

**ROLES OF PRODUCT DESIGNERS
IN SOCIAL INNOVATION:
CASES FROM PORTUGAL**

Master of Science Thesis

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Master of Science Thesis

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Programme in Industrial Design

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FINAL APPROVAL FOR THESIS

This thesis titled “ROLES OF PRODUCT DESIGNERS IN SOCIAL INNOVATION: CASES FROM PORTUGAL” has been prepared and submitted by Isaac Arturo ORTEGA ALVARADO in partial fulfillment of the requirements in “Anadolu University Directive on Graduate Education and Examination” for the Degree of Master of Sciences in Industrial Design in the Department of Industrial Arts and has been examined and approved on 19/12/2017.

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ABSTRACT

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This thesis work is based on the subjects of Design and Social Innovation, considering both as fields that can contribute to the expansion of each other. Design is already a well-established profession within the Industrial sectors, yet a new wave of thought calls for its implementation in problems that are of a social nature, and that would complement the work of technical innovation which is usually assumed by designers. To present a panorama of how designers could be better integrated into Social Innovation, a literature review of works dealing with the concepts of roles of Design, social innovation, Design and social aspects, and practices of Design is presented. Followed by a field study consisting of a survey of ten examples from Portugal; a country with the particularity of having an already striving Social Innovation sector. This context gives Portugal the characteristic of serving as a model case to research about the route taken by Social Innovation initiatives and the possibilities for future designers. With the aim of founding ways to facilitate the incorporation of designers to this field. A summary of the main aspects of these examples are presented and discussed; as well as a general description of what could be the general situation in Portugal. It ends with the recommendation of two possible paths to be followed by designers wanting to enter the field of Social Innovation.

Keywords: Roles of Design, Social Innovation, Design and Social Aspects, Design Practices, Portugal.

ÖZET

SOSYAL İNOVASYONDA ÜRÜN TASARIMCILARININ ROLÜ: PORTEKİZ ÖRNEĞİ

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Bu tez çalışması, birbirlerinin gelişimine katkıda bulunabilecek alanlar olarak değerlendirilen sosyal inovasyon ve tasarım konularını ele almaktadır. Tasarım, endüstri sektörü içerisinde artık bilinen bir meslektir, ancak yeni bir düşünce dalgası, tasarımın, tasarımcılar tarafından genellikle tamamlayıcı, teknik bir inovasyon çalışması olarak görülen ve sosyal nitelik taşıyan sorunlara yönelik uygulanması gerektiği üzerinde durmaktadır. Bu doğrultuda, tez çalışmasında, tasarımcıların sosyal inovasyona nasıl daha iyi entegre edilebilecekleri hakkında görüş sunulmakta, tasarım rollerine ait kavramlarla ilgili çalışmaların literatür taraması yapılmaktadır. Ayrıca toplumsal inovasyon, tasarım ve sosyal yönler, tasarım pratikleri ile ilgili bilgiler de bu çalışmada yer almaktadır. Sosyal inovasyon, Portekiz'deki en gelişmiş sektörlerden biri olmasa da diğer sektörler arasında kendisine yer açmaya çalışmaktadır. Bu özelliğinden dolayı da saha çalışması için Portekiz'de 10 görüşme gerçekleştirilmiştir. Görüşmeler yardımıyla çalışmanın, sosyal inovasyon ve geleceğe yönelik olasılıkları belirlemek üzere örnek bir vaka özelliği taşımakta olduğu ve tasarımcıları uyumlu bir biçimde bir araya getirmek amacıyla olası sonuçları ortaya koyduğu yönünde verilere ulaşılmıştır. Bununla birlikte bu örneklerin temel yönlerinin bir özeti sunulmakta ve tartışılmaktadır. Son olarak Portekiz'deki durumun ne olduğu ile ilgili genel bir açıklamada yer almakta ve çalışmada sosyal inovasyon alanında çalışmak isteyen tasarımcıların takip edebilecekleri iki olası yol üzerine öneriler sunulmaktadır.

Anahtar Sözcükler: Tasarımın Rolü, Sosyal İnovasyon, Tasarım ve Sosyal Bakış Açıları, Tasarım Uygulamaları, Portekiz.

19/12/2017

STATEMENT OF COMPLIANCE WITH ETHICAL PRINCIPLES AND RULES

I hereby truthfully declare that this thesis is an original work prepared by me; that I have behaved in accordance with the scientific ethical principles and rules throughout the stages of preparation, data collection, analysis and presentation of my work; that I have cited the sources of all the data and information that could be obtained within the scope of this study, and included these sources in the references section; and that this study has been scanned for plagiarism with “scientific plagiarism detection program” used by Anadolu University, and that “it does not have any plagiarism” whatsoever. I also declare that, if a case contrary to my declaration is detected in my work at any time, I hereby express my consent to all the ethical and legal consequences that are involved.

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Isaac Arturo ORTEGA ALVARADO

FOREWORD

This thesis was made to accomplish the requirements for the degree of Master of Science in Industrial Design from the Graduate School of Sciences at the Department of Architecture and Design at Anadolu University in Eskişehir, Turkey.

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1. INTRODUCTION

Practices of Design are not fixed, and designers take on roles that fit the contexts in which their work develops. In recent years, the scope of Design has been broadening, including efforts towards solving problems that are of social nature; and, cannot be solved with classical Design methods -which focus solely on technical aspects of production-.

Social problems are never solved and are usually ill-defined. A one solution approach is not enough, as these new problems are wicked in nature -they don't have only one source of origin- (Rittel & Webber, 1973). For designers to work with these problems, it is necessary a reformulation of their roles. Moreover, if Design is to be taken as a profession of social impact.

Notions of Design having a social impact are not new. Lawson (2006, p.29) stated: *“the future role of designers are inevitably linked to the kind of direction in which we wish society to go”*. Therefore, whatever the work of a designer is, it is connected to a model of what is expected of the society. The practice of Design is not only a reflection of the kind of society it is immersed in, but a driving force for its future.

The discussion about the roles designers play within societies is driven by perspectives of the spaces from which it is enacted. A separation of Design as a professional practice is remarked, in opposition to design as a task enacted by all humans. Based on the distance professional designers take from the people for whom they generate solutions. The three roles were suggested by Markus in 1972 (Lawson, 2006, p.29):

“The first role is essentially conservative, centered around the continued dominance of the professional institutions. (...) The opposite to this conservative approach is actively to seek different structural changes in society but which also would result in the end of professionalism as we know it. (...) The third, middle, path lies between these two extremes, (...). In this role, designers remain professionally qualified specialists but try to involve the users of their designs in the process. These more participatory approaches to design may include a whole range of relatively new techniques, ranging from the public inquiry through gaming and simulation through to the recent computer-aided design procedures. (...)”
(Lawson, 2006, pp.29-30)

A typology of designers' roles based on the distance they take from the society they act upon¹ is still relevant today. And, it is more important now than ever, as the practices of Design are becoming more complex by introducing new actors.

¹ A “society acted upon” is a group of people for which designers solve problems, or find opportunities for solutions, if the main aim of Design is to get to an ideal state based on a current context.

A one size fits all approach cannot be followed for designers working in social contexts. Margolin & Margolin (2002) already made a call for a social design based on methods not found in classical design practices, hoping that a reorientation would allow designers to obtain the necessary skills and tools required to work on social problems.

1.1. General Description

Some designers have begun to apply strategic approaches. And, are consciously incorporating social, emotional and economic contexts of communities as part of the requirements for their solutions. This is what might shape the practices of Design in decades to come (Manzini, 2016). Thus, broadening the practices of Design as there will be a closer relation to the public and social issues (Bonsiepe,1998). The need for a shift, on how and what designers approach as their practices, is an urgent matter.

The involvement of Design with societal problems is not a recent trend, it has been a topic for almost five decades, even designers in the methodology movement discussed it as part of the post-industrial societies' talks. Cross (1981) presented it as follows:

“Such a paradigm would suggest a reorientation not only of the values, beliefs and attitudes of designers, but also of the goals of design (i.e. the nature of design products), and of the methods for achieving these goals.”
(Cross, 1981, p.5).

1.1.1. Challenging the role of Design

Global communications make possible the recognition of unequal realities, in which technological advancements are not solving problems such as hunger, sanitation, education, and workplace-access for all humans. In addition, the most industrialized countries are also facing challenges that are the result of many of these advancements.

New technologies may also deepen the problems. Many jobs will be lost as result of production automatization. Design practices are also challenged; artificial intelligence and parametric design can replace most of the tasks related to form giving. Designers will need to redefine their tasks, and can include roles related to solving issues for social needs.

These scenarios that designers may face, should be taken as opportunities for professionals. These will add more complexities, as De Moraes (2010) exposed: *“All these requires and will require from designers a capacity that goes beyond the project, more, a permanent capacity of actualization and of management of complexity.”* (De Moraes, 2010, p.11)

In any human task, a newly recognized complexity implies a set of contradictions, refrains and possible agreements that are the base for its reframing. Design is not different in this aspect. Some, like Lipson & Kurman (2013) focus their attention on the technical new opportunities, and dream about an improved material reality in which everybody can manufacture their own products at home and designers take the role of tool creators. While others, like Bonsiepe (1998) at the turn of the century called designers to strengthen their relationship with the public domain, to work on the issues of self-identity in front of the interests of dominant economies (referred by him as otherness). These two approaches are different, but can be complementary to each other, in front of the new challenges.

Most of the arguments about the new roles of Design tend to be positioned in one of the two fronts: one subjected to benefits of technical advancement, and another subjected to the impact it can have in fostering social development. These two fronts -on which the role of a designer stand- are noted by Thorpe & Gamman (2011) as two paradigms:

“The first paradigm (...) linked to an industrial economy model of production and consumption, one that is typically technology driven (...) seeks to provide goods and services to essentially passive consumers. The second paradigm (...) is led by forces for social change or by social need and often (although not always) relates to what is understood as the social economy...” (Thorpe & Gamman, 2011, p.218)

For the most, Design is still linked to roles in technical production and visual creation; Julier (2006) invites designers to move from a Visual Culture to a Design Culture, by emphasizing on the interrelations between material and nonmaterial expressions: *“... design culture contributes to the structuring of practice and the formation of the rules of engagement of its related field”* (Julier, 2006, p. 75). Design practices can be enacted upon the recognition of intangible outcomes, such as behaviors, social relations, social values and others, that are beyond what traditional practices intend to modify.

1.1.2. A Social role for emerging Design

Design practitioners are starting to incorporate approaches dealing with the creation of solutions that are aimed at solving problems that fall out of the realms of technical solutions. One example of this, is the 2011's spinoff of the internationally acclaimed design consultancy IDEO, which under the name IDEO.org seeks to apply their design problem-solving know-hows to solutions for social needs; done by applying IDEO's authored design-process methods, and working mainly in developing countries (Pastorek, 2013).

The Co-lead and co-founder of IDEO.org stressed the fact that their problem solving is not oriented to material products, and that it can have a more systemic less tangible outcome:

"We like to think of design as the way in which you see the world and the way in which you frame problems. And that can take almost any kind of direction, and come to an output that absolutely doesn't have to be a physical thing." - Patrice Martin (Pastorek, 2013)

IDEO.org is the result of a role reframing; a well-known and established international Design consultancy that is applying their usually business/commercial and industrial oriented know-hows on problems that are outside of these realms. Even approaching issues that are consequences of the industries they serve, or that were left unattended by businesses for not having a marketable value. This kind of reframing is what is expanding the scopes of Design. Designers, and people outside the field of Design, are recognizing that tools used by designers might as well help in solving societal issues. It is what Manzini (2016) denominated "Emerging Design".

Emerging Design practices include all non-traditional ways of enacting Design. Which can be on the approaches and/or awaited results. They are all the practices bringing Design to unexplored spaces - such as the social space -. The role Design plays within the social space is not easy to be defined; defining it raises some questions such as: What is considered social? Who does design? What are the results awaited? What is the experience Design can bring? Should we call it Social Design? Can the social be designed?

One stream of thought – gaining popularity- is the one of Social Design, which Papanek (1985) called integrated design. It assumes social implications for Design - within the professional industrial space- as a set of moral responsibilities integrated into a code of good conduct. From it, was developed the assumption that designers should work as morally conscious individuals, by doing good against harming commercially oriented practices. Therefore, a designer is at the same time doing public good while serving the industry.

Some designers -as the ones from IDEO.org- are starting to work on social issues. And they do it by working with people in disadvantage. In contexts that are not driven by the creation of economic value nor by manufacture constraints, rather by human needs. To attend the requirements imposed by those contexts means a complete redefinition of the approaches. Solutions or outcomes generated by designers won't be evaluated in terms of their physical efficiency, nor by their perceived beauty. Setting the need to re-elaborate the roles of designers. Noted by Janzer & Weinstein (2014):

“In designing social situations, as social design aims to do, a different set of processes and research methodologies must be used than those employed in designing objects.” (Janzer & Weinstein, 2014, p. 328).

It is easy to find examples of designed objects that are marketed as social design; they are presented as solving or improving living conditions for a group of people. An example is a shelter for refugees made by IKEA in 2016². This product is effective in solving the problems of shelter construction speed and distribution. But, it doesn't change any aspect of the relations and structures of the social exchanges experienced by a person living as a refugee. These objects are to be deployed in refugee camps, secluded areas that are separated and self-contained. The immigrants in these camps do not interact with the people from the receiving country. It is not possible to change social conditions by simply creating new products.

It is necessary to ask: How can Design assume a social role? A question that can be complemented by the one: What does it mean to have a social role in Design? The answers must be in terms of the approaches within the Design profession and the contributions it offers to societies. A Definition might be beneficial for the establishment of positions and roles that designers can assume, as well as their relation to other professionals.

² The scope of this Project can be followed on the sites: <http://www.bettershelter.org/> and http://www.ikea.com/ms/en_US/this-is-ikea/ikea-highlights/Home-for-a-refugee/index.html

1.1.3. A social scope for Design

The case for broadening the scope of Design -to include social aspects- has been presented. Although, Design practices are usually linked to innovation (Verganti, 2009), it is necessary to research about the role of Design for innovation that is not technical. This research can be done by looking at the participation of Design in Social Innovation. Works in this field are a complement to technical innovation, and might be the answer to the challenges faced by present-day societies.

“While societal development in the nineteenth and twentieth centuries was driven by technological progress and economic dogmas, the twenty-first century must give rise to social innovation to encourage societal and systemic changes.” (Grimm et al, 2013, p. 437)

Social Innovation as a field is still not well established. It is overgoing a process analogous to the first years of industrialization. The first industrializations created the conditions for the existence of Industrial Design professions; hence offering opportunities for designers as new professionals. Designers' roles developed in parallel to industrial development. However, in contemporary days, Design and Social Innovation offer each other ground to grow on practices and theories. A more broadened role of Design can be uncovered by establishing the linkages between both spaces.

It can be recognized that the roles designers play can be reconsidered. To reframe the designer's role doesn't mean to eliminate of all the pre-existent practices of Design. But to take the appropriate tasks for the field in which they will be applied. A reframing of Design could depart from specific lessons learned from previous practices; Dorst (2015, pp. 59-71) mentions it in his abstraction of “five lessons of what Design does”. These lessons can help in facing problems by using the core skills of Design, without focusing on specificities. If designers know what are the characteristics of a social problem, then, they can choose how to apply their own knowledge.

Design is already being applied to tackle problems within the space of Social Innovation. Manzini (2015) acknowledges the role of Design in this field, in the contribution to the creation of self-sustainable communities; and notes that in Social Innovation Design is just being applied in a contemporary way, apt for the context and kind of problems faced today. Instead of reframing Design in its intentions, Design is being reframed on its practices, and one of these practices is Design for Social Innovation.

Designing for Social Innovation means that the designers must assume roles as they do when designing for industry. Acknowledging these roles can be done by pursuing research on the intersection of Design and Social Innovation. Furthermore, in this thesis, an exploration of the field of Social Innovation in the country of Portugal is presented to get insights about possible roles to be assumed by product designers.

1.1.4. Portugal: Opportunity for the study

The Social Innovation Index (Kondo, 2016) edited by The Economist Intelligence Unit presents a comparative index of Social Innovation in 45 countries -the ones in the G20, as well as members and candidate countries to of OECD³-. This Index is composed of four pillars: 1) Policy and Institutional Framework, 2) Financing, 3) Entrepreneurship, 4) Civil Society.

The 45 countries included in the Index (Kondo, 2016) were ranked according to their general scores, that can reach a maximum of 100. In the general ranking, Portugal occupied the 22nd position out of 45; with a score of 52. Out of the European countries included, it is the second one with the lowest score, third if Turkey is included. Yet this score means that although Portugal is not a top-notch country for Social Innovation, it already has a developing field.

Portugal is exactly in the middle of the ranking (Kondo, 2016), and has a score close to the median value. Therefore, two reasons to study in the space of Social Innovation in Portugal are taken:

- 1) It presents some good conditions for Social Innovation be developed in a short period of time.
- 2) There are still many challenges and improvements that can be made, and they are opportunities, which might be achieved by Design.

The four components of the index show some of the weakness and strengths of Portugal in terms of Social Innovation. It is well ranked in terms of Policy and Institutional Framework; the document mentions that it is one of the seven countries that have estate policies for the field. It also has a good score and ranking in the component of Entrepreneurship. Besides having a middle performance in the component of civil society. Whereas it underperforms in the component of Finance.

³ The Organization for Economic Co-operation and Development (OECD): is an international agency dedicated to gathering data and analysis of countries' economic behavior and evolution with the aim of generating recommendations and increase well-being of people around the world.

Portugal was the first European Country that established a program for investment in Social Innovation, which is supported by the government and financed by the European Union. It started in 2014, with a resolution from the Council of Ministers. The program regulation frames Social Innovation as an economic sector and establishes specific activities susceptible to receive funding (Diário da República, 2014). Which explains why it is well ranked in the institutional framework component of the index (Kondo, 2016).

Most of the population in Portugal do not struggle with problems of poverty or famine; in terms of quality of life, conditions are good. Nevertheless, social challenges are present in other dimensions. These are conditions that set Portugal as a good example for study; it is a country in which Social Innovation might not be oriented to attending the poor, but in generating solutions for diverse sectors of the society. Some context data is presented in the text-box below.

Portugal is a small country, with a territorial surface of 92225 square kilometers and an approximate population of 10358077 inhabitants. Around 64% live in urban environments; an urban population that grew almost 20% in the last 30 years (was around 45% in 1986). With 40% living in conglomerates of more than 1 million inhabitants; in Cities such as Lisbon and the Metropolitan area of Grande Oporto (World Bank, 2017).

From the countries in the European Union, it has one of the most unequal income distributions (OECD, 2017). And, a rising elder population proportion, with low fertility rates, which will continue to stress new social issues and demand for services in the future. OECD data from 2013 shows that 19,62% of the Population in Portugal are 65 years and above; and that the fertility rate is of 1,23% which is lower than the replacement rate of 2.

Having most of its population living and growing in urban environments adds tension to the offer and maintenances of public services. Together with this fact, the country is still recovering from the Financial Crisis that shocked the world in the period 2007-2008, that made Portugal enter a recession until 2014. Yet Portugal is arguably not a country in a bad situation, but with major areas to improve, as presented by OECD's Economic Survey of Portugal:

"While Portuguese citizens have a remarkably low self-perception of their well-being, they rank above the OECD average with respect to work and life balance, housing, personal security and environmental quality. However, there are wider gaps in well-being relative to other OECD countries in key areas such as incomes, jobs, education, health, governance and social connections." (OECD, 2017, p. 16).

Portugal is also one of the OECD member countries where the government expends more than 20% of the annual GDP in Social Programs; almost a quarter of it is given to attend social needs of the citizens. Around 12% is used in the attention of elders, being this the major expenditure, followed by Health with 6% and the rest distributed in other programs that attend families, unemployment and other issues. (OECD, 2016).

In Education, Portugal is one of the OECD's countries with less adult population (between 25 and 64 years old) with upper secondary and tertiary education diplomas. Which shows the need to improve the education conditions not only for the youth but for the adults as well (OECD, 2013). It is also notable the widespread access to communication technologies, 69% of the Portuguese population are individual users of the internet, and virtually 100% has mobile telecommunication service access.

Access to water and sanitation are high, with 96% in urban areas and 85% in rural ones (World Bank, 2017). These and other basic needs are nearly universally covered in Portugal, yet as OECD's 2017 Better life index shows, in Portugal, people are less satisfied with their lives in general (OECD, 2017).

1.2. Objectives and Scope of this Research

Social Innovation - as noted by Manzini (2015)- is an effort that can be started by any actor within a community. The concept of community is important, and it will be revised in more detail in the next chapter. Moreover, it must be stressed that Social Innovation is aimed at attending the needs of specific human groups. Therefore, this thesis takes into consideration examples in which specific communities or groups of people are attended by Social Innovation initiatives, and searches insights for opportunities for designers.

The study of the roles of Design, hence of designers is studied from initiatives that are identified as Social Innovation initiatives, the role Design plays is recognized in the activities by the people who develop design tasks in these initiatives. The starting point for this research is the assumption that designers might not be playing an important role, or even have no presence in the processes of Social Innovation in Portugal. Still, Design might be carried out in some way by somebody.

The main objective is to:

- Understand how product designers can participate in Social Innovation for specific communities, by using insights coming from examples found in the context of Portugal.

This objective involves answering:

- a. What are the tasks and activities Design can bring to Social Innovation initiatives?
- b. How could it be better done by professional designers?

Three specific objectives had been proposed to systematize the insights about the roles of designers in Social Innovation from the examples found in Portugal.

1- Identify opportunities for professional designers to participate in the process of Social Innovation. From the reasons and ways of participation.

