NU⁸² – is an association working to promote collaborative housing and other alternative ways of living. The association supports existing co-housing units as well as groups intending to create new units.

⁸⁰ Følstad, A., 2008b. Towards a Living Lab for Development of Online Community Services. In Electronic Journal of Virtual Organisations (EJOV), Vol. 10, pp. 47-58.

⁸¹ <http://experimentcity.net>

⁸² <http://www.kollektivhus.nu>

Wien: Parq⁸³, a platform for high quality participative housing was designed by Dr. Gernot Tscherteu (Planhaus). Parq sees itself as a communicative link between residents and architect/planners/designers aiming to create smart, tailored and affordable housing solutions.

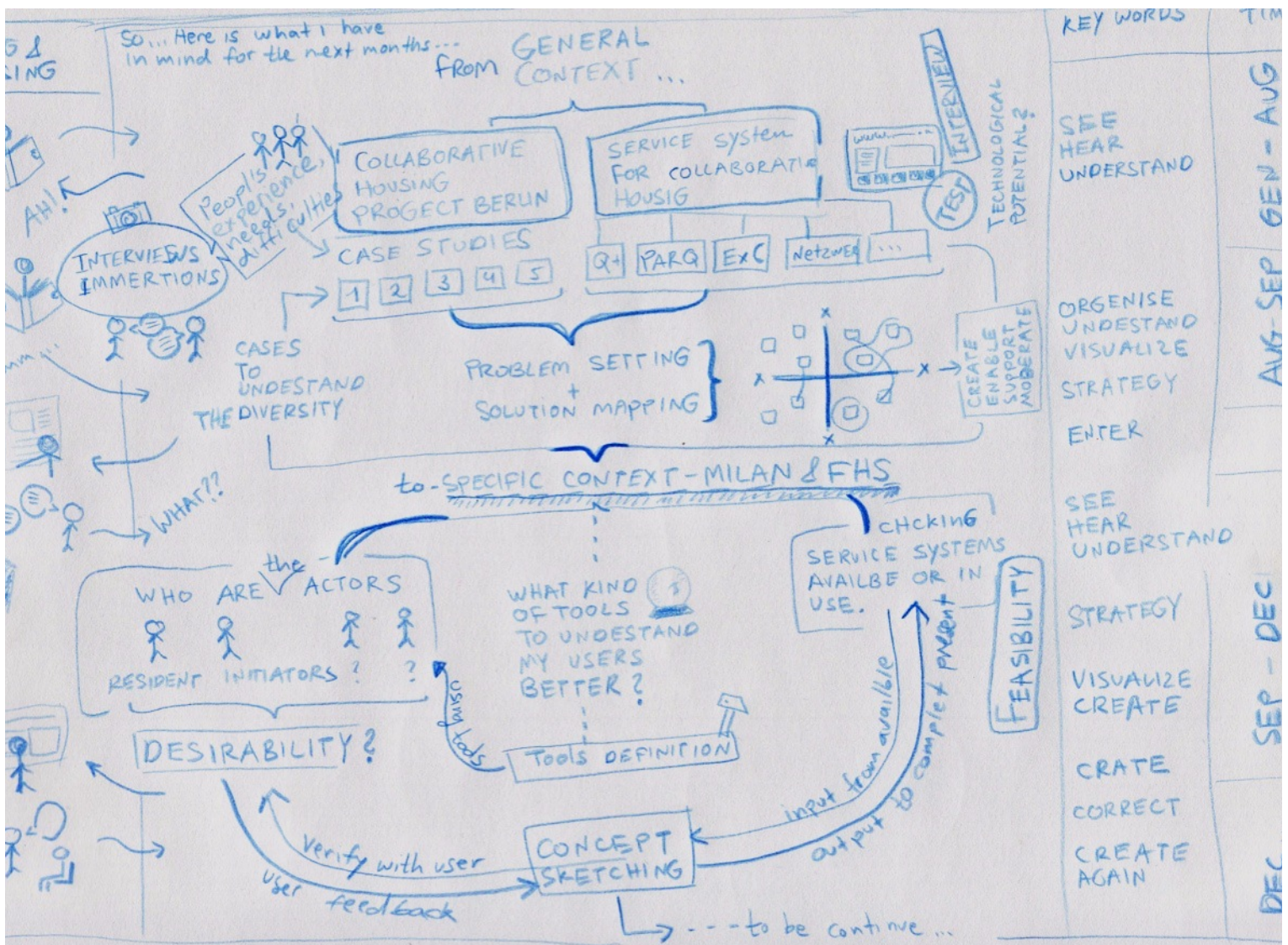
The screenshot displays the Parq platform interface. At the top, there is a navigation menu with links for Home, Über parq, Projekte, Hilfe, FAQs, Research, Presse, Suche, Kontakt, Impressum, parq-Team, liat, Log-Out, and Meine Einstellungen. The Parq logo is visible on the right. Below the navigation is a breadcrumb trail: Projekte > parq for everyone > Phasen > Phase 1 > Wie bekannt ist Timeshot. The main content area is titled 'parq for everyone' and includes a 'Projektentwicklung' section for 'Timeshot'. A survey titled 'UMFRAGE ABSTIMMUNGSMODUS' is displayed, asking 'Wie bekannt ist Timeshot, 11. Sep 2007 11:16' by user Benedict. The survey text reads: 'Ich habe mich ein wenig umgeschaut was die Funktionen betrifft, jetzt eine erste Umfrage zum Thema.' Below the text is a 'drucken' button. To the right of the survey is a poll titled 'Kennen Sie die Internet Community "Timeshot"?' with four radio button options: 'Na klar, ich bin jeden Tag dort' (selected), 'Ja ich kenne und nutze Timeshot', 'Ich habe mich mal angemeldet um Bilder anzuschauen', and 'Nein! Völlig unbekannt'. A 'Senden' button is located below the poll options. At the bottom of the page, there is a footer with the text 'ganz nach oben © 2004 parq | Impressum | agb // liat // MEMBER // MEMBER // 2 // 2'.

Figure 23: Parq platform interface

⁸³ <http://www.parq.at>

5. METHODOLOGY

In line with the above, to verify my hypothesis I will describe my participatory action research. Initially I will describe the overall project and its objectives and following will be a description of three main sub-actions. Finally results from each single action and a general overview of the results.



Participatory action research: description of overall project

I chose a participatory action research to be the main leading line of my activities. This has meant that together with an overall understanding of the literature and the theoretical background, I have developed several actions that were important for understanding the main features. The fact that every situation is different than another due to the context, culture and time factors, operating in small scale experiments verifying constantly the hypothesis is the most suitable way to approach this research. Also, since user participation is one of the main issues to be evolved in housing innovation, using PAR I am able to test this point right away since community participation is one of the methodology basics. The actions were used for the development of the design project and of this written final dissertation.

The flow of work is described in this image below:

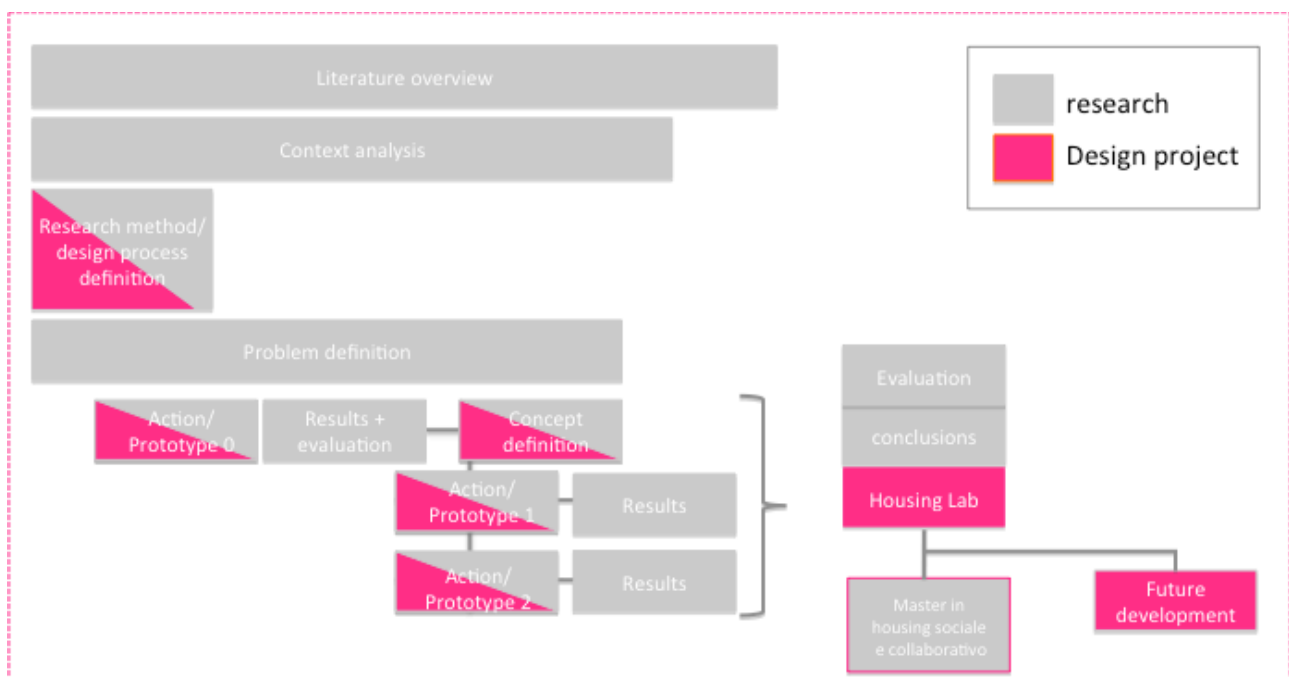


Figure 24: workflow for my research and project

The first action (action 0) was very much important for giving a stronger background and also for verifying the area of interest. It was essential for the creation of a network and for knowledge exchange. The other actions (1 and 2) are prototypes of the

future possible actions to be done by HousingLab. They differ from each other in many aspects:

	Future co-housers coaching	Social network for a co-op building
Modality	Face to face	Online + face to face
Tools	Probes + generative tools	Probes
Action type	Bottom up	Top down + bottom up
Designer position	Outsider facilitator, active observer	Inside member, facilitator, observer
ADKAR factors to work upon	Knowledge Ability Reinforcement	Awareness Desire Knowledge Ability Reinforcement

Table 2: the difference between action 1 and 2

Here under is the description in detail of each of the actions:

5.1 ACTION 0: EXPERIMENTCITY: A EUROPEAN NETWORK FOR COLLABORATIVE HOUSING.

Aims of the action:

- Define the area of interest.
- Verify the topic relevancy and the use of a European network of support.
- Verify the local interest
- Create a local network of experts.

In order to understand the collaborative housing trend in Europe and discover the various strategies existing over Europe we have participated in a European project called Experimentcity, coordinated by the German institute id22. The project is a collaboration of members from eight different European countries that meet in two occasions to

compare and discuss their experiences on the issue. The group was chosen very carefully to include people not only from different countries, but also from very different



Figure 25: a post card for promoting the experimentcity meeting in Milan

experiences. The Experimentcity Europe network first event was held in the context of the EXPERIMENTDAYS 10, a combination of international conference, project market, excursions and workshops. Experimentcity was born as a local project for Berlin and its citizens. It has done a lot to promote new ways of building and living. The idea to enlarge this experience was born in 2009. If exchange and communication of example is so fundamental for the implementation of such projects, why not do it on a European level? The project is a collaboration of members from eight different European countries that met in two occasions to compare and discuss their experiences on the issue. The group was chosen very carefully to include people not only from different countries, but also from very different fields. The experimentcity europe platform's first event was held in the context of the EXPERIMENTDAYS 10, a combination of international conference, project market, excursions and workshops. In the framework of the 2010 European Year against Poverty and Social Exclusion, experimentcity began to explore questions of affordability

and social inclusion, as well as political, social and economic conditions supportive to collaborative and innovative housing projects. Furthermore, through the development of common tools and terms, the meetings aimed to advance an improved and ongoing exchange among European partners.

The main activity for me, and the DIS research unit was the organization of the meeting in Milan. The meeting included various visits to best practices, and a series of workshops. The meeting is saw the use of design and co-design tools to create a productive environment where the material and knowledge collected in the previous meeting can be creatively elaborated. In particular, workshops will be made to advance the development of a European movement supporting collaborative housing forms.

The following workshops were held:

- A common lexicon, comparison and narration tools
- Communication strategies
- Networking, Internet, databases. A European website and online platform
- Moderation and co-design tools
- Implementation strategies and dealing with municipalities
- Grants and fundraising. Grant applications and common projects

The visitors in Milan will have the chance to visit three cases of collaborative housing in Milan. Casa Ecologica: the first ecological building in Milan, built through a habitants co-op. Urban Village Bovisa – the first co-housing in Milan, by cohousing ventures. Parco Paolo Pini : an ex psychiatric hospital transformed into a public-inclusive space.

Also, during the two days of meeting, local experts will be taking part in the meetings contributing from their knowledge and learning from the network. Two public presentations are programmed to discuss bottom-up and top-down collaborative housing initiatives on the local and the European level. These meetings aim to open-up the topic of sustainable housing in the Milan area and in Italy. The first meeting will take place on

25/03 evening, and will be hosted by CCL (consorzio di Cooperative di abitazione). In this occasion European examples will serve to inspire a local discussion on the topic. The second meeting will take place in the fair FALACOSAGIUSTA (DO THE RIGHT THING – Exhibition of Critical Consuming and Sustainable Lifestyle). In this meeting a reach debate will be created between European and local partners to understand existing initiatives and future possibilities. These are the full description of the workshops:

Building a European movement

This workshop starts at the common interest of the group in building a European movement. In this workshop we will use other examples of movements in order to define the what we would like to have and further develop a mission statement using the current drafts as springboards. We intend working in details on some parts of the statement in the workshops that will follow the next days.

Expected results

1. Description of the movement
2. Further development of a statement
3. Draft for activities list

Workshop conducted by Polimi and id22



Figure 26: a board of values, field in the workshop : European movement

A common lexicon, comparison and narration tools

How could we more effectively compare housing cultures in our different cities? How could we explain the differences between case studies? In this workshop we will continue working on the idea of a common glossary together with some visual tools for comparison and narration. We will define the most important elements that should be compared and make draft tools for this means. We will use some already available tools and modify and complete them for our needs.

Expected results

1. Best practice comparison tools + 2-3 examples
2. Case study card + 2-3 examples
3. Improved glossary

Workshop conducted by Polimi and Dick Urban Vestbro

Communication strategies

When we communicate or advertise collaborative housing, what strategies shall we use? How could the benefits be explained? How to overcome prejudices? What is the difference between communicating to citizens and communicating to municipalities? Those questions will be addressed with the help of communication experts from social housing foundation and polimi. They will use different media tools to explore the different strategies and make some examples with the group.

Expected results

1. Examples for advertising of collaborative housing (print and video)
2. Communication strategy guideline

Workshop conducted by social housing foundation and Francesca Piredda

Networking, internet, databases. A European website and online platform

In this workshop we will discuss concretely about a future European co-housing website. What is the ideal format and which features and functions are most important? Feedback regarding the current Experimentcity website will be collected and improvements suggested. We will learn strategies from the examples of the Wohnportal. Berlin and the Bundesportal from Stiftung trias. Focus will also be placed on the co-housing-cultures.eu project currently being considered by the EU for funding. How can this project be further developed and supported?

Expected results

- Feedback for existing websites
- Concrete suggestions for an ideal future European co-housing website

Workshop conducted by Stiftung trias, Gernot Tscherteu and id22

Moderation and co-design tools

In collaborative housing solutions the residents participate in planning their own solution/or in planning the way they will share their activities once they live together. This is not an easy process and there is a great need for experts and dedicated tools. In this workshop we will have a simulation of two co-planning situations and will use different tools to cope with the circumstances. The workshop is held by two experts in the area of moderation and co-design tools.



