

Making the difference through design. Possibilities for the re-production of Social Capital.

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Contemporary societies have been strongly characterized by the emersion of hybrid economies, which in several cases, through *making*, pursue goals of urban regeneration and social engagement. Recently, the Municipality of Milan has started to be interested in several hybrid and collaborative experiences, focused on: 1) the creation of local markets; 2) the revitalization of peripheral areas; 3) the engagement and its inhabitants.

This paper presents the first step of a collaborative study developed by the School of Design of Politecnico di Milano and the Institute of Design of IIT of Chicago within the Sister Cities policy program. The results of preliminary research activities, which wanted to investigate the relationship between design, manufacturing and social inclusion will be presented. The main focus will be on the actual and potential role of design within these hybrid activities with a particular attention to its capabilities to support the creation/acquisition of Social Capital both at individuals and territorial levels.

Keywords: hybrid enterprises, making, Social Capital, urban regeneration, civic design



Introduction

This paper presents the first step of the collaborative study developed by the School of Design of Politecnico di Milano and the Institute of Design of Illinois Institute of Technology of Chicago within the Sister Cities Policy Program. Civic Design has been the topic chosen for this collaboration, and the Italian team decided to analyze it through a focus on the local economy (in particular manufacturing), innovation, and social inclusion. This report summarizes the results of a specific section of the field research activities, in order to investigate the relationship between design, manufacturing and social inclusion. Companies and associations which work in these - apparently diverse -sectors, actually mix different characteristics: innovation, social entrepreneurship, (new) craftsmanship, design, storytelling, meanings, a strong focus on territorial development and the relationships.

Then Milanese context, which is the one I am focusing on, has recently been strongly characterized by the emersion of these hybrid economies, which also the Municipality has started to recognize and to be interested in.

The systemic approach, which we propose to use, was initially applied in the environmental field of urban management. This approach focuses on the articulation of the different elements which compose a city and the connection between them (Friedmann, 1987; Taylor, 1998). In more recent years, the ecosystemic approach was extended also to knowledge and creative fields (Becattini, 1989; Harrington, 1990; Landry, 2000; Santagata, 2007). The European Union, as well, has been more and more careful about the development and the study of creative and innovative ecosystems, which are seen as levers for sustainable growth, because of their focus on co-creation and coopetition among different groups of stakeholders.

This paper focuses on selected case studies, whose spokespeople were interviewed. After the interviewing phase, we organized a co-design workshop called "Let's make room for innovation!" which was held at POLIFACTORY (fablab of Politecnico di Milano) and involved both the group of our interviewees, students, and experts from several fields (e.g. design, architecture, psychology, etc.). The brief of the workshop was co-designing an urban living lab in the Milanese suburb of Bovisa. The workshop was attended by 30 people, divided into 5 working tables; it lasted 4 hours and provided a series of specific questions, which were answered by participants using specifically designed tools. The final output was an idea proposal for an urban living lab were making and culture encountered.

In this paper, I am going to present the interviews results according to the role which design (and making as well) can have in the development of network and in the creation/acquisition of Social Capital both at territorial and people levels.

For a definition of Social Capital

The concept of Social Capital has been used by several disciplines in order to study, discuss and analyze the creation of community networks, the achievement of economic success, and the support to local development. Its definition has been changing over time and often has been taken for granted; however, a unique definition of the concept is not possible and also a complete overview of it cannot be the main focus of this paper. Therefore, in this first paragraph, a possible composed definition which could be useful and effective for the present argumentation is going to be delineated.

The definition proposed by Jane Jacobs (1961) was related to two main levels of manifestation and impact: the individual/personal level and the territorial/urban level. She stated that Social Capital is created and reproduced thanks to the presence of informal relationships, local self-government networks, neighbourhood associations.

The importance of factors such as proximity, on the one hand, and informal networks, on the other, are already present in Jacobs dissertation. By proximity I do not mean only a physical-geographical proximity, which is a condition, but not a guarantee, for the presence and the development of cognitive, organizational, social and institutional proximity (Boschma, 2005); while, for informal networks, the concept of *weak ties* proposed by Mark Granovetter (1973) identified a relationship which is nor of kinship or friendship, but which is expressed in a combination of trust, (non-economic) exchange and reciprocity. These two elements (networks and proximity) are very much connected, indeed networks have a variable length: they can be very local, but they can also extend to the whole city.