2- Identify the participation of the community in the process of Social Innovation. From methods and tools used to engage different actors, including designers.

3- Identify the incorporation of design as part of a social innovation-driven strategy. From impact measurement, project's life duration and further stages.

1.3. Structure of this Thesis

This text follows the standard structure of a thesis document (see Figure 1.1). It starts with a brief introduction; which establishes the need and path for a research on this subject, and it is this first chapter. The second chapter is a discussion of the concepts from the reviewed literature, with the intention of defining relevant aspects in relation to Design and Social Innovation.

The third chapter is focused on the methodology; it presents the method and tools chosen for data collection, as well as how they were conducted and reformulated. In this section, the concepts from the reviewed literature are appropriated and operationalized.

The fourth chapter presents the data gathered through the interviews and their corresponding analysis; confronting it with the findings from the reviewed literature. It also presents a discussion about the roles designers should play in the field of Social Innovation.

The fifth and last chapter is the conclusions section. It is a short text about what has been abstracted from the areas of Design and Social Innovation as intertwined activities -from the examples interviewed in Portugal-, and presents recommendations about how this information can be used by practicing designers.

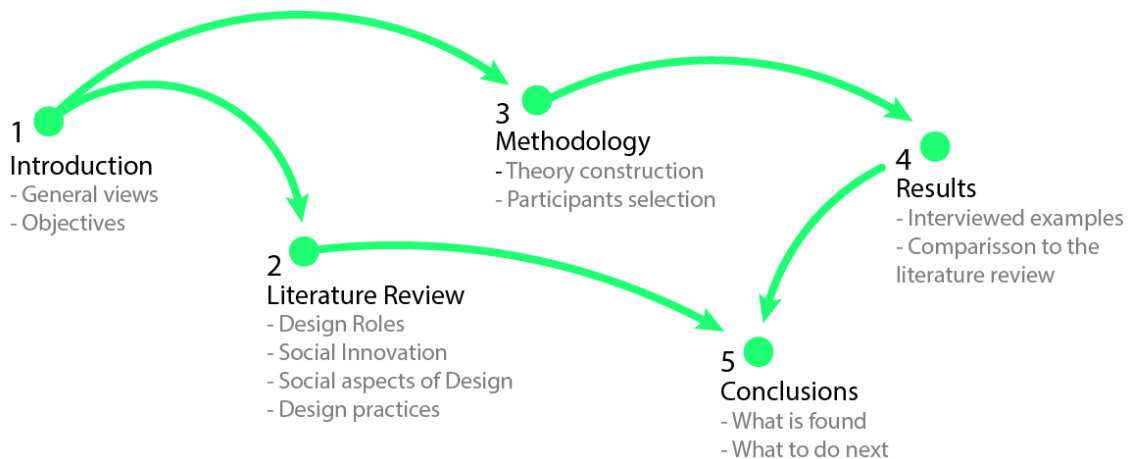


Figure 1.1. Structure of this thesis

2. LITERATURE REVIEW ON THE SUBJECTS OF DESIGN AND SOCIAL INNOVATION

The interest of this thesis is to delve into aspects of Social Innovation as a field, and to propose possible roles for designers. Emphasizing on new approaches, with the aim of bridging the problem-solving capabilities of Design with the needs of specific communities; by assuming that communities can be made part of their own Social Innovation initiatives, as appears on the reviewed literature presented as follows.

This chapter summarizes the concepts framing the intertwining of Design and Social Innovation. The outcomes are presented as discussions, that by no means have the intention of being final, but rather initial explorations. These concepts might be helpful for the discussion of the results from the field study presented in a later chapter.

Limited work has been done in theorizing the relation of both fields⁴. In spite of it, a set of examples that are based on Design can be found in *The Open Book of Social Innovation* (Murray et al, 2007); this book offers a description of methods and stages for Social Innovation, as well as mentioning the different professions of Design that can get involved in the process.

The literature revision started from articles about methods to work in collaboration with communities. Some of these are collaborative design, participatory design, communities of participation, user engaging design, and action research. To simplify the review, the information was clustered in four main concepts, which are described as follow:

1. Roles of Design: concerning the specific modes of intervention, which designers can assume in relation to one specific field and the actors participating in it.
2. Social Innovation: a rather new field or sector of action and intervention for Design. It shares some characteristics with industrial and business settings, providing opportunities for designers to enact new ways of doing.

⁴ One very complete work about Design for Social Innovation is the book “Design, When Everybody Designs: An Introduction to Design for Social Innovation”, written by Ezio Manzini and published in 2015. It covers many of the areas about the relation between the two subjects. It is also necessary to note that, this book is partially made from previous articles published by the same author.

3. Design and social aspects: this subject will be treated as a concept as there are still many undefined aspects on what should be considered as the ‘social aspects’ of Design. It is also related to concepts, such as: ‘social design’, ‘Design for social impact’, ‘Social good’, ‘Inclusive design’, ‘Design for social change’.
4. Design practices: it refers to specific practices of Design dealing with social problems. They include processes or methods established to be enacted by Design. Using means recognized by practitioners from the field of Design.

2.1. Roles of Design

The Merriam-Webster’s online dictionary offers two definitions for the word role:

“1: a (1): a character assigned or assumed (2) : a socially expected behavior pattern usually determined by an individual's status in a particular society

2: a function or part performed especially in a particular operation or process.” (Merriam-Webster’s online dictionary, 2017)

This basic definition offers two possible approaches to identify roles. The first approach identifies the people who assume and enact them; whether they are self-assumed or imposed by others. While the second approach is in terms of the position, importance and interactions required and permitted as part of a process.

For the roles of designers, both approaches are considered. A role might refer to the tasks designers assume, and to how these tasks are integrated within the specific contexts in which they happen. (See Figure 2.1).

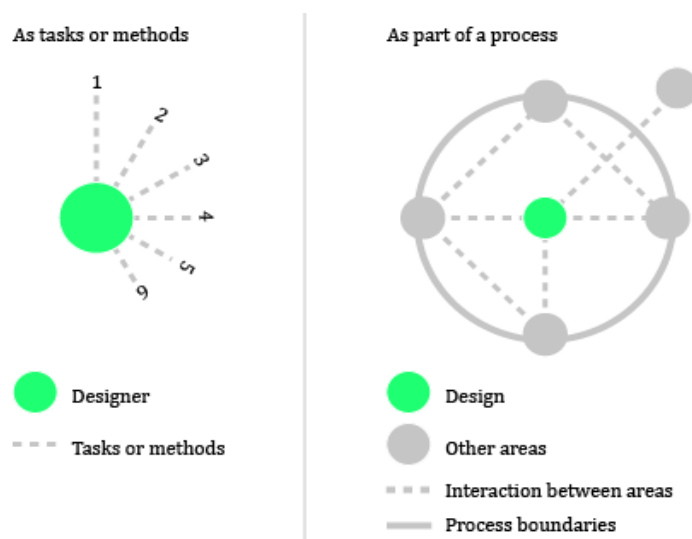


Figure 2.1. Approaches to identify design roles

The review of the roles of Design, can be made by departing from two sources:

1) Definitions of Design, as these are usually made from and for specific contexts; And they specify what design does in general terms.

2) Study cases of designers and projects in which design is assumed as a component. These portray, tasks, methods and ways in which the action of design is conducted.

An exhaustive review of all the definitions that have been given to the term design would be unproductive for this review. Definitions of what design means, appear in the first chapters of many books and theses about Design; in conjunction with diverse definitions given by professional associations and higher education schools. This generates a problem of polysemy, that is not in the aims of this thesis.

To avoid the discussion about the definition of Design, it was decided to take one definition. One definition that is already classic among designers, as it is used in many studies, is the one proposed by Herbert Simon (1996), which aligns well with the multidisciplinary nature of Design's practices, it states:

“Everyone designs who devises courses of action aimed at changing existing situation to preferred ones” (Simon, 1996, p.111)

Simon (1996) furthers his definition by adding that design is the core of all professional training. Simon (1996) also claims that design drives the artificial: as it is the science of what things ought to be. Design is defined by Simon (1996) as the creative a process for engineers and people developing technology. But this definition opens design as an activity to be enacted by all humans; that can be applied in any field, as it doesn't reduce it to specific tasks, but to the goal of changing current situations into ones chosen deliberately.

The notion of Design as a common human endeavor is recently acknowledged by Manzini (2015), by defining design as one of the two modes of doing. Calling those two modes: 1) the traditional mode and 2) the design mode. The first mode does not require changes, as it sticks to the classical or commonly accepted way of doing: while the design mode, more in accordance to Simon's definition, tackles problems and needs by changing what is done or how it is done. Hence design can be approached as a general human capacity.

The perspective of Design as a human capacity does not contradict other perspective. It entails that it can be exerted by anybody, but leaves room for specific people to deepen in skills and methods. It is important to bear in mind that over the last two centuries -in accordance to the contexts of the industrial revolutions and their aftermaths- Design has been framed as an industrial endeavor mainly related to manufacturing.

Design is still widely recognized as a set of tasks related to the industry with the aim of conceiving objects. The industrial revolution gave design a role related to manufacturing, for the processes of envisioning products that could be made using machines and serial production. The capacity of Design was reduced by the constrains of industries. Munari (1983) explains it when he identifies areas of action for the profession of Design. Along with industrialization emerged industrial design, and all the other specializations related to production.

“In Industrial Design three fundamental concepts are handled: form, function, and technology, within the fixed frames of economic and socio-cultural factors” (Gay and Samar, 2004, p.14)

Gay and Samar’s (2104) book about Industrial Design History, presents Design as a wider field, but sets it around the three concepts mentioned as fundamental for industrial design. Which are the ones that have driven the concerns of Design for a long time, and impose three roles to designers:

- 1) As form givers: for products and graphics, it means taking care of the visual aspects, as well as of other senses, by assigning the form of the objects.
- 2) As function optimizers: as the objects created should accomplish the tasks desired by their users. The designer has the role of assuring that the way in which a user wants an object to act is how it does. Other terms as usability and interface design are related to this role.
- 3) As innovators: in industry, it is related to the novel use of technology to generate new opportunities, for usage, ways of manufacture, and new physical and visual characteristics. This allows products to be constantly renewed. (See Figure 2.2)

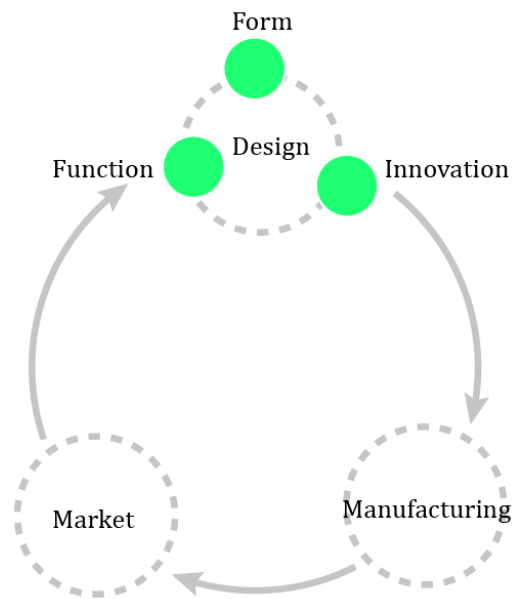


Figure 2.2. *The common role given to design in industry*

This perspective of Design also includes externalities. They are mentioned as factors: economic, social and cultural. These factors are contextual constraints for Design. But are not considered as targets for the changes enacted by Design. Meaning that the role of Design is passive, as it is informed by those framing factors, but without intending to change them.

Design centered only on tangible solutions -objects- is usually performed under the influences of externalities, and it is a commonplace for the practices of Design professions in mainstream business and industrial setups. Bonsiepe (1997, p.23) refers to the roles Design play in innovation for products in businesses, and does it by summarizing them as activities that answer the specific needs of the different departments of a company. These departments are management, manufacture, marketing, finance, development among others. (See Figure 2.3). Design answers the needs of these departments by offering a solution that brings them together, but does not exert any influence as feedback.

The contributions of designers are the of the objects they provide. And these objects are made according to the requirements set by the other departments of the company; in a way that the product fills the requirements of the contexts of possible users, but is also filling the requirements of the company's departments. This way, the requirements of the different departments are also externalities included by designers.

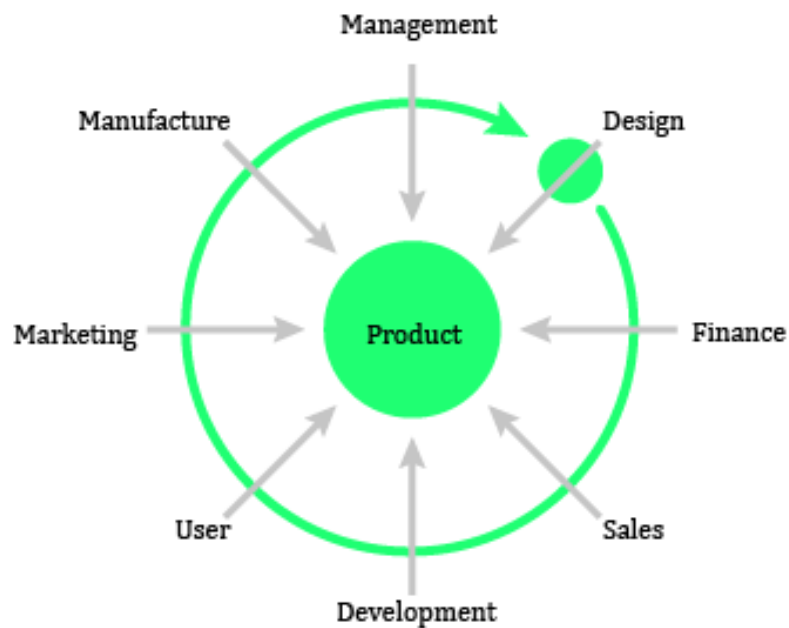


Figure 2.3. *Design in the business sector (Bonsiepe, 1997)*

Design can serve in far more areas than just defining the product, and it is a thought also present in marketing literature, even well-recognized scholars on that field have a take on the definition of Design, of course, one that serves their field. As in the quote below:

“Design is the process of seeking to optimize consumer satisfaction and company profitability through the creative use of major design elements (performance, quality, durability, appearance, and cost) in connection with products, environments, information, and corporate identities.” (Kotler and Rath, 1984, p. 17).

In this definition, Design is situated as the intermediary between businesses and consumers. (See Figure 2.4). The role of Designers can be understood as being the translator. Taking what would satisfy the consumer as input; and generating something that could generate profits for the company. These solutions are not reduced to products, they can be environments, information and corporate identities. It can be said that with this perspective Design has a more strategic role. Design is approached as a managerial role, as to approach the two goals, more than products is necessary.

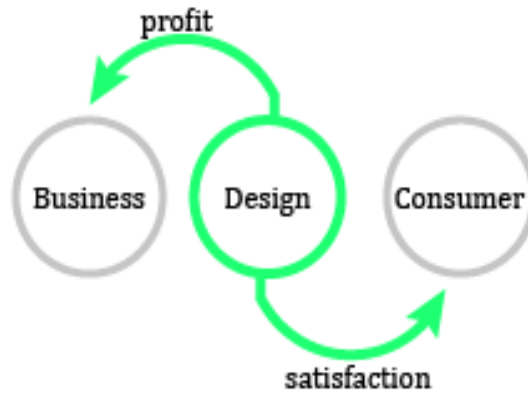


Figure 2.4. *Design role in markets*

Design as a potential field for marketing -as well as for other areas of the industry- is what drives authors like Conley (2010) to consider that designers should take on broader roles within organizations. Being those roles of managerial nature. It means that designers could have more impact on the decisions related to the business goals.

“Involvement in what an organization normally does moves design from outsider to insider status.” (Conley, 2010, p.12)

In businesses, designers in managerial positions can bring the capacities of Design to all the different departments. Which also implies bringing people with professional Design training to be part of the decision-making processes of the organization.

Julier (2010) mentions Buchanan’s idea of the fourth order of Design, by which designers could implement the strategies of management. And furthers it to contexts outside businesses by postulating that *“design be a process of transformation, which reconfigures the routines and points of view.”* (Julier, 2010, p.246).

“Design culture as a culturally incorporated practice can also go further than orchestrating the relations between producers and consumers, to become a process which transforms daily public live and its aspirations” (Julier, 2010, p.248).

“In state of maturity, Design can participate in the external presentation of goods and services to the public, but also of the intern systems that manage the development and distributions of those goods. Hence, it translates the debate from the material form to the immaterial processes, from Design as provider of objects to the modeling of relations and structures.” (Julier, 2010, p. 76).

Julier (2010) also pays attention to the concept of “dematerialization” proposed by Ezio Manzini. A concept that explores modes in which products can be sustained or replaced by immaterial systems. Requiring strong social and environmental components supported by the network formed by the distinct material and communicational relations.

Julier (2010) defines the culture of Design as a discipline. It means that Design has its own culture. This culture is what organizations appropriate when they include designers. The culture of Design is one that adapts to the contexts in which they take place. This is a culture based on innovation, change, and invention. By viewing Design as a culture, it becomes clear that it can take multiple approaches, but most importantly, that deliver in multiple ways -outcomes-. (See Figure 2.5).

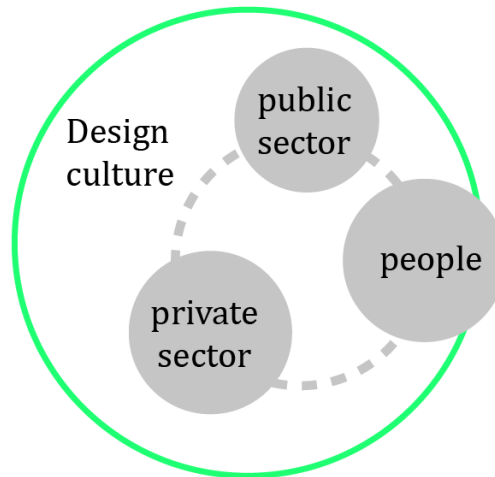


Figure 2.5. *Design as a culture*

Manzini (2015) expands the perspective proposed by Julier (2010), by stating that a culture of design is not the culture of a discipline; but an expression of the many cultures in which the designer (or person enacting design) is involved. The way in which design takes place varies; and it depends on the context and the structure of the relations between participants.

Brown (2008), in an Article about Design Thinking, postulated that Design professionals are no longer requested to make developed ideas into more attractive ones. Rather, they are requested the creation of ideas that better meet consumers' needs and desires. In solutions that are more than objects; as they are systemic strategies. And the designer can take a leadership role. Requiring the designer to be able to work in three spaces: inspiration, ideation and implementation. Recognizing in those spaces the people who will make use of the products. And recognizes that designers are not only those with a specialized knowledge of Design, but anyone who acts on those three spaces to innovate.

In the introduction, three possible roles design could take in the future were introduced. A similar approach is taken by Manzini (2015), as he proposes three roles that Design can take:

1. Diffuse design: as a natural human ability, design can be enacted, even if it is not acknowledged. Also, Design Thinking is included in this space.
2. Expert design: the design that is enacted by specific people with specific skills and in specific cultures, this is also a result of the social division of work. This requires experts to generate solutions.
3. Co-Design: which is the result of the interaction between stakeholders. Professional designers assume the role of facilitating the processes, and the solutions are shared creations.

This typology presented by Manzini (2015), is in tune with his perspective of Design as a mode of doing, yet it leaves aside some of the specific roles designers can assume.

A detailed typology is presented in a study for designers' roles for e-learning services from 2009 (Yee et al, 2009). This typology was developed by Lauren Tan, as part of her Ph.D. about Design methods in the public and social sectors (Yee et al, 2009). In her proposed typology, seven roles for designers are included. Focusing on the specific tasks that designers play when working directly with users. These are: 1) Facilitator, 2) Communicator, 3) Capability builder, 4) Strategist, 5) Researcher, 6) Entrepreneur, 7) Co-creator. In all these, the designer assumes a different relationship with the stakeholders involved.

Another typology of the roles for designers is made according to the distance they take with the people they intend to serve. Lee (2008) offers this typology, which includes similar roles to the ones described by Manzini (2015), but also offers the counterpart of the role of the user (or people served by Design), this is included in Table 2.1.

Table 2.1. *Typology of design participation (Lee, 2008, p. 36)*

Space of Operation	What's Design Participation for?	Relation between the designers' and the users'	The role of 'designers'	The role of 'users'
Designers' space	1. Innovation (designer only)	The work with design community do not overlap with the work with users.	Masters /authorities	Imagined user/representatives
Realm of collaboration (between designers and people)	2. Collaboration (designer-driven)	The work with design community overlaps with the work with users.	Co-designer /facilitators	Co-workers/partner
	3. Emancipation (user-driven)	The work with designers is included as part of the work with users.	Stimulators	Creative people/advisers
Users/people space	4. Motivation (user only)	The work with designers and work with users is not distinguished.	Craftsmen /builders	Active clients

This typology presents design as the interaction and tension of two spaces. One is the expert space, in which designers are the only ones capable of enacting design; and the other space is where users/people are, and design can be enacted by anybody. In between, there are opportunities for collaboration between both spaces, which could be taken as opportunities for the expression of new ways of doing Design. See Figure 2.6.