Figure 27: defining the use of the shared room, with a co-design tool developed by Roberta Condit

Expected results

1. Documentation of the simulation
2. Practical examples to bring back to each country

Workshop conducted by abcittà + Roberta Conditì

Implementation strategies and dealing with municipalities

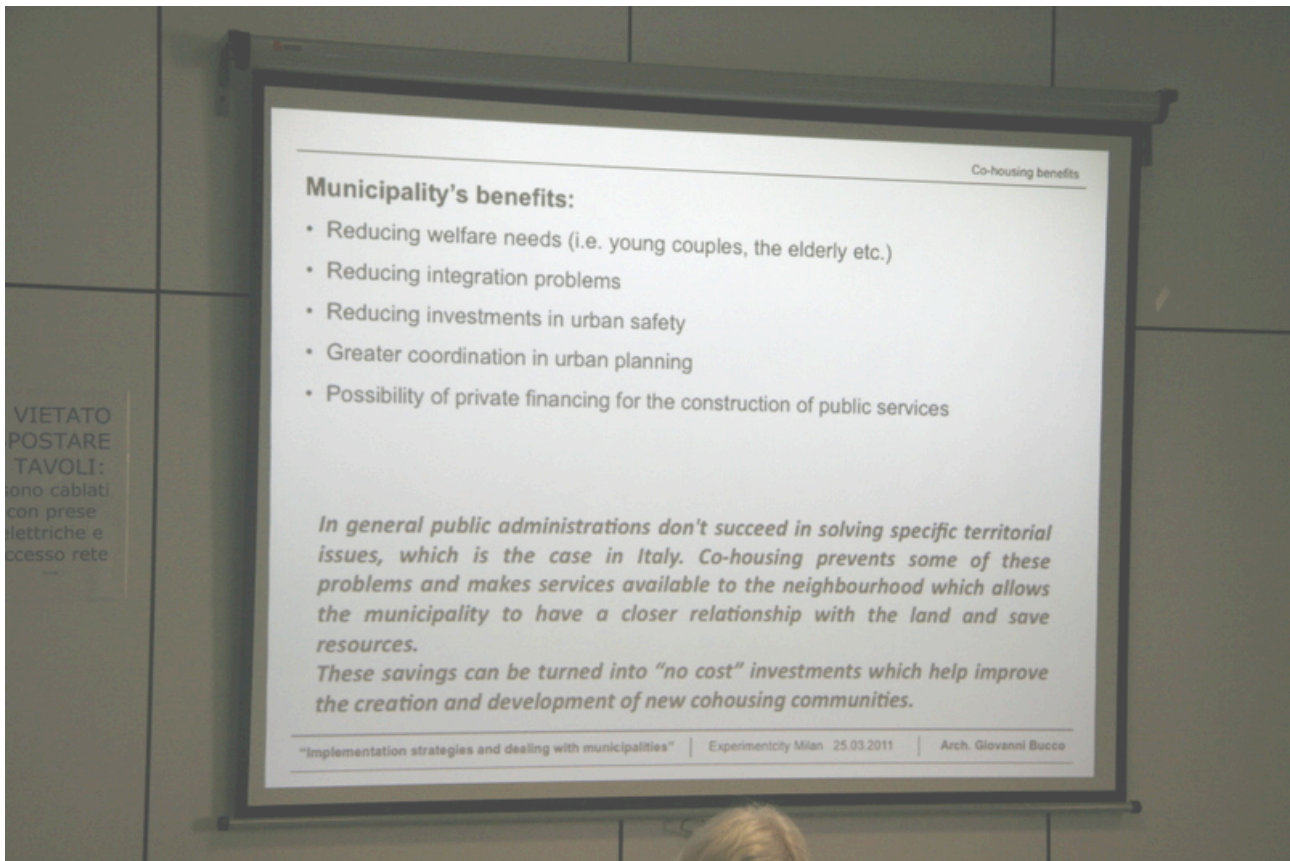


Figure 28: a slide explaining the benefits for the municipality from collaborative housing forms

What are the possibilities for local municipalities and governments for assisting collaborative housing forms? How to make good collaborations between bottom-up activist and top down decision makers? What is already being done in the different countries and what can still be happening? We will try to answer some of these questions, looking inside our own experiences and learning from each country.

Expected results

1. Road map for a better top down-bottom up collaboration

Workshop conducted by giovanni Bucco and Kerstin Kärnekull

Grants and fundraising. grant applications and common projects

What opportunities exist to ensure further funding of our projects, and what new projects or activities could be formulated based on these funding opportunities? We will bring together several proposals, select the most promising options and compose strategies for successful applications. Already applied for applications such as the Europe for Citizens program will also be discussed. A focus will be placed on grants which could possibly support the existing co-housing-cultures.eu project.

Expected results

- New ideas for funding opportunities will be formulated
- Find strategies to further support current projects

Workshop conducted by id22

Results from this action:

Two main outcomes of the project:

Brochure: the brochure contains a presentation of the project, of its initiators (project partners), of European co-housing model projects, a manifest – mission statement of the new European platform for co-housing, summaries of the Berlin and Milan events' activities, a co-housing glossary and references (recommended publications and websites).

DVD: The DVD contains the brochure as well as materials prepared by project partners for the Berlin and Milan events (presentations of their organizations, the history and current situation of co-housing in their cities, regions and countries as well as an overview of housing policies) and illustrative pictures. The DVD is available from id22: Institute for Creative Sustainability e.V. Please send orders by email to institute@id22.net with your address and the word "experimentcity".

Website: The website has supported the communication of the project, presenting the

concept and program of the Berlin and Milan events, and offers a networking platform where the partners' profiles, a collection of European co-housing model projects, a co-housing glossary and a discussion area are accessible. The website continues to serve as an important communication tool for the project partners and the general public. It will continue to be updated and evolve to serve the needs of the platform in the future.

To my specific research this action was very important. The exchange of knowledge and tools with other people in Europe that were dealing with similar situation helped me defined the basic lines for the development of housinglab. I realized how codesign tools were important to the process and was happy to know that some people took those tools back home to deal with their own situation. As a network we have created a mix of terms and a dedicated vocabulary. This is very helpful for international discussions on the topic and in order to avoid confusions.



5.2 ACTION 1: COACHING OF FUTURE COHOUSERS

Aims of the action:

- Verify if a coaching program can assist a group bring their dream project to reality.
- Understand what are the steps needed and which tools to use.

In this action a group of people interested in creating their own housing solution in co-housing are being coached from the very first moment. The group is assisted during several meetings in transforming them from singles to a group capable of managing a construction task. Creating a sequence of meetings with precise order and using design tools to involve the people improve their ability to create and share a project. The meetings are being documented in written documents and pictures.

This action begins when a couple (Anna and Emanuele) ask me to help them to create a cohousing together with a group of friends. We decide to organize a first meeting to talk about the idea and present the many possibilities of living more collaboratively. The meeting was fixed for 14/11/2010 and was held in Anna and Emanuele's home. There were about 10 people (or families) in that meeting. Before the meeting I asked everyone to fill in a short survey about cohousing. This was important in order to understand people's idea about it and what drives them towards cohousing. The survey was very similar to the one used by my research unit before launching the first cohousing in Milan. From the survey I understood that the group was formed from people between 27 and 45 years old. There were singles, couples and families with small children. In the survey people were introducing themselves, telling something about their families and about the reason that brought them toward this idea. Some of the answers are reported here:

“ We are a young family. After two years of marriage, Giovanni was born and we think he will not remain an only child. We like to spend time in the family, to have friends over for dinner, be in contact with nature, go out of the city from time to time. We like our socially valuable work. We are both very busy with it but we manage to be flexible enough to combine it with family needs. We detest shopping malls especially during week-ends. We like small local shops even though it is luxury nowadays. Many books and music are also part of our life. Some cinema, some theatre. We feel like we have a good balance between couple life, family life and individuals. We don't know exactly where we would like to live. We have many thoughts and we do not always agree upon them. We will have to. Eventually”.

“Laura, 35 years old, I live in Milan since 3 years now. I work for an editor. I have big passion: cinema. I like music, literature and theatre. I don't mind living on my own. I live in a small building and I am used to silence and to having a small but comfortable and beautiful home. The idea of “living together” is appealing for me. I spent one year in a “comunità di famiglie” and after this experience I tried several times to fix it so that I go to live with friends. One year ago I began with a cohousing project but it did not work out (for the project). Now, that I see there is a new opportunity I hope finally it will come true!”

During the first meeting I talked about collaborative housing and asked everyone why

he or she were there. The aim was to make people understand that there were some options and to understand what was the main orientation. The meeting went nicely and people were happy about that. After that meeting about 7 members decided they would like to go with the idea of cohousing and develop it. I proposed to the group to follow them in this process offering a path that included some meetings aiming in creating a group and sharing a scenario and then concrete steps towards finding the area and building their house. I explained them that the process is long and that all of them will have to put energy and time into it. Luckily I said so, because the process ended up being much longer than even I thought. We planned our second meeting after the winter holidays. Before the break, I wrote everyone an email, including the description of the second meeting and small picture I have made from the answers I got in the survey.

Abbastanza vicina e abbastanza lontana dalla città. La nostra casa è immersa nel verde ma collegata bene con il centro locale e con Milano. Condividiamo momenti del tempo libero, coltiviamo le nostre verdure e qualche volta alla settimana mangiamo assieme.

Tranquillità, silenzio e convivialità sono parole che descrivono bene la nostra casa.



Figure 29: the first vision visualization made for the group

For the next meeting I asked everyone to bring color newspaper, scissors and glue. We were going to make a small collage: "cohousing of my dreams". Also I asked them to take a paper and divide it in two, write in one side, why they like the idea of living in cohousing and on the other side what are their fears and worries in regards to cohousing. I will first explain the collage work and then come back to that second one. The collage of "cohousing of my dreams" is an exercise aimed at understating what does it mean to have a common vision and work in groups. Also, it is the first time that people begin to speak in a concrete way on the way they would like to live. More the 7 members came to the meeting. The word was passing and new members joined the group. We began our meeting again with self-presentations and explaining why each member was there. Then we began the collage activity. Here is the full description: The group met at the common room of a cohousing unit in Milan. The common room is like a big living room with an open kitchen and has a homey feel. The group was asked to bring color magazines and was given scissors, glue, pencils, colored paper and big sheets of white paper (A0). In the first part the whole group sat around a big table and had twenty minutes to cut out images from the magazines individually. They were asked to cut out images that represent (also in a symbolic way) elements they (personally) would like to have in their future housing situation. After twenty minutes I divided the group in three groups. They had one hour to create a collage together (Figure 3a, 3b, 3c). The work in the small group was divided in this way: each individual explained to the group what the images he/she had cut out represented. After everyone had presented their images, they had to understand which ideas they shared and how to create one collage that could be representative of the whole group. They had to decide which elements to keep and which to leave out, which to put in the middle and which at the side. They were also allowed to add keywords to the collage to explain their intentions better. Designers moderated group work in order to focus on concrete, clear visions. At the end of this phase the collages were positioned on the big table and everyone could see them. After a break we sat together to compare our impressions and understand which shared elements were most important.



Figure 30: working on the collages



All three collages presented many images with no clear focus of attention. This showed us how difficult it was for people to let their own images go. To make everyone happy, most of the images were kept, but distributed in groups. The participants added written titles to the different clusters. Despite the number of images, the clusters were similar. All groups expressed their wish to have:

- Shared work (mostly domestic work)
- Shared leisure (cinema, books, cooking)
- Spaces dedicated to children
- Sustainable consumption through group action
- Green areas (also vegetable gardens)
- Openness (to society)
- Relaxation (meaning making life a little slower and finding space and time for just resting)

This similarity between the groups directed the discussion towards deciding priorities. The different groups explained each collage and wrote the main outcomes. After this meeting, some people understood that their view was rather different than the majority and left the group. (Their idea was more similar to communities of self help). The rest of the group was invited to participate in a next meeting where we would see the pro and contra of cohousing.

To that third meeting, on March 6th 2011 everyone were asked to bring a paper with their positive and negative ideas about cohousing. Then, sitting around the table I asked them to separate the page in two, and to take the part of the reasons they would like to participate in a cohousing. They had to then cut the single reasons a part in order to have only one reason for each piece of paper, then we began reading out loud the reasons.

One began and if anyone else had another similar reason, they had to say so and read it out loud. We grouped the similar ideas together. We did the same thing for the fears and worries. The group was surprised to see how easy it was for those groups of ideas to be formed. Basically they all had very similar thoughts. We made an effort to give a name to the different groups. We talked about the negative notes and thought together how the group will handle them. Here are the group's of thought coming from this exercise:

The positive notes about cohousing and the main reasons for the members to be there can be divided in to these groups:

- Friends on the same floor: knowing your neighbors and having a feeling of being in a family like dwelling.
- All for one and one for all: self help and improved organization. Helping each other in daily activities, sharing the fatigues.
- The pleasure of doing things together: not only help but also being able to do stuff that you don't want to do alone, like cultivating vegetable or working with wood.
- Together, money has more value: the possibility of taking advantage of the power of a group in saving money. (purchasing groups and also space related issues, as in the following point)
- More space, better space: use the shared rooms in order to design better the personal apartments. For example shared space for washing machines, working tools or vehicles.
- We, in our surroundings: being able to improve the neighborhood by opening up to others. Not being a close community but a community that can bring benefits to the surroundings.

The fears and worries were also divided into groups:

- Declining friendships: how could we make sure that there is enough personal space and that the collective spaces and activities do not influence our friendships?
- I do not want to live in a cohousing anymore! : what do you do if in the end, or after some time you realize it is not a good solution for you?
- Will I be able to sell my apartment if I don't want it anymore? Does it loses value because it is in cohousing?
- How will we take decisions? What is the best way?
- The place we find: what if some people are not happy with the area we find or with the project?
- Long process: the process might get long, maybe too long for me
- The apartment is now too small/big for me, but I still want to live in cohousing. What do I do?
- Privacy: how do keep my part of privacy?
- Costs: will it cost more than a normal house? How do we divide the costs of the shared spaces?

All those negative points were discussed. Some were "resolved" by the group members immediately, by understanding that the rest of them had the same fear (like privacy..) Other points served for making fixed meetings on certain topics like: decision making and conflict solving, architecture of cohousing, financial aspects.

On March 16th 2011 the group met again and transformed the thoughts into a document. This document is the mission and vision document. The vision are few lines that defines the group and the mission is built from the points the group found on HOW they would like to do that. Those are very similar to the points I wrote above "pro cohousing". The vision is reported here and the whole document is brought in attach.

Vision:

"We would like to find a more human way to live, through neighbors relationship, friendly contacts and a life style that is economically and ecologically sustainable. We intend to create a mix of sharing and being autonomous, of private and public spaces, everyday life bargains and leisure". This document will be the leading document of the project for a long time. From the moment it was created, each new member had to except it when joining the group.

April 1st 2011, the group meets up to see the movie: *"Voices of Cohousing"* by Matthieu Lietaert

April 17th choosing the area: the topic is discussing the area in and around Milan where to look for an area. This was a meeting that many people from the group were expecting. It seemed like it might lead to problematic. People were thinking of very different areas of the city. We had maps of Milan and together tried to understand which one were completely irrelevant and where was the group needs concentrated. We drew lines on the maps and took notes about specific area. For example, a general area might be OK but a certain street in that area is to be excluded. The group decided both on a specific area and on other criteria that were helpful to define the brief for the research.



Figure 31: defining the desired area

April 27th: a meeting of the group to divide some work (contact with other stakeholders)

May 14th Conflicts and decision-making: a guest came to introduce the topic of conflict solving and decision-making. Especially, she introduces the consensus method, used by many cohousing communities to make decisions.

May 28th Talking about money and size of the apartments. From this meeting we produced a complementary document that is useful as a brief for architects to look for the right area and have clear the needs and the possibilities of the group. From this point on the group had to decide who will do that work, so several meetings were planned to meet architects and studios that are able to look for an area and make project proposals. Here begins a more technical and informative phase:

June 15th meeting with cohousing.it: cohousing.it is an agency helping groups to realize their cohousing. They are responsible for the first cohousing in Milan. They built 3 cohousing units in the Milanese area. During the meeting they explained their service and made an economic offer.

July 6th CCL Claudio Palmerini: CCL is a consorzium of building cooperatives. Its aim is to help group with realization of their house. They are also updated on real-estate areas and the group wanted to know if they had in mind something that might fit their needs or if they could be integrated into an existing project.

July 26th Meeting Rossella and Filippo: Two architects that made an offer for the research of the area. One of them has a lot of experience in cohousing and participatory planning.

October 2nd meeting to resume the situation and make a decision about how to follow.

October 13th ABCittà: some friends work for ABCittà, a social cooperative that deals with community participation and facilitation. They also prepared an offer for 6 month of research and project proposals.

October 15th meeting to decide to whom to give the mission and to consolidate the group by putting some money together in order to pay for this work. A total of 4000 euros is being collected. Some people decide they do not contribute but they still want to be up dated on the situation. Other keep on participating even if they have big doubts about their possibility to actually go on with the project.

October 24th the architects Rossella and Filippo are chosen and are given the contract for looking for an area for 6 month.