The most well-known scholar who theorized the concept of Social Capital, is probably Pierre Bourdieu (1980) who analyzed it in connection and interaction with other types of capital (economic and cultural) and defined it as the set of real or potential resources that depend on the possession of a lasting network (of relationships) and of more or less institutionalized relations founded on high levels of respect and reciprocity.

Therefore, as mentioned before, the utility of Social Capital is recognized at two levels, which are simultaneously separated and connected: the personal and the collective. Social Capital supports individuals in solving everyday problems, such as finding a job; at the same time, by doing so, it can generate broader positive effects on the city and beyond. According to Enzo Rullani (2006) Social Capital is embedded and rooted, often implicitly, in territories. This approach clearly states the shared and collective nature of this resource, which is particularly useful for the attainment of economic and social improvement of places. As far as the economic competitiveness is concerned, for example, the importance of Social Capital has been widely discussed in the constitution of districts, first industrial, then cultural and creative (Becattini, 2000; Scott, 2006).

As the shared value of Social Capital is concerned, Arnaldo Bagnasco (1999) analyzes what Robert Putnam called *civicness*, that is a fabric of values, norms, institutions and associations that permit and support civic engagement, mutual trust, and widespread tolerance, where the interest is no longer (only) private and personal but becomes public. The possibility that a culture of *civicness* found fertile ground is directly influenced by the presence of high levels of Social Capital. According to Putnam (1993), the possession of Social Capital can directly have a positive impact on a territory (nation, region, city) and on the functioning of its democratic institutions; therefore, territories need strong social participation to attain certain levels of efficiency. Putnam developed this statement thanks to Tocqueville's work on civic participation in America in the 1830s; however, as Ferragina (2012) highlighted, Putnam did not consider Tocqueville's main explanation about the conditions which allowed high levels of social participation at that time in America, which was the widespread condition of equality. At the same time, it might seem quite optimistic to talk about "widespread equality" in order to define the general environment of America in the 1830s. Surely, America was a more equal country compared to others but, if compared with 1993 (when Putnam wrote) or with the current situation, notwithstanding the permanence of social and inequality issues, we might say that at least basic rights have been conquered since then¹.

As said before, Bourdieu theorized that the different typologies of capital (Economic, Cultural and Social) are able to influence each other's and in particular the possession of high levels of Social Capital could favor the acquisition and accumulation of Economic Capital. In this paper, I want to highlight also a backwards process, which thanks to the participation in economic and cultural activities allow people to improve their levels of Social Capital. The (strategic) collaboration between governmental institutions, civil society, enterprises and academy (in our case represented by Politecnico di Milano) can be able to open their close networks. In line with what Rullani (2006) proposed, I am going to question if design can act as a facilitator in the production of new bonds and - therefore - new forms of Social Capital.

¹ "Every boy knew that he might be the governor of the State, or a member of Congress. There was nothing to hinder him from being President; all he had to do was to learn. No position was beyond his reach if he chose to work for it. Franklin was a printer's boy and Andrew Jackson a poor boy who worked his way up from the humblest position." In this caption from the article "A Portrait of America, 1830" (EyeWitness to History, <u>www.eyewitnesstohistory.com</u>, 2008) for example, it is very clear that the equality was at that time extended to white boys, excluding women and Afro-American people.

Making: from business to local development

"Making" and the Fourth Industrial Revolution has been extensively investigated in the last few years by academics, journalists, politicians, and have also raised the interest of many entrepreneurs and passionate people.

Several pieces of research have been developed on the topic of fab labs networks and makers movement; in many cases, these studies highlighted problems of economic sustainability of these activities, but a more cultural-related role of these places emerged (Wang, 2015; Taylor et al, 2016; van Holm, 2017). Indeed,

"For makerspaces to become similarly ubiquitous and sustainable platforms, they need to offer the kind of institutional stability that will support meaningful community programming, educational opportunity, and grassroots economic growth. A glance at the history of makerspaces illustrates both the challenges and opportunities of building communities, and businesses, around the ethos of shared making." (Holman, 2015)

In order to theoretically frame our study, we took into consideration the social and cultural side of "making". "To make" (*fare*), in Italian, is often associated with the concept of capability, of "being able to make" (*saper fare*). These capabilities are both objects and contents of places such as makerspaces and fab labs, but also districts, regions and even nations are often recognized as repositories of specific making/artisanal cultures.

Makerspaces and fab labs, specifically, are not only connected with the physical production of goods, but also with the production of knowledge and relationships, which sometimes are expressed through the physical production/practice. Harvey Molotch (2003) stated that goods and social practices are directly connected and are able to sustain each other's. This means that the availability of a certain object is able to influence the endurance of people habits (e.g. what and how they eat); on the other way around, habits influence the consumers request of certain typologies of goods, and therefore their production.