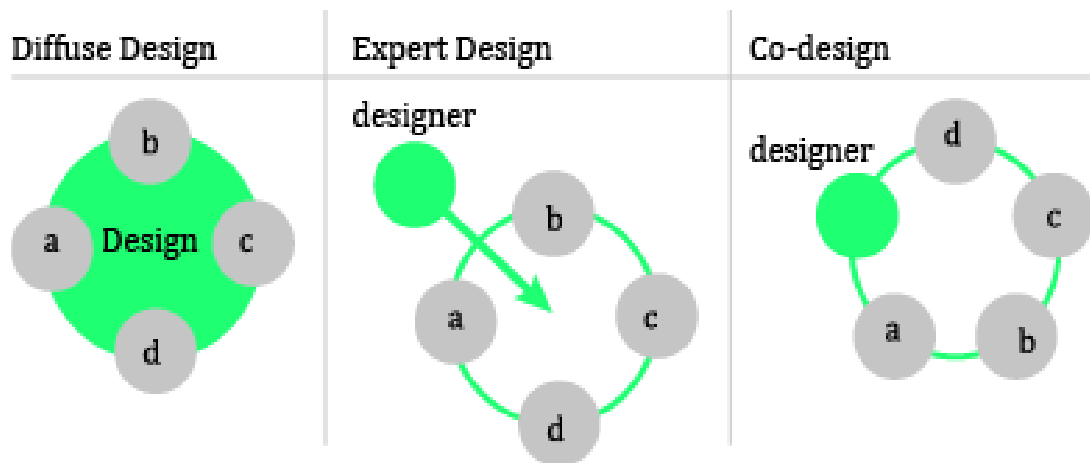


Figure 2.6. *Tension between expert and non-expert design*

The roles designers can assume are specific when they are referred as technical skills for manufacturing objects. On the other hand, the broadened Design offers roles for new designers; requiring skills that go beyond technical abilities. They can be categorized in four main groups (Press & Cooper, 2003, pp. 196-200): 1) Intelligent maker, 2) Knowledge worker, 3) Sustainable entrepreneur, 4) Active Citizen. See Figure 2.7.

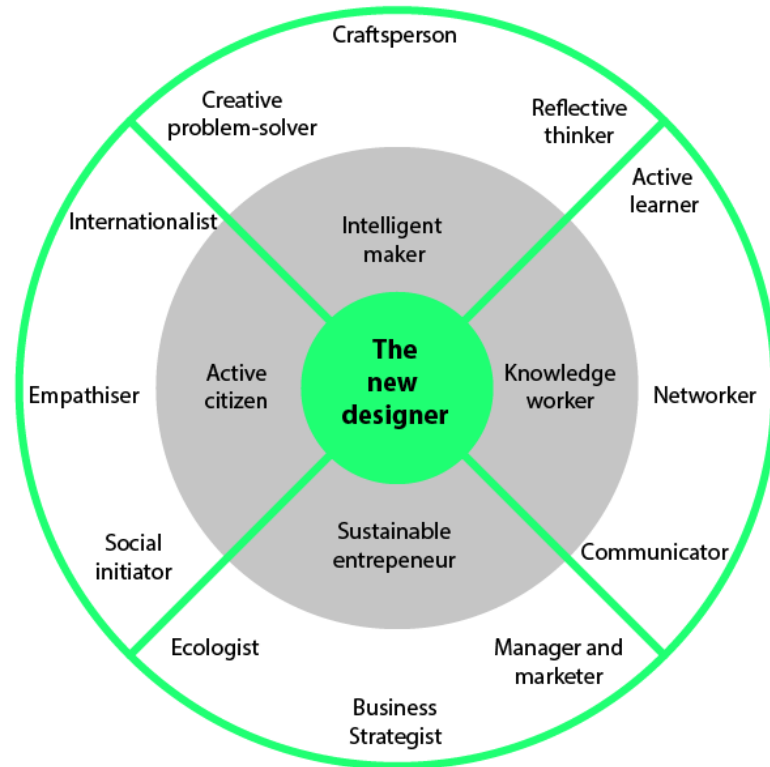


Figure 2.7. *The new designer* (Press & Cooper, 2003, pp.199)

What is expected from designers has evolved over time. Traditional roles are not disappearing, instead, they are being enhanced, complemented and specialized. Design is in part a culture and a way of doing. Designers must procure the establishment of relations within the contexts in which their practices take place. Design might take shape as a research-driven activity (Press & Cooper, 2003, p.128). Through research is that designers will be capable of bridging, technology, science and humanities.

Industrial Design is a direct result of the Industrial Revolution. The role designers usually assume is the one of creators of goods for the market. This model is mainstreamed; and incorporated in most Design education and professional bodies (Press & Cooper, 2003, pp. 162-77). Contrary to it, designers are starting to move to fields like service design and design for social and public sectors, which are based on relations instead of goods.

The concept of the roles of Design is not only related to the kind of activities developed by professional designers. They can also be studied from the kind of outcomes -goods or objects, relations or processes- and from the people enacting design - professional, or anyone else-. Manzini (2015) argued that Design is a human act, a mode of doing that is based on changing how things are done. It implies that design can be found in other activities that are not traditionally recognized as Design.

One example of it is in a study about vernacular design in an Inuit community from Alaska (Reitan, 2005). In this study, design is recognized as a component of the development of the community ties. It is done in a process that lacks the participation of expert designers; this community even lacks the notion of Design as a separate concept from the one of manufacturing for the community.

From this community's work, it is abstracted that Design is a learning process that is collective, with no beginning or end. It is integrated into daily life, and as part of the knowledge for their practice. (Reitan, 2005, p.79). This study serves as evidence that design skills can be socially transferred and incremented, even when Design is not acknowledged as a separate concept. Which means that accepting design as a human capacity can help in recognizing more broader roles, and better ways for experts to be integrated into the processes as guidance for better results. Manzini (2015) also notes it, by referring to the ability of designers to create a sense for a context.

The identification of roles for designers, is not as simple as asking "what designers do?". One of the challenges - that must be confronted when doing field work- is about how to identify other forms in which design might be present, in ways that are not conventional.

2.2. Social Innovation

Social Innovation is a space -or sector- that offers opportunities for the broader roles of Design. Roles that are not strictly connected to manufacture and market setups. To offer a better perspective of the contributions Design can provide in this new sector, it is necessary to understand the implications of social innovation as a concept and as a space of action.

A brief literature review of the concept showed a repeating pattern of arguments indicating a lack of a standard definition of the concept. Rana et al (2014) present an introduction to the term; commenting on the connection it had in the 1970s, when it originated, to the work of social science scholars in francophone countries. At that time, it was considered for any activity that engaged with contemporary social problems to accomplish beneficial outcomes. Later the term was adopted by management and business sciences scholars, and introduced one of the dimensions of innovative business strategies during the 1990s. On the last decade, it has become more of the interest of policymakers in the public sector, as it involves social changes. According to Rana et al (2014) most studies about this concept are conceptual work, lacking applied examples.

On the study of Unceta et al (2016), Social Innovation is considered a polysemic quasi-concept. There are multiple takes about the term; usually with corresponding models of how impact is measured. The missing consensus on the definition of Social Innovation, has the resulting effect that goals and ends measured do not usually correspond each other. This opens opportunities to present virtually any effort as Social Innovation. In the work of Unceta et al (2016), an index to measure impact is reported as a tool, based on social impact instead of on financial revenues. This case highlights an important factor of what can be considered the outcome in this field; which unlike the industrial sector, is not revenue, nor products, it is a social impact.

Pol & Ville (2009) questioned is the concept would prevail or fade. Some meanings given to the concept are characterized and put in relation as constructs. It is not a formal typology, but provides categories of study: 1) in relation to institutional change, 2) in relation to social purposes: as quality and quantity of life, 3) in relation to public good: questioning what public good is, 4) as needs unattended by markets: stressing the importance of separating it from business innovation. See Figure 2.8.

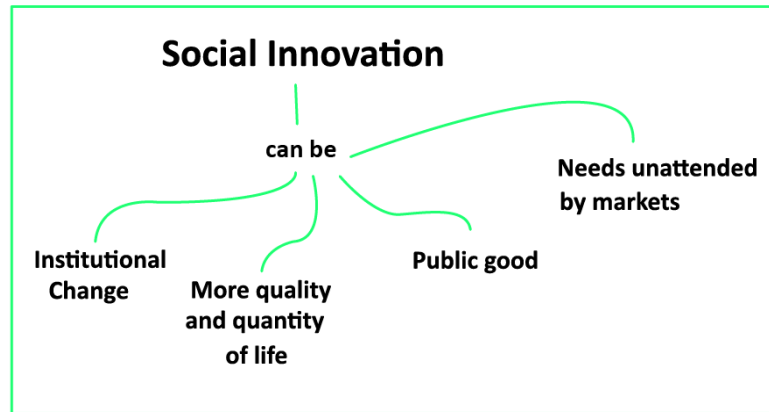


Figure 2.8. *Typology of Social Innovation (Pol & Ville, 2009)*

Pol & Ville (2009) discuss the importance of focusing the attention on desirable social innovations. In addition, business innovations can generate an impact that can become a social innovation, but it can have no desirable results. There is a special relation between business innovation and markets outcomes. It stresses the importance of establishing proper public policy, as the failure of a beneficial idea in markets might require the intervention of the public sector. These authors summarize their definition of social innovation by establishing that it might overlap with business innovations. These overlapping innovations are the innovations to focus on; they are the ones that can generate self-sustainable models and have beneficial social impacts. See Figure 2.9.

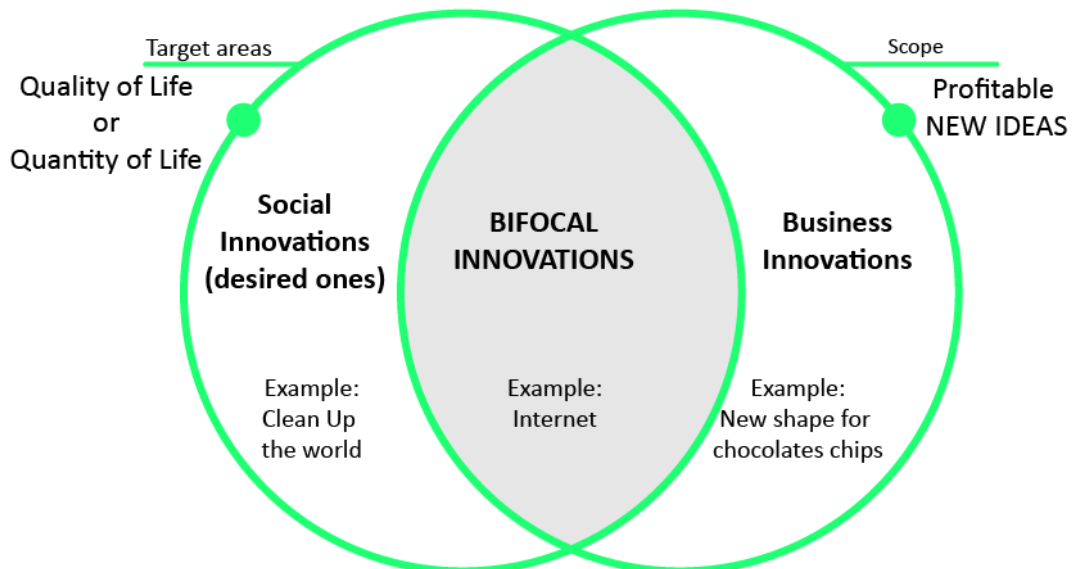


Figure 2.9. *Relation between social innovations and business innovations (Pol & Ville, 2009, p. 884)*

Pol & Ville (2009) also mention the necessity of focusing the attention on more aspects other than only generating profits. Profits might be a factor only necessary to the expansion and adoption of a social innovation. If social innovation and business innovation overlap, it is because both require organization, and organization needs funding.

Mumford & Moertl (2003) have a perspective about social innovation that includes organized social work at the center of the action. Work that requires funding from other actors or from market strategies. Unlike other approaches that set the attention on the individuals that enact the innovation (entrepreneurs); this perspective is set on the idea that certain people act as leaders. And through those leaders, changes are set in motion; this is done by gaining support from their social backgrounds. These leaders enact a special kind of creativity:

“Mumford (2002) defined social innovation as the generation and implementation of new ideas about people and their interactions within a social system. In fact, social innovation appears to represent a particularly significant form of creativity, leading to the formation of new institutions, new industries, new policies, and new forms of social interaction (Damanpour, 1991; Drazin, Glynn, & Kazanjian, 1999; Gryskiewicz, 2000).”

(Mumford & Moertl, 2004, p.261)

This definition presents two valuable aspects of Social Innovation. It sets it as a process of creation; which is the area of specialization of Design, and set the outcomes as the formation of new social spaces -institutions, industries, policies, forms of social interactions-. The creation of new social spaces and modes is one of the paradigms of Social Innovation; complemented by the one of the improvement of quality and quantity of life.

On the paradigm of the creation of new social spaces and modes, the work of Hämäläinen & Heiskala (2007) can be included. In it social innovations are considered as new mental paradigms; that emerge as a response to the effects of technologies and policy changes that affect the techno-socio-economic space of a society. These responses generate new social issues, that defy the established social structures and institutions. Thus, generating opportunities for creativity and innovation aimed at the creation of new institutions. Consequently, creating new conditions in the social context and giving opportunities to creative modes.

Hämäläinen (Hämäläinen & Heiskala, 2007) notes that structural transformations -that change the rooted cultural ways of doing- occur when systemic coordination problems are solved, by the action of public and private actors:

“... the new mental paradigms begin to shape the political decision-making processes that determine the system’s collective goods and services and its behavioral rules.” (Hämäläinen & Heiskala, 2007, p. 46).

To change people’s attitudes in a social environment, individual actors assume the roles of entrepreneurs with the capacity to envision social innovations and move ideas further; by overcoming the struggles against coordination problems.

Heiskala (Hämäläinen & Heiskala, 2007) estate that the world is going through a third industrial revolution; and that social innovation must be studied to better confront the changes it implies:

“... in addition to the challenge of techno-economic adjustment, the third industrial revolution calls for social innovation that would transform the regulative, normative and cultural aspects of the social systems, and their interplay with each other and the techno-economic structure.” (Hämäläinen & Heiskala, 2007, p.52)

Social changes might come from the new connections that originate from the expansion of new technologies. Particularly communication technologies will drive new social forms; stressing challenges on the normative and cultural rules by which societies organize.

Heiskala (Hämäläinen & Heiskala, 2007, p. 62) mentions that institutional structures are dependent on techno-economic structures and cultural-normative rules. Hence, two ways to approach structural changes are possible, by applying a material (technical) deterministic model or by going with a cultural deterministic model, each case will define a series of different methods to act on institutional change.

A cultural deterministic model means that abstract ideas are translated to values; which are translated to social norms. By referring to the process of Generalization identified by Parsons -worldview—>Values—>norms—>means—>behavior-, social innovation can be regarded as changing behaviors that are routinized in everyday life. These changes would result in new societies as these are actualization (reification) of cultures (Parsons, 1964; Parsons & Platt, 1973; Hämäläinen & Heiskala, p.63-64).

Heiskala (Hämäläinen & Heiskala, 2007) also mentions that societies have mechanisms for social regulation - like market and politics-. Therefore, these are not spaces from which social innovation can originate; instead spaces that could be modified or replaced by social innovation. The course of action of such mechanisms is not changed unless there is a crisis. Four different type of institutional change can be distinguished:

1. Reproduction
2. Incremental change/evolution.
3. Radical change/revolution.
4. Chance/change without control. (Hämäläinen & Heiskala, 2007, P. 64-67)

Social innovation -and entrepreneurship- make use of incremental change/evolution and radical change/revolution. In addition, social innovation can only appear when there is dissatisfaction. To study social innovations, the typology created by Robert Merton can be used (Merton, 1938: Heiskala, 2007, p.67), as it includes the types of reactions according to the cultural ends and institutional means being changed:

Table 2.2. *Reactions to social order according to Merton (Hämäläinen & Heiskala (2007, p.67)*

Type of Reaction	Cultural Ends (values)	Institutional Means (norms)
Retreation	-	-
Uniformity	+	+
Ritualism	-	+
Innovation	+	-
Rebellion	-/+	-/+

The reactions presented in Table 2.2. imply modes of action that maintain or break the social orders; the case for social innovation could be summarized with the phrase: when cultural ends are present but not met by institutional means, there is room for innovation. Simply meaning, that if there is a socially desired outcome or behavior that is not entirely met by the social actors or interactions in present time, then changes are required.

Heiskala (Hämäläinen & Heiskala, 2007) concluded that: *“social innovations are changes in the cultural, normative or regulative structures of society which enhance its collective power resources and improve its economic and social performance.”* (Hämäläinen & Heiskala,2007, p. 74). Social innovations are, therefore, not tangible productions, but the result of a change on how a social interaction is carried on. It also presents a power dimension; if the dissatisfaction of a group is well canalized, it becomes a new way of doing.

On the second paradigm for Social Innovation; the works of Geoff Mulgan (2007) and the Young Foundation (Murray et al, 2010) are good sources about how the field of Social Innovation is being conceptualized and molded for and from the perspectives of business sciences; emphasizing on social innovation as an economic force. Mulgan (2007) defined Social innovation as:

“innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly developed and diffused through organizations whose primary purposes are social” (Mulgan, 2007, p.8).

In this definition, the main point is that social innovation is presented as activities and services; meaning that they can be more easily recognized as a set of actions; even if they are not changing any cultural or normative pattern, they still have the goal of solving a social need.

Mulgan (2007) presents Social Innovation as a process with stages -that are not fixed-. And does it by identifying the process when it comes from 1. Social Organizations. 2. Social Movements. 3. Politics. 4. Government. 5. Markets. 6. Academia (Mulgan, 2007, pp.27-32). The general process has three stages: one of generation or gathering of ideas; one of put into practice and reformulation; and one of appropriation, growth or inclusion by established social structures. See Figure 2.10.

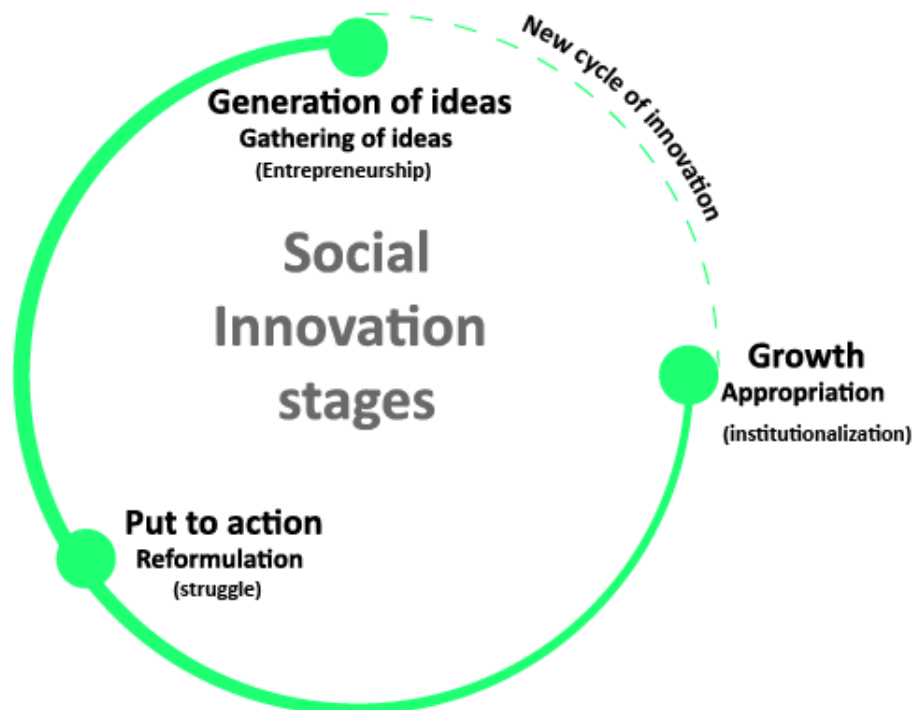


Figure 2.10. Stages of Social Innovation (Mulgan, 2007)

Mulgan (2007) mentions that Social Innovations are a complex process. The efforts usually end up being part of another sector different from the ones of origin. The sectors included in Table 2.3. are not the only ones in which social innovation can take place, as Mulgan (2007) notes, other sources for social innovation such as Philanthropy⁵, social software and open source methods -such as the case of Wikipedia-, are gaining terrain as they support ideals of transparency, solidarity, cooperation, equality, and democracy.

Table 2.3. *Social Innovation stages in different sectors (Mulgan (2007, pp.29-30)*

Sector	Stage 1	Stage 2	Stage 3
Social Organizations	Generation of Policies	Prototypes	Growth
	Practice, imagination, beneficiaries and user inputs generate possibilities.	Startups, incubators, learning by doing and pilots road tests ideas e.g. Pledge bank, new models of refugee integration	Organizational growth, emulation, replication and franchise to achieve scale e.g., Médecins Sans Frontières, Wikipedia, Grameen, Teach First, Reach Out.
Social Movements	Formation	Campaign and Advocacy	Legislation, habit change, changed values
	Small groups, seeking likeminded allies, spurred by anger, resentment e.g. current campaigns against slavery or for legalized prostitution.	Movements try to demonstrate worthiness, unity, numbers and commitment e.g. slow-food and Make Poverty History.	Governments endorse claims and pass legislation. Public habits change e.g. equal opportunities in business, gay marriage.
POLITICS	Demands and campaigns	Policy formulation and manifestos	Public spending, programs Legislation, new professions
	NGO s, party activists, people in need and the media make demands for new programs e.g. father's rights, or free elder care.	Politicians become champions, ministers and officials take up issues and give political commitment e.g. to extended schools or new powers for neighborhood governance.	Bureaucrats and professionals then implement, provide funding and authority e.g. for tax credits, early years centres or bicycle transport networks.
Government	Generation of possibilities	Piloting, testing, learning by doing	Scaling up
	Creativity methods, consultations, contestability and the adaptation of models from other sectors generate possibilities e.g. weekend prisons or nurse led primary care.	Incubators, zones, and pathfinders – with assessment and evaluation methods – test and capture lessons e.g. restorative justice or carbon markets, or uses of artificial intelligence in family law.	Growth, new structures, franchises and spending programs achieve scale e.g. urban road charging and integrated web portals.
Market	Embryonic niches	Niche Markets	Co-option into mainstream
	Enthusiasts produce and consume in what is almost a gift economy, e.g. life coaches.	Small companies, mission related investment and consumer and shareholder activism develop niche markets e.g. speed dating or plug in cars.	Multinationals and majors buy in and achieve marketing clout e.g. Linux software, complementary medicine and fair trade.
Academia	Invention	Diffusion	Incorporation
	New ideas are developed on the margins of academia e.g. 150-year life expectancy.	Ideas are tested in practice or spread through academic networks e.g. Cognitive Behavioral Therapy or participant action.	The once radical idea becomes mainstream e.g. the idea of educating for multiple intelligences.