February 11th first presentation of the architects. They present four possibilities and projects to the group. I ask each family to fill up a form saying for each proposal why they like it and why they don't like it. This would help us in understanding better what are we really looking for.

February 16th 2012 a proposal arrives from other architects on an area in via Columella from Studio Costruzioni Italiane: Giovanni Bassi and Matteo Vischioni

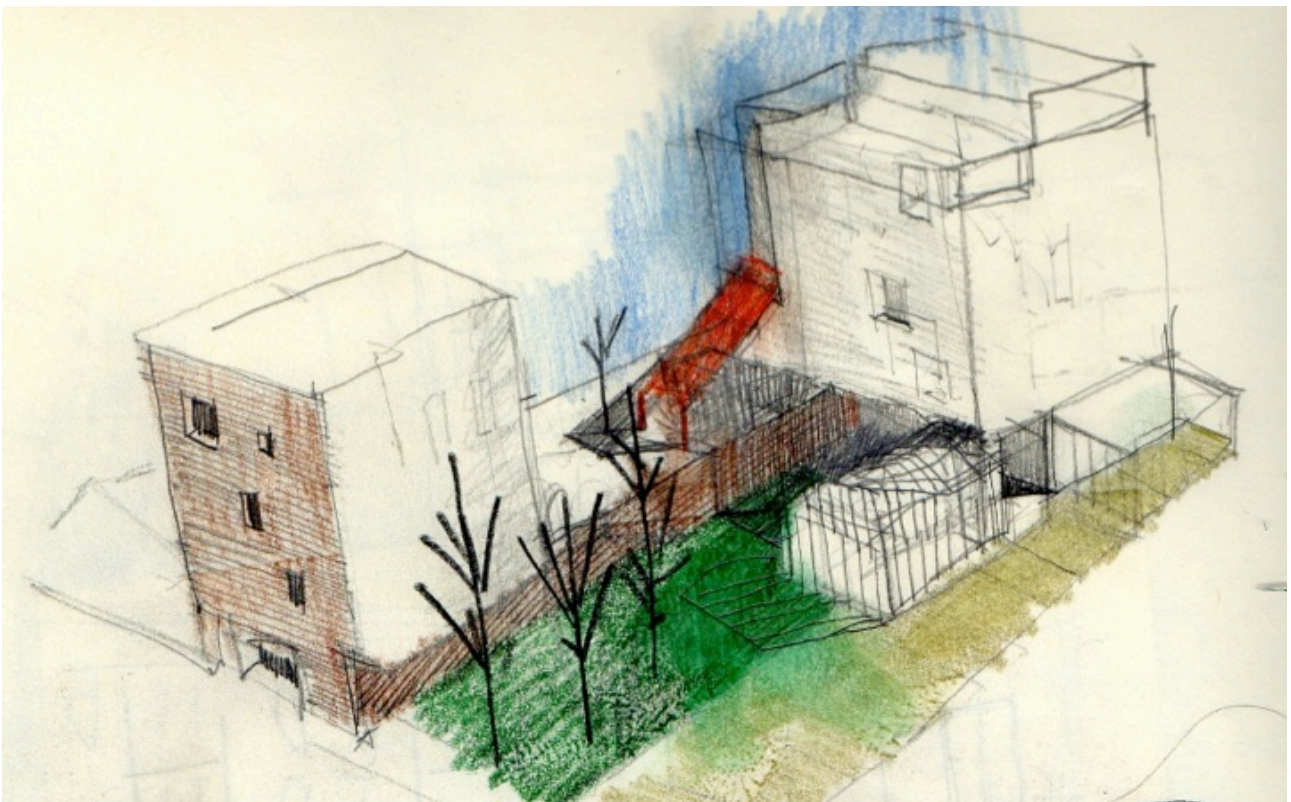


Figure 32: sketches for the project in Columella, Giovanni Bassi e Matteo Vischioni

February 25th the group meets to discuss the options by now. During this meeting the families confronted their options on the various proposals, forming a new document to send to the architects with detailed information about their reasons to refute all of the proposals.

March 12th the architects send an answer to the group asking to reconsider two of the options.

April 1st the group meets to discuss this letter and the proposals

April 10th meeting again with the architects

April 17th meeting of the group

April 23rd meeting with the architects, the architects present other proposals and also a table that resumes the projects by now seen.

May 6th meeting to discuss how to move on and to reflect on the architects work. There has been some conflicts with the architects due to bad communication mainly.

May 7th architects meet to discuss areas

June 12th reflection meeting

June 14th proposal on another interesting area in Via Stamira D'ancona. This proposal was important for the group, as it was very interesting and gave them an alternative to via columella.

July 10th reflection meeting

July 23rd meeting with the architects and owners of Columella

July 24th an OPEN meeting to have more people joining the group and decide together between the two projects. At this point, the group was rather small. About 5 active families. It was important to open up the possibility to other friends and see if the

group might grow. It was also important to involve them for deciding between the two areas. More people for on or another would make a difference.

July 26th meeting with owner of Stamira D'ancona.

September 12th meeting after the summer vacation, decision taken to move on with the proposals of Columella.

September 17th meeting CCL to speak about Columella

November 27th meeting again with CCL and owner of Columella

Operative phase:

After this meeting, it is clear the CCL do not want to go ahead unless there are more members of the group. At this point we decide to organize a presentation open to everyone and to present the project. The presentation is fixed to December 19th. we opened a dedicated internet page and a facebook page for the project.

December 19th public presentation: the public presentation was made during the evening of December 19th. Very close to Christmas vacation. We had a presentation of the group, housinglab and the architects. We showed the project and shared our experience by now. We asked people to leave their contacts. About 20 people were present that evening. Less then we expected but still a good number for the type of communication we had and the time chosen.



Figure 33: during the presentaion of the project



Figure 34: presentation of the project by the Architects

February 2nd meeting with new members of the group. People that came to the last meeting and also new people that did not make it to the first one. The group was now of about 30 families. CCL member is present during this meeting and is getting the idea that the group is serious and that we can go on with the project.



Figure 35: working on the mission and vision document to update it

February 22 an economic proposal to columella

March 2nd meeting of the group

April 4th the owner of columella refuses the proposal

May 4th meeting with the group for deciding how to go on with the project. The group choses to make another proposal to the owners and to increment the price. The offer is sent few days later. The owners answer proposing to make a kind of exchange: land for part of the building. The group refuses the proposal

Conclusions

Following the project and walking hand by hand with the people involved was important for learning about the process and the group dynamics made around the cohousing project.

Sustainability of the process: As it is, the process was very long. In fact it was too long to be economically sustainable. By that I mean that for this specific group it was the right thing to do. But if I was to develop a replicable process, that times would have to be made differentially. I am not suggesting any magical formulas. No one, can make a real bottom up, participatory process in a short time, but also very few people will go about 3 years making plans for a cohousing. Nevertheless, since this is the first time that a spontaneous group is reaching this far. Probably this first group could open up ways for future groups to come and to ease their way into making the process quicker and more efficient. Local stakeholders, like the CCL consortium, banks, the public administration will be more ready to give answers to those groups and to help them with the process.

Readiness of stakeholders and infrastructures: the general feeling is that you work in a new zone. No local actors or administrations are really ready for you. This means that the process is not only longer but also not as efficient as it may be. Some rules, regarding building social and collaborative houses are made in the local municipality urban plans, but it is not so clear to whom exactly the rules apply. How much social should you be, in

what way and to what expense? It is so that every time you meet a local stakeholder you have to begin again and explain the idea of the cohousing, the spirit of the group and the process you are following.

The importance of the designer in the process: Fortunately I can say that my role in the process was of a great importance. Having leaned from previous experiences and having built a large archive of case studies has given me the tools to really lead the group through a good and concrete process. I was able to give them the feeling that things were possible, to give them the tools to work towards the realization of the house and to facilitate and moderate the process. I am convinced this is something worth repeating.

Incredible energy from the people involved: it seems strange to write it but, in conclusion, one of the most incredible surprises of this action is to the realization of how much time and energy people are willing to give and donate because they believe there is a different way of living. Those people dedicate time, not only to build a house, their house; they dedicate their time to think how different life in the city may be if you have an important relationship with your neighbors and with the surroundings. They work hard because for them it is the only way to stay in the city. Many of them choose to live and be involved in planning cohousing as an alternative of going out of the city. This has given me the ultimate lesson about the fact that quality of housing really matters.

5.2.1 Lesson learnt

1. **Be transparent:** make sure you tell people the truth about time and energy they will need to go through this process. Make sure you let them know about the people you involve or why you choose not to involve them. This transparency and communication will help you build trust in the group and will also help teach the group what it means to work in a collaborative way.

2. **Be flexible:** the group is changing and evolving, plans might change. Even if after some time of experience and learning from other's people experiences you have in mind

a process that is plausible, keep in mind that it may need to be modified because of people's needs and wishes. It is better to have in mind clear objectives rather than fixed appointments and meetings.

3. **Listen**: listen all the time even if you already heard those words in other contexts and with different groups. Every group must go through certain phases. Listening will help you be flexible and adapt to the group. Listening will help you learn from people and help them get the right direction. Listening yourself will serve as a good example for the members of how to behave with the other members.

4. **Take decision and guide towards the right decisions**: use your skills and capacities to make decision or orient the group firmly towards certain decisions. We are not only facilitators of the process; we bring our knowledge and experience. We should, as in the previous points listen and be flexible but we should also show the ability to act in a strong and independent way. Our decisions in critical moments may influence the project and the stakeholders involved.

5. **Visualize**: always keep in mind that people need to see something in order to believe or even only understand. Make sure that proposals are visual enough for understanding them. Make sure that the communication is clear for the public. Make people visualize themselves by giving them easy to use tools. Making a house is a concrete project and the quicker people will learn how to express their ideas the better they will be able to discuss future design decisions.

6. **Be a mediator and a connector**: especially in difficult moments and through conflicts, be the mediator and also acknowledge when things go beyond your area of expertise and you need to involve other professional people.

7. **Make people understand they can do without you**: make the group meet alone, without you to discuss certain things. Give people clear responsibilities from the very beginning. Make them understand that the project is theirs, and in their hands. Step

back whenever you can to make them confront situations on their own. After all, this is what will happen once they move in.



5.3 ACTION 2: SOCIAL NETWORK FOR HOUSING COOPERATIVE

Aims of the action:

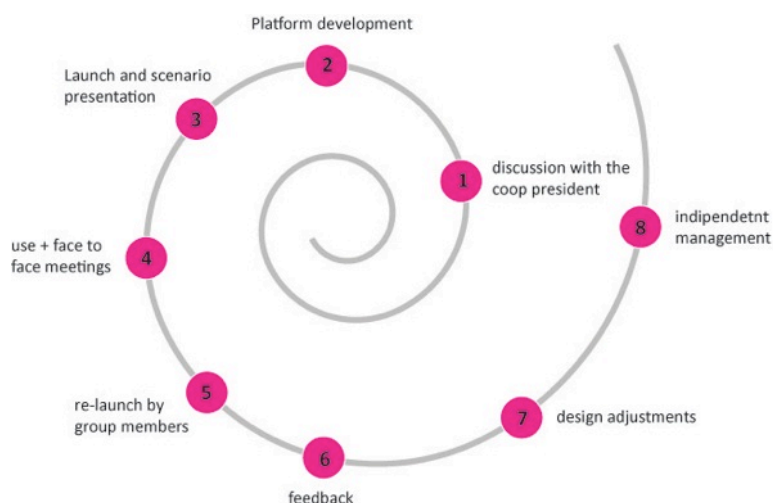
- Explore the use of digital tools for the creation of an active community.
- Understand of pre-housing intervention are useful for the community life.
- Explore both top down and bottom up interventions.

The house in Scarsellini street is a 100 apartment building built by a construction co-op that clearly understands the need and the importance of community life in the building. This can be seen by the way the residents are involved in the decision making process and by the fact that the constructor has included some common areas in the building plan. Nevertheless, in all the past co-op housing projects, the work on “making a

group” and creating social ties between neighbors did not happen before moving in. In a construction co-op the inhabitants are involved in the construction process, but there is no time dedicated to allowing bottom up ideas related to community life to grow and therefore to influence the design of common areas and spaces.

In the action of social networking I am the designer but I am also part of the project from the inside, since I have bought an apartment in the building (This is also the reason that I will talk about this project as “I” and not as “we)”. As well as the initial idea, this has given me, the opportunity to act from the inside. An online social network was built to support the creation of the community and to enable the community to come up with new ideas for the building and for their everyday life. This was accompanied by a presentation and a series of meetings with both the co-op president and the inhabitants. The idea is to open up possibilities to the future residents and create active participation in creating their still-to-come social life in the new condominium. The action is divided in several phases:

1. Discussion with the co-op president and consortium.
2. The creation of the online tool.
3. Launch of the tool and presentation to the inhabitants.
4. Use of the tool and face to face meetings.
5. Monitoring system: video interviews and surveys to both co-op stakeholder categories (inhabitants and collaborators).
6. Here below is the description of the action in detail, including some short stories that explain better the spirit of collaboration.



Living in Scarsellini st. 17, a personal story with professional conclusions:

Somewhere in 2009 I got an email informing me about a new house in construction in Milan. I was living in Berlin with my husband and was pregnant of my first child. We had in mind to go back to Milan and have thought about buying a place, but I couldn't imagine then it was the one. You do not just buy a house: you look at it carefully. You want to know what is around now and what is going to be around in the future. You look for the services you think you might need. You look at the proximity of your working place, schools, parks and shopping places. You ask people about the area. You ask your architects friends about the project. All those things and more are done before you decide to buy a house. And so we did. Around the birth of our first girl Noa we also decided to buy a house in Milan, In Scarsellini Street. Actually, to be precise, we did not buy a house; we decided to become part of a construction cooperative that was building a house. Our share in the house would be a very nice apartment with a big terrace. When we joined the cooperative, only few apartments were left and everything was still to be done. There was only a big hole in the ground. We followed the process of building from Berlin and made modifications to our apartment plans. Few months after that big decision, in the beginning of 2010, I began working on my PHD in design at the Politecnico di Milano. The topic was "collaborative housing". I couldn't possibly know what is my thesis going to be about exactly, but I wanted it to have some concrete experiments. I realized I had a great opportunity in front of me. From the one hand I was a part of a construction cooperative in Milan (which I knew only very little about) and from the other I was writing about socializing and cooperating in the city. It came to my mind that actually, if I wanted it, I could have known all my future neighbors already. The organization helping our cooperative had all the information and contacts of all 100 prospective owners. I thought this would be a good idea because we could, for example exchange opinions on the design of the apartments for example. The more I thought about it, the more reasons came to my mind of why I should know my neighbors now. I could for example ask them if they had children going to good kinder gardens in the

neighborhood. I could ask them what did they chose for their floors and why. We could create purchasing groups for things that were not included in the house, like furniture. We could just know each other a little and have a better feeling when moving in. The advantage of begin part of such a big house was that even if just a small number of people would participate It will still be enough to create interesting projects. It was clear to ME that I could benefit from it. But now I had to find a way to involve the consortium and the other neighbors. Wanting to meet people that are not currently living in the same area, an on-line tool was my first thought. We could have a dedicated on-line space for knowing each other. Our cooperative was created and assisted by a Consortium: CCL (consorzio Coopereative Lavoratori). This consortium has the aim of proposing new housing initiatives, collect interested people, and assist with fining construction companies and other suppliers. It has, as an organization, experts in engineering, architecture, economics etc. The cooperatives belonging to this consortium has realized and delivered about 13.000 apartments in Milan and the surroundings. Other 1.500 apartments are being built at the moment. Every cooperative has a managing board. The president of our cooperative was Graziella Antoniotti. I decided to write her and meet with her to discuss the possibility of launching a digital platform for the prospective users to join to. In 07/10/10 I met Graziella Antoniotti for the first time. This meeting was certainly a milestone in the project. Graziella, lives in another house that was made by a cooperative and for many years now was involved in encouraging neighbors to collaborate and use the available shared spaces. She immediately understood the spirit of the experiment and we agreed on making space for a presentation in one of the next official meetings. In the mean time I tried to understand which tool to use. I did not think about making a new one. This was not part of my aims or expertise. I decided then to take an existing platform. I chose NING because it seemed to have all the features I needed and a good price. I personalize it from a graphical point of view, choosing a simple theme and then defined the main Forum categories:

- (1) let's get to know each other: for personal introductions
- (2) together is better: for sharing ideas about how to use our being a group
- (3) shared rooms: to talk about the future use of our two common rooms
- (4) marketplace: for exchanging knowledge and tools.