In order to define our field of interest, we connected making with knowledge and social inclusion issues, identifying several pieces of evidence:

- production is an urban and cultural fact, which is able to re-signify places;
- in many cases, makerspaces and fab labs are located in peripheral areas because of the availability of empty and large spaces, and because there are more accessible areas compared to city centers. The localization in the suburbs often contributes to the physical and cultural regeneration of these areas. This aspect is particularly evident in Italy and especially in Milan (Armondi & Bruzzese, 2017);
- rediscovering craftsmanship means to uncover a deeper relationship between people and their work (Friedmann, 1987). We assist nowadays to a new idea of craftsmanship, which owns a renovate dignity and value (Sennett, 2008);
- craft knowledge is based on mutual, learning, cooperative, collaborative connections, and development of dialogic competences (Sennett, 2008);

In line with Molotch view, there could be then the chance that also the production of goods (and I am not referring to GDP production) might be able to sustain positive and innovative social practices, looking in particular at inclusivity.

In the following paragraph, I am going to focus the attention on Milano, making a rapid overview of research and activities which were particularly useful to frame our study.

Milano: theoretical framework and reference research

Makerspaces and fab labs, even if take back on the production working activities, are clearly part of the panorama of so-called Post-Industrial societies (Touraine, 1969; Bell, 1973) defined by:

- Closing down of several factories and the consequent need to re-define the identity of cities whose economy was based on manufacturing industry.
- Flexibility of workers, products (customizable), production quantities, etc.;
- Growth of the service sector: people working in commerce, tourism, health, education, entertainment, transport, etc. sectors become more numerous than the workers in the industrial sector;
- Increase of the importance recognized to knowledge (scientific and theoretical);

• Global networks of interaction (Castells, 1989).

As Antony Giddens (1990) highlighted, globalized societies and the working sectors which characterized it, are defined by dynamics of time-space compression. This last aspect is represented also by the faded boundaries of traditional urban functions: different tasks co-exist in the same places (work, consumption, leisure, etc.) "and new functionalities emerge as people take spaces into new uses" (Di Marino & Lapintie, 2017: 1). Di Marino & Lapintie (2017) talk about Post-Functionalist cities, which are characterized by hybrid forms of work, enterprises, and spaces, in general. For this reason, as I am going to deepen later, we decided to take into consideration for our research, not only makerspaces and fab labs but also other kind of spaces where sharing, encounter, production, socialization, etc. happened in order to delineate a complex ecosystem which characterizes also the directions taken by the municipal administration of Milano.

In the last few years, many Milano-focused research studies, and projects have been developed on the topic of "making". I quickly summarize those which were useful to theoretically frame our research.

Studies and research developed within the Design Department of the Politecnico di Milano by Stefano Maffei & Massimo Bianchini, directors and founder of POLIFACTORY, were particularly interesting for their analysis and reflections on the urban dimension of the phenomenon. They developed the idea of micro-urban manufacturing applying to it the concept of ecosystem (Maffei & Bianchini, 2013; Bianchini et al., 2014). At a national level, in 2015, with other scholars, they produced the "Maker's inquiry" (Bianchini et al., 2015), with the purpose of studying and analyzing the makers phenomenon in the Italian context. They investigated also the economic sustainability of the sector discovering that the majority of makers (54.4%), who participated in the survey, confirmed that making was a secondary and complementary economic activity; in addition to that, the majority of respondents (36.5%) declared an income range between 10,000 and 25,000 euros per year, and on the other hand, 23.1% of them declare an income between 0 and 10,000 euros.

Inside the Department of Architecture and Urban Studies (DAstU) of the Politecnico di Milano a research group, coordinated by Ilaria Mariotti (Armondi & Di Vita, 2018), carried out a FARB project called "New Working Spaces. Promises of Innovations, Effects on the Economic and Urban Context". The importance of the political framework, in which the investigated phenomena takes place, was particularly relevant in this research; indeed, one of the main focus and result is about the regenerative capabilities of these new working spaces, which often substituted old typologies of production. The research used the interesting interpretative category of proximity, proposed by Ron Boschma (2005), who analysed different typologies of proximity (cognitive, organizational, social, institutional and geographical) and how they might influence learning and innovation processes.