⁵ One example of Philanthropy enacting social innovations are the efforts of the Bill & Melinda Gates Foundation, which seeks to provide better living conditions (material) through empowerment and of people in the third world. With many projects that can be criticized as well as applauded for their results and methods. More can be read here: <http://www.gatesfoundation.org/>

It is also noted that social innovation, as well as most innovations in business and technology can fail. The most likely ones to succeed, happen when the right background and context conditions are present: and those conditions are also dependent upon the sector from which the innovation is sourced (Mulgan, 2007, pp. 33-34).

Leaving the sectors aside, Mulgan (2007, pp.34-35) proposed three key characteristics that are present in all social innovations: 1. New combinations or hybrids of existing elements. 2. To put them into effect they must cut across organizational, sectorial or disciplinary boundaries. 3. They leave behind new social relationships between previously separate individuals and groups. These three characteristics emphasize the roles played by connectors, which are the people and institutions that “*link together different people, ideas, money and power.*” (Mulgan, 2007, p.35)

Mulgan (2007, pp.41-45) also calls the attention to the need of a stronger, better body of theory about social innovations, and sets characteristics that differentiate it from business innovation. These last ones follow different objectives and different growth patterns. He also makes emphasize on innovation studies and social investment as fields to search for theory background. Social Innovation is not focused on generating profits, but on answering social problems. But, it depends on the actions of other actors to attain funding. Although in some cases self-funding is also attained by establishing models that generate new social regulatory spaces for the sharing of financial resources.

The work of Mulgan (2007), is expanded in the Open Book of Social Innovation by Young Foundation (Murray et al, 2010). In this book, the process of social innovation is presented as having six stages:

1. *Prompts: All factors needed for innovation.*
2. *Proposals: formal methods.*
3. *Prototypes: the idea is tested.*
4. *Sustaining: the idea becomes everyday practice.*
5. *Scaling: Offer and demand are met and replicated.*
6. *Systemic change: the final goal; the change becomes the norm.*

These six stages are presented as what could be awaited when enacting a social innovation. It doesn't mean that it can't be the result of self-organization and accident (customs), but it is a process that can be deliberately carried out.

Manzini (2015) refers to Social Innovation within the second paradigm; and

describe its importance to Design as a sector that is growing in its importance for governments. Social Innovation is an opportunity to enact solutions for problems that in the past were considered intractable. Design is a mean that enables tangible signs of the problems. One of the problems as mentioned by Antadze & Westley (2012) is that outcomes are usually measured in terms of generation of economic value -profits- instead of in the multidimensional factors affected -social, cultural, economic, among others-.

It can be assumed that there is no consensus on one specific definition of social innovation. And at least two paradigms are found. One focused on the creation of new social spaces and interactions, and another focusing on attending social goals through the creation of specific economic actions.

The first paradigm is the result from dissatisfaction with the ways in which a social interaction is carried on. Any kind of relations between groups and individuals, that is founded on interactions that institutionalized -meaning a way of doing that became a custom- can be subjected to be changed by social innovation.

The second paradigm sets social innovation as the intentional activity towards a major change in recognized social problems, through specific actions. This is easier to put into practice, as the real social innovation, is an awaited result of setting the ideal conditions; through finance and cooperation of stakeholders.

Design as a field might have more opportunities within the second paradigm. As presented by Manzini (2015), Design can bring methods for creativity and strategy, while putting the people to be benefitted at the center.

Aside from these two paradigms, it is also important to mention that Social Innovation is widely considered an economic sector. Springing from the third sector and the inability of public institutions to deal with the well-being of all citizens. And could be the basis for a fourth sector as noted by Jiménez & Morales (2011), this sector would compete with others to earn financial resources. But it would not share the same space in markets, and should be oriented differently. A great deal of its success will be related to how the civil society aligns to innovations that are aimed to solve problems for everybody and not only to bring profits to its creators.

2.3. Design and Social Aspects

The relation between Design and social aspects is also part of the discussion about the aims of Design. There are multiple points of view. In this section, the discussion is started by providing one basic definition of the term “social”; as provided by the Merriam-Webster Online Dictionary:

“3: of or relating to human society, the interaction of the individual and the group, or the welfare of human beings as members of society”

(Merriam-Webster Online Dictionary, 2017)

This definition integrates two approaches. Which can help in elucidating the positions taken by designers when confronted with social matters. These approaches are “interaction” and “welfare”. These are closely related to the practices of Design. On a first instance, designers organize their work departing from the interactions with other actors. As well, considering how the interactions with the solution provided by Design is efficient in attaining the desired goals or not. Furthermore, designers usually deal with improving current situations, with the ideal objective of bettering human lives. See Figure 2.11. However, the consideration of social aspects is usually superseded by commercial aspects, which drive production in commercial setups.

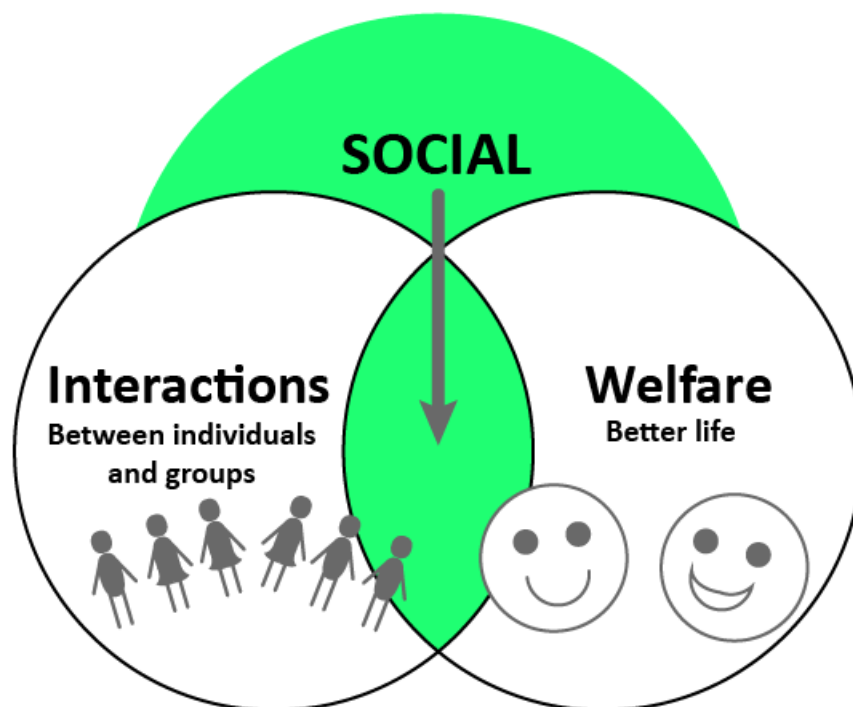


Figure 2.11. Approaches to the concept "social"

Norman (2011) wrote that social aspects, of Design -in terms of interactions- enable regulation of behaviors. The regulation happens within the complexity of a socio-cultural system, done by giving people -users in this case- nodes or cues to what can be done in a specific cultural context. A sort of affordance taken as a social signifier. This approach that is not only related to objects, and it is similar to the first premise of symbolic interactionism (Blumer, 2009, p.2). Even though, it can be best understood in relation to the objects and images that designers can create to enable certain human relations; therefore, to drive social relations and behaviors.

Besides the approach of interaction; the meaning “social” has for designers can be found on the definition of Design provided by Buchanan (2001b). In this perspective, the relation of Design with the social space is in terms of the outcomes that come from using or applying a designed solution:

“Design is the human power of conceiving, planning, and making products that serve human beings in the accomplishment of their individual and collective purposes.” (Buchanan, 2001b, p. 9).

This definition confers a social duty to Design. And does it, in terms of welfare, which is to help humans in achieving life accomplishment. Buchanan (2001b) also notes that the definition of a product he refers to, includes 3D objects but it’s not reduced solely to them. Instead, it offers the idea that Design can be categorized in four orders; the first one concerned with signs and symbols, the second one with physical objects, a third one with services and interactions, and a fourth one that deals with the creation of systems See Figure 2.12.:

“The focus is no longer on material systems—systems of “things”—but on human systems, the integration of information, physical artifacts, and interactions in environments of living, working, playing, and learning. I believe that one of the most significant developments in systems thinking is the recognition that human beings can never see or experience a system, yet we know that our lives are strongly influenced by systems and environments of our own making and by those that nature provides.” (Buchanan, 2001b, p. 12).

This perspective of Design as a systemic approach, sets it as dealing with something that cannot be physically experienced, but that influences people’s lives, and that can as well be influenced. Moreover, it goes on the lines of the debate about the outcomes of Design as part of its pertinence to solve social issues.

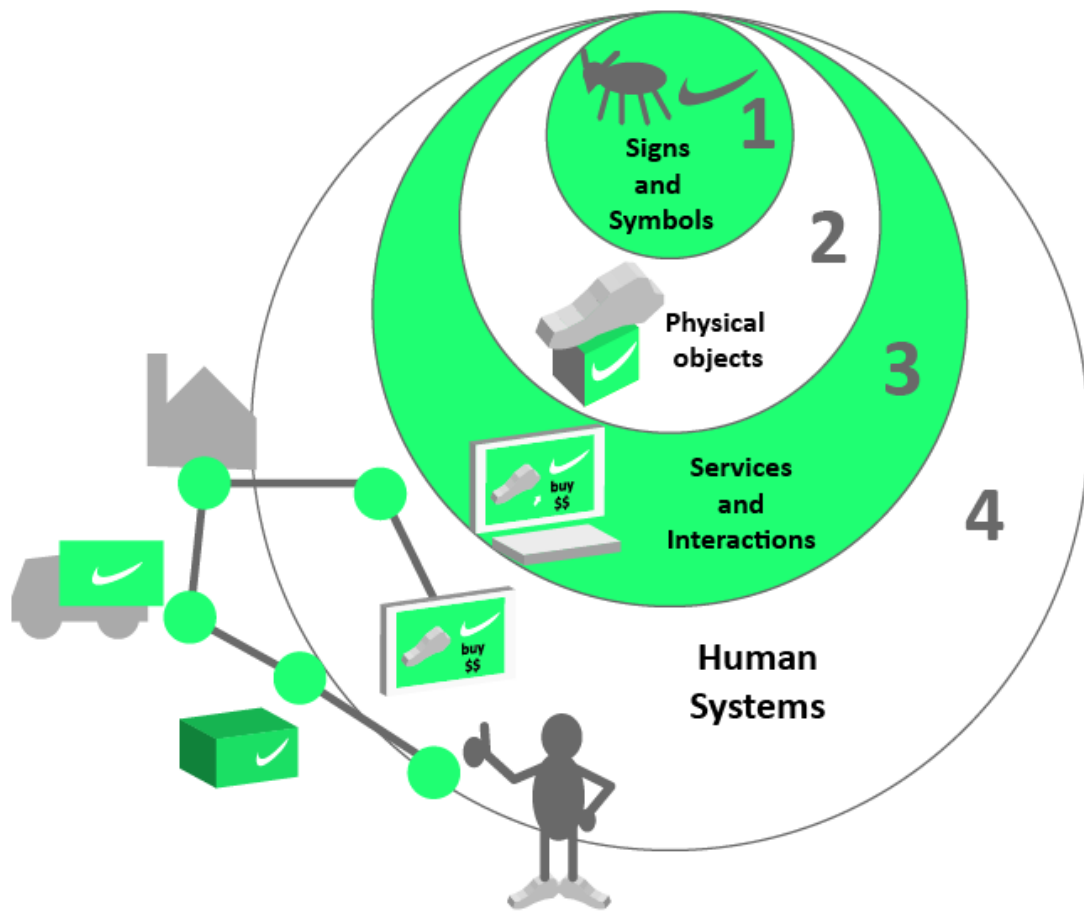


Figure 2.12. *Buchanan's four orders of Design (Buchanan, 2001b)*

The systems referred by Buchanan (2001b) are also social systems; such as communities, political parties, governments, companies, and even markets. These are the systems in which interactions happen, and the norms that regulate the actions and experiences of individuals and groups are present within them.

The relation of Design and complex human systems (social systems), is better explained by Buchanan (2001a) in a reflection about Human dignity and human rights as the core purpose of all Design activity:

“As an instrument of cultural life, design is the way we create all of the artifacts and communications that serve human beings, striving to meet their needs and desires and facilitating the exchange of information and ideas that is essential for civil and political life. Furthermore, design is the way we plan and create actions, services, and all the other humanly shaped processes of public and private life. These are the interactions and transactions that constitute the social and economic fabric of a country. Finally, design is the way we plan and create the complex wholes that provide a framework for human culture—the human systems and sub-systems that work either in congress or in conflict with nature to support human fulfillment.” (Buchanan, 2001a, p.38)

The perspective shared by Buchanan (2001a) sets a responsibility for designers on how the products of their work feed the systems; and shape the interactions that affect the lives of humans. It puts the relation of Design and social aspects under the wider view of the concept of human-centered design, by stressing the importance of Design as a way of thinking for addressing contemporary problems faced by humans in all aspects, not only in the usual terms of product usability and product appearance.

The idea that design should take a social approach is shared by other academicians and design thinkers. The concept that emerges most commonly is the one of social design. It is related to the work of Victor Papanek (1985) in *Design for the Real World*. Although a direct mention of social design is not done in his work, he does include what is the basis for it:

“All that we do, almost all the time, is design, for design is basic to all human activity... Design is the conscious and intuitive effort to impose meaningful order” (Papanek, 1985, p.3)

After Papanek’s work (Papanek, 1985), many perspectives on Design had centered on the discussion of objects that accomplish improvements in living conditions through, usually done through their technical aspects, or feasibility of manufacture in conditions of scarcity (economic, social and environmental). These perspectives, are also an ethical call for designers. Who should assume a conscious role about their potential power to harm, in opposition to the role assumed for the markets. This means, that designers must approach social aspects as a part of their practices in market-oriented activities, reducing the possible harms or, by solving the problems of those in social disadvantage.

Attending the disadvantaged through social design is a noble approach. But, as Manzini (2015) notes, it is also a problematic one; as it induces designers to take on people as passive receptors of Design’s outcomes. People who are usually voiceless in the process, receive solutions that are not demanded nor sustainable for their own economies. Which is why, social design is sometimes confused with charitable work.

“Can Designers Industrialize socially responsible solutions?” This is the question that Morelli (2007) made to argue about social design as proposed by Papanek. For Morelli (2007) there is no need to separate the social aspects of design and the ones of the markets. There is no difference in Design’s processes; but on the actors, and factors, it organizes around to make a solution possible. It includes products and services that require considering the technical and social contexts.

Thorpe & Gamman (2011) discuss that, the social role of Design should be responsive to context and available resources. Contrary to it, designers should not be held accountable for the final outputs and outcomes. Melles et al. (2011) offer a more comprehensive view of this possible role or paradigm for Design; it states that the most socially responsible solutions come from cases in which a co-design approach was applied. Meaning more proximity of the designer and the community served.

IDEO and The Rockefeller Foundation offer a vision centered on the effects products and services have on the social space, but not by pretending to alter social structures:

“Social impact applies to a broad spectrum of contexts. To designers, it is about the impact of products or services on individuals and groups of people. We look at the broader impact of all of the design work we undertake. We think about balancing the needs of the individual with the needs of the overall community. On every design project, we can consider the triple bottom line and take into account social, environmental, and economic impacts.”

(IDEO & The Rockefeller Foundation, 2008)

The perspective of IDEO & The Rockefeller Foundation (2008) about Design in the social space is similar to the one proposed by Morelli (2007). Design is considered an activity that brings solutions (products or services), and should consider social, environmental, and economic aspects of the groups involved, without disattending the markets. One of those markets is the job market for designers working on those problems.

Another factor of the relation of Design and social spaces -with interactions- is the one of the context. For Julier (2017) the 2000s marked a time of change for the professions of Design; the image of a designer working with a group of people with charts and post-its became the norm. It is directly related to an interest generated from the public sector, as part of the process of neo-liberalization, to use the know-how of Design for the generation of solutions that would set more responsibility on private sector and users than on public institutions. Being it a result from the policies of austerity enacted by many governments.

The context of moving common public social objectives to the private sector led to the creation of the sub-field of Design for Social Innovation. An activity which is rather vaguely defined, but organizes around private actors and their resources available to tackle long-term solutions for communities' needs.

Chick (2012) stated the changes Design is over-going as follows:

“In this perspective, design becomes about the everyday practices in particular sites and locations; it becomes about a practice committed to the work of envisioning emerging design topographies through which social and material transformations take place, in a setting, encouraged and shaped by the opening up of questions and possibilities. Design professionals working in the design for social innovation field are generally learning new strategies, tools and methods through ‘on the ground’ projects and action-based research situations.” Chick (2012)

Criticism is also found for the reasons, methods and outcomes of Design dealing with social changes. Janzer & Weinstein (2014) identified a lack of social research techniques in methods for Design Thinking and Human Centered Design. Thus, highlighting it as a cause for contemporary colonialism. The solutions made by designers -as external participants of a community- might be insufficient to the contexts of the people they intend to help; yet, the benefits for the designer might result in an imposition of the solution.

Another critical perspective is found in the work of Kiem (2011); it stresses the need to recognize the political dimension of Design. When it is not recognized, Design participates in the preservation of unbalanced power structures, which can be the same that originate the problems being tackled.

The approach of “social” as a concept, requires the assumption that it has two dimensions: one of interactions, and one of welfare. The first one, means the creation of connections between different actors and the generation of regulations and norms for the ways in which they can interact. The second dimension, means the state of well-being of all the members of a group. This two are not exclusive; they even complement each other, the modes of interactions could define how resources are distributed among members of a community, and could lever equality or inequality within it.

On Design, the discussion has long been on the side of welfare, ignited by thinkers like Viktor Papanek, who started a movement towards a social design seen as an activity different to the one of the commercial design. So, designers had to assume two different roles, compensating for the wrong-doings of their commercial work. Yet, this perspective is contested and other designers call for an integration; a design that is social and puts the private (commercial sector) to work on welfare.

New approaches require new ways of thinking the relation of Design and what is social. Design can help in leveraging the welfare of communities, and it can only be done when designers are aware of the contexts and the interactions happening.

Design by itself is not capable of gaining awareness of the contexts. It is important for designers to acknowledge the work of other professionals, who also deal with the social space, and who do it in more specific ways. Just as it happens in industrial settings, in which designers deal with professions mainly from the fields of finance, marketing and engineering; it is necessary to gain knowledge of other areas that would help to expand the tools and skills -as well as the information available- for the generation of solutions that match the real complexities of the social systems.

2.4. Design Practices

The praxes of Design are usually identified by the specific skills and tasks developed by designers. Thus, literature about Design methods describes specific actions (steps) to be followed by designers. The aim is usually to achieve better results, from the actions applied at specific moments of the Design process. Thus, resulting in specific models of Design. Specific models are used in many academic articles as the base for arguments about best practices. Elaborating metrics of control for the outcomes of Design. Prevailing models impose the way in which designers ought to work, and the roles they assume.

The methods and techniques applied by designers working in the social space are multiple. Ranging from Design Thinking for non-designers to action research for data gathering -using social sciences and anthropology techniques-. Furthermore, these are strengthened with concepts such as co-creation, collaborative design, transformative design, communities of practice, participatory design, and other frameworks for the work that can be done when doing Design as part of a collective effort.

Bayraktoğlu et al (2014) mention three groups of practices of Design in the developed World (Europe and USA); based on the country and contexts from which they developed. From England, developed by the British Council of Design and the financial sectors: Service Design, transformative design, and Design for financial services. Coming from the work of Politecnico Di Milano and DESIS Network, in Italy: Creative communities for Sustainable lifestyles and research for sustainable design. And finally, from the USA: Design Thinking and Design for Development.

Each of the models of Design mentioned in the previous paragraph refers to a different idea of what designers ought to do. They are also related to services and products delivered by specific actors -public and private; these are the outcomes that designers can help in defining.

Some other models, that also connect design with the social space, don't intend to elaborate feasible outcomes. Rather, used to question how things are done, as it happens in the cases of critical and speculative design, which are supported on answering what can be instead of what is ought to be (Auger, 2013).

Most of the models share the characteristic of being based on Designing in close contact with the people that are intended to be served. It includes making them part of the processes. In some of the models, the designer is only the guider, who opens the space for social actors to create their own solutions.

Examples of articles presenting the work of designers along with communities can be found in many of the journals of Design. It makes it hard to present a statistic of the numbers of articles about these subjects, examples vary not only on methods, but also on outcomes. Yet a generalization from a small sample of these articles can be done, as shown in Table 2.4.

In general lines, it can be identified how the work of designers is less related to the creation of products, and more to the management of a collective process of creation. These processes are supported by the ideas and interactions between multiple actors within a social context (community).