Like any on-line social network, one has a personal profile and the possibility to add more or less information.

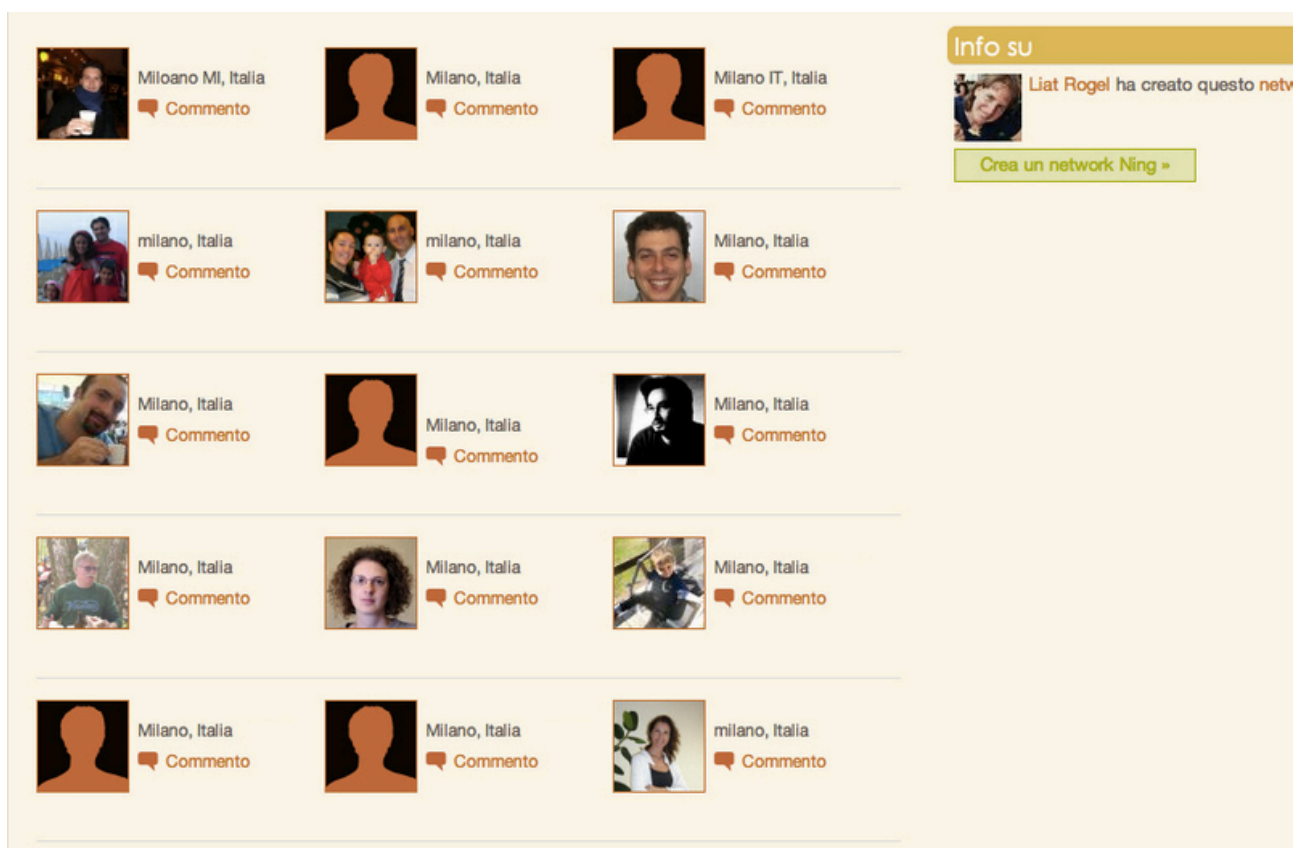


Figure 36: the memeber page interface

The platform was ready and finally we manage to find a time for a public presentation. In this presentation, in April 11th 2011, about a year before the building was ready and with a 6 months pregnancy belly, I talked in a public meeting about the opportunities offered by knowing each other. I used existing cases to show the power of collaboration and what we could do together. I also spoke about the two common meeting rooms we have and about the possibility to use them better and really make

them useful for our everyday life. The focus was, for the first time on living rather than building. I then introduced the social network as a tool for socializing, communicating and for sharing knowledge and ideas. At the end of the presentation I gave my email address and asked people to write me if they wanted to get the invitation to the platform. The meeting was also documented and a copy of the presentation with my address was sent to everyone by mail. This presentation was very positive. People were interested and came to me after the meeting to already suggest activities to do in the building. Some people were not interested and only one person was against the initiative, suggesting that to close relationships between neighbors could create strong conflicts and even damage security.

I had a good feeling and I was waiting to see how many people will actually join the network. About 12 people joined the network in the days following the presentation. The number of people was little but the contributions have demonstrated a great interest in making a better house. Those that joined in has indeed captures the spirit of the initiatives and contribute with either presentations that were explaining their reasons for joining the platform, or suggesting ideas that could benefit from a group spirit. Gaetano wrote the first personal introduction. Already in the first public presentation of the project, this "man in a suit" that was so much interested in this surprised me. Already then, he asked about the possibility to create a self-managed kinder garden. I would discover later that he was waiting for a child, as was I. Gaetano wrote:

"Hello I am Gaetano and together with my wife Nicoletta we also reserved an apartment in Scarsellini street. (...) In a few months our family will be gladdened by the arrival of Gabriele our first child to whom we hope to give a stimulating, friendly and healthy living context, as houses used to be. The purchase of an apartment in Scarsellini has been for us an (pass me the term) ideological choice as well as economic and we liked the idea of a participatory construction of the house (...) and the criteria of green building. We are therefore particularly pleased to

accept the invitation launched in the last assembly for an active participation in the definition of the use of our shared rooms, and to establish right away good neighborly relations”.

As a reply, Giovanna writes:

“hello, we are Stefano and Giovanna. In a month we will get married and the house in scarsellini street will be our first home. We are happy for this choice and we hoped from the beginning that this will be an opportunity for us to meet people with whom to share many experiences. This is why this online social network seems like a good idea and we like it. Looking at the future, the idea of self managed kinder garden is great! We would also like to participate in the organisation of a food purchasing group, the shared spaces and any other convivial event”.



The image shows a screenshot of a Facebook post. At the top left is a profile picture of a man. To its right is the title "Wi-Fi per Tutti". Below the title, it says "Post aggiunto da" followed by a name and "il 6 Maggio 2011 alle 13:30 in Assieme è meglio (Modifica)". There are two icons: an envelope icon for "Invia messaggio" and a speech bubble icon for "Visualizza discussioni". The main text of the post reads: "Ecco qui la prima vera condivisione. Ragionando un po' sulla nostra bella casa ho fatto un po' di conti come Liat. Se siamo circa 100 famiglie abbiamo circa 100 telefoni fissi e più o meno altrettanti contratti ADSL internet... In realtà con un unico router potenziato per un raggio di 200 metri potremmo avere un unico contratto ADSL (naturalmente con password) per tutto il condominio. Per chi poi ha esigenze particolari può sempre attivarsi un abbonamento singolarmente come già aveva previsto. Si possono trovare diverse soluzioni comunque tutte convenienti. L'importante è organizzarsi. I vantaggi sono palesi anche se... Lascio a voi onori e oneri della proposta..."

Figure 37: shared Wi-Fi, the first initiative to be realised

When I first launched the platform I thought the first use would be personal presentation (category 1) and that this would lead to a sense of community and beginning to imagine new ways of collaboration. Actually, Gaetano and Giovanna were the only one that made a personal presentation in the first weeks. Category 2 was working much

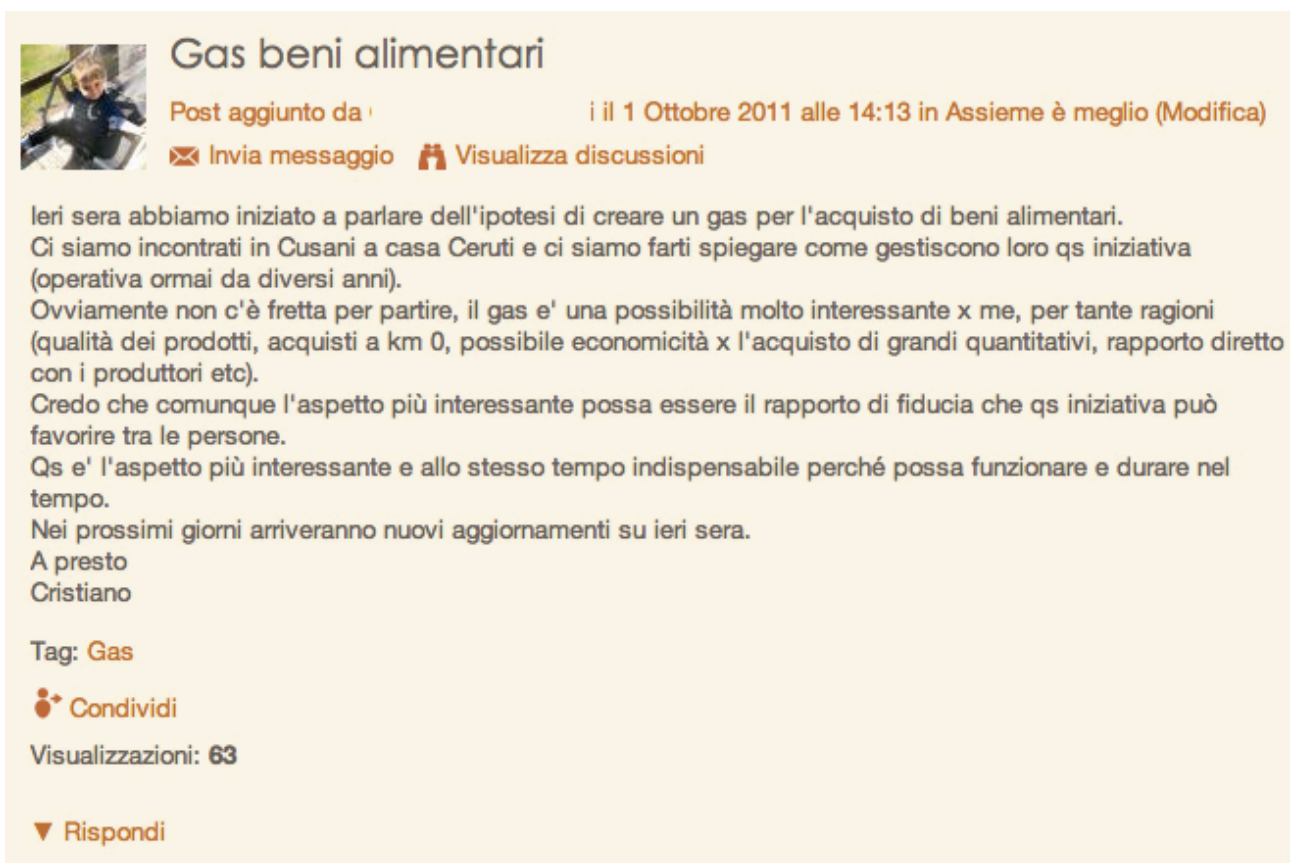
better, with people suggesting car-sharing, in-house kindergarten and shared WIFI. This last one really encouraged a dialogue between members and activated them towards the realization of a shared Wi-Fi connection. Daniele suggested it because it was absurd to think that 200 families would each have their own contract when a single router could have been enough. Daniele got immediate response from Carlo and Alessandro that discussed it online and then began to ask for offers, get information from companies and even make power point presentation to show to other members. It was the first initiative that was born.



Figure 38: the first non-formal meeting of the future niehgbours

Two months after the launch we had our first face-to-face meeting. We have met before in the assemblies of the consortium but never met to know each other. The meeting was helpful to get an idea of what was happening on the Internet site and to get new ideas. It also served to talk about our shared spaces and their uses. About 12 people

participated. Graziella Antoniotti joined that meeting and all the other meetings we had with that group. Her support was very important and gave people the idea that things could really change. She assisted, where possible, in bridging the gap between the residents and the consortium decision makers. She explained how some initiatives, like the shared Wi-Fi would never have taken place without people's participation and how these could also be innovative elements for future buildings. The first meeting has brought news to the on-line platform as well. Many people took upon themselves to ask for discounts around. This was done mostly for home furniture. Many companies were glad to give us reduced prices if we were more than 10, 15 families. The meeting was helpful also for enriching the online platform. After the meeting more people introduced themselves and wrote some news about ideas and discounts. I wrote a summary of the encounter and posted it on the web site, so that other people could follow the news.



The image shows a screenshot of a forum post on a light yellow background. At the top left is a small profile picture of a person. To its right is the title 'Gas beni alimentari' in a bold, dark font. Below the title, the post is attributed to 'Post aggiunto da [name]' and dated 'il 1 Ottobre 2011 alle 14:13 in Assieme è meglio (Modifica)'. There are two icons with text: an envelope icon for 'Invia messaggio' and a speech bubble icon for 'Visualizza discussioni'. The main text of the post discusses a proposal for a purchasing group for food goods, mentioning a meeting in Cusani at the Ceruti home and listing benefits like quality, local sourcing, and economic advantages. It ends with 'A presto Cristiano'. Below the text are tags for 'Gas', a 'Condividi' button with a plus icon, and a 'Visualizzazioni: 63' indicator. At the bottom left is a 'Rispondi' button with a downward arrow.

Figure 39: operative proposal for the purchasing group

The number of members and ideas increased after the summer break: category 2 was filled with many different ideas. This encouraged another face-to-face meeting and

the re-launch of the initiative. The second face to face meeting was important for the creation of the food purchasing group. A small group of neighbors volunteered to begin and collect information on how to create such group and from which farmers to buy food. I will write more about the purchasing group here under. Many new people joined the network and, after the meeting, people added much more information to category 1, trying also to figure out who is living next to them in the building and putting faces to ideas. This curiosity about where people live has led to the creation of a house diagram by Alessandro.



Figure 40: a scheme of the localisation of neighbours in the building

It is a nice way to represent the house as a place where people live and not only numbers of apartments. Category 3 was discussed after several inputs from a smaller group about common spaces design. Category 4 was never really used before moving in, instead a new category was suggested and implemented: Talk about it with your neighbors.

Blow is a graph showing the registration of members on the platform and some moments that were important for their growth.

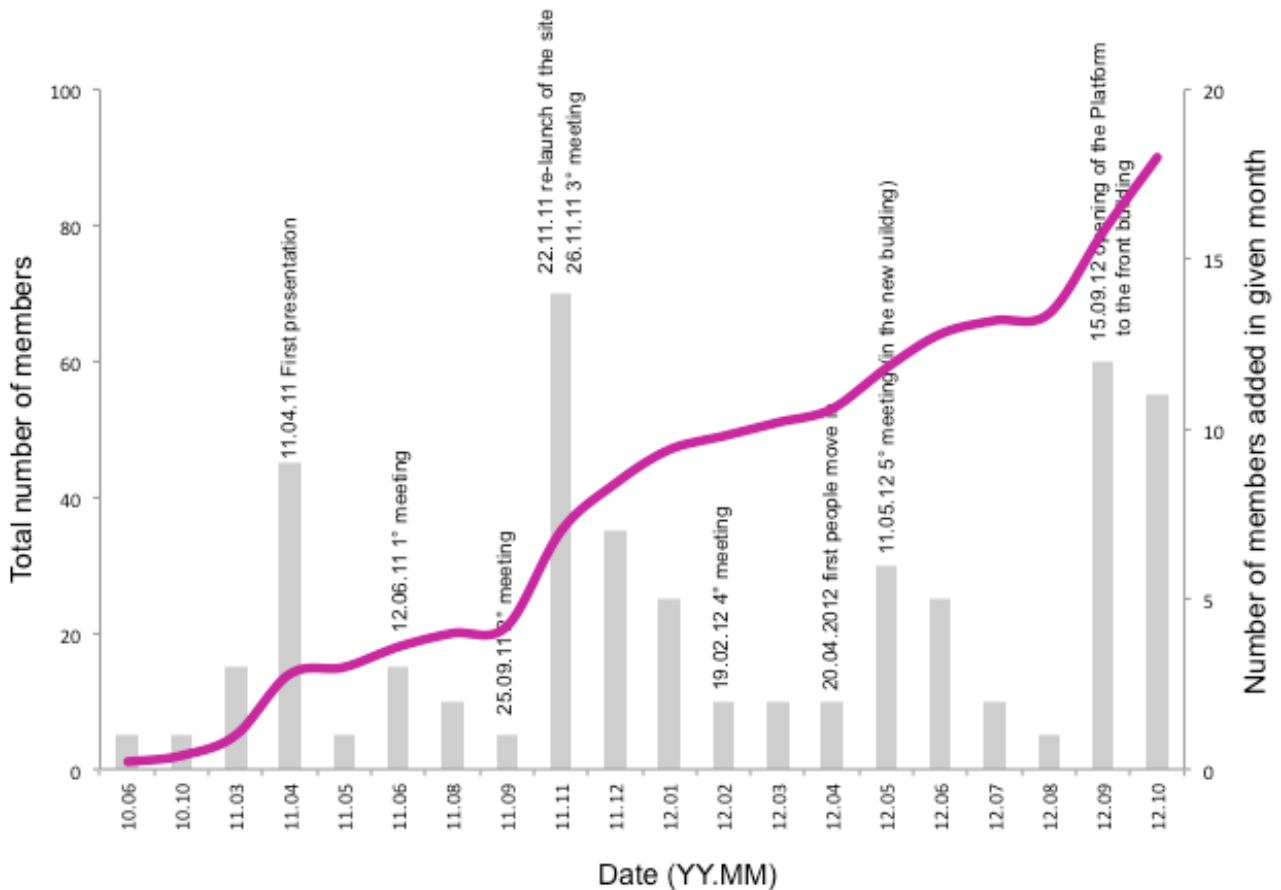


Figure 41: The members on the on-line platform, from Oct 2010 to October 2012

Other two encounters were made before moving in: one before winter holidays and one afterwards. Both of them had seen many people participate and made some ideas concrete. They were also important for defining better the use, the furniture and their rules for our two shared rooms.