Professors and researchers in Sociology (mainly from The Sociology and Social Research Department of the Università degli Studi di Milano Bicocca) stressed the current re-specification and re-signification of the manual and productive work focusing also on the cultural value of makerspaces and fab labs, which actually seems to be the most important value if compared with the economic one (Colleoni, Vicari Haddock & d'Ovidio, 2015; d'Ovidio & Rabbiosi, 2017). In addition to that, a research carried out in collaboration with *cheFare* and Fondazione Feltrinelli, "broke" the wall which separated culture and production, developing an analysis of 6 different case studies which involved both cultural and art spaces, makerspaces and fab labs (Giuliani, 2018).

To conclude, I want to mention a project which wasn't developed within academy: *SUPER* - *II Festival delle Periferie* (The festival of the suburbs). We had the opportunity to discuss and involve their initiators and researchers in order to compare our projects since they had several points of contact. In particular, we were interested in their idea that peripheral neighborhoods of Milano are important pieces of the whole Milanese ecosystem, and, in the strong connection between culture, making and social innovation, which they wanted to highlight thanks to the organization of workshops and events around the city.

In light of the core concepts, which emerged from the research listed above, we decided to look at "making" in a wider way or in an "open" way as Sennett suggested (2018). Indeed, making is not only oriented towards utilitarian purposes but also towards sociality goals (Sennett calls it "limited fraternity" relationships) favoured by processes of co-creation, collaboration or even by the possibility to meet and interact with other people in the same (physical) place (Fassi & Sedini, 2018).

In the following pages, the study that we carried out starting from February 2018 to September 2018 in collaboration with the IIT of Chicago will be presented.

Made in Milano: a collaborative research

The idea of considering all those activities able to bring together people both for economic and leisure purposes as *making* was quite "extreme". However, it has been thought that it would have been an interesting point where to start from and then eventually focus our attention on more specific and coherent issues. However, using an ecosystemic approach and having as a research goal the identification of a possible definition of Civic Design, we thought that this was the right path.

In collaboration with the IIT of Chicago, we identified our common research questions and 10 key concepts which would have been driving our research.

In this paper is going to present only the work developed on the Milanese territory by the School of Design of Politecnico di Milano. Not all the steps and results of the study will be taken into consideration, but only some specific research activities, focusing mainly on the following research questions: How can the goals of social innovation and inclusion be achieved through making? What's the role of Design in these processes?

The initial mapping activity involved places and initiatives of (and for) (new) work, creativity and aggregation:

- coworking spaces;
- fab labs & makerspaces;
- service centers and hubs;
- incubators;
- cultural centers;
- spontaneous engagement spaces;
- cafés;
- events.

Then, our first group of case studies was selected among the 180 mapped activities. The selection was based on three main factors:

- 1. their mission: more or less focused on social innovation
- 2. their location: peripheral
- 3. their originality: they had not already been investigated by other recent research (in particular by those mentioned in the previous paragraph).

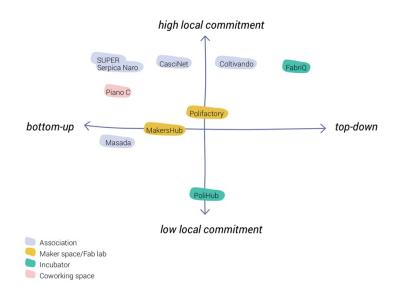


Figure 1: Matrix of the selected case studies. source: Vanessa Monna.

We interviewed also some key informants from the Public Administration (the Municipality of Milan and the Metropolitan Area of Milan). Additionally, we decided to interview some artisan entrepreneurs, because they

had been suggested to us from the previous interviewees or because their activity was particularly interesting for us; indeed, all of these spaces owned crucial characteristics of innovativeness (e.g. integration of traditional and 4.0 tools and technology), openness to a wider public, connection with the design field (in terms of competences, strategy, collaborations, etc.), suburban localization. We involved in the interviewees' group the following sectors: jewellery design, lute manufacturing, typography, bakery, bicycle manufacturing, brewing.

In total, we interviewed 19 people. The interviews lasted on average 45 minutes; they were recorded and fully transcribed.

Made in Milano ecosystem: vision and mission

Some of our case studies were actually born from previous spontaneous experiences of political and social activism, then they associated themselves and, after a while, they decided to become enterprises or associations. Others were initiated thanks to the Municipality or the Academy with the purpose of regenerating places/spaces, and with the purpose to involve specific marginalized populations or to favour the encounter between citizens. Others were already mainly business-oriented.