The examples in Table 2.4., are not extensive, they are a small sample. But, from them, it can be extracted the use of similar concepts and the variety of methodic approaches. Also, it must be pointed out that these examples all originated from inside a program in a university department or in university related institution. Sanders & Stappers (2008) already pointed the kind of parameters and techniques used by designers depending on the approaches they follow. See Figure 2.13.

The examples in Table 2.4. are mostly research-led, and have the goal of including the user as a peer in the process. Yet, there is a tension about what the participation of users should involve, many of them, while researching see the user as a subject.

Table 2.4. *Examples from articles and conference papers*

Article Title / Authors	Design Method	Techniques	Concepts	Designer's role
Reshaping the Boundaries of Community Engagement in Design Education: Global and Local Explorations Hicks, T & Radtke, R. (2015).	Participatory Design.	- Focus groups. - Sessions with the community. - Community visits. - Sketch book.	- Community engagement. - Community based design. - Public interest design.	- Synthesize visuals. - Facilitator.
Designing for Social Engagement in Online Social Networks Using Communities-of- Practice Theory and Cognitive Work Analysis: A Case Study Euerby & Burns (2012)	Classical design	Relation between elements and sociological theories.	- Communities of practice	- Expert. - Community is not accounted. - Designer generates tools for social interaction.
Community participation to design rural primary healthcare services Farmer & Nimegeer (2014).	Participatory Design	- Introductory meetings. - Four thematic workshops.	- Co-production. - Co-producers- - Participatory action research.	- Facilitator of the process. - Synthesizer.
Community media and design: Insight Journalism as a method for innovation Blum-Ross et al (2013)	Insight journalism.	- Call for professional and non-professional journalists. - Stablishing a communal newspaper. - Reporting on micro-life style.	- Participatory Design- - Community journalism. - Co-design - Co-creation - Community engagement. - Research.	- Expert gaining insights.
A room for design: Through participatory design young adults with schizophrenia become strong Collaborators Terp et al (2016).	Participatory Design	- Selection of 14 participants (7 patients, 7 healthcare professionals) - Co-design workshops. - Design Artefacts: Storyboards, card sorting, mock-ups, paper prototypes. - Metaphor for direction.	- Participatory design. - Collaborative partners. - Co-creation- - Co-design. - Community of practice.	- Facilitators. - Patient as designer of needs. - Designer as guide.
Ageing together: Steps towards evolutionary co-design in everyday Practices Botero & Hyysalo (2013).	Collaborative open ended participatory project.	- Intranet and website. - Sharing of materials. - Meetings. - Workshops. - Elaboration of an agenda. - Probes. - Prototypes.	- Co-design. - Collaborative design. - Participatory workshops. - Community of practice.	- Works as part of the project. - Designer as other member of the community.
Creative Places for Collaborative Cities: Proposal for the 'Progetto Habitat e Cultura' in Milan Franqueira (2010)	Participatory Design.	- Meetings with association's members. - Material for meetings. - Workshops.	- Community. - Collaborative city. - Participatory project. - Top-down/bottom-up approaches.	- Designer creates visualization for solutions. - Synthesize results. - Guides meetings. - Facilitator. - Researcher.
Co-creation and Co-design: Applied Research Methods in Healthcare Service Design Aitken & Shackleton (2014)	Action Research	- Job shadowing (observation) - One session for co-creation and co-design. - Second session for visual testing of campaigns.	- Co-creation - Co-design - Action Research	- Facilitator - Creator of solutions from insights. - Solution evaluator.
Participatory Design in Public Services: Strategies to enhance children's healthier Behaviors Franqueira et al (2012)	Participatory Design.	- Ethnographic methods. - Proposals. - Implementation. - Evaluation.	- Participatory Design.	- Strategist. - Researcher.
Industrial Design Students Design for Social Innovation: Case Study in a Taiwanese Village Yang (2016)	Co-creation	- Visits to a community of producers. - Workshops and work together in creating products. - Creation of product identification (logo and packaging)-	- Co-creation.	- Researcher. - Creator of products.
Co-ideation of disaster preparedness strategies through a participatory design approach: Challenges and opportunities experienced at Turrialba volcano, Costa Rica van Manen et al (2015)	Co-ideation. (Collaborative participatory design)	- Two workshops. - Previous material to invite the participants. - Brainstorming.	- Co-ideation. - Community based process.	- Facilitator. - Synthesize ideas. - Recommends. - Researcher.

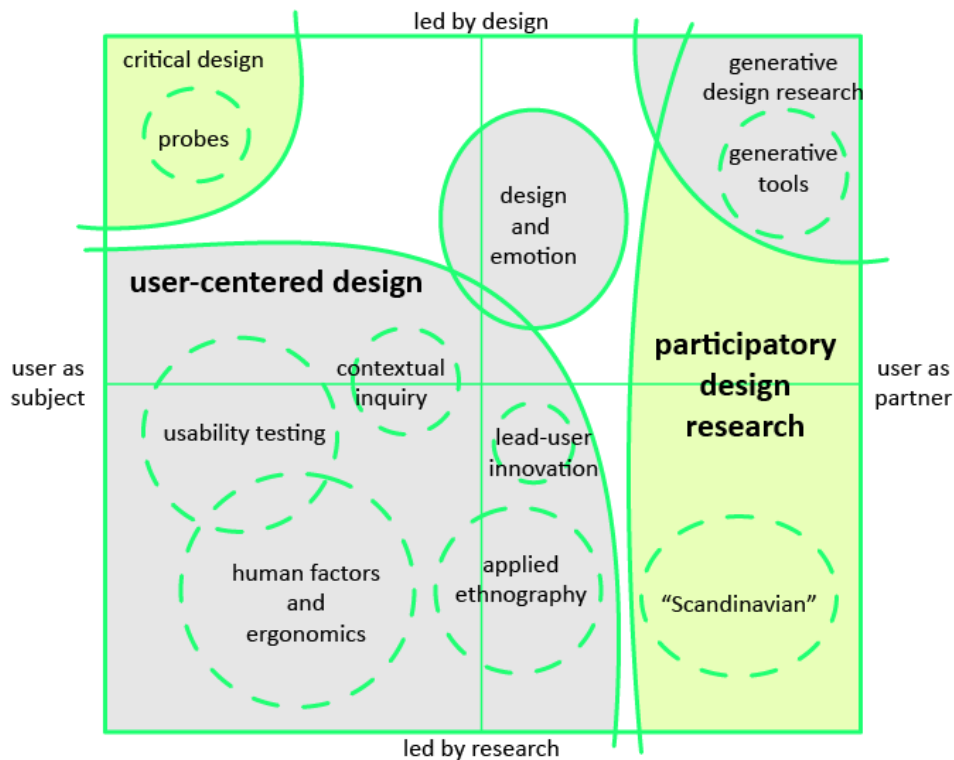


Figure 2.13. *The current landscape of human-centered design research as practiced in the design and development of products and services (Sanders & Stappers, 2008)*

Sanders & Stappers (2008) also identified two paradigms in design practices about social issues: 1) one based on the user as a subject of study; 2) one that takes the user as a partner. This means, designers working with social issues, still need to confront the dilemma of choosing how to approach the people they intend to Design for, to include them or to observe them.

An example of the first paradigm applied is in the case of Design Thinking, practiced by Design consultancies like IDEO. IDEO's main perspective for social impact is found in a non-academic article from 2009, written by its CEO: Tim Brown, and Joselyn Wyatt who leads its Social Innovation group. In the article, they introduced Design Thinking as a *"new approach to creating solutions"* (Brown & Wyatt, 2010).

Design in Design Thinking, as opposed to the traditional focus, does not center on looks and functionality but rather on creating systems to deliver products and services. Design Thinking relies on insights that spark from the community and their unique cultural contexts. On their narrative, Design Thinking is the same process of Design but applied to non-conventional projects.

IDEO's Design Thinking has no linear steps, so they call it a process of spaces. Defining three (see Figure 2.14.):

1. Inspiration: In this, the designer takes a problem that is not well defined and could be re-worked through its brief; according to the needs or contexts found, in a process that is done by observing people (users).
2. Ideation: this is the space in which ideas are generated, basically the more the better. For IDEO, it is better to count with people with "T-shaped" thinking, those who can extend across different disciplines, so they can bring more diverse knowledges.
3. Implementation: the space in which prototypes of the best solutions are evaluated. It is the most significant space, as it can mean the success of the solution.

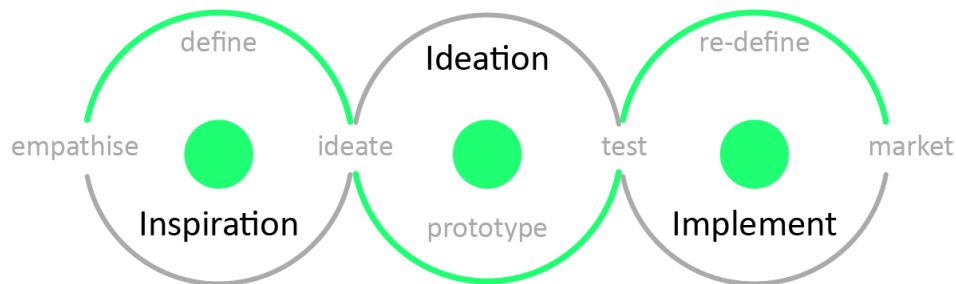


Figure 2.14. *The three spaces of Design Thinking (Brown & Wyatt, 2010)*

IDEO also stresses the need for implementing solutions that are systemic. Design thinking is recognized as having the capacity to lead to hundreds of ideas for solutions that would better serve organizations and people. Yet, it seems to be still connected to improving technical aspects, such as distribution and cost of manufacture; and not for institutional and behavior change. The user is someone who offers a problem, and insights for it to be solved, but not the solution, as it is a task of the designer.

The case of IDEO's Design Thinking for Social Innovation, and some of the cases in Table 2.4., -considered under the point of view of Sanders & Stappers (2008)-, can help in questioning, if practices based on approaching communities are integrating people into design, or if instead, designers are using that people as the base for gathering information to be used in their solutions, but improving well-being under the goals of private or public organizations.

For many, Design is an activity for the creation of embellished products and services. It is the result of designers being considered creative experts. An expertise that is being challenged by the new socially oriented paradigms of Design, and emerging forms of it (Manzini, 2016) which require strategic approaches and active incorporation of communities' actors.

Manzini (2015) describes two roles that designers can assume when approaching social innovation: 1) designers designing with the community as peers to the other members, and, 2) designers designing for the community as external agents, conceptualizing and developing specific solutions. Better solutions might be attained when the distance between the community and the designer is reduced.

Concepts such as participatory design or collaborative design (co-design), provide a framework for designers to act (Manzini, 2016). Community efforts, although not always driven by Design, result in social innovations (Manzini, 2015). To drive changes towards better social states, Design should be reframed too, as a community endeavor.

Designers, or any other individual member, alone cannot leverage the well-being of a community. Participation of all the actors involved in the context of a community is preferable. Participation “is based on the principle that the environment works better if citizens are active and involved in its creation and management instead of being treated as passive consumers.” (Sanoff, 2014). By using participatory approaches, designers should assume that solutions are no longer product of their individual geniuses.

Collaborative design (co-design) is a complementary concept to the one of participatory design (although sometimes used interchangeably as in the case study of Aitken & Shackleton, 2014). It invites designers to engage with communities in terms of publics, establishing relations beyond one-time product solutions (Botero & Hyysalo, 2012). Engaging people in the matters of their own realities, is part of what design can propel as a force for change.

Manzini (2014) indicates that social innovation can be promoted from two different levels: 1) from top-down, when the process is pushed forward by institutions, authorities and organizations that are not the community affected by a social issue; and 2) bottom-up efforts, when members of the community affected, get organized, engage in activities and embody the solutions needed. In either case, the participation of designers is a requisite for social innovation, yet designers as solution-focused practitioners have tools that could be helpful in the process. See Figure 2.15.

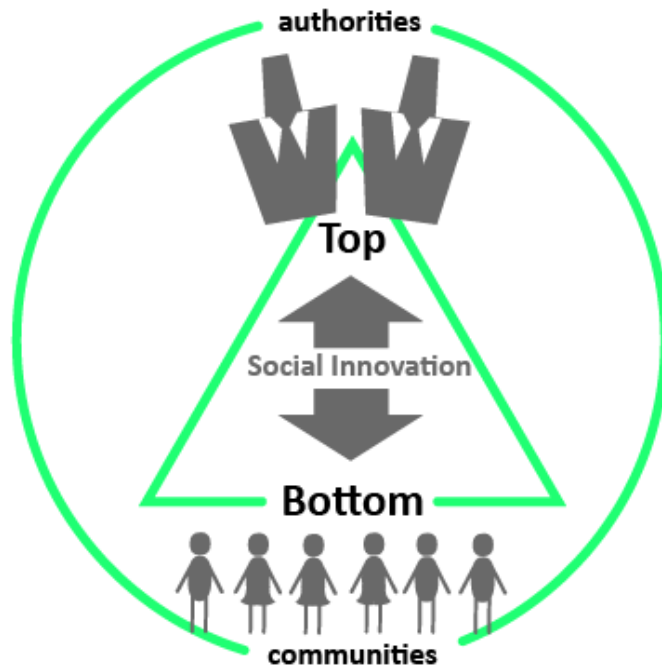


Figure 2.15. *Two possible origins for Social Innovation (Manzini,2014)*

The last concept included in the discussion about Design from the perspective of the designer’s practices within communities, is the one of “communities of practice”, as proposed by Wenger (2002, p.4; Euerby & Burns, 2012). These are groups of people who interact on an ongoing basis, sharing concerns, sets of problems or passions about a topic, and while doing it, they establish a learning community to deepen knowledge and expertise. Designers who integrate with communities could serve better in transmitting Design values and culture into socially innovative solutions.

Manzini (2016) mentioned two issues that emerge from Co-design and similar approaches⁶: 1) Solution-ism: when the focus is the solution, leaving out possible future issues, and 2) Participation-ism: when designers lose their capacity to propose better-suited solutions by becoming voiceless managers of the process. In the first one, the problem is the user as a passive subject; while in the second one, it is the designer as a passive manager.

Julier (2017) notes that new approaches, closer to the user, tend to have specific visual forms: post-its, boards, Play-Doh, Sharpies; which are signs of a shift of value in Design, from objects to processes. A process that is enacted through a series of design artifacts “... concerned, at least in theory, with working with the situated realities of everyday life whether these actually exist or are speculations” (Julier, 2017, pp.145-146).

⁶ These are approaches of Design that emphasize the inclusion of users and others interested in the solution of a problem as active participants in the process of Design.

It is possible to identify that the emergence also changes the roles designers assume, closing gaps with the space of the users (community). Consequently, giving more importance to the process of designing and less to the outcomes. There is although, the question if these new forms of design are only being put by specific institutions, such as higher education institutions, or if practitioners outside the academic space are also approaching communities.

The cases of IDEO and some mentioned by Julier (2017) of small design consultancies specializing in Design for the public sector, might serve as an example to consider that there is space for commercial designers applying methods based on research for solving social concerning problems.

It can also be questioned if the emergence of Social Innovation will have an impact on Design and mean a renewal of the outcomes it provides, or if instead, it will remain as an area for which design has an instrumental value, but will not become completely embedded.

2.5. Synthesis of The Literature Review

In this section, an abstract of the four concepts covered is presented. It has the objective of discussing the relevant aspects considered for the cases selected and studied as part of the field work (presented in next chapters). A summary is presented in Table 2.5. below. The four concepts considered are presented in terms of paradigms or tensions, which are the theoretical approaches selected.

About the roles of Design, two concerns are presented:

1) The kind of problems Design addresses; presenting a tension between technically oriented and socially oriented solutions. The tension is set between tangible and intangible solutions, objects vs. processes. Resulting in a shift from design as visual and product creation, to design as systemic intervention through tactics and strategies.

2) About who enacts design; resulting in a tension between two spaces, one in which designers participate as experts and assume the creation of solutions, and another in which design is recognized as a human attitude, that can be enacted without designers. There is a third space, which it is a hybrid space that results from the overlap of expert and diffuse spaces; in this one, designers assume the role of guiders, and outcomes are the result of peer work with other actors.

About Social Innovation, it is noted that there is not a unique definition of it, and at least two paradigms are found:

1) As changes in the norms, behaviors, values, spaces and institutions that shape social interactions. This paradigm is more related to social sciences, and involves also the recognition of other social dimensions, such as power (politics).

2) As changes towards the achievement of social goals, which are not covered by already established markets or public policies. This paradigm is more related to business and economic sciences. And social innovation is considered as both a form of help and an economic sector.

3) From these two paradigms, a third concern is found, and is related to who enacts the innovation, from its origin and the means to fund it:

a) Top-down: when an innovation is pushed by institutions already in power, such as governments. In these cases, funding is usually provided.

b) Bottom-up: when innovation is pushed by entrepreneurs, who can be individuals or groups (communities) with the aim of solving their own problems. In these cases, funding is usually a concern.

4) Another tension that sparks from the concerns of social innovation is the kind of organization that puts social innovation into action. Being social businesses the more distinctive ones.

On Design and social aspects, two paradigms are present:

1) One that sees it as interactions. Which means that Design has the power to establish systems to allow specific behaviors and forms of interaction, by setting the necessary conditions (material ones).

2) One that is related to welfare. Also, related to doing good, by setting upon the designer a responsibility for the products and services designed. It also means that the designer should have a mindset targeted on generating good effects and improving the lives of others by not surrendering to the wrong-doings of industry and markets that have no other goal than maximizing profits.

3) Apart from these two paradigms, there is also the discussion on how social aspects are approached from Design. Which can be approached when the designer acknowledges the complexity of the social space and the specific contexts they intend to change. On the contrary, by not acknowledging these factors, designers might offer solutions that are not adequate to the contexts of the people they intend to impact.

About practices, when Design is applied to social issues, the orientation is towards the processes (methods) that lead to a solution. The main aspects are related to how research is approached:

1) Research as a process for everybody: the designer acts by using action research techniques, by bringing together members from a community or group; who participate as collaborators for the generation of solutions. This kind of participation is more enacted in the public sector and by research centers (from universities).

2) Research as a process to gain insights: the designer acts as a researcher intending to gain insights from the members of a community, to posteriorly offer a solution that better suits their contexts (or that doesn't).

3) There is a tension between two spaces: The commercial space and the academic space. Design as a process or "Design Thinking" is already growing in the commercial space, as it allows companies to gain insights of market value, which is not the objective targeted in research done in the academic space.

Table 2.5. *Aspects to consider on a study of Design roles in Social Innovation*

Concept	Variable	Attributes		
Roles of Design	Orientation:	Technical- commercial. (Profits)		Social (life improvement)
	Solution:	Tangible (object)		Intangible (Process)
	Actor:	Everybody (Diffuse)	Guided (Co-design)	Designer (expert)
Social Innovation	Goal:	Changes in interactions. (is not tangible, a process)		Changes to solve a social issue. (can be product or services)
	Origin:	Top-down (institutions)		Bottom-up (communities)
	Funded by:	Other actors (donatives, government budget)		Generates a self-sustain. (Own economy)
	Organization:	Other type of organizations.		Social Businesses
Design and Social aspects	Vision:	Interactions. (Through products or services)		Responsibility. (How products and services affect lives)
	Social context:	Acknowledged (specific community characteristics)		Ignored (one size fits all solution)
	Relations:	Can be changed by design		Not in the scope of Design.
Practices of Design	Type:	Non-participatory		Participatory
	Outcome:	Non-Collaborative (insights)		Collaborative (co-designed/co- created)
	Solutions:	Systemic, considers the context in depth.		One time solutions.
	Space:	Commercial (Design Thinking)		Academic (Design research)
	Designer's proximity:	Close (collaborative partner)	Medium (guides the process)	Distant (provides solutions)

There are two gaps of information in the reviewed literature; in relation to Design, and specifically professional designers in Social Innovation. One is about how designers get involved in social innovation, when there is not an institutional background, such as a university or a social organization. It can be addressed by questioning if designers take opportunities for Social Innovation as part of an entrepreneurial mindset.

The second gap, is the lack of information about how people already enacting Social Innovation initiatives approach designers for help on generating new ideas or solutions.

These two gaps are part of the same problem, which has two directions, one that goes from people in Social Innovation to designers, and one that goes from designers trying to enter the field of Social Innovation. In both directions, research should be done on how to integrate more designers in social innovation, in practices outside the academic world, and how to make design recognizable as one of the professions that can help in leveraging Social Innovation.

3. METHODOLOGY: CASES FROM PORTUGAL

This chapter describes the methods and approaches used in this thesis. It covers the operationalization of the concepts from the literature and the field studies. For these studies, qualitative methods were selected over quantitative ones as the aim was not to provide a generalization based on a large sample. Instead, to provide a description of how Social Innovation is conducted, with the aim of getting insights on how to better integrate Design within this field. Thus, providing a theoretical framework from the reviewed literature and a description of the field of Social Innovation and its relation to Design, done from a sample of social innovation initiatives in Portugal.

Social Innovation in Portugal is a growing field; however, it is not as well developed as in other European countries. Projects and initiatives are already being developed in many parts of the country. These initiatives don't follow the same goals or procedures; some of them are supported by private companies, others have a non-profit social organization such as NGOs (non-governmental organizations) or charity groups as background; and in other cases, it is the work of private individuals seeking a solution, and some are even started with Design at its core.