The shared rooms

Most of the big houses built in a cooperative in Milan and the area have a shared room. This is usually proposed as a meeting room for routine meetings between the owners. However, having a meeting room that is used only few times a year is a pity and

an economical waste. Also in some buildings the residents desired to have more social activities in the room. CCL has developed this idea and when building a house, the shared rooms are now part of the design and thought of as places that can facilitate social activities and encounters. For example there is a kitchen, a toilet and some of the basic furniture. In our case, two rooms were planned and build. When we began to meet each other on and off the platform it was important for us to understand how to use the rooms. This meant: beginning from an idea of use, through the furniture and regulation. We created a smaller group of people that took upon themselves to think about the rooms. The first proposal was about the destination of the two rooms. The first one, on the first floor, next to an inner garden was proposed as children space. The ground floor with an equipped kitchen was proposed for sports activities, dinners and as a big "living room". Both rooms could be used in different ways: a free access, planned activities and private booking. This was the first description of the rooms:

Room on the first floor:

This room is dedicated to children. Being next to the garden it is suitable for playing inside, afternoon snacks and meetings between parents. In the mornings it could offer a space for home stay parents who want to share some quiet moments in company. There are sofas and a kitchen to prepare something to drink. In the afternoon, the children can eat together an afternoon snack at tables suitable for children. These tables are also used to do artistic work or sociable games. Another space is set up with soft mattresses and pillows for children or for those who want to relax and read a book. In the room there are cabinets and boxes of toys that we share. The room is always open in the afternoon, while in the morning can be opened on request.

List of furniture):

- Cabinets and library to contain books and games
- Washable soft mattresses

- 2 children tables
- 8 children chairs
- 1 sofa and armchair (light and covered with washable material)
- A coffee corner / kitchen (sink, kettle, cups, etc ...)

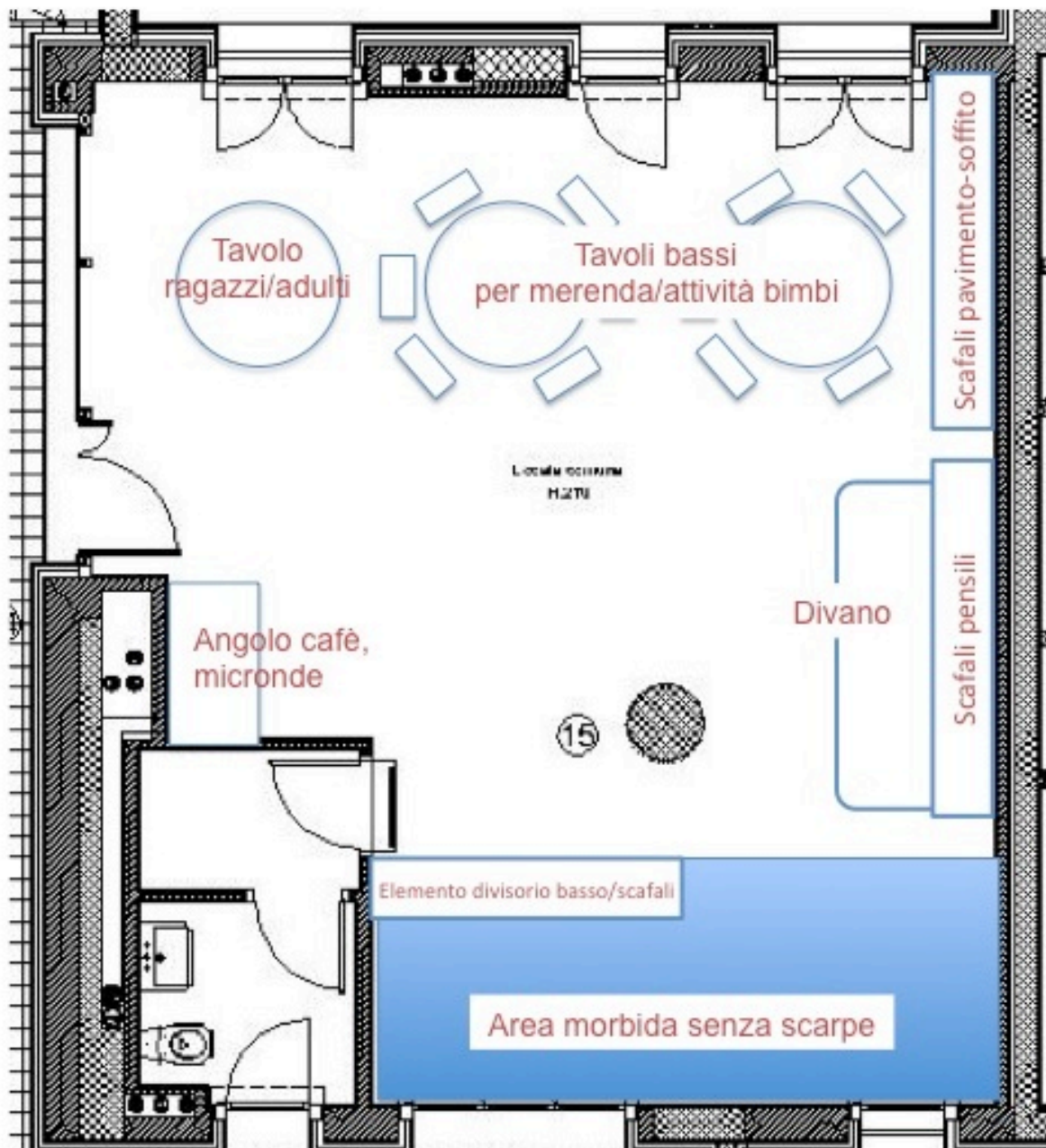


Figure 42: furniture hypothesis for the shared room on the first floor



Figure 43: the shared room on the first floor in use

Room on the ground floor:

During the day it's a relaxation room, for reading and for study. Where you go to read the newspaper, do homework or work. It is simply furnished with tables and chairs and a corner with some most comfortable armchairs. There is a big library where everyone can leave books they want to share, and in the kitchen there is always the possibility of preparing a tea or coffee. For courses and meetings: this is also the room where courses and meetings take place. It is equipped with a wardrobe with mirrored doors. In the closet one can leave mattresses or other useful equipment. In order to organize seminars or film club there can also be a projector.

For the food-purchasing group: there is a utility room and a fridge to keep the food ordered until it is withdrawn.

For dinners: dinners (private or shared) are easily achievable: the kitchen is ready, (to heat the food), there is a dishwasher, and also all the plates, cutlery and glasses required.

For parties: The festivities easily take place here. All furnishings are light and easy to move to have the space you need.

List of furniture:

- Tables (about 4 to 6)
- Chair (folding or stackable) 30
- book shelves
- Wide closet with mirror doors
- Kitchen inclusive of fridge, electric oven, dishwasher and microwave.
- 3-4 armchairs comfortable and lightweight.

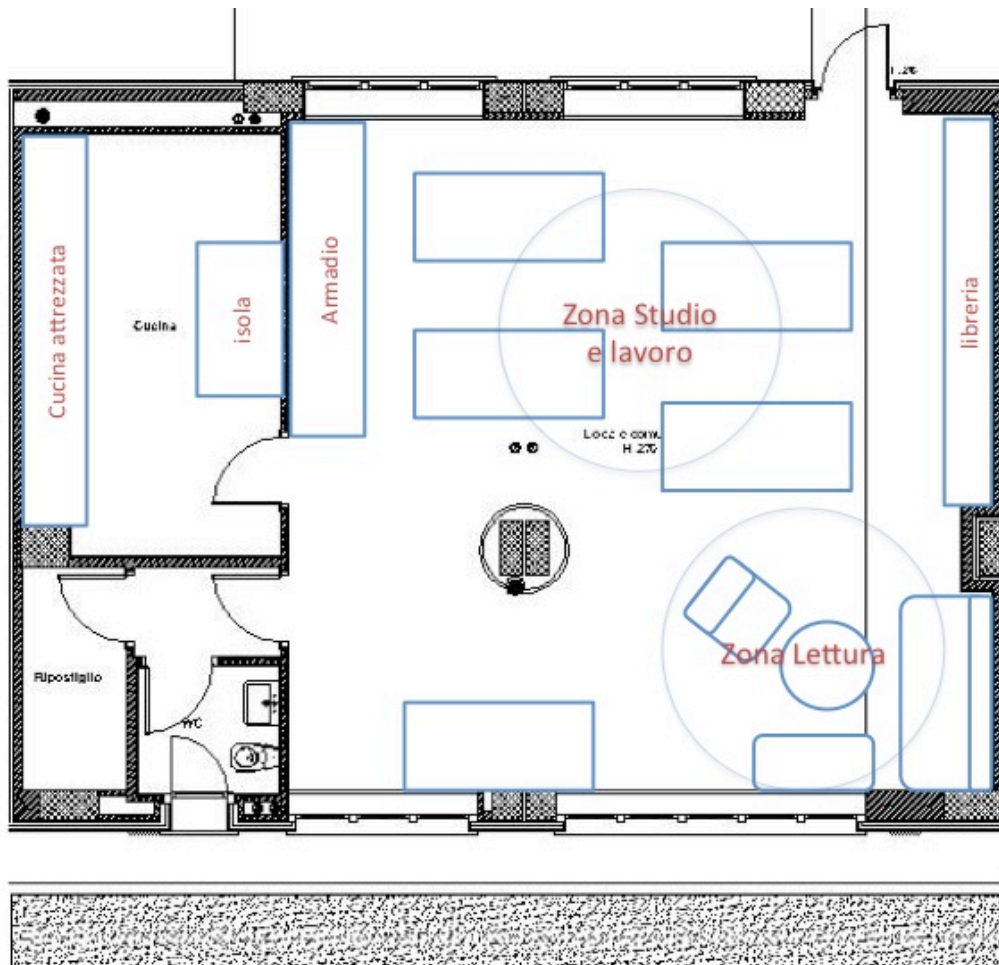


Figure 44: furniture hypothesis for the shared room on the ground floor

This first description was accepted by the larger group with small modifications: The ground floor room would become more of a living room adding more couches and a small table. Both of the rooms would be open all the time for everyone with terms that were still to define. In fact, in other buildings, the use of the rooms is either in precise hours or by booking. We wanted to make the rooms as accessible as possible and to have a free use. For this to happen we had to write a dedicated book of rules. The rules cover all the important aspects of using the shared rooms and define the three modalities:

Free access: each can come and work/study/chat in the rooms whenever the room is free

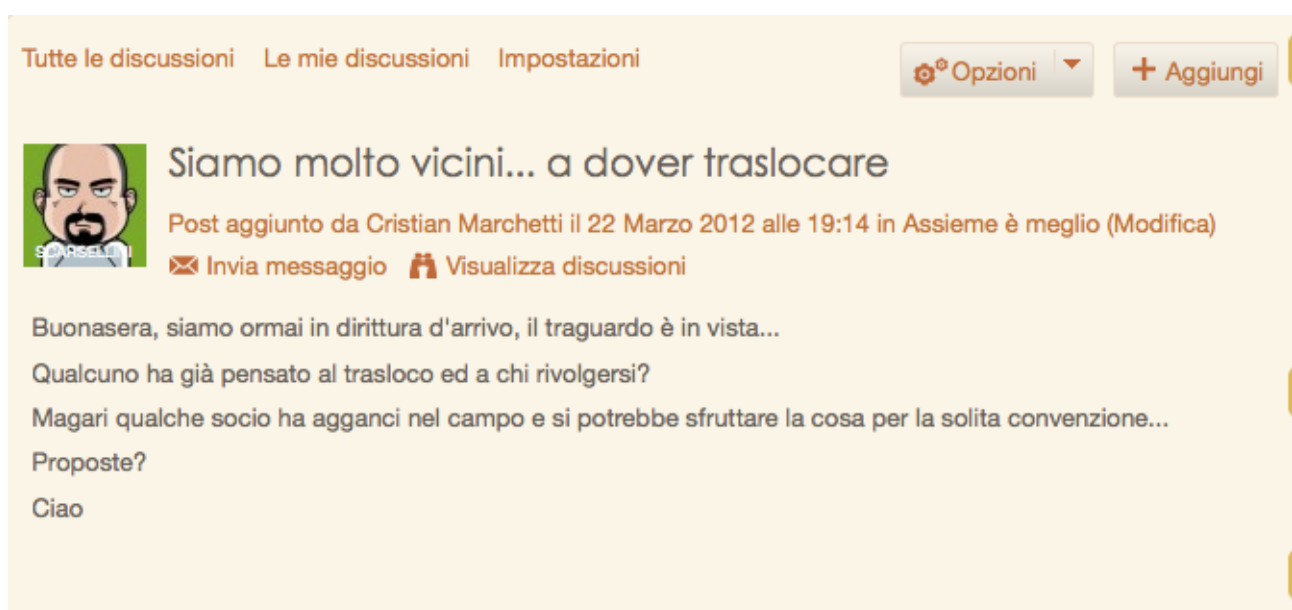
Public activities: courses or seminars that are open to everyone but limit free use. Booking the room for this kind of activities would cost 10 (up to 4h.) or 25 (whole day) euros.

Private booking: for private dinners or parties: 25 (up to 4 hours) or 50 (whole day) euros.

For the free access, the difficulty was that there was no record of the people that use the room. Therefore, no one was responsible for possible damage. The first solution for this was to implement an access with cards that would record entries and exits. This resulted as too expensive for the cooperative to do and so we had to come up with an immediate solution. The assembly voted in the end that each resident could have a key to the rooms upon request and upon signing a dedicated form. In case of damage, either one person takes the responsibility or all people possessing the key would be charged. This solution was accepted and implemented. Solutions of this kind that give great responsibility were possible, for my view only because trust was already built between members.

Moving in

The use of this tool and the meetings proceedings the day the building was ready has influenced the experience of moving into the new building a lot. For many people, moving in meant a change of living area, a house, schools and so on. Knowing people before moving in was important to ease this moment that for many people is extremely stressful. On the 21/04/2012 we finally moved to the new apartment. We were one of the first ones to be in the building.



The image shows a screenshot of a forum post. At the top, there are navigation links: "Tutte le discussioni", "Le mie discussioni", and "Impostazioni". On the right, there are buttons for "Opzioni" (with a gear icon) and "Aggiungi" (with a plus icon). The post is by a user with a profile picture of a man with a beard and the name "SPARSELLI". The title of the post is "Siamo molto vicini... a dover traslocare". Below the title, it says "Post aggiunto da Cristian Marchetti il 22 Marzo 2012 alle 19:14 in Assieme è meglio (Modifica)". There are two action buttons: "Invia messaggio" (with an envelope icon) and "Visualizza discussioni" (with a person icon). The main text of the post reads: "Buonasera, siamo ormai in dirittura d'arrivo, il traguardo è in vista... Qualcuno ha già pensato al trasloco ed a chi rivolgersi? Magari qualche socio ha agganci nel campo e si potrebbe sfruttare la cosa per la solita convenzione... Proposte? Ciao".