Social issues were often at the core of our interviewees' mission. Even if social innovation is harder to pursue by artisans, many of them pay specific attention to sustainability.

Several activities are focused on empowering marginalized people, such as immigrants and refugees. In addition to that, sometimes, they were able to help people who lost their jobs (or just wanted to change it) to reinvent themselves, thanks to the participation in their courses or activities.

"The isolation issue is very strong; being an unoccupied woman or with bad conditions of work in a period of general crisis is a very strong weakness." Piano C

In general, a common characteristic of these case studies is that they try to promote *social mixité* (Wirth, 1938; Sennett, 2008) in the composition of their workers, collaborators, users, and clients' groups. *Social mixité* is also obtained thanks to the design of new products and new hybrid spaces, which for example are capable of trigger a change into the average target by diversifying it.



Figure 2: Noor, nato con la camicia banner. source: Serpica Naro.

I can mention here the activity "Noor nato con la Camicia" (*Noor born with a shirt on*)² carried out by Serpica Naro association. This initiative was started in February 2016 to promote the work of Noor Zaman, an Afghan tailor who was waiting for the approval of his request for political asylum in Italy.

"Anyone could come here to get custom made shirts or a kurta (a traditional vest), upon payment of a deposit. Now Noor continues to have his private customers who contact him via Facebook. He also teaches in some courses here about shirt and vest tailoring, we also went to Pavia to organize an ethical fashion show with his collection. We tried to create some opportunities for him." Serpica Naro

² The name of this activity in Italian is actually a wordplay, since "being born with a shirt on" means "to be lucky".

He has now obtained the status of refugee and works as a tailor. Sometimes he still goes to SerpicaLab to make the tailored shirts committed to him.

Made in Milano ecosystem: localization and relationship with the territory



Figure 3: Localization of case studies and artisans-entrepreneurs (pinpoints) selected. source: Carla Sedini, with snazzymaps.com.

The reason for being in Milan was always identified as quite strong for our interviewees. Milan was recognized as the right place where to invest because of the presence of several *soft* factors, together with the *hard* ones.

The localization in a specific neighbourhood, though, while in some cases was a choice in other cases happened by chance. Indeed, some interviewees declared that the localization in a specific area of the city was part of their entrepreneurial project, not only because of accessibility but also for reasons of cognitive proximity. The connection with the territory was often stressed as a win-win element both for the enterprise and for the area, which underwent a social, economic, and territorial revitalization also thanks to the localization of these new businesses.

In other cases, the location was mostly due to the availability of a space with the right economic and structural characteristics.

Sometimes the peripheral localization represents a weakness and a challenge in attracting users and clients. This difficulty seems to be much more related to a mental prejudice than to actual problems connected with safety or accessibility.

"The location does not help. There's a wrong perception of suburbs. But the policy helps (Suburbs delegation in the municipality of Milan). It's not that easy to reach us, there's no subway lines, for example. But it is more a mental constraint." FabriQ

The impact of these spaces is not measurable yet. However, in some cases, just the fact of regenerating an abandoned area was able to make it accessible and to attract people.

In addition to that, several initiatives were also able to change the perception of places which were once felt as private and closed from the outside, turning them into spaces open to the community (local or not). Indeed, the relationship with the city emerged also from events and activities aimed at opening these spaces and connecting the inner community with the external one. "Cavriano [an area of Milan] has a forgotten identity. The action of making a place accessible to different targets is something that you can measure in terms of presences. Farms and vegetable gardens make a place an important social device." CasciNet

FabriQ, for example, is the first incubator of the Municipality of Milan specifically dedicated to promoting social innovation. The launch of FabriQ in 2014 is part of a wider long-term plan of the Municipality to relaunch the North-West area of the city and a wider policy of recovery of empty or abandoned spaces. FabriQ is located in a suburban area of the city, called Quarto Oggiaro, which does not own a very good reputation. FabriQ is located in a regenerated 650 square meter space.

One example of initiatives developed for and with the neighbourhood was "The Street Art week" which was one of the activities composing the wider project "Mettiamoci in gioco" (*Let's get involved*)³ focused on the social regeneration of a small playing field close by FabriQ. In particular, during "The Street Art Week" painting and street art activities were developed at the playing field, under the conduction of the well-known Milanese street artist, Bros. Involving people from inside and outside the neighbourhood, this marginal and residual space was given new life thanks to co-drawing activities.



Figure 4: The playing field in Valsassina street (Quarto Oggiaro) before and after. source: FabriQ.