The objectives of this thesis require an exploration on the field of Social Innovation. Which, in this case is limited to the geographical space of Portugal. To do a case about the country, it was decided to do it in a descriptive way, by using principles of Grounded Theory (Glaser & Strauss, 2009). Thus, requiring a set of examples, in a similar category -Social Innovation- to elaborate a comparative study to find a common pattern.

The research for this thesis was done in Portugal, a country with a Social Innovation sector moderately developed. It is shown in the data from the Social Innovation Index 2016 by The Economist (Kondo, 2016). Considering this fact, it was decided to generate a conceptualization (Bryman, 2012, p. 387), of this field in this country. To do it, a qualitative research method was selected to gain insights from local initiatives.

Qualitative methods (Bryman, 2012) were chosen, as they fit better the objectives established in the introduction. Allowing the gathering of specific details about areas in which designers and design skills could be integrated into Social Innovation. Thus, being possible roles to be enacted by designers. Which can be compared to what is found in the reviewed literature.

The literature review of the concepts -presented in the previous chapter- was done concurrently with the field work. This was done following the process of Grounded Theory (Corbin & Strauss, 1990); the analysis was done from the start of the data gathering and concepts were grounded (or considered relevant) when they appeared repeatedly and constantly in the data (concepts).

The sampling of the literature review was purposive, subjected to the concepts that appeared from the first interview. Texts were selected according to their relevance and year of publication -a time window of 30 years was used for articles-; with the intention of having contemporary relevant ideas regarding the work in the field of Design in relation to the social space.

The theoretical sampling (grounded concepts) were framed together from the concerns that emerged after each interview (Bryman, 2012, pp. 418-420). Furthermore, the literature surveyed immediately after each interview, served to refine the concepts according to the relevance they had for the interviewees. See Figure 3.1.

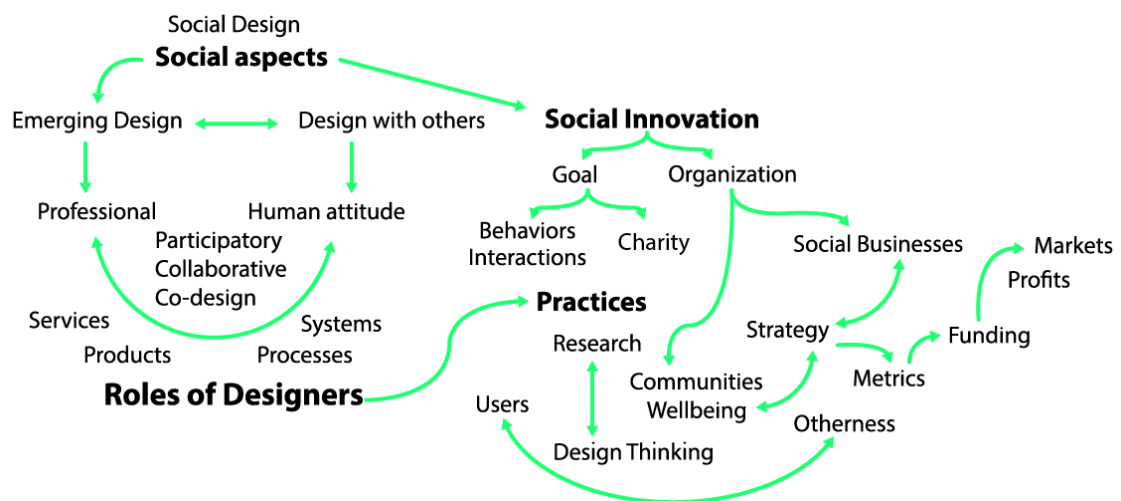


Figure 3.1. Concepts reviewed and relations in the literature review

The concepts abstracted from the reviewed literature were organized four main categories; which, had been already presented in the previous chapter. These, help to better understand the intertwining of Design and Social Innovation. Some of the literature served the function of filling knowledge gaps about the generalities of Design in the social space. Consequently, the results from the literature review can also serve as a theoretical framework for the field study.

The second part of the process was the field studies. For this thesis, a non-experimental exploratory qualitative study. The research was done with information gathered from Portuguese examples of Social Innovation -initiatives or businesses-. With the aim of building a description of the roles played, or opportunities to be played, by designers.

This thesis research considers the presence of design in two forms. First, as a human attitude (design); with the aim of changing a situation to a desired state. Secondly, as a professional task to provide solutions (Design). To delve on these two forms of design, it is necessary to consider all the possible aspects that Social Innovation involves, and it requires knowing what those who are already developing these initiatives define as their main concerns.

This thesis started by considering classic Grounded Theory principles (Glaser & Strauss, 2009), requiring no previous in-depth literature review done. It was done with the intention of avoiding inferring possible outcomes. Hence, the already presented literature review is also the result of revision done in parallel with the process of data gathering from the sample. The process of reviewing and selecting literature was closely connected and guided by the concerns that emerged during the field studies.

The data from the field studies was gathered by unstructured interviewees (Bryman, 2012, p. 471). A process that involved initially contacting 30 Social Innovation initiatives, of which 10 accepted to participate. The 10 interviews were realized over the period of 4 months. The participating interviewees were people from the working team of seven Social Innovation related initiatives, and three from people on Design related practices. This sampling was purposive; to provide examples in different areas of the country and with different goals.

3.1. Method

Classic Grounded Theory methods imply starting without a problem, or with a problem loosely defined (Glaser & Strauss, 2009). A general framework is required, but not a literature review, to build theory from observation and comparison of subjects' characteristics, and not by pre-assumptions on the subject to be studied.

The first step was establishing a general topic: Role of Design in Social Innovation for communities, in this case. A prejudgment was done, that Design is present in Social Innovation and that communities -as groups of people with similar characteristics- are included as collaborators by the people implementing Social Innovation.

The concept of Social Innovation was pre-assumed as: activities, initiatives and projects that seek the wellbeing of such groups. These assumptions, if real, would have allowed finding projects in which a social issue that affects a specific community is being approached by using methods of Design. Yet this is an assumption that proves to be real in literature, but not on what is found on the field studies, which required rethinking the research.

The from the goal shifted from finding designers that work on Social Innovation, to finding opportunities to include Design as part of this field, by considering the characteristics found on the Portuguese examples. These characteristics are not generalizable, as the examples in the study are from the specific context of Portugal, but they offer insights about the intertwining of both fields in a semi-developed context.

The second step was the data gathering. It involved applying the unstructured interviews; and taking notes about the subjects and concerns mentioned by the interviewees. It is important to clarify, that the subjects for this research are the initiatives, and not the interviewees. Although, the interviewees provided the required data about the initiatives.

The unstructured interviews were done with people working on projects, initiatives or businesses enacting social innovation or social entrepreneurship. Each interview had a duration between thirty minutes and one hour. And the participants offered information about their projects, such as the process for ideation, their goals and the participation of the communities. The data gathered was recorded and a transcript was used for posterior analysis through the process by coding similar ideas -portions of speech-, which were the base for the concepts and categories.

The concerns that emerged from the interviews helped in identifying which literature to review; and how to establish relations between the concerns while they appeared. The notes taken directly after each interview, in the form of memos (Glaser & Strauss, 2009, pp.90-91), helped in defining the main topics -expressed and encountered in the initiatives, as well as those left out-, the gaps found in the field studies were later approached by recognizing solutions already present in the reviewed literature.

The gathered data was further studied by doing an analysis of the interviews, selecting related concerns and coding them under a tag. It helped in establishing a formal theory -or at least a description- by grouping concerns and establishing relations. These relations are not assumed as a generalization of the behaviors; but a descriptive theory for the field of Social Innovation in Portugal, that would allow designers to develop capacities to act on it in a more successful way.

The last step in this research involved a discussion of the theory built in contrast to the findings from the literature review. Allowing the identification of better ways to integrate Design as part of Social Innovation within the context of Portugal. It establishes a possible frame for comparison in further studies in other contexts or over time.

3.2. Participant Selection

The main objective of this thesis is to understand how product designers can better participate in Social Innovation. Consequently, it could be thought that designers should be surveyed as the subjects; but, it would be a wrong approach. Surveying designers wouldn't reveal what happens in the field of Social Innovation, but what designers think is being done or what should be.

The correct manner to approach the field of Social Innovation, is through examples of existing projects and initiatives. The characteristics of these examples can be categorized in terms of goals, approaches and strategies. And they would help in signaling the pertinence for the participation of design, as a profession and as a human attitude.

In Portugal, Social Innovation is more developed in the form of Social Entrepreneurship. There are private and public programs -as well as strategies- that support and study its growth. One initiative had been implemented by IES (Social Business School) and Instituto Padre Antonio Vieira (MIES, 2017), which is a tool that maps Social Innovation and entrepreneurship initiatives in the country, on the regions of Alentejo, North, and Center.

The project mentioned in the previous chapter offers a map on its website, helping in visualizing the location and distribution of social innovative initiatives in Portugal. Having access to this Map of Social Innovation and Entrepreneurship -MIES by its initials in Portuguese- (MIES, 2017) was an advantage, as it allowed to grasp the kind of projects being considered as Social Innovations in Portugal. This tool enlists a total of 4205 projects, of which 444 are described on the site, with 134 selected as cases of good practices for Social Innovation and Entrepreneurship.

Using the MIES (2017) tool and the information provided in the datasheet for each project, a sample of 25 projects were contacted to participate as subjects for this thesis. It was considered that at least some kind of formal aspect should be present, whether a product or a service representing a material aspect in the form of a visual brand, a packaged product, or a digital platform.

The 25 selected projects were contacted via email or through their social media profiles. During the period between February 6th and February 27th. From the 25 selected projects, 5 gave authorization to participate in an interview. Other two interviews were from projects found online; through a search on Google with the words “social innovation” and “projects” and “Portugal”. One interview, done also as part of another project, that was realized by a second-year university group of students from the Design Methodologies course at ESAD Matosinhos, as part of their class work.

Another aspect, that appeared while searching for initiatives to approach, was the fact that in Portugal, there are already some education or training programs aimed at developing the potential of social entrepreneurs from the field of Design. Some of these were contacted, as they are considered as part of the development of Social Innovation in this country; and two interviews were done.

Finally, one interview about a Design office that works on solving problems through non-tangible solutions, processes, and Design Thinking; regarded as the first one with a Design Thinking method developed in Portugal. It was selected as they have worked on projects pertaining Social Innovation.

The summary of the participants is presented in Table 3.1. It is a collection of ten initiatives from different parts of the country; with different backgrounds and contexts for their origin and day to day work. These are important pieces of information, considering that social innovation can be started by diverse actors to cover diverse issues.

Table 3.1. *Participants on this research ordered by date of interview*

#	Subject	Interviewee: Gender, Position.	Type	Location	Mode	Language	Date
1	ProactiveTur/ TASA	Sara Fernandes: Female, Marketing	Community project/Social Business	Algarve	Presence/ observer	PT	19/01/2017
2	CAIS Recicla	Filipa Mora: Female, Communication José Sinde: Male, Psychologist	Social Association/ Social Business	Porto	Presence	EN	03/03/2017
3	EKUI	Celmira Macedo: Female, Founder, volunteer.	Social Association	Miranda do Douro	Online	SPA	06/03/2017
4	MyFarm	Luis Luz: Male, Founder, volunteer advisor.	StartUp/ University/ Social Business	Beja	Online	EN	08/03/2017
5	Somos + (somos mais)	Paula Rodrigues: Female, Manager Vânia Oliveira: Female, Communication and Marketing.	Social Project/Social Business	Braga	Presence	EN	10/03/2017
6	Speak. Social	Mariana Brilhante: Female, Business Growth.	StartUp/Social Business	Lisbon	Online	EN	22/03/2017
7	Terra à Terra Project.	Emanuel Monteiro: Male, Promoter of Environmental education and training,	Social responsibility/ Community project	Porto	Online	EN	03/04/2017
8	Mind Shake	PhD. Katja Tschimmel: Female, Founder-Designer	Design Thinking Consultancy	Porto	Presence	EN	28/04/2017
9	Porto Social Impact Factory/Porto Design Factory	Joana Lacerda and Angela Pinto: Female, Social Entrepreneurs/Architects and social innovation mentors	Social Business accelerator/ Design Thinking mentoring/ University	Porto	Presence	EN	12/05/2017
10	ID+ DESIS Lab	PhD. Teresa Franqueira: Female, Coordinator/ Designer/Professor	University/ Research institute	Aveiro	Presence	EN	17/05/2017

3.3. Analysis Technique

The information -data- gathered from the interviews was analyzed in a two-stage process. The first stage was a preliminary analysis, done with notes taken from the interviews. Also, recurring to impressions gotten from information and other materials found on the websites of the subjects. The result from this stage was a preliminary set of categories about the general concerns of each initiative. This result was also the main aspect driving the literature review.

Categories are how the ideas that appeared in the interviews were organized. These are specific tags -codes-, and are the base for the concepts used to construct the theory - or description-. To be included, a category should repeat in all the interviews, or be singular in one specific example; but relevant in contrast to the others. For example; in the first interview, a relevant topic was: products are means, but not the main goal. This was coded under the category “goals”, in the following interviews similar topics were found, this category -its code- is part of the concepts in the description.

The second stage included a formal analysis of the interviews. The content in the transcripts was analyzed and clustered to be compared on each of the categories (codes) generated in the preliminary stage. This task allowed the identification of repeated appearance of concerns, and to re-code similar concerns within a pertinent tag for the category. This way, a proper description of the field can be achieved, while the gathered information is reduced to the most important aspects.

Finally, a discussion about the finding in relation to the research objectives, and the concepts from the reviewed literature. To identify areas of opportunity and gaps, as insights, from the Social Innovation initiatives. It provides the foundations for a critical path of action for designers; which can be followed when approaching projects in the field of Social Innovation.

3.4. Limitations

This thesis had some limitations that must be accounted for its validity in generating a theory -description-. The first one is that the research work is not for a generalization of behaviors, but, to offer a description of the current situation of Social Innovation from some examples in Portugal, enough to infer a pattern by reaching data saturation. Its results can be considered of relevance for other contexts, but only as a reference for comparison. This study can be furthered by doing an extensive quantitative analysis, by using the categories in the description (theory) as part of a hypothesis to be tested.

The second one is the territorial limitation. Made on purpose, with two reasons in mind; to make efficient use of the stay of the researcher in Portugal. and to take advantage of the possibility of studying a case in a country with a mildly developed field of Social Innovation. The selection of participants also had a bias, as some initiatives that are developed by local communities and social groups may not be included as part of Social Innovation, because of a lack of diffusion of the concept.

4. RESULTS OF THE FIELD STUDIES

The field studies for this thesis included three formal steps; described as follow:

1) Note taking and preliminary description. The notes taken during the interviews contained the aspects considered as more relevant -subjective to the researcher's own background-. These notes were used to construct a first description about the topics that appeared repeatedly on the interviews (see Figure 4.1.). This first description was also used to define the literature to be reviewed. On this step, common concerns were identified from what called the attention of the researcher. Through these concerns, a group of preliminary categories was created.



Figure 4.1. Concerns (categories) deducted from the notes taken

- The first category, about sustainability, was linked to matters of funding.
- The second category is related to products/services as means and not as goals.
- The third category, was established about the relation with public organizations (State), a tension about their participation.
- The fourth category, about the lack of tools to measure the impact of Social Innovation on aspects that are not financial.
- The fifth category, regarded Design, considering the participation of designers, or people doing tasks of design, without it being related to the strategy or on connecting the process of Social innovation with the people benefited, instead, design as a mean to generate market value.
- The sixth category, regarded the people attended -the community-, those who receive a solution as an aid, but don't manage its creation.

These categories were deducted from the notes taken. And were considered a first approach to the idea of what Social Innovation is. The preliminary description can be summarized as: any project that seeks to help others who are being affected by an issue with common characteristics, done by providing specific solutions. The solutions are financed from external sources; which extend the life of the project. These sources, can be the sales from a product or service on the market; but this is not the main goal of Social Innovation, these are means to reach changes that impact the lives of those others.

This first approach is an oversimplification of the subjects treated by the interviewed people, and is expanded and corrected in the detailed analysis done as part of step 2.

2) Analysis of the interviews. The recorded interviews were analyzed in detail. This analysis was made to identify specific concerns about the topics of Social Innovation and Design. Design was considered as a topic that could be expressly mentioned or described in the process to generate a solution.

This analysis took as a basis the existing notes. Despite using a transcript of each interview to encounter new categories. For each interview, a set of categories of topics was created, and these were later clustered in codes and compared to the ones present in the other interviews. Thus, resulting in a common pattern.

The codes with which the categories were labeled serve as the concepts that form the theory -in this case a description-; that can be used to elaborate on recommendations for designers wanting to enter the field of Social Innovation.

The description is made from the similar concerns appearing on the 10 interviews used as subjects. To do it, it had to be kept in mind that this is not a quantitative analysis and that the repetition of a pattern of equal answers is not relevant as the inference of similar characteristics from the information gathered. For the proposed description in this thesis, it is important to refer to the qualities of the information.

The clustering of information was done by considering the similitude of the information and not the repetition of terms. For example, these two quotes from two different interviewees:

1: “... *our outcome is not really tangible, isn't it, you can't measure it in a way as it will feel in the future, not immediately...*”

2: “... *the impacts are not immediate, you need five, ten years to see them, so it is difficult to convince others, and probably the impact will be longer...*”

These quotes are from two different interviews, in both, there is concern about the time it takes for the outcome -goal- to come to fruition. Which makes it un-apprehensible for measurement tools. Thus, they were re-coded under the code “not measurable”. In terms of outcomes or impact of Social Innovation, they fit better with the information given by the other interviewees. As it was clear that the concern is not time, but on how to measure the impact of a solution in an easy and fast way.

From the 10 interviews realized a total of 28 aspects mentioned were considered as common categories. And were coded -and re-coded- following the logic of the example provided before. These were relevant aspects that mentioned by the interviewees, and were later clustered in the codes that define the description presented as result of this study. These aspects were identified from similar words mentioned or inferred by the concern they signaled. See Figure 4.2.

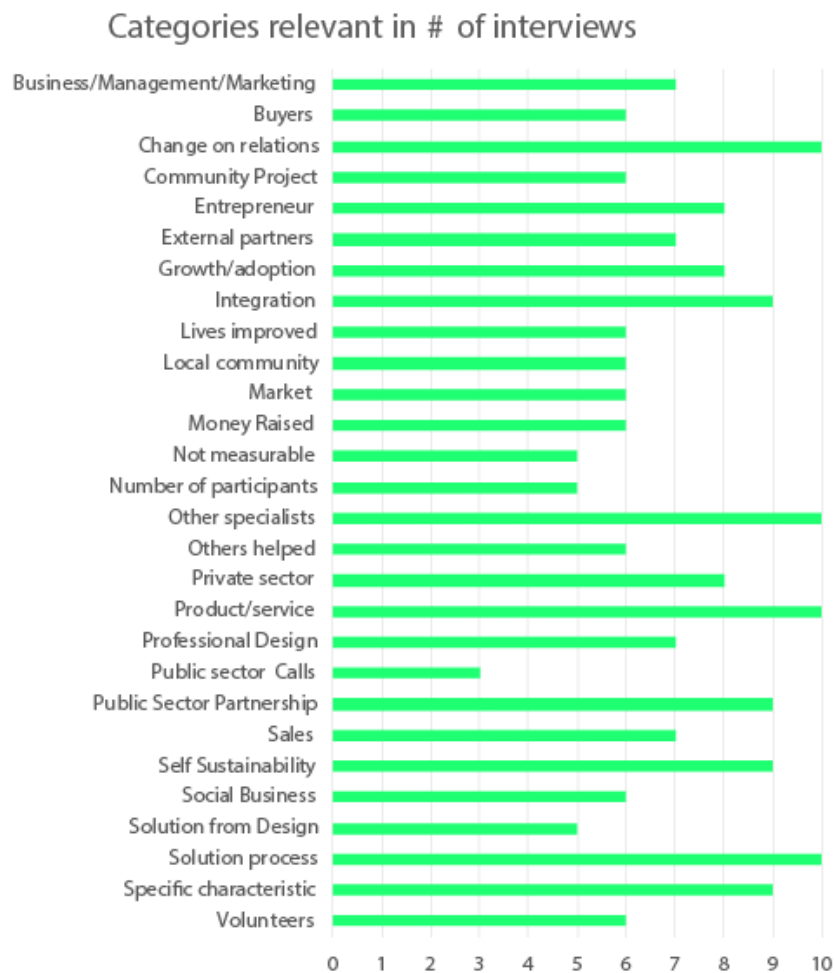


Figure 4.2. *Categories clustered by number of interviews in which they appeared*

The categories created were later clustered in eight main codes. as they were related to specific issues mentioned by the interviewees.

The last three interviews had a more direct relation to the field of Design, and for these, a second re-coding was done. Using categories pertinent to the field of Design. These had more relevance to how the processes of Design are conducted; and how designers should conduct them in projects that are for Social Innovation or for non-tangible solutions. The categories generated were not clustered with the main categories, and are not part of the main description; but they are referenced as part of the results of this thesis. Some of the concerns are very specific to the way in which Design is approached by the interviewees, and could be work for a posterior study. See Figure 4.3.



Figure 4.3. Categories from the three interviews with people on the field of Design

3) Description of the Field of Social Innovation in Portugal. A description was abstracted using the main codes categorizing the available information from the interviews. The main codes are presented in the following section with a summarizing preamble for each of the subjects' most important information points. The categories were conceptualized and explained by comparing the characteristics of each one of the ten examples. The final discussion also offers a comparison against what was abstracted from the literature review. This exercise helps in the generation of a descriptive case of Social Innovation in the country of Portugal. It is helpful to signal paths of action for designers wanting -or having- to integrate their practices into the field of Social Innovation.