Figure 45: a discussion about moving companies

We all were busy with our own apartments and with managing the personal change in life. Nevertheless people continued to talk over the online platform. We manage to pass on some boxes for moving or lend and borrow tools useful in those first days. On May 11th only few weeks after moving in we had our first meeting in the building. We enjoyed the nice weather and held it on the balcony. Many people came and it felt great.



Figure 46: first party in the building

After some time in the building some activities really started happening. First, the shared rooms were finally furnished and ready for use. It took some time since the construction company still used them as magazines. With the decision to buy most of the furniture in Ikea, we thought it was a good idea to assemble the furniture together. On 02/12 many of us came alone from 09.30 am with tools in our hand to prepare the room. It was a nice day and until 14:00 most of the furniture was ready. We had a light lunch together and in the evening a big get together to celebrate the day. It was great to see that people from all ages participated in this day and that the work was self-coordinated. People got to know each other better while doing something, so symbolic as assembling things together. It was much better than we could expect. With the rooms ready, some activities good finally happen. I would like to tell here about play hours, the courses and the purchasing group.



Figure 47: Assembling together the furniture for the shared rooms

Children play: to begin and use the rooms, one of the easiest ways was to meet in the children room in the afternoon. The children play while the parents chat. In wintertime, all parents appreciate a space other than home where their children can play safely with other children. The organization was very easy. If you decided to go by yourself to the children room to play, you just post an event on the platform. We call it "let's play". People can see the event and say if they come or not. Clearly people can also just show up. This was a great way to begin and use one of the rooms. The meetings became more and more frequent and especially a group of new-moms was created. Those groups are extremely important as the first months as parents can be tough. This space has allowed parents to get together with sometimes 8-10 children, without it becoming a bargain to no one. The children, in this way have their space and can really create a group that will grow up together.



Figure 48: children play together while parents relax and socialize

Courses: one of the first ideas that came on-line was a fitness course in the shared rooms. When the rooms were ready, Roberta suggested her Pilates instructor for all of us. She arranged a meeting in her house for all the interested. Together with Alessia, the instructor, we discussed the possibilities. Finally we came up with a suitable day and hours and invited everyone else to join in for try lesson. About 30 women (and one man) came to the lesson. The room was full. We still have the course every Wednesday evening and about 18 women do it constantly. Similar story was for a Feldenkrais course that is held every Monday evening. Healthcare is based on prevention and for many of us, having those course just where we live was the only way to keep on and do it.

Food purchasing group: Another idea that was immediately suggested and quickly implemented was a food-purchasing group. Food purchasing groups in Italy are pretty common. Usually they are based on ecological and ethical beliefs. So, not only is the food chain reduced, but also, you support local production, organic cultivation and fair trade. For our building It made a lot of sense to make a purchasing group. Many people were

interested and that meant we could have the farmers bring the food to us and gain from economical convenience and the comfort of food home delivery. A small group of neighbors began collecting information from other local purchasing groups and going around to farmers and testing products. They also developed a regulation and defined some roles. In the evening after the day of assembly, this group organized a tasting evening with products they suggested to everyone. The evening was successful and soon afterwards people began ordering food. The first products were: fruit and vegetable boxes, rice, oil and oranges. On the first delivery, the shared room was still occupied and so people had to go to Enrico's garage. Soon after that the meeting place became the ground floor shared room. Shortly after that, other members proposed products and farmers and today the purchasing group is buying also meat, cheese, flowers, beans, canned products (like tomatoes, salsa and jams), juices, beer and more. Usually there is one person responsible for one producer and that person manages the order. Buying food together has brought other initiatives, like a course for making bread at home. Pilo, one of the younger members that was not all convinced about the social network, proposed to teach other people how to make bread at home. Together with Davide, another neighbor that makes bread and focaccia at home, they organized a baking course in the afternoon. The afternoon was fun and the participants were grateful. Clearly, after the course people stay together to taste the bread and hang out.



Figure 49: organic vegetables boxes in the common kitchen



Figure 50: a course about bread making

Other uses of the shared rooms: people use that shared rooms for their private dinners and parties often. Since the space is welcoming, the feeling is like conducting a party at home. The free use of the room is working for the children room but not yet for the ground floor. People do not just go there and have a coffee as we could imagine. It is probably a question of time and of reasons why. In the children room, one finds more sense of going there rather than staying home, but the other room is still not defined.



Figure 51: christmas party in the building

Some HOT discussions

Over the platform there were not only nice suggestions and presentations. Some topics generated discussions between the neighbors. This is for example the case of the public

park. Between our building and the twin building in front of us there is a public park. It seemed like, for a while, that this public park would have some special rules, different from other parks. The closing hours would be anticipated and no dogs will be allowed inside. This was thought as in another experience of CCL consortium with a similar situation, that was the case. It was confirmed by a person from the municipality and for some time the signs at the entrance were according to those rules. Then another local public organization did not confirm the special conditions. Many people in the building thought that reduced opening hours and no dogs was a good solution and immediately wrote how they felt. Their arguments were sometimes very personal, like: I would like to eat dinner on my balcony without the fuss of people under my house. Or: my children should be able to play on the grass without worrying about dog excrements. Those ideas were then contested by others that were surprised by people that were so keen to collaborate and socialize in certain occasions but were so closed towards the outside and towards people that had different necessities. (like dog owners or teenagers). The discussion continued over several days creating an unpleasant feeling on and off line. Some people expressed themselves in harsh terms. After a few days some people apologized for their tones, and some just changed their attitude. The issue is not yet solved, and probably it is not a decision we can make. A group of neighbors did get together to form a petition and then to send it over to the public administration.

Results from the specific experiment:

The results of these actions can be seen on two levels:

1) The use of the platform has been useful for ideas sharing and developing. The ideas were not always immediately explicit, but the fact that the forum is open and public allowed people to gain inspiration from one another and come up with new ideas (like in a prolonged brainstorming).

2) The use of the platform influenced social relationships in the "real" world. From a survey I made after one year of use I learned that most people got to know at least 3 people on the web site and communicated through the web. Also people found it interesting to share personal pictures, thoughts and so on. The reinforcement of personal relationships was important for future actions.

From the survey it was clear that:

- All members did not know each other, but get to know each other through the online platform.
- The actual role of platform is assisting in communication, and organization of collective actions.
- Knowing people in advance made the members feel more secure in their new environment.
- People see themselves continuing and using the platform in the future as a support to their community neighbors life.

Critical aspects:

Some critical aspects have arisen from this action: some were about participating or not in the discussion forums on-line: these critical points are usually pointed out from the younger people living in the building. There are two main reasons for that:

Flanders effect: First one is the first impression of what it means to have friendly neighbors. Pilo, for example, did not participate to the activities and the meetings before moving in because of what he called: the Flanders effect. Nedward "Ned" Flanders, Jr. is a recurring fictional character in the animated television series The Simpsons. He is the next-door neighbor to the Simpson family and is generally loathed by Homer Simpson. A devout Christian with an annoyingly perfect family, he is amongst the friendliest and most compassionate of Springfield's citizens and is generally considered a pillar of the Springfield community. His primary role in the series was to be so "cloyingly perfect as to annoy and shame the Simpsons", whereas Homer Simpson has always hated Ned Flanders and always tries to undermine him. There has been a consistent effort among the show's writers to make him not just "goody good and an unsympathetic person". So, begin friendly and nice with your neighbors could also have negative effects such as an annoying, over friendly, perfect neighbor. After moving in, the reasons to use the network were clearer, and this is what brought Pilo to participate more and even propose initiatives.

"I don't really want to know you" effect: neighbors, traditionally in buildings like ours do not know much about one another. They meet in the elevator or in the garage and then in the ordinary meetings between owners. Having another space for expressing opinions on-line, makes opinions and views more transparent. Some people say that it can also have a negative effect, as not knowing one person may allow you to keep on smiling and have a small talk in the elevator. On the other hand, if you recognize that same person as someone with very strong opinions that differ from yours, that might be difficult to have the same neutral sympathy for that person.

Other criticalities are related to the freedom of speech and participatory character of the platform:

"Its my home and I can do what I want" effect

The platform offered many people the possibility to suggest and create new things in the building. In that spirit, it was sometimes taken to far and people would have the feeling they can do whatever they want in the building and the shared room. This could have also worked in a smaller community, but the big community we had here do not really allow a complete self-management of spaces and some initiatives. Some people were therefor frustrated with the fact that it takes time to do certain things together (they cannot just go and buy some furniture for the shared rooms) or angry because their ideas were not accepted.

Conclusions

As a designer, being part of this project was illuminating. I would probably not do it if it weren't my house; but I think it is important that I draw some professional conclusions from this very personal story. I divide it in two part: a) a systemic view of the interface B) lesson learned, The interface design is interesting for understating some specifics of the specific choice of tool. The lesson leaned in here should assist me or other designers, to carry out similar experiences in urban large dwellings.

A) Interface of online platform⁸⁴

The online platform was developed by customizing features supported by NING platform. Considering the varying degree of familiarity with ICTs among the residents, the interface was configured to be easily usable, with WYSIWYG (What-You-See-Is-What-You-Get) style text editors and image up-loaders. Except first-time registration, any additional procedures were not required to use the platform. In order not to alienate people who do not use social media like Facebook, and Twitter, integration with other social networking services was excluded.

⁸⁴ This pat is entirelt taken from "Cho E, Rogel L (2013). Urban social sustainability through the web. Using ICTs to build a community for prospective neighbors. ICT4S conference. Proceedings. ETH Institutional Repository: Zurich"

When the platform was launched, an invitation email was sent to all residents of the building, and only those who accepted the invitation were registered as member of the platform. Registration could be done by answering the invitation email, and providing basic information like name, gender, date of birth, and house number. Once registered as a member, everyone could create his/her own profile with pictures. The profile page provides an overview of recent activities of the member within the system (e.g. recent posts, feedback to others' posts), list of friends within the community, as well as basic information about him/her. The profile page encourages relationship building by enabling members to send personal messages, add each other as 'friend' to personal network on the platform, as well as sharing information about themselves with others. Profiles provide users their identity on the system, and aid in discovery of common interests and articulating relationships. (Hanrahan, et al., 2011⁸⁵)



Figure 52: Profile page of a member

The front page of the platform is composed of features creating ambient intimacy and providing social affordance, referring to the quality of artifacts in any space physical or virtual, which invite and facilitate social interaction among the participants in that space.

Among various features, such as forum topics, and pictures and videos recently uploaded by members, an activity stream is placed in the most visible part of the front page. The activity stream presents an aggregation of recent updates and activities of members within the system, ranging from recent posts, to someone adding another

⁸⁵ [7] Hanrahan, B, Ahuja, S., Pérez-Quñones, M. A., Kavanaugh, A. L. 2011. Evaluating Software for Communities Using Social Affordances, In Proceedings of CHI 2011, May 7–12, 2011, Vancouver, BC, Canada, pp. 1621 - 1626

member to his/her friend's list. Members can also share their activities, and status by directly typing short message into the activity stream. The activity stream can give a sense of vitality of the community, and show new users the range of activities that they can engage in within the platform. (Crumlish & Malone, 2009)⁸⁶



Figure 53: Activity stream feature in the main page

A list of forum topics was placed under activity streams in order to provide overview of on-going discussion. Discussion topics included not only practical issues like how to use communal spaces and internet contract, but also those to trigger members to get to know each other (Figure 53), and to find who are living next door. Some of forum topics (e.g. 'Let's get to know each other') were proposed by me, but gradually more topics were posted by members, such as offers/request of product sharing, suggestion for group purchase of food.

⁸⁶ Crumlish, C. and Malone, E. 2009. *Designing social interfaces*, O'Reilly Media

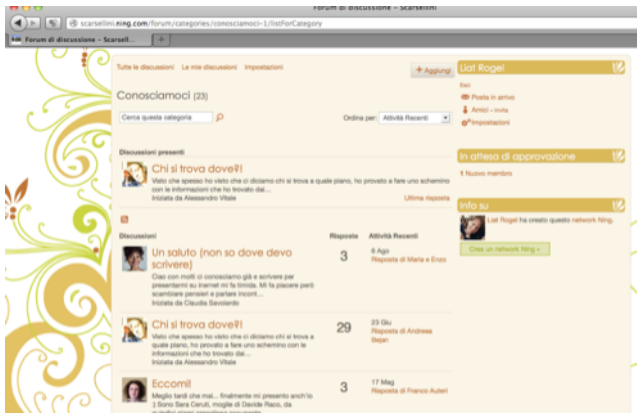


Figure 54: One of forum topics 'Conosciamoci (let's get to know each other)'

When there are members whose birthday is coming up, they are introduced on the front page, with a messaging tool that helps easily send a personal message to the person.



Figure 55: 'Birthday of today' feature

5.3.1 Lesson learned:

1. Offer scenarios of living

The first presentation of this project was not only an invitation to join the social network; it was a presentation of a possible future scenario. A scenario in which neighbors collaborate in various ways to save money energy and time, and to enjoy improved urban social life. This scenario was presented through images of other urban dwellings where those things happened and also other types of best practices that are known to most people. Using a scenario means giving sense to the participation and inviting people to take part, if they wish in the realization of such scenario. It means offering people the power to make a difference and to work for something they would like to have. People

added their own words to this kind of scenario with different words: “living like in the old days”, “ creating social opportunities” , “creating a safe place where everyone knows one another” , “like a big family” and so on.

2. Offer enabling platforms and create spaces for expression (public form of probes):

When people decide they want to take part in creating a new way of living they should have the possibility to do that with certain ease. It is important to create the right tools that facilitate: the expression of needs and desires, the possibility to actually generate something and the option do dialogue. This makes the online social networking tool a kind of design probe. According to Mattelmäki there are several reasons to use design probes: for inspiration, for information, for participation and for dialogue. The online social networking tool in this action was used for similar reasons as can be read above. The main difference is that all interventions on the network were public. So, the creation of the future was very much based on horizontal exchange between the participants. The use of a platform so much similar to facebook has made it easy for most people to participate immediately. Nevertheless, the fact that the platform is private (only for the habitants) makes it a good place for sharing information and opinions that one might not do in completely open social networks like facebook. The division of the forums into categories was helpful in order to make it clear where one should make concrete proposals and where to just discuss interesting issues and make personal presentations.

3. Welcome and facilitate

Even with the best of intentions and tool, those processes still have to be facilitated. For example, the first members that joined in did not always wrote something about themselves or added a picture. Also, some people were ignoring the categories and just write randomly. This meant for me to give a “welcome” to each new member and explain a few things about the network. It also meant moving discussions from one category to another or answer email of people asking for help. Facilitation is useful for practical issues

as well as for psychological effect. The feeling is that someone is there, helping it all to happen. Through time I made few video tutorials explaining how to post a profile picture, a new topic etc. After about 6 month when the platform was working well with many active members, many things happened alone. People are greeting and welcoming new members, they even write when someone is posting in the wrong way. So slowly facilitation is not needed anymore.

4. Encourage informal encounters:

The face-to-face meetings we had were necessary for the project to go on. So first of all these should be created and encouraged. Second, those should have an informal way, so that people will feel comfortable and gain the sense of self management and responsibility. Even if the president of the cooperative was present, she was not managing the meeting. The meeting and the topics depended on the people participating. Also the meetings are facilitated but in a very light way. People would sit around the table or in a circle, rather than in front of one person. People are encouraged to bring food and drinks so that informality is almost naturally created. The face to face meetings we had before moving in were crucial for the success of the whole project.

5. Build In between, neutral virtual and physical spaces

The social network is a tool that offers a space for socializing virtually before doing in in "the real world". This, as I wrote before might have negative aspects: "I preferred not to know your opinions, and just smile to you gently in the elevator". But it also has positive ones. The ties created on the social network are of weak ties type. They are easier to manage, as they do not include going and knocking on your neighbors' door. The online space is a natural space, of everyone and no one. It gives people the first idea of who are their neighbors and therefore eases the "real world" encounter. On the same level, the shared spaces in the dwelling are working in a similar way. Offering a space for children to play, gives people the possibility of not inviting anyone to their place. reading it here it might seem like the opposite of what you want to create, but actually it allows people to

relate much faster, and then decide how and with whom they would like to have stronger, more significant relationships. I could say then, that both the creation of an on-line platform and the one of shared spaces allow people to have many weak ties and through those already enhance a sense of community and collaboration.