As it is possible to understand from this example, our case studies were characterized by a multiplicity of activities and purposes.

Made in Milano ecosystem: design role

Several managers and entrepreneurs, who were interviewed, studied in a Design School. They stressed how the role of designers have changed over time: there has been a return to analogic processes and tools, often (but not always) connected and integrated with digital fabrication and, in general, new technologies. This clearly has an effect on productions which are composed of small quantities and high-quality goods in opposition to large-scale distribution processes.

The contribution of design in our case studies happened both on tangible and intangible aspects. Therefore, design was helpful both in the ideation of specific tools, in the design of the space and its interior, and also in the activation of networks and good practices.

In general, there is wide recognition of the value of a design approach and where design is not immediately at the core of the entrepreneurial or associative strategy or it is not an "in house" resource, our interviewees declared that they try to collaborate with designers and design schools.

According to the answers collected, it is possible to identify three main roles that design can play for these spaces:

³ It was a project carried out by a local partnership - created thanks to a tender promoted by Timberland and King Baudouin Foundation - made up of FabriQ, Save the Children, ASD Futura, and Ambiente Acqua Onlus, acting in the Quarto Oggiaro.

1. The first two can be combined. Design has an **envisioning** role to imagine good practices and project opportunities; and it has a **facilitating** role able to activate relationships (which will be discussed in the following section).

"In 2007, we looked for external [from the company] product design for our guitars. A young designer came in, bringing the idea of a shape linked to gestures. That same year, Giulio lacchetti proposed bringing the topic of music to the Milano Design Week. Each designer was linked to a company in order to make a musical product. So, we also made an instrument for this event." Noah Guitars

2. Design has a **strategic** role within enterprises from other fields, allowing the reinvention of traditional businesses, expanding their offer, developing a communication plan, and attracting new types of clients.

"We use a method which we called 'work design'; it tries to connect already existing resources. Your job is a project. This method is based on the design thinking approach." Piano C

Coltivando, a community garden within the Bovisa Campus of Politecnico di Milano, is another interesting case study to be mentioned. Coltivando was ideated in 2011 and developed in 2012-2013 and it is addressed to two main purposes: allow the local community to discover a public place which they usually do not attend, and create connection between people from different communities, such as students, citizens, scholars, etc. with - it is possible to say - the pretext of growing their own food. Service design combined with a community-centered design and a spatial design approach were used to develop Coltivando.

"In the preliminary work, we had spent a lot of time figuring out how to divide the harvest among people. Unexpectedly, we realized that people did not care: they came regardless of the collection, it was more for meeting people. For this reason, we have also organized harvest days." Coltivando



Figure 5: (left) first Coltivando Happy hour; (right) a usual saturday at Coltivando. source: Coltivando

Today Coltivando is managed by a team of 15-20 people plus some "supporters" who pass by sporadically or on special occasions. Indeed, the permanent people who take care of the garden meet there every Saturday but Coltivando organizes and hosts also workshops and convivial events which are able to attract people who usually do not participate in it as well.

Made in Milano ecosystem: network

Some of our case studies were born thanks to the connection between different actors and stakeholders: Academy, Government, Civil Society, and Enterprises, according to a Quadruple Helix approach (Carayannis & Campbell, 2009). In other cases, this network was created after their constitution. In others more, institutions have taken an active part in the project, through specific offices.

The creation of networks, in most of the cases, is not limited to the business activity or association, but it is also extended to their workers, users, clients, "friends" as it was mentioned also in the previous pages. These

spaces are indeed platforms for encounter where the creation and accumulation of Social Capital is made possible. This goal can be already declared in the mission of the space or it can be a (positive) side effect. Design plays an important role for this purpose; the creation of networks can be achieved by design or with design, where in the first case design is the content and-or the agent and in the second it is a tool and-or a strategy.

"Our vision was to create a place where people could work supported by adequate spaces and equipment. Above all, a place where there is a real exchange, sharing, putting aside the competition, and embracing the idea of internationality (because we believe in it)." About Officina Orafa (About Goldsmith Lab)

A good example of network creation at different levels is the MakersHub Design Hostel initiative: during the Milano Design Week, the spaces of MakersHub were transformed into a hybrid hostel and exhibition space.

The creation of networks works both at the organizational and territorial level (e.g. among institutions) and at the users' level; in addition to that, in this case, design worked both as content and as a tool for the ideation, realization and the experience itself.