4.1. Coded Findings

The information gathered from the 10 interviews was thoroughly analyzed and classified into eight main categories. The codes for these categories are the concepts included in the description of Social Innovation in Portugal. These concepts and the relations established between them are the material used to propose paths of action for designers. The final chapter presents recommendations based on this description. Although, the recommendations are based on the examples from Portugal, but the description could be applied to other contexts -countries- for comparison. The concepts provided may help in identifying different developments of Social Innovation.

The concepts, coded from the examples that were subjects in this thesis are:

1) Origin. 2) Organization. 3) Innovation Mechanisms. 4) Funding. 5) Participation. 6) Impact. 7) Team-work. 8) Design. They were created by clustering the 28 initial categories according to the topic they belonged to. See Figure 4.4.

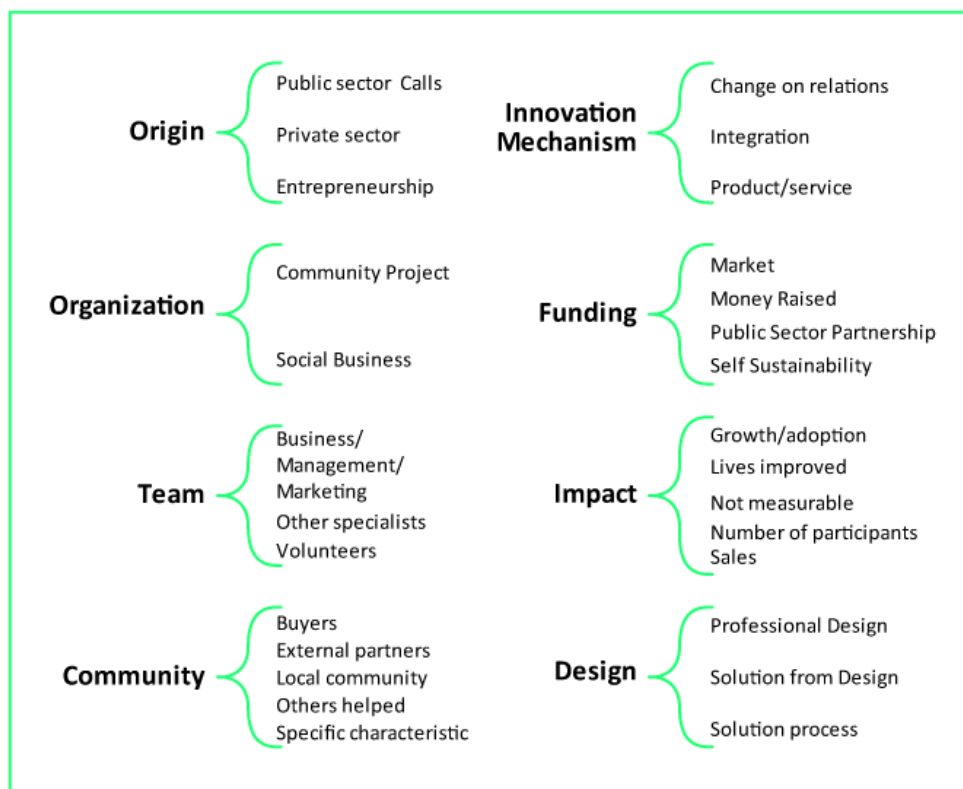


Figure 4.4. Main codes from categories clustered

The concerns and aspects mentioned by the interviewees were clustered in eight categories. These categories are described in the following section. The relations of this codes are also abstracted and presented. A preamble for this description includes a brief introduction to the 10 examples that were subjects for this thesis.

Subject #1: TASA PROJECT

Source: interview

TASA Project (Ancient techniques current solutions)	Description:
	A project from the region of Algarve (south of Portugal). It connects Designers and artisans with the mission of improving and giving new value to ancestral artisan techniques. This project became a well-established business model. It is managed by a group of people from ProactiveTur, a company from the sector of tourism, this company oversees the marketing and commerce of the products developed by the artisans and designers, they also look for ways to connect buyers and producers.
	Years active / Starting year
	7-8 / 2010
	Tangible/visual solution
Website, online store, brand and product line.	
Intangible solution	
Strategic innovation for the craft industry. Added value to the region of Algarve and to its artisans.	

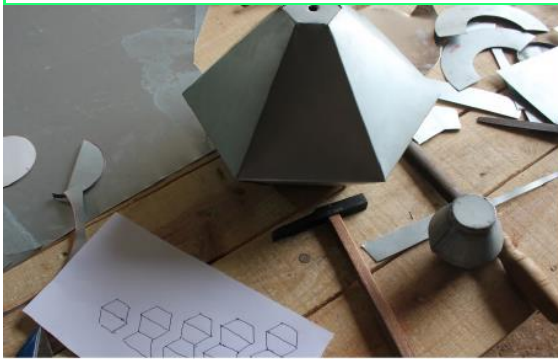


Figure 4.5. TASA PROJECT's work with craftsmen (Algarve Regional Coordination and Development Commission, 2017)

Subject #2: CAIS Recicla

Source: Interview

CAIS Recicla	Description: <p>Project located in Porto, but working in the whole North region of Portugal. They produce Eco-friendly products, such as notebooks and agendas that are manufactured using waste material donated by industrial and commercial partners such as UNICER and Casa da Música. The project is also a workshop for people attending the social-work and psychologic services of CAIS association. It is also functions as a work placement opportunity for people in condition of homelessness, who gain the required soft skills to go back to the working force.</p> Years active / Starting year <p>5-6 / 2011</p> Tangible/visual solution <p>Eco-friendly products from waste material, and CAIS brand expansion.</p> Intangible solution <p>Partnerships with private actors (network). Empowerment by giving people in condition of homelessness a paid fulltime work opportunity, and by allowing others to participate in the workshop as part of a therapy.</p>
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Figure 4.6. CAIS Recicla's product exemples (Associação CAIS, 2017)

Subject #3: EKUI

Source: Interview

EKUI

Description:

The project was started by PhD graduate Celmira Macedo, who is a specialist on education for children with communication disabilities. She created a set of cards aimed at helping these children to learn the alphabet according to their own capabilities. The method and the tools created (cards and videos on-line) is being used in classrooms with children with and without disabilities. The project is regarded as a social business.

Years active / Starting year

5-6 / 2011

Tangible/visual solution

EKUI cards, method created by the entrepreneur and sold on-line.

Intangible solution

Inclusion of children with disabilities (reduced sight, blindness, hearing problems) in regular classrooms. Awareness by teachers and other students about the challenges of these populations. Training of professors in new methods.



Figure 4.7. EKUI CARDS educational technical set (EKUI, 2017)

Subject #4: MyFarm.pt

Source: Interview

MyFarm.pt	Description: Project from the region of Beja, that aims at connecting consumers of vegetables and fruits with local small producers through online services. When the project started their goal was to create a version of “Farmville” with real production, but it was soon disregarded for its inefficiency, yet the idea of how to connect consumers and producers through digital means remain. Their objective although is about reducing the depopulation of rural areas. Years active / Starting year 5 / 2012 Tangible/visual solution Website and online store (adelaide.farm). Intangible solution Direct relation of consumers and producers, and stopping depopulation of rural areas by offering producers an opportunity to earn money by staying there.
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Adelaide.Farm a plataforma que liga produtores a consumidores com laços sociais e ambientais.



Figure 4.8. MyFarm's platform "your virtual vegetable garden" (MyFarm, 2017)

Subject #5: Somos+

Source: Interview

Somos+	<p>Description:</p> <p>Project from Concelho do Villa Verde (Braga), started by the Red Cross. It sells cookies, chocolates and jams made in artisan ways, by women from a vulnerable community (Gypsies), and gets most of the raw materials (fruits) from donations made by local producers in lands that are not being used or abandoned. A brand was created in partnership with a local advertisement agency with the aim of giving extra value to the product. The product also gives work to two women every year as an opportunity to be integrated into the working space.</p> <p>Years active / Starting year</p> <p>3 / 2015</p> <p>Tangible/visual solution</p> <p>Branding Somos+ and packaging of products. Also, an on-line store.</p> <p>Intangible solution</p> <p>Empowerment of women through an option of work and new mindset among the community about the role of women.</p>
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Figure 4.9. Somos+ product branding (CRUZ VERMELHA PORTUGUESA, 2016)

Subject #6: Terra a Terra

Source: Interview.

Terra a Terra	<p>Description:</p> <p>This is a project from Porto's Greater area waste management company LiPor, which includes eight municipalities. The project aims at avoiding organic waste, and gives the materials and training needed by community members to start their own composting. This project was first funded by another European project, and only gives services to people living in houses with gardens where compost can be done. It is one of the many projects of LiPor, and is seen as one of their community services, but it is not managed as a separate project.</p> <p>Years active / Starting year</p> <p>10 / 2007</p> <p>Tangible/visual solution</p> <p>Materials given to community members to make compost at home (for houses with gardens)</p> <p>Intangible solution</p> <p>Education about composting, spread of the idea that composting can be done at home, and that the compost can be used in communal gardens.</p>
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Figure 4.10. Terra a Terra project's invitation banner (Lipor, 2017)

Subject #7: Speak Social.

Source: Interview.

SPEAK SOCIAL	<p>Description:</p> <p>Project started in the city of Leiria (North of Portugal) by an entrepreneur who had been working for Google. The project started by trying to connect locals and foreigners in meetings to teach and learn the Portuguese language, it evolved to become an online platform with the aim of creating a community of on-line for migrants to be integrated in the receiving city. As a digital platform plus an in-person course component with a monetization system based on paying a low fee for joining a course, the project is being escalated to other European cities and is already garnering partnerships from NGOs and public institutions.</p> <p>Years active / Starting year</p> <p>5 / 2012</p> <p>Tangible/visual solution</p> <p>An online platform that gives migrants information about events on their area and language courses so they can interact with others.</p> <p>Intangible solution</p> <p>Acceleration of the process of integration to the receiving society.</p>
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Figure 4.11. *SPEAK's audience and some of the cities where they work (SPEAK, 2017)*

Subject #8: Mind Shake.

Source: Interview.

MindShake

Description:

Design practice located in Porto, focused on spreading design thinking and creativity methods. Their work doesn't deal with creating object, but on transferring knowledge about how to innovate, mostly in business set-up; yet they are open on working with other kind of organizations, such as municipalities and NGOs. They already had experiences with social innovation. And the founder is actively participating in an European Project to apply design thinking to education and training (www.d-think.eu), this project has the aim of changing how higher education is approached.

Years active / Starting year

2 / 2015

Tangible/visual solution

Their own website (mindshake.pt) were their method developed for design Thinking can be found and accessed free of cost. Also share all material about their researches through this channel.

Intangible solution

Incorporation of Design Thinking methods into other fields, such as education.

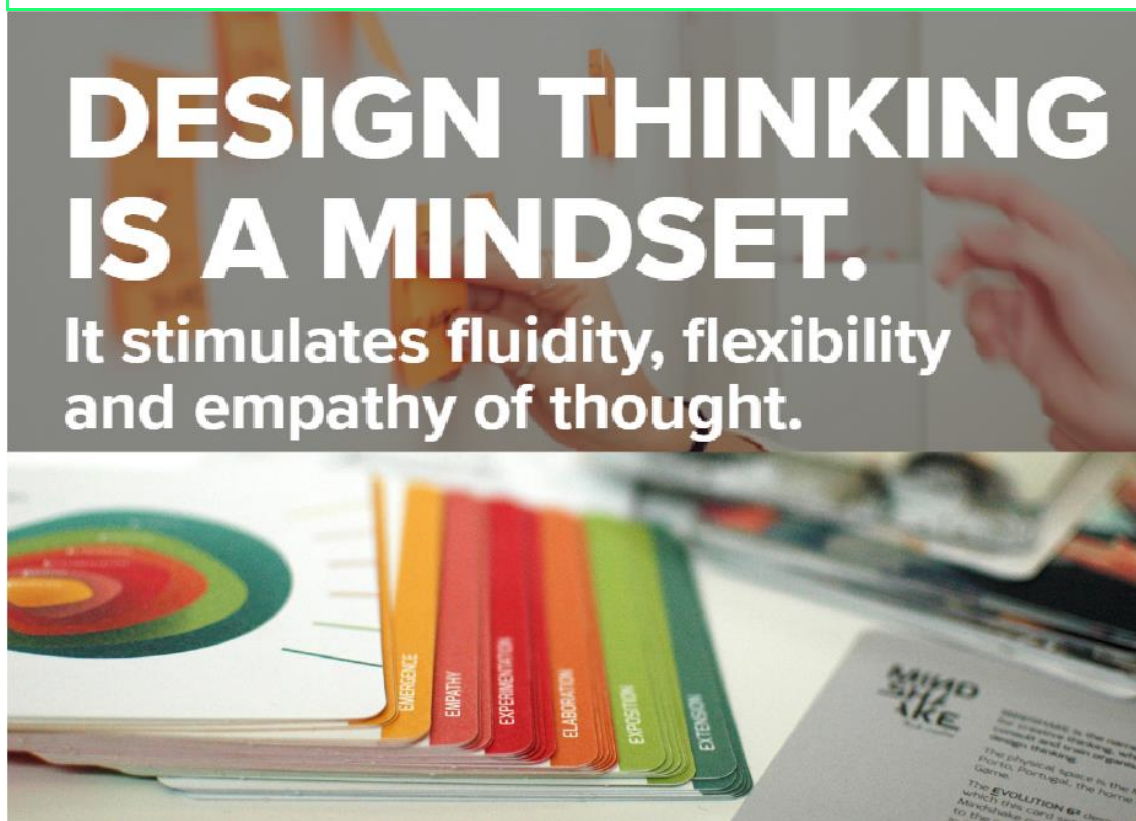


Figure 4.12. *MindShake's work is based on applying design thinking principles (MindShake, 2017)*

Subject #9: Social Impact Factory

Source: Interview.

Social Impact Factory (Porto Design Factory)	Description: Project accelerator in Polytechnic of Porto, a state university, this program is supported by European Union funds. Porto Design Factory had been working with entrepreneurs and innovators since its creation. Their focus is on providing assessment and support to the entrepreneurs, so they can have a market ready product/service in less time. The Social Impact Factory is a new project that will accelerate and house entrepreneurs who want to have a social impact. This is done in partnership with the Social Impact network from Germany. Now, they are already testing their approaches with three projects. Years active / Starting year 2 / 2015 Tangible/visual solution Dependent on the project they are accelerating. Intangible solution Dependent on the project they are accelerating.
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Figure 4.13. Porto Design Factory's manifesto, same for the Social Impact Factory (Port Design Factory, 2017)

Subject #10: ID+ DESIS LAB Aveiro.

Source: Interview.

ID+ DESIS Lab (University of Aveiro)	Description: This program is part of the DESIS Network (Design for social innovation and sustainability) started by Ezio Manzini in Politecnico di Milano. The focus of this Lab is on Social Innovation as new connections between actors, in terms of their interactions and relations. For them Design plays a role providing visualization for the new interactions and also by providing the conditions (spaces, objects and moments) necessary for those interactions to happen. Design is also seen as the medium to put research in visual ways so, that it can be easily integrated by others. Years active / Starting year 10 / 2011 Tangible/visual solution Dependent on the project they are working on. Intangible solution Dependent on the project they are working on.
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Figure 4.14. DESIS LAB is based on participation and research (ID+ DESIS, 2017)

4.2. Data Analysis

The context provided is the starting point for this analysis. The following information is an organized description of the eight main categories made to cluster the data gathered from the interviews. The three examples from Design related initiatives - MindShake, Desis Lab Aveiro and Social Impact Factory- are included in this analysis, yet they provided further information about the orientation to what Social Innovation and the work of Design is. To use this information, an extra analysis of these three is offered later.

Seven of the main categories are in relation to the concept of Social Innovation, and one is specifically related to Design. These categories are:

1) Origin: on this matter, it is important to mention that five of the initiatives are considered a social business. One specifically as a social start-up; and of the remaining ones, one is regarded as an experimental workshop with a social business orientation; while another one is considered a community project.

All the initiatives have origins that are related to pre-established organizations. They did not emerge from the own desire or interest from the people or community they aim at helping. From the cases of Design related initiatives, in one as their orientation is linked to establishing communities and interactions, for them the matter of origin is a process of civil participation; while in another one the origin is to be connected to the work of an entrepreneur who wants to create a social impact. See Table 4.1.

As found in the literature review, Social Innovation can originate from various spaces (Mulgan,2007), and it could depart from the needs of a group of people or an institution, in both private and public sectors.

In the ten examples, the origin was mentioned, being more predominantly connected to private parties -such as socially oriented non-profit organizations- which are already developing work for a social group, followed by mentions of individuals who act as entrepreneurs and who start the process of social innovation. Mentions about state or public organizations as origin or partners are the less, and not as important as the work of an individual or a private group -non-profit social association or network of interested companies-.

Table 4.1. *Examples' origins*

Example	Origin
TASA Project	- Private company (Proactive Tur). - Call from the commission of Professional Development in Algarve. Public interest.
CAIS Recicla	- CAIS Association (Private funded socially oriented association) - Private partnership (donor of material).
EKUI	- Leque: Associação de Pais e Amigos de Pessoas com Necessidades Especiais - Entrepreneur (Founder) from her doctoral studies.
MyFarm	- University (academic/research initiative) - Students
Somos +	- Red Cross from Braga. - Partnership with local farmers who donate fruits.
Terra a Terra	- Public Waste Management Entity (LiPor) - European project (Miniwaste)
Speak Social	- Entrepreneur (project founder) - Associação Fazer Avançar (socially oriented association that provides help to young people seeking to solve social issues).
MindShake	- It can be public or private.
Social Impact Factory	- Is the work of the entrepreneur. - The entrepreneur is a special someone.
DESIS Lab Aveiro	- Civil society - Public/Private partnerships.

2) Organization: the organization type is not explicitly mentioned in all the interviews. It is abstracted from the type of work done by the initiative in connection to their objectives. The concept of organization is defined by the institutional approach taken from those enacting the solution, and how they interact with those being benefited.

In practices of Design for Social Innovation, the predominant is the work with communities, to solve or to better understand their problems. A lack of these approaches might explain why in the examples the predominant organization model is the one of Social Businesses. Focused on gaining profits. See Table 4.2.

Table 4.2. *Examples' organization type*

Example	Type of Organization
TASA Project	- Social Enterprise. - Community of artisans
CAIS Recicla	- A workshop - Social Business oriented
EKUI	- Social Business
MyFarm	- Social Business
Somos +	- Social Business
Terra a Terra	- Community Project
Speak Social	- Social Business (Start Up).
MindShake	Businesses.
Social Impact Factory	Social Businesses or StartUps
DESIS Lab Aveiro	Spaces for community and social interaction.

3) Innovation: this subject that was not clearly expressed by any of the interviewees. It is abstracted from what is expressed as the solution they provide. The apparent more tangible solutions, such as visuals and objects (products) are not considered the social innovation, but a sort of mechanism to attain their goals. See Table 4.3.

Innovations are the changes being enacted, which should be related to the goals of the initiative, but the goals for a social innovation are not always the same accomplished by the means used. In the examples three predominant categories are present: integration of groups of people, change on relations (interactions) and new products/services; the last ones are used as tools to finance the operation and expansion of the social innovation by providing a value for the market -something that can be sold-.

Table 4.3. *Innovations and mechanisms from the ten examples*

Example	Social Innovations	Mechanisms
TASA Project	<ul style="list-style-type: none"> - Local craftsman industry recovery. - Involvement of young people with craftsmanship. - Revaluation of craftsmanship. 	<ul style="list-style-type: none"> - Creation of a Brand. - Strategy of network of designers and artisans for the creation of products. - Workshops. - Online store.
CAIS Recicla	<ul style="list-style-type: none"> - Empowerment of people through work. - Reintegration of people in homelessness situation to civil society. 	<ul style="list-style-type: none"> - Creation of a company that also works as a workshop. - A contract to help people in homelessness overcome their situations (it is not training): only one person a year. - Creation of eco-friendly products that prolong the life of materials that otherwise would be waste. - Use of CAIS recognition as brand.
EKUI	<ul style="list-style-type: none"> - Inclusion of kids with communication disabilities to regular classrooms. 	<ul style="list-style-type: none"> - Set of cards. - Training on a new method for teaching. - Online store and media access.
MyFarm	<ul style="list-style-type: none"> - Relation of consumers and local producer without intermediaries. - Recognition and revaluation of local farmers and local production. 	<ul style="list-style-type: none"> - Online platform to connect both ends (consumers and producers). - Online store. - Products branded (personalized) with the name of the producer. - Visits organized to the local farms on request.
Somos +	<ul style="list-style-type: none"> - Empowerment of women. - Change of mind in a vulnerable community (gypsies). - Use of fruits that are not collected by local producers. 	<ul style="list-style-type: none"> - Creation of a company that manufactures sweets. - Branding and packaging. - Training of women with low education (non-certified). - Job opportunity for six months (two women every six months). - online store.
Terra a Terra	<ul style="list-style-type: none"> - Avoidance of organic waste from home. - Local promotion. 	<ul style="list-style-type: none"> - By offering the material needed and the training to do compost at home.
Speak Social	<ul style="list-style-type: none"> - Migrants can integrate in a society by attending courses and activities. - Local activities. 	<ul style="list-style-type: none"> - Platform to inform about social activities and follow ups on courses given by volunteers. - A virtual community with other migrants and locals is generated online. - In person courses.
MindShake	<ul style="list-style-type: none"> - Apply methods of Design to other fields. - Creation of new processes. 	<ul style="list-style-type: none"> - A set of methods. - Formal academic research.
Social Impact Factory	<ul style="list-style-type: none"> - Creation of socially impactful market ready services and products. 	<ul style="list-style-type: none"> - Training and housing for entrepreneurs. - Prototyping and testing.
Desis Lab Aveiro	<ul style="list-style-type: none"> - Changes in the ways people interact. 	<ul style="list-style-type: none"> - Formal academic research. - Projects that help in visualizing solutions.