6. Don't wait, prototype

This experiment was not about the social networking tool itself. It was about dynamics. Maybe an ad-hoc platform would have worked a bit better, but, 1. How could we know what is the right "ad-hoc" for this case? 2. Programming a new tool takes a lot of time and usually is not cheap. The choice here was then to choose something that already exist and apply it to the situation. In this case, chose a NING platform. This choice allowed me to go very quickly "out to the field" and try out this idea of socializing before moving in. It is a very important lesson: waiting to make the perfect tool might be completely useless. Go out there, choose from many available options and try out. There is always time to redesign a tool, if necessary and with a much better idea of how it should be designed.

7. Let go

As I wrote in the very beginning of the description of this action, my role here was a bit strange. From the one hand I am the designer-researcher, from the other a user. But, at a certain point, if I was only an outsider designer I should have let go and give that tool and the activities in the hand of the residents only. Today I can say that this would have been possible after about a year or so. In a new project I would build this part better, understanding as soon as possible who might be in charge of what and creating dedicated coaching moments.



Figure 57: having breakfast together



Figure 56: a sewing lesson

Overview of results from the single actions

From the studies described above, it shows how codesign tools were used to make a process for 'use before use' (Ehn, 2008): future scenarios for collaborative services and infrastructures were designed before the house was built or completed. The tools were valuable for the design process in several ways:

- Giving the designer insights into what is otherwise difficult to imagine and bringing them into a close relationship with the other actors.
- Assisting the participants (including top down decision makers) in overcoming barriers towards innovation in housing, moving beyond the vision of a traditional way of living and giving them the courage to take action. (Creating Awareness but also the desire to participate and support change)
- Giving people new tools to help them to express themselves, where they can feel safe to propose, discuss and develop new future scenarios. (Giving knowledge on how to change and partially enabling them to do so)
- Achieving positive results quickly reinforces actors, including the designer, in sustaining change

The actions were extremely helpful for the development of my design project: HousingLab. They have combined a wide spectrum and a rich network on the topic of collaborative housing as well as practical approaches and tools to be used. The personal involvement in the actions and the many co-design activities that were included made it a great environment for coming up with innovative and creative solutions for housing. In a very concrete way, these are the main contributes I have had from the single actions:

Action 0	Action 1	Action 2
<ul style="list-style-type: none"> • A network of European stakeholder • A local network of stakeholder • A better understanding of the context • Framework to the difficulties and the area of opportunities • Best practices of housing and of living-labs for housing. 	<ul style="list-style-type: none"> • The steps needed in the process of coaching a cohousing group • A framework of difficulties and opportunities • A better understanding of group dynamics • The development of specific tools for coaching groups. • Connections with important local stakeholders. 	<ul style="list-style-type: none"> • A concrete experience in an existing building • The structure needed for a neighbors social network • The steps needed in the process of activating the community before moving in • Relationships with cooperative consortium

Table 3: results from each action

More generally, answering to the main question of the project:

Action 0	Action 1	Action 2
A confirmation of the need for a living-lab in housing from the confrontation with other stakeholders. The availability of best practices from which to learn.	A specific tool for coaching groups, with sub-tools for each step of the way.	A specific tool and process for new buildings.

Table 4: how the action answer the project question

6. HOUSINGLAB MILAN PROJECT.

HousingLab is a laboratory for collaborative innovation in urban housing. It is offering research and experimentation for the development of sustainable housing across 3 main areas: information, coaching and small-scale experiments. The HousingLab structure aims at working with all the stakeholders on a local scale by involving them in different initiatives. This participative community centered approach applies the principles expressed by the change management theories throughout the activities of the laboratory as will be explored here under. HousingLab is thought as a living lab, a physical space supported by a virtual one that could be recognized as a collaborative environment for innovation in housing.

6.1 HOUSINGLAB, A SERVICE MODEL AND THE CONDITION FOR SUCCESS

HousingLab is born from a series of actions and research on the topic of collaborative housing. In order for it to actually exist in the city and therefore bring positive change to the housing market, HousingLab is described as a service. This service is presented in two different models: The first model is an independent one where HousingLab is economically self-sustainable. HousingLab will offer activities and research to private clients as if it was a private design studio. The collaboration with an academic institution is very important for keeping a research line that can be developed through time. Therefore in the map below there is a strong connection with Politecnico di Milano. As an independent agency, all activities will have a certain cost for the final user. HousingLab might benefit from regional, national or international grants, but this will not be the main form of income. If grants do enter, it will mean that some free offering can be done towards the general public or the public administration. The main income will be generated by offering consultancy and coaching to individuals, groups, construction cooperatives and private constructors.

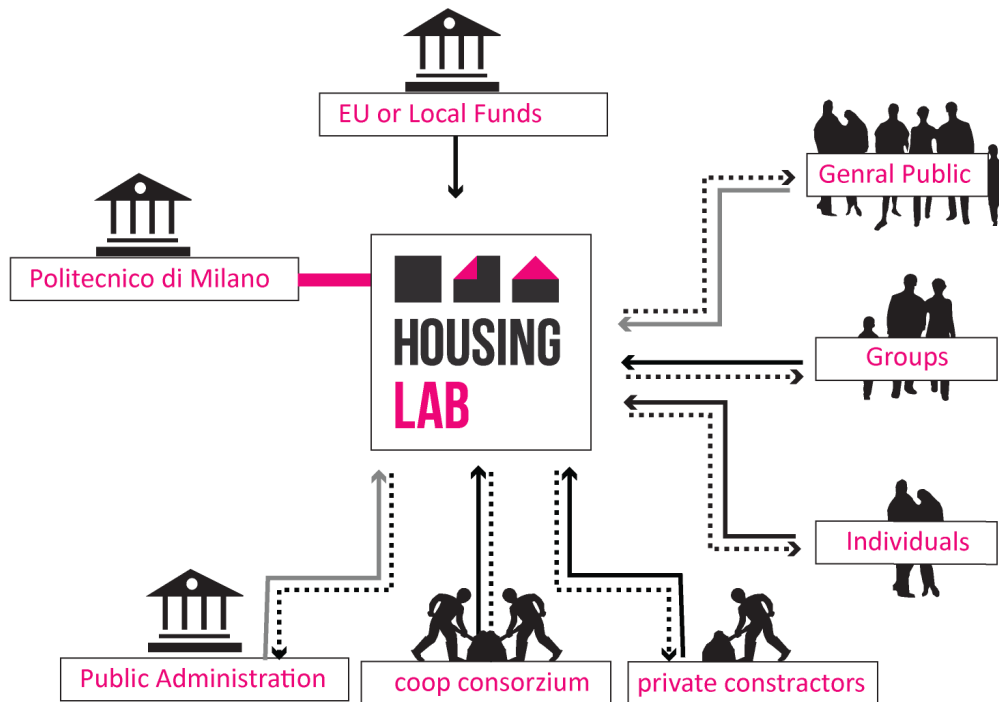


Figure 58: system map of HousingLab without public contributions

In the second case, HousingLab can be seen as a public agency. For example, a local public administration may decide to implement such agency and dedicate a special contract to it. This may be a short term contract for 3-4 years. In this case, many offerings can now be free and open for the general public. For example: first consultancy meeting, informative encounters and guided visits. Groups and cooperatives may enjoy reduced prices, as they are contributing to the general urban qualification. They can also be forced to include social and societal aspects in their housing solutions. The advantage for the large public is being able to approach the context of collaborative housing and understand if it fits the need without being economically involved. For the public administration it means creating an active community of stakeholder around the topic that facilitates the implementation of existing or future projects.

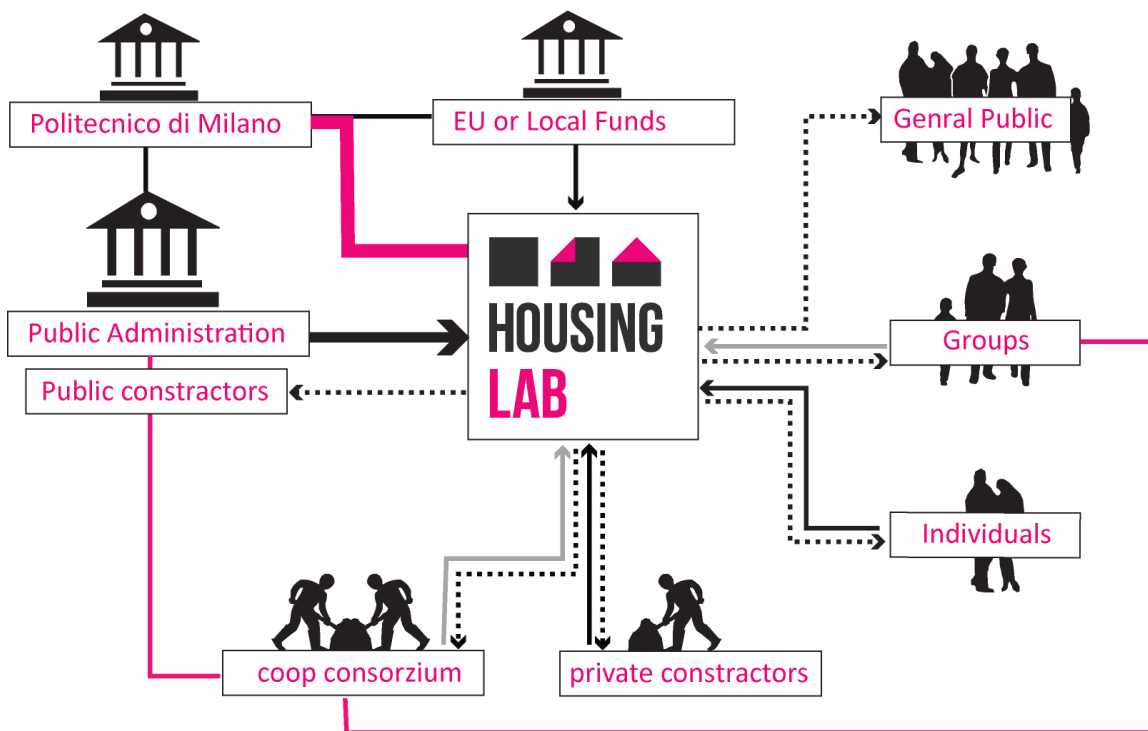


Figure 59: : system map of HousingLab with public contributions

6.1.1 Offering map and use scenarios

Through the meetings with the European partners and through a study of the specific Milanese context, I have delineated some initial macro areas that can boost the HousingLab intervention. These areas are:

- Assisting independent groups in planning and building their own solutions. And to increase the number of best practices examples

This offer is yet very specific and specialized. There is notable trend towards cohousing and groups, today in Milan do not know who to go to. Some of them need basic orientation for understanding the best solution for them, other need consultancy and coaching. During the construction phase HousingLab will have a crucial part in bridging between the group and the various professionals working on the house. Even if this group is still small, one can imagine it will grow quickly, not only in terms of numbers but also in terms of users: cohousing for the elderly are good example for that. The more examples people will have to look on, the more the idea will seem more feasible and

close to everybody.

- Promoting the creation of communities in developing co-op buildings.

Since Milan is very rich with houses built in cooperatives, a community work can be easily implemented. As shown by the action of Scarsellini street, quality of life really changes for people if they know each-other in the construction phase. This macro area is not only of an easy start but also represents big numbers of the total population.

- Improving neighbor's life in existing buildings

In terms of numbers, this is the area that might influence the greatest amount of people. Existing buildings will not just vanish. There is a need for improvement that can come from a work on and with the community. This is probably the most important action HousingLab could do. Nevertheless, It is a challenging area that should be addressed carefully and is certainly depending on public funding.

To act on the three macro areas, the offer of HousingLab is spread on three main levels of action:

- Information: increasing the awareness of a variety of Collaborative Housing solution and its advantages for the stakeholder's community. This
- Coaching: building trust and competences in order to enable people in a Collaborative Housing project.
- Experimentation: testing ideas immediately on field to verify hypothesis and build solid models.

The offer is shown in the drawing below. Some of the activities are already in a trial phase. (in pink). For each method and tool there is a short description in the following paragraph.

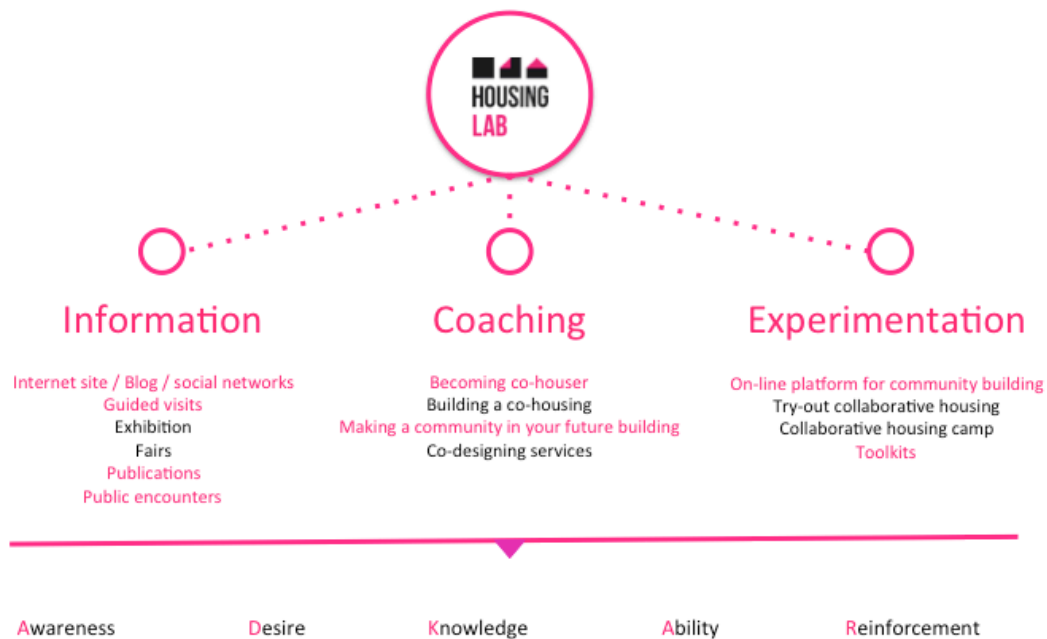


Figure 60: offering map divided by 3 main categories

6.1.2 Tools and methods

Information should be done in a way that really take people into the experience. As said before, the associations with Collaborative Housing are not always positive. Clever strategies should be created in order to give people the right information. This can be done with several tools and methods:

Internet site/blog/social networks: create the community around HousingLab. HousingLab has already an Internet site, a Facebook page and a twitter account. These are helpful for updating people following with information about local and global news about collaborative housing. They are also used for gathering the community around the topic.

Guided visits: to see places and talk to people is the easiest way for understanding. HousingLab has already carried out a series of guided visits in Milan. In every visit, people can come inside the houses and talk to other people. A short description of the visit is then uploaded on the Internet site. A second step would be to create “virtual visits”. Short movies that take you inside collaborative housing around the world.

ABITARE BENE A MILANO

VISITE GUIDATE A ABITAZIONI COLLABORATIVE

HousingLab organizza una serie di visite gratuite a case e abitazioni milanesi che seguono la strada della sostenibilità. Venite a conoscere le abitazioni e gli abitanti.

- | | | |
|-----------------------------|---|--|
| VEN 13/04
H 18.00 |  | SOLIDALE, APERTO, ACCOGLIENTE
Il Condominio Solidale di Bruzzano
Via Urbino, 9 - Bruzzano (MI) |
| VEN 27/04
H 18.00 |  | GIOVANE, SOCIEVOLE, ECONOMICO
Cosycoh, il cohousing in affitto
Via Alamanni, 20 - Milano |
| VEN 04/05
H 18.00 |  | SOCIALE, INTEGRATO, OSPITALE
Il Villaggio Barona
Via Zumbini, 6 - Milano |
| VEN 11/05
H 18.00 |  | ECOLOGICO, COLLABORATIVO, VERDE
Il villaggio cooperativo Scarsellini
Via Scarsellini, 17 - Milano |

BERLINO?



Stiamo organizzando una visita guidata a Berlino, se siete interessati contattateci per dettagli

HousingLab è un laboratorio di ricerca, sperimentazione e sviluppo nel settore dell'abitare sostenibile. Crediamo nell'importanza del divulgare le buone idee e nell'ispirare chi vuole intraprendere la strada dell'innovazione

PER ISCRIZIONI:

HOUSINGLABMILANO@GMAIL.COM

WWW.HOUSINGLAB.WORDPRESS.COM

Exhibitions: Exhibitions on the topic can be useful for opening up the topic and attracting people from different backgrounds.

Fairs: the Experimentdays fair seen in Berlin is a great way to bring different interested stakeholders to the same place. It is one of the next projects of HousingLab to bring to Milan.