Figure 6: Design Hostel, day (left) and night (right). source: MakersHub

Starting from the idea of Davide Crippa, founder of the Ghigos architecture studio, MakersHub offered the space, realized the technical project and the set-up, and coordinated the whole operation. The collaboration with the Design Department of Politecnico di Milano and POLI.design was crucial, in order to internationally spread the call. This was the first level of creation of networks, which during its second year in 2018 actually started the Bovisa Design District.

"We understood that playing 'solo' was not sustainable. We had to think in a wider way. It was a win-win partnership with the territory: the birth of the Bovisa Design District has brought to light Bovisa potentialities, which we only had imagined years before." MakersHub

The second level is represented by the fact that several young designers (and design lovers) from all over the world slept and lived together for several days, knowing each other both personally and professionally, since they could use their accommodations also as showrooms.

Making the difference through design: first conclusions

In these first conclusions of the collaborative study here presented, I want to highlight the main roles played by design with a particular focus on the topic of social inclusion and Social Capital improvement.

First of all, apart from the results collected by the research, design had a wide **political** role. Indeed, in light of the general concept of Civic Design, which is based on the central role of citizens in the creation and diffusion of civic visions (Saunders, 2008), two Universities (School of Design of Politecnico di Milano and the IIT of Chicago) started a collaboration after being involved in the policy Milano-Chicago Sister cities program.

Looking specifically at what emerged from our study in Milano, design served as a **content**. Indeed, the topic of making is strictly connected both with traditional and advanced design and this is pretty evident in artisans, maker spaces, and fablabs case studies.

Design was also a **strategic** lever for innovation and development processes inside other hybrid enterprises, such as co-working spaces, incubators, social gardens.

A transversal role of design and making was the creation of **networks** and - as a consequence - the support given for the development of Social Capital.

Indeed, making, manual, artisanal, and design activities:

- are perceived as more inclusive than intellectual ones, and therefore able to create a *social mixité* and favor the dialogue between different people and stakeholders;
- can positively influence social redemption, because they also offer opportunities for excluded and weak population groups.

In this sense, design can have a positive impact on the creation of more suitable and sustainable working environments.

Milano, as an ecosystem, is an interesting case study because it seems that the role of making and design has been recognized at several levels from the political to the entrepreneurial and the social side.

A dense environment is already empowering and stimulating by itself; in addition to that, the continuous support for the creation of new initiatives to connect different stakeholders is a way to create a legacy, a reputation, and an environment defined by values of openness and empowerment. Richard Sennett in his most recent book (2018) talked about the Open Smart City, a city which support non-required encounters. Indeed, cooperation has not necessarily be driven by consent, but can also be supported by different stakeholders, collaborating in the accomplishment of impersonal tasks (such as growing tomatoes or co-design a hostel). The creation of such social environment which does not only answer to utilitaristic purposes is made clearly possible by the personal commitment of people but, in order to become a consistent /persistent practice, needs institutional and political support, which could be mediated by the strategic role of design.

References

Armondi, S. & Di Vita, S. (2018) (eds.). *Milan: Productions, Spatial Patterns and Urban Change.* London-New York: Routledge.

Armondi, S., & Bruzzese, A. (2017). Contemporary production and urban change: The case of Milan. *Journal of Urban Technology*, 24(3), 27-45.

Bagnasco, A. (1999). Tracce di comunità. Bologna: Il Mulino.

Becattini, G. (1989). Riflessioni sul distretto industriale marshalliano come concetto socio-economico. *Stato e mercato,* 111-128

Becattini, G. (2000). Dal distretto industriale allo sviluppo locale. Svolgimento e difesa di un'idea. Torino: Bollati Boringhieri.

Bell, D. (1973). The Coming of Post- industrial Society: A Venture in Social Forecasting. New York: Basic Books.

Bianchini, B., Arquilla, V., Maffei, S., & Carelli, A. (2014). FabLand: 'Making' digital/analog distributed urban production ecosystems. *Conference proceedings From Fab Labs to Fab Cities - and Fab Citizens, FAB10Barcelona.*

Bianchini, M., Menichinelli, M., Maffei, S., Bombardi, F., & Carosi, A. (2015). *Makers' Inquiry. Un'indagine socioeconomica sui makers italiani e su Make in Italy.* Milano: Libraccio Editore.

Boschma, R. (2005). Editorial: Role of Proximity in Interaction and Performance: Conceptual and Empirical Challenges. *Regional Studies 39, 1,* 41–45.

Bourdieu, P. (1980). Le capital social - Notes provisoires. Actes de la recherche en sciences sociales, 31, 2-3.

Carayannis, E. G., & Campbell, D. F. (2009). 'Mode 3'and'Quadruple Helix': toward a 21st century fractal innovation ecosystem. *International journal of technology management*, *46*(3-4), 201-234.

Castells, M. (1989). *The informational city: Information technology, economic restructuring, and the urbanregional process.* Oxford: Basil Blackwell.

Colleoni, E., d'Ovidio, M., & Haddock, S. V. (2015). The Making of the Human City. Milano: Fondazione Feltrinelli.

d'Ovidio, M., & Rabbiosi, C. (2017). *Maker e città. La rivoluzione si fa con la stampante 3D?*. Milano: Fondazione Feltrinelli.

Di Marino, M., & Lapintie, K. (2017). Emerging Workplaces in Post-Functionalist Cities. *Journal of Urban Technology*, *24*(3), 5-25.

Fassi, D., & Sedini, C. (2018). Design Solutions for Resilience. In H. Pinto, T. Noronha, E. Vaz (eds.) *Resilience and Regional Dynamics. An International Approach to a New Research Agenda*. Springer International Publishing.

Ferragina, E. (2012). Social Capital in Europe: A comparative regional analysis. Edward Elgar Publishing.

Friedmann, J. (1987). Planning in the Public Domain: From Knowledge to Action. Princeton: Princeton University Press.

Giddens, A. (1990). La costituzione della società. Comunità, Milano.

Giuliani, I. (2018). La città culturale. Spazi, lavoro e cultura a Milano. Milano: Fondazione Feltrinelli.

Granovetter, M.S. (1973). The strength of weak ties. American Journal of Sociology, 78, 1361-1380.

Harrington, D.M. (1990). The Ecology of Human Creativity: A psychological perspective. In M.A. Runco and R. S. Albert (eds.) Theories of Creativity. London: Sage Publications.

Holman, W. (2015). Makerspace: Towards a New Civic Infrastructure. *Places Journal*. Retrieved from https://placesjournal.org/article/makerspace-towards-a-new-civic-infrastructure/?gclid=CN7lv7K5zMkCFdRuGwodO-IAxw&cn-reloaded=1 [last access April, 15, 2019]

Landry, C. (2000). The creative city: A toolkit for urban innovators. London: Earthscan

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

Maffei, S., & Bianchini, M. (2013). Microproduction everywhere. Social, local, open and connected manufacturing. Social Frontiers. Conference 14th-16th November, London (Essay commissioned by NESTA UK in the area of SI EU research).

Molotch, H. (2003). Where Stuff Comes From: How Toasters, Toilets, Cars, Computers and Many Other Things Come To Be As They Are. New York: Routledge.

Parente, M., & Sedini, C. (2018). Design as Mediator Between Local Resources and Global Visions. Experiences of Design for Territories. In O. Moret (ed.) *Back to the Future [ICDHS 10th+1Conference] Proceedings Book*, 29-31 Ottobre 2018, Universitat de Barcelona.

Putnam, R. D. (1993). The prosperous community. The american prospect, 4(13), 35-42.

Rullani, E. (2006). Capitale sociale e nuova modernità. Sociologia del Lavoro, 102, 35-64

Santagata, W. (2007). *La fabbrica della cultura: ritrovare la creatività per aiutare lo sviluppo del paese*. Bologna: Il mulino.

Saunders, M. J. (2008). Civic design organizations (Doctoral dissertation, University of Pennsylvania).

Scott, A.J. (2006). Creative cities: conceptual issues and policy questions. Journal of Urban Affairs, 28, 1, 1-17.

Sennett, R. (2008). The Craftsman. London: Allen Lane/Penguin Press.

Sennett, R. (2018). Building and Dwelling: Ethics for the City. London: Allen Lane.

Taylor, N. (1998). Urban Planning Theory since 1945. Thousand Oaks: Sage Publications.

Taylor, N., Hurley, U., & Connolly, P. (2016, May). Making community: the wider role of makerspaces in public life. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (pp. 1415-1425). ACM.

Touraine, A. (1969). La société post-industrielle : naissance d'une société.

van Holm, E. J. (2017). Makerspaces and local economic development. *Economic Development Quarterly*, *31*(2), 164-173.

Wang, D., Dunn, N., & Coulton, P. (2015). Grassroots maker spaces: a recipe for innovation? Wirth, L. (1938). Urbanism as a Way of Life. American journal of sociology, 44, 1, 1-24.

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