Publications: books articles and popular publications are an important part of information diffusion. Some examples to such publications in the last years:

Public encounters: round tables and seminars on specific topic enhance community. Some of them were held during experimentcity Europe. Other are now in program together with the Experimentdays.

The image shows a screenshot of the Best Up website. At the top, there is a header with the Best Up logo (text: "BEST UP bello equo sostenibile") and a navigation menu with items: "edicola", "chi siamo", "attività", "soci", "servizi", and "ci piace / rete / gallery / contatti". Below the header, there is a main content area with a search bar and a "cerca" button. The main article is titled "housinglab: nuovi modi di abitare la città" and is categorized as "Edicola - News". The article text describes HousingLab as a research and development laboratory in Milan, focused on sustainable housing. It mentions that HousingLab is formed by a group of experts who use participatory experimentation to create innovation and offer new housing models. The article also includes a call to action: "Come? Attraverso informazione, consulenza e coaching, sperimentazione sul campo. Seguendo un metodo di lavoro che si basa proprio su ricerca, innovazione e sviluppo. Si parte dalla comprensione del contesto, dei bisogni e delle tendenze in atto, per andare a sviluppare soluzioni creative, condivise e durevoli, dopo averle testate e confrontate con gli utenti." Below the article, there is a "HousingLab" logo and a "SOSTIENI BEST UP" banner with the text "+BEST UP - CO2 PIÙ BEST UP, MENO IMPATTO AMBIENTALE". On the right side of the page, there is a "Best Up Newsletter" sign-up form with fields for "Nome" and "Email", and a "I soci sostenitori di Best Up" section featuring the "FLOS fresia alluminio" logo and a link to "vai all'archivio news dai sostenitori".

Figure 62: Best.up publishes a public encounter by HousingLab

Coaching: information is simply not enough. Even when people know about their alternatives and heard from people about how to walk the collaborative housing way, it is still very complex. Helping people hand by hand to go through the phases, is crucial, especially in such an early phase as here in Milan.

Becoming a co-houser: This is a series of meeting and activities aimed at transforming a group of people interested in building a cohousing to a community with a vision and mission statement, capable of taking decisions and actually plan and build a house. The time needed for such plan is depending a lot of the specific situation, but the first steps could be done in 5-7 meetings of 3 h. each.



Figure 63: publishing new cohousing initiatives and presentations

Building a co-housing: This is a coaching plan that aims to prepare people and make them understand the complexity of construction and planning. It is made to bridge between the group and the architects and to give people basic tools of interior design.

Making a community in your future building: a combination of an online social networking tool and face to face meeting, this process aims in building a community of neighbors in new buildings that are still under construction. The process is about 1.5 years long and by the end the community is able to use the tools independently.

Co-designing services: 2-3 days workshop for deciding how to better use the common spaces and how to implement the services needed.

Using shared spaces and facilities: a process for deciding the modality of uses and the rules for the shared spaces and activities: Writing together the regulations and designing the needed communication for it.

Experimentation: side-by-side with information and coaching is the need of people to actually try on their own. This is the reason HousingLab offers short experiences with various tools for people to experiment. Those could come in all phases of the process.

Understand your space: a series of meetings in a large space allowing people to plan spaces and rooms in a full size environment. This is both a team building activity and a lesson about interior design.

Role play: by taking upon themselves different roles in given or improvised situations, people can simulate the reality of sharing spaces and activities. It is a good way to stimulate discussions and even fights, before you reach a point when it is too late.



Figure 64: role playing

Cohousing camp: a temporary situation where people put themselves in a similar mode to living in a cohousing. This could be done in a tent or also in other fitting structure. In

only few days people may be able to understand some issues to work on when their house will be ready.

The offer described here can evolve and change to the different situations that accrue. Exchanges between other stakeholders that do similar activities is crucial for the development of new and interesting tools.

7. DISCUSSION

Looking at the development and the actions of HousingLab and generally on the insights from the research, I would like to discuss the contribution of it to the design discipline as well as for the housing field. I began with the *Hypothesis that There is need for a change management process in the housing field to reach innovation. New organizational tools and services should be (co)designed for the success of the process. In particular the organizational tool is in the form of a LivingLab and the tools are from the codesign discipline. This hypothesis was confirmed during the actions and had brought to the realization of a service model. Beyond the specific HousingLab project there are some matters of discussion that I would like to develop here below. I will point out the connection between housing and design (1), the operation by living-labs (2) and the use of participatory action research (3).*

1. **On the connection between housing and design:** during my actions, I have worked with people in order to bring social innovation to housing. I used design tools and methods that come from various fields of design. I believe the design discipline could offer expertise such as service design, co-design and community centered design to the housing field:

Co-design: allows a better involvement and habilitation for people in designing their own solutions;

Service design is related to seeing the house no more as a product but as a product-service system;

Community centered design: to emphasize the importance of a holistic view on housing as a place for a community and as part of a given neighborhood and city.

This scheme below was developed from this understanding; it represents a sequence of steps and activities, able to identify a model of co-design services in the collaborative housing field. The following figure is describing a repeatable and scalable process divided into three main steps:

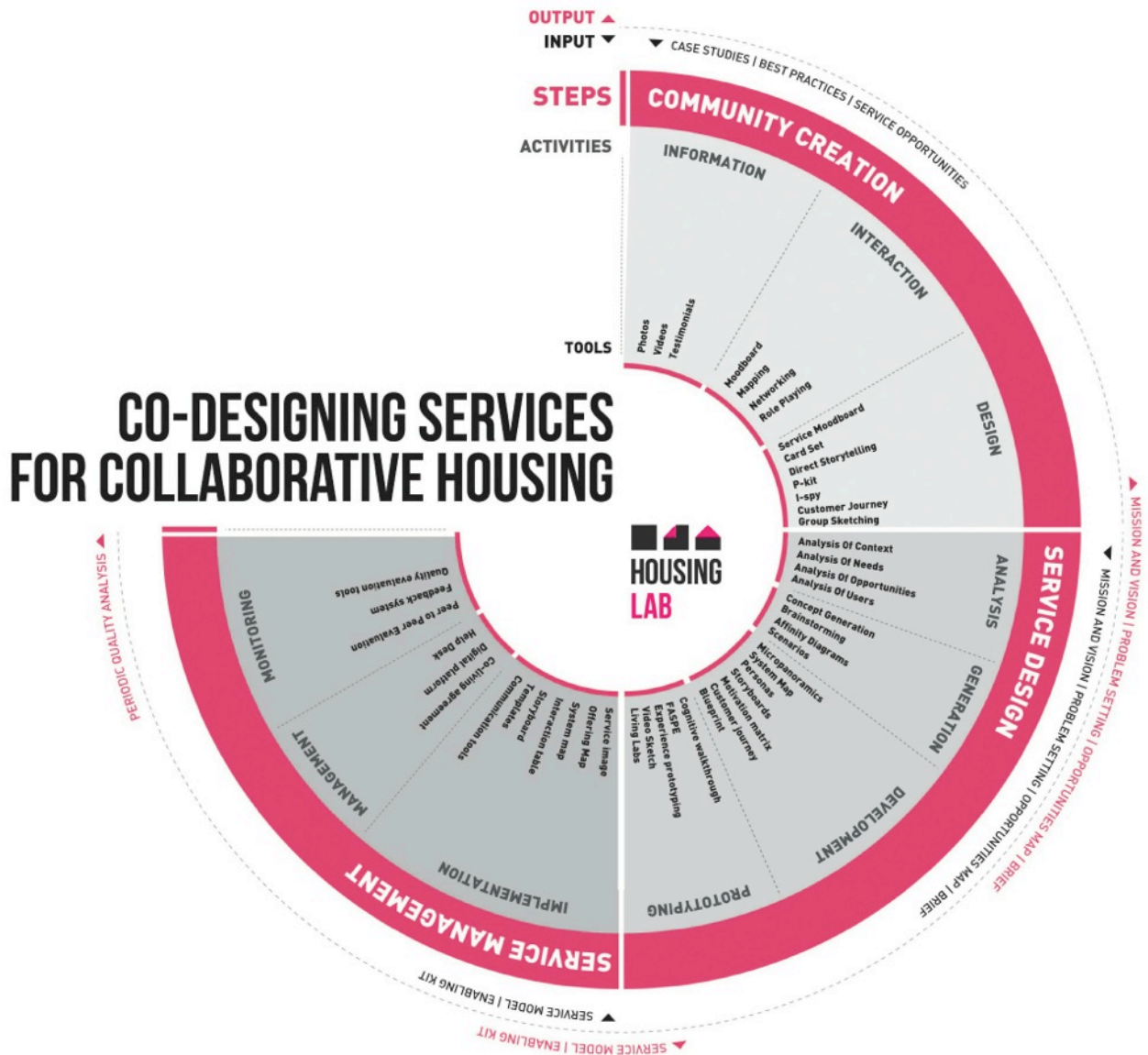


Figure 65: co designing services for collaborative housing

Community creation: For the services in a collaborative housing to be co-designed, there is first need to define the community. It might be a whole new community with people that did not previously know each other or the reinforcement

of an existing group (like neighbours) as an enabled community. The activities in this step are: information, interaction and design. This step's outcome is a document presenting the mission and the vision of the group as well as a brief for their collaborative housing form.

The design of services for and by the community is the second step. The services, usually of a collaborative type, are to define the character of the specific collaborative housing solution. The activities in this step follow service design models (Meroni, Sangiorgi, 2011): Analysis, ideas generation, concept development and prototyping. These activities do not necessarily follow a linear timeline. The outcome is a service model and a kit for service management.

For the services to function properly throughout time we need **services management**. It is not enough to make a change in the house model, one should also be able to keep the innovation going. As Lewin's model (Lewin, 1947) suggests: first unfreeze the current situation, apply the transformation and then refreeze the results in order to maintain the desired status reached through the change process. This step is aimed to supply the right tools in the hand of the community in order to implement and manage the new service. Also, a monitoring process guarantees the up-dating and eventually the modification of services. This step's output is quality analysis tools.

The idea is that design is integrated into housing development in very different phases. Today, the housing field is lacking knowledge of design thinking and the design discipline do not come in direct contact with housing developers. Maybe, more precisely, Design enter in housing in a very late phase regarding interior and furniture design. HousingLab is trying to bring these worlds closer together.

2. On living-labs for housing

There is no one way living-labs work. They have different definitions and different working models depending on the geographical position and on local policies. HousingLab is described as a living-lab for housing and could be implemented as shown above in different ways. The importance of creating a living-lab lays in the fact that it implies experimentation and prototyping for housing. Today, very few housing developers or private citizens think there is a need to try-out new models and services. By creating a living-lab, I believe the personal phases of change could all be tackled: Awareness: by communication, information and participation. Desire: by pointing out best practices and getting to know the possible alternatives. Knowledge: by coaching and orientation. Ability: by giving the right tools and methods. Reinforcement: by keeping contact with ongoing projects and offer management support. I think a living-lab approach allows working on the **fuzzy front end of housing**: working with people at the fuzzy front end (Koen et al., 2007) leads to the development of surprising, creative solutions where people realize they actually have the power to create their own way of living. Initial resistance is overcome when people start to visualise their future life in collaborative housing. As soon as initial fears are solved, a proactive approach emerges and people start to refer to the house (the product) as an enabling space, a platform on which to create services in their daily life to share with neighbours and even inhabitants of the wider district. The fuzzy front end in housing design is usually neglected, and hardly ever do the residents influence it. Changing this attitude and making housing more collaborative is a keystone towards more sustainable urban development.

The barriers HousingLab should cross are still strong, especially those that come from the top down. An accurate work has to be done in order to make it possible for public administrations and local municipalities to implement some of the innovation strategies suggested in here. Also, for private constructors and investors, to understand the added value of social innovation, we still have to go a long way. There

is no doubt that the (slow) diffusion of best practices on the local area will make it easier. Good examples create demand and consumers are the ones that influence the market. Right now, the feeling is still that only a small group of people knows about different options offered by collaborative housing and so is willing to invest a lot of time and energy into it. The vast majority of people do not think in these terms.

The bottom-up resistance still exists clearly, but I truly believe that it is in the power of constructors (private and public) to be brave enough and offer solutions even if it seems like the market is not "asking for them". Where else in other industries this is done constantly, the housing market remains stiff and so much related to traditional way of thinking about the building, the apartments and the families. Constructors will innovate in term of green building and energy efficiency but will not dare add some shared facilities and services. This is a big step to take; it will make the transition faster and easier.

Having that said, the direction of HousingLab seems to be the right one. The local municipality of Milan has just recognized co-housing forms, as forms of valuable social housing that should be supported by the public administration. Different experience of spontaneous communities in dwellings is born and they communicate their activities and by that show a nice new trend and a new way of living. It takes time, but going in the right direction and thinking about the right tools we have in our side is already a lot. During the past three years, as can be read in this thesis, HousingLab has already done some steps in the local area of Milan. The next important step is the importing of the fair and event "Experimentdays" to Milan. Experimentdays is a an annual local event (so far in Berlin and Vienna). It is a meeting point for people, businesses and associations linked to collaborative housing initiative. Together they create a showcase of existing projects from which to learn. It becomes a meeting point and a fair architectural, building products and financial services that are specially designed for groups of people who want to build and live together in respect to the environment. This event, made by housinglab will have all the potential to reinforce

the movement and give the stakeholders the right tools to develop it further. It is planned to be held during 2014.

3. On participatory action research

The participation of people in the design project and in the research project were essential parts of HousingLab development. By constantly verifying the hypothesis and the findings made by the theoretical research, not only was the research modified and improved, but also, the people involved gained awareness to the topic of collaborative housing. Some tools I used are worth while focusing on: Making 2D collage, like in the case of "vicini per Casa" is a consolidated design tool: It is used in fashion, interior and communication design in the form of mood-boards and in codesign to permit people to use existing visuals to express their thoughts. Here it has a similar role by the use of images and their combination to something new. More, it becomes a group activity that helps building up a discussion between members. The use of social networks as probes is a new approach. Cultural probes usually work through individuals who actively share their own views and experiences of their personal lives/habits. However, in this case, people were asked for their hypotheses about future ways of living, in a Forum. This means that their views were shared with other people and could immediately be commented upon and therefore developed over time. As in any codesign process, this allows ideas to grow in a much "safer" way, knowing that many stakeholders have already contributed. According to Mattelmäki (2006), there are several reasons to use design probes: for inspiration, for information, for participation and for dialogue. The online social networking tool in this action was used for similar reasons, which are elaborated below. The platform was offered to the prospective neighbours in order to express their ideas, tell their experience and share some details about themselves. All this information was open for everyone and so people could use the output for inspiration, information and participation. The fact that the platform is open, means that the insights are not only in the hands of the designer, but also of the community as a whole. This is why I call it a

“public form of probes”. The re-thinking of tools and methods of participation and integrating them into the research was very important for the process. Especially when it comes to new tools offered by ICTs they are not traditionally defined as such. I hope to develop further this concept and allow other researchers to make useful use of social networking tools as probes.

Conclusion

To conclude this dissertation I would like to spend a few words on the value of a PhD research. During my research time I have come to contact many people and work in very different teams. I have decided to take this time as an opportunity to really implement some actions and work on my local surroundings. The local work together with the connectivity to European and international stakeholders, made it possible for me to create a valid design project and to come out with interesting research results. Working on my surroundings has allowed me to follow in person some of the following reactions and actions to the work I did. I am still hearing from people in my building about how the social networking platform has changed their experience of living here. I still follow a group of prospective co-houser, and still I am surprised of how determinate they are to find new ways to live in the city. My understanding of the different possibilities offered in the word “collaborative housing” has made it in me a mission to bring the news to many people. My design background has made it a goal to find ways to communicate them well and to actually show people a future vision where they can see themselves in. I am glad that the result of my work is something the city needs and that I am sure to carry on also after my studying process. I am convinced that such living lab models as housing lab are an important answer for the lack of innovation in housing. The connection between different labs and the exchange of knowledge and experience are essential for opening up open innovation canals where, despite the cultural and legal differences, people can still learn from one each-other and import/export valid experiences.

I began this dissertation talking about innovation in urban areas by creativity and by using the new technologies of networking and communicating. It is by connectivity that those small initiatives that are already there can have the power to grow and to evolve. Like the city, collaborative housing will have to find the way to be adapted to all kinds of cultures and situations. The right tools are a key for facilitating and simplifying process. This is why, in my opinion HousingLab must evolve too as an open and shared environment. Where the needs of people and the ideas that come from the society are the ones that will help it make a difference.

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