4) Funding: concerns about funding are present in every interview. Which is remarked as one of the reasons for having business-like schemes. There are three concerns related to this subject: one of sales as a model based on offering a product or service that can generate revenue that helps in the sustain of the project, generating at the same time a kind of self-sustainability. The second concern is about making an initiative self-sustainable to avoid depending on other organizations. And the third concern, which is in general how to raise money or gain partnerships to sustain the operation, it seems to be a major concern on the first stages of Social Innovation. See Table 4.4.

This matter may be the most important, as it was clearly stated in relation to the sustain of the projects, and it seems to be the most concerning aspect in almost all the examples. Although, it is recognized that it is not their main goal, funding is necessary to continue working, and therefore also the driving aspect of their activity. Hence, that almost all of them are funded by selling some product or service.

Table 4.4. *Funding from the ten examples*

Example	Funding from	Funding objective
TASA Project	- Products sold.	- Self sustainability of the business.
CAIS Recicla	- Products sold: to specific clients and other products for retail.	- Payment of the contracted employed person as technician (person overcoming the situation of homelessness).
EKUI	- Cards sold. - Money raised from private and public programs. - Volunteer work	- Payment of the team. - Training to school teachers.
MyFarm	- Products sold. - Private and Public programs. - Volunteer work.	- Continuation of the project. - Testing of new ideas.
Somos +	- Products sold: retail. - Red Cross and partners gave the first funding. - IIEFP (Portugal's Institution for Education and Formation) pays for the first contracted. - Volunteer work.	- Contracts and training for the benefitted women. - Gain self-sustainability and contract more women.
Terra a Terra	- LiPor, Porto's greater area waste management entity (eight municipalities).	- Continuation of the project.
Speak Social	- Payment of language courses (low-cost) - Volunteer work. - Money raised from private and public programs. - Partnership with government institutions.	- Self sustainability. - Establishment of the fulltime team.
MindShake	- The source is not important, can be public or private.	- Elaboration of the project and payment of designers.
Social Impact Factory	- From the market.	- To sustain the creation of a business.
Desis Lab Aveiro	- Public and private institutions in partnerships. - If the idea is good the money comes.	- To keep the solution working, a model must be established.

5) Participation: This category includes concerns about the benefited people. Who are also considered the community being helped by a social innovation initiative, and all the private and public actors that take part of it. In the examples, a combination of partnerships is present, including private and public actors, in relations that go beyond funding. The level of involvement of the community being attended is low. Commonly, the people with the problem are not consulted about the solutions and are included later as their experiences are the feedback for the work being done. See Table 4.5.

Table 4.5. Participant actors on each example

Example	Community attended.	Community involvement	Other actors
TASA Project	<ul style="list-style-type: none"> - Local craftsmen. - New artisans. - Clients 	<ul style="list-style-type: none"> - Artisans get involved by sharing their knowledge of ancestral techniques. - Workshops. - Artisans gain a way to sell their products. 	<ul style="list-style-type: none"> - Designers. - Young people who attended workshops. - Local authorities. - Managers of the project.
CAIS Recicla	<ul style="list-style-type: none"> - People in situation of homelessness. - People following a therapy. - Private sector partners. 	<ul style="list-style-type: none"> - Integrated through the work. - Did not part take on the ideation. 	<ul style="list-style-type: none"> -Designers, propose products (are paid) - Clients, request specific products. - Partners, donate waste material.
EKUI	<ul style="list-style-type: none"> - People with communication disabilities (speech, sight, hearing). - Educators. - Specialists (language therapy) - Civil society in general. 	<ul style="list-style-type: none"> - Are the users of the product, therefore subjects. 	<ul style="list-style-type: none"> - School teachers. - Other children. Both give feedback about inclusion. - Education authorities -Private funding.
MyFarm	<ul style="list-style-type: none"> - Local agriculture producers. - Local consumers. 	<ul style="list-style-type: none"> - At the beginning, low, now they give feedback about production capabilities. 	<ul style="list-style-type: none"> - Local authorities that help in bridging the project with the farmers. - Private partners as investors.
Somos +	<ul style="list-style-type: none"> - Women from a gypsy community (low educated) - Consumers 	<ul style="list-style-type: none"> - Almost none, are benefitted but did not participate on the project's ideation. 	<ul style="list-style-type: none"> - Owners of local lands where fruits are grown but not collected. - Selling point partners. - Other partners on the Red Cross network.
Terra a Terra	<ul style="list-style-type: none"> - People living in houses with gardens in Porto. 	<ul style="list-style-type: none"> - High involvement as the project requires the benefited to take their own action after some education. 	<ul style="list-style-type: none"> None.
Speak Social	<ul style="list-style-type: none"> - Migrants. - Locals who want to interact with foreigners. 	<ul style="list-style-type: none"> - The evolution of the project is guided by the feedback from the participants, seen as users. 	<ul style="list-style-type: none"> - Public authorities that give funding for specific courses or lend spaces for the courses to be carried. Private partners (to start)
MindShake	<ul style="list-style-type: none"> - All members of a team. 	<ul style="list-style-type: none"> - Everybody should participate on the creation of the solution. 	<ul style="list-style-type: none"> Doesn't apply.
Social Impact Factory	<ul style="list-style-type: none"> - The people selected by the entrepreneur to be impacted. 	<ul style="list-style-type: none"> - The entrepreneur gets insights from them and tests with them. 	<ul style="list-style-type: none"> - Funding partners from public and private organizations.
DESIS Lab Aveiro	<ul style="list-style-type: none"> - The people selected to be helped, with the guide of someone. 	<ul style="list-style-type: none"> - Everybody should participate actively, as these are concerns of an active civil society. 	<ul style="list-style-type: none"> - Governments and private institutions that can provide resources for the solution to be.

This category is abstracted from the characteristics indicated about the group of people worked with, not indicated as a community, but recognized as the people benefited, which are referred in terms of their locality, or about a similar characteristic. The community is also integrated by the partners who take part in the initiative.

Some initiatives work in the form of social businesses, being dependent on sales. Buyers of the products/services are also considered part of the community. In general terms, the community is regarded as an external group of people who gets help from the initiative or program. For example: in one example, the community benefitted are women from one specific locality, who are at the same time members of an ethnic group; in another the community benefitted are people in condition of homelessness; in another one, migrants in any city with high density of population, and in one the community is integrated by rural agricultural producers, who live in areas where depopulation is increasing due to migration from rural to cities.

In all the examples, the community is identified as being helped, and the implemented solution is given to them and assumed by others, not by a request from the group itself; in some cases, it may be the right approach for acting, as people in certain conditions may not find the right spaces to communicate their own desires.

6) Impact: the concerns about Impact are three: one, it is not easily measured, as the goals are not for short-terms nor on standard key performance indicators, rather come as something that is qualitative, “felt” or “intuited” by the working team. Second, it is only recognizable in terms of numbers of participants and lives impacted, improvement in conditions and general emotional states of the participants. The third one, is in relation to the long-term growth or adoption of the Social Innovation over time.

Growth can be in two ways: one as wider adoption of it by governmental institutions or big companies -in the form of partnerships-. In five of the interviews, it was clear that their intention is to grow and be integrated by state or public institutions, by provoking a systemic change (Murray et al, 2010). The other way is growing in terms of sales, which is a self-funding mean, it is the main reason for having business-like organizations. Sales allow measuring the success, but not the impact of the initiative. See Table 4.6.

The goals established by a Social Innovation initiative should be the most important and most clearly stated in their discourses. Yet these are not clear in terms of objectives, nor in terms of the impact in relation to the community; but more in terms of funding, duration and validity of the solution proposed. It is also important to note that the main objective of a social innovation is not usually aligned with the solution proposed, at least not obviously.

Table 4.6. Impact from the examples

Example	Objective	Impact	Future
TASA Project	- Give new value to craftsmanship and artisan techniques.	- In terms of artisans involved and growth of the project.	- More artisans involved. - Institutionalized network of work.
CAIS Recicla	- Giving people a space to overcome a bad situation. - Empowerment of participants in life skills.	- Measured in terms in participants attended. - Measured in terms of clients for the products sold. - Observed improvement on the quality of life of the participants.	- More clients. - More people attended as contracted workers in the workshop.
EKUI	- Inclusion of people with communication disabilities.	- Measured in terms of cards sold. - Measured in terms of professionals using the cards.	- Sell more cards to make the project sustainable. - Inclusion of the educative system in national education programs.
MyFarm	- Reduce depopulation of rural areas. - Local consumption of agricultural products.	- Measured in terms of local agricultural producers participating.	- Having more local agricultural producers participating in the different communities of Portugal, and take the model to other countries.
Somos +	- Empowering women from a gypsy community.	- In terms of women attended. - Observed improvement on the quality of life of the participants.	- Selling more products. - Economic self-sustainability.
Terra a Terra	- Avoid organic waste.	- People making compost at home.	- More people making compost at home.
Speak Social	- Integration of migrants to the receiving society. (37)	- Terms of people in their network. - People who attended their language courses.	- Expansion to other cities in Europe. - Establishment of partnerships with Public authorities and ONGs.
MindShake	- Creating new processes - Improving	- Creativity can be integrated by everybody.	- New connections with Design
Social Impact Factory	- Entrepreneurs can go to the market faster.	- The product/ service is already tested so will be impactful.	- New connections between socially conscious people and the needed resources.
DESIS Lab Aveiro	- Solutions are well visualized and feasible.	- The projects are better done that if there were not designers.	- Designers participate as entrepreneurs and take a commitment with their communities.

7) Team-work: this category is abstracted from the information about people who are part of the project. There is not one specific professional profile for the people who integrate the core team. But most, include people who assume management roles; and others who fill positions related to communication and marketing. Other specialists are external partners or volunteers.

In some cases, there is a person who acts as founder/coordinator/CEO/entrepreneur, being head of the operation and ideation of solutions, while the rest are supporting roles. For example, designers are external participants, who shape products or services that are a mean to reach markets.

Only in one interview the importance of including the community as part of the working group was stated. Thus, giving importance to generating a space for an active civil society. The team is the people working at the core of the initiative, with decision-taking capacity. The members of the communities attended are not part of those core teams. See Table 4.7.

Table 4.7. Team members and work division

Example	Number of members	Professions:
TASA Project	- 5 (ProactiveTur management team)	- Several: Marketing, Business Management, Media Studies, Environmental Engineering, Geology.
CAIS Recicla	- 7: 5 from the team at CAIS Porto. 1 Paid worker. 1 Person from the community who helps around.	- 1 Social worker. 1 intern in Social work. - 1 Psychologist. - 1 Journalist. - 1 Manager. - Workshop: 1 manufacturer.
EKUI	- 4 professionals in therapy development. - External advisors: volunteers.	- Founder: PhD in Education for people with disability (volunteer). - Core team 3: psychomotricity, speech therapist, sign language interpreter. (Paid) - External advisors: graphic design, psych pedagogy, sales, marketing, management. (volunteers)
MyFarm	- 4: only two full time.	- Coordinator (professor at Politecnico de Beja, Volunteer) - CEO: Manager. - Marketing: manager. - Communication/Development: Volunteer from another company (Guess What).
Somos +	- Working team: 2. -Manufacturers: 2.	- Coordinator: from red cross, teacher and social animator, half time (paid). - Marketing, branding and design: 1 volunteer. (not paid) - Manufacturers: two women every six months. (Paid by IEFP).
Terra a Terra	- Unknown.	- Team from the Education, communication and Marketing unit of LiPor.
Speak Social	- 7: 4 fulltime (paid), 1 part-time. 2 interns.	- 1 developer and CEO. - 1 in charge of materials. - 2: Support: questions and allocation. (One intern, one full time). - 1 Partnerships and business growth. - 1 UI/UX design: volunteer.
MindShake	- Dependent on the team.	- No profile, everybody should participate in the process of ideation, and have a knowledge about how to conduct it. - Designer (paid)
Social Impact Factory	- The entrepreneur is the most important. The other members provide technical capacities.	- The entrepreneur: moves the activity. - The partners/collaborators: provide the necessary to co-create solutions.
DESIS Lab Aveiro	All the members of a community. The designers as guide.	- Designer: Committed to the solution and paid. - The community: active participants.

8) Design: as noted by Manzini (2015) it is a human attitude and a mode for doing -seeking to differentiate from the classical common way-. In this sense, it can be argued that design is present in all Social Innovation examples that participated in the interviews. It is abstracted from the process followed by the initiatives from their starts and through their development. It follows a common pattern; starting with someone thinking over a problem or an opportunity to solve a problem an enacting to change the situation.

The solution process includes a stage of prototyping or testing an idea with users. Much like the process of Design Thinking -with inspiration, ideation and implementation- ; but lacking the community's participation in the creation of these solutions. Something that in the reviewed literature appears like an endeavor -or role- for designers.

One of the interviewees from Design academia pointed out that “*it is our role to prove that we can do a differentiation*”, followed by the notion that designers should be part of the communities as committed members. Yet, in almost all the other examples, Design is mainly seen as the work of experts, aimed at improving sales by offering nice products, and not by connecting the different actors together. See Table 4.8.

The matter of how Design is integrated is the most important for our study. Yet, it is one of the subjects that appears less important to the interviewees, although it is a component important in most of the cases as it provides the most visual and tangible part of the existing initiatives.

Table 4.8. *Presence of Design in the ten examples*

Initiative	Professional Design	Design as an attitude towards solutions
TASA Project	- Product design: by invited designers, as part of giving value to the products and renovating them. (47) - Packaging and Branding.	- Can be seen in the creation of a networked solution through a diversification of solutions: workshops, tourism with participation of artisans, sale of products.
CAIS Recicla	- Designer (paid) provide product solutions (creativity) congruent with the materials available and manufacture capability. (47)	- The project underwent stages of trial and error to find a functional way of bringing together different actors (material donors and workshop’s objectives).
EKUI	- Graphic Designers and illustrators provide improvement for the cards and related multimedia material. (51)	- The cards and education system were first developed by the founder as a tool to be used in her own practice. Later became a product that could be used for inclusion.
MyFarm	- In the development of the website and online store.	- The solution found was a process of work in Politecnico de Beja, the first tests were around an idea of having a virtual farm, that would be worked by actual farmers in a real location, but it was abandoned as the farmers were not capable of keeping up with the work. Yet this solution is still awaiting to be resolved, meanwhile other products, such as selling vegetable baskets have been started.
Somos +	- In the creation of the brand and packaging. Also in the use of a seal on each product with the label: “social change makers”.	- Too little, the project itself is a good solution, but it is the only one.
Terra a Terra	Little: the products used are imported.	- This is a project out of many from LiPor, so it shows that there is a team working on developing different solutions for waste management.
Speak Social	- The platform itself has lots; graphic design, user experience, user interface design.	- When the project started it was a series of meetings announced in media such as newspapers, but evolved to become an online platform which helps in scalating. Also, courses started to be offered, and later a side project to offer language courses was introduced (SPEAK PRO) but it is not part of their main activity.
MindShake	- Professional designers provide the capacities to visualize a solution as a process, even those are not tangible.	- Design Thinking is a creative method and everybody can learn the process to work with it.
Social Impact Factory	- Professional designers are technical providers for the solution, but are not necessary.	- Design Thinking is important, and the person enacting is more important as a series of traits or characteristics from them is what matters.
DESI Lab Aveiro	- Professional designers are important to the process as they can guide to better results, as they can visualize solutions in better ways, connecting the necessary actors.	- Design can be enacted by anybody, and communities of people have the capabilities to come to better solutions when working together.

4.3. Codes Regarding Professional Design

The last three interviews as part of the field research were done with initiatives related to the field of Design. One from the academic space, from the Master Degree program on Design for Social Innovation at Universidad de Aveiro, which part of DESIS Network: one from MindShake, a consultancy focused on process design through Design Thinking; and one from Social Impact Factory part of Porto Design Factory, which works as a Social Start-Ups acceleration program.

Two of these enact design for social change, and one focuses on work with companies, yet, uses a method for Design Thinking developed in Portugal and based on collaboration -which is social innovation within companies-. The information from these three interviews was also categorized into seven subjects:

1) Focus: it answers the question about who should take the center role on bridging design and the activity of other actors (including fields). This is about the position taken when starting a working mode in which Design takes a relevant position.

2) Attitude required: from the perspective of the interviewees, what is the attitude that should prime in the designers dealing with problems that include complexities that must be solved in a social environment.

3) Approach: this, regards the way by which designers deal with the social issue presented to them.

4) Social: the way in which designers include others in the work of Design. Through the recognition and implication of their own voices.

5) Funds: This is an important question, as designers are also part of a professional community and should seek ways to leverage these issues.

6) Outcome: the outcomes awaited and how they could be measured over time. In a social innovation initiative, it is directly related to concerns of impact.

7) Process: this subject is in relation to how design is carried on by designers, and what are the positions they assume in front of others.

These seven subjects will later be discussed by confronting them to the eight abstracted from the 10 examples. These three interviews reveal an existent interest in having Design professionals who can deal with problems that are socio-technical, by recognizing their complexities. See Table 4.9.

Table 4.9. *Three Design oriented examples from Portugal*

	DESIS Lab Aveiro	Mind Shake	Porto Social Impact Factory
Focus	Designers: sometimes are the drivers (creatives)	A team of people: the designer guides but does not provide the solution.	The entrepreneur is the driver of change and gets help from others.
Attitude	Commitment and perseverance: it takes time.	Sociality: the designer must be able to deal with other people and to communicate.	Entrepreneurship: Sometimes the person is more important than the idea they have.
Approach	Research and visualization: The designer offers ways for solutions to become real.	Process of thought and visualization: The designer is not the only visualizer, but can help the ideas of other to be better understood.	Coaching or mentor: the designer acts by showing others how their ideas could be implemented.
Social	Communities: participation of civil society is the most important. The designer should part of the community.	Team members: everybody collaborates on proposing solutions; the process of creation is shared.	Helping others: the work is shared with a group of specialists (co-design), and aims at attending the needs of others.
Funds	Partnerships: coming from public and private actors. It is a “struggle”. Designers must be paid. If the solution is good, money will come.	If there is no payment, no design work can be done. That is why it is hard to work with public institutions.	The solution must be good enough to go to the market. The solution is part of the social business.
Outcome	The impact of social innovation is not immediate. The designed solution is the base for stablishing partnerships and defining more work needed.	Design, specifically Design Thinking provides processes, but these are not final solutions, and that is why every member of a team should learn how to apply Design Thinking methods and tools to continue improving.	The Entrepreneur is ready to go to the market and sustain the project by its own means when he has a good prototype. An idea can remain in the social space or be taken as a commercial project, it is not that important.
Process	Design must be done with the community, together. When designers participate, the solutions are better. Empathy is a main value.	Design is about the creative process, methods for Design Thinking are just models, simplifications. Interpersonal intelligence and capacity of communication are main values.	Hands on approach and always prototyping, you cannot know if it works, if you haven’t test it. Knowledge exchange is the main value.

4.4. Discussion

The role of design and its impact is different when it is a considered a practice (Design) or a human attitude (design). In the literature review, the discussion is centered on concepts about design in relation to social issues. These issues can be focused on the improvement of life, or in generating new interactions. Approached by offering tangible or intangible solutions. And, more importantly, it is the recognition that design can be enacted by different actors and not only by professional designers.

Design as a human attitude is present whenever changes in conditions towards a desired situation are put into practice. It is a human mode of doing (Manzini, 2015), it is through design, that humans modify their pre-existent reality. In the examples of Social Innovation from Portugal -included as subjects for this thesis-, the main objectives or goals seek changes on specific aspects of the reality of a community -or group with similar characteristics-. To accomplish their goal, a solution is created to reach a desired state. It can be argued that design is present since the beginning of all the initiatives, although not being guided by professional designers.

The assumption that professional designers can help in leveraging solutions according to the objectives of Social Innovation cannot be taken as truth from the examples presented. The participation of designers is minimal, and linked to visual aspects. On most of the examples; designers don't participate in the process of creation of solutions, as they are not part on the ideation, yet, in some, they have a role in defining the products that will serve for raising funds.

A meaningful participation of designers from the beginning, is not found in the examples. Design cannot be accounted as necessary. This situation can be the result of a lack of knowledge about the skills professional designers can contribute with. One of the interviewees referred to the topic of Design as: "*maybe in 10 to 20 years it will be a topic of interest*". In the case of DESIS Lab Aveiro, Design is promoted as a task to be performed by a professional designer, who commits to a community. With an attitude that even includes struggling to gain a space in the social arena.

The example of MindShake also offers a perspective on the commitment designers can take on changing their own practices. This is done by incepting the concept of designing processes, other than product solutions, which aligns with the idea of having designers as coaches and mentors for entrepreneurs; also present in the example of Porto Social Impact Factory. In these examples, the designer doesn't take an own stand to offer a solution, as he/she requires an igniting causation that usually comes from outside.

The external causation in Social Innovation can be identified as the problem to be solved, or as the social situation to be changed. In the interviewed examples of Social Innovation, the driving goal is helping a group of people, usually in a situation of disadvantage. The most common solution is establishing a social business.

In the case of Portugal, as mentioned in the Social Innovation Index (Kondo, 2016), it is not easy to get funding for these kinds of innovations; but it seems that it is easier to gain it when they are in the form of Start-ups or new businesses with social orientation. This is also pointed in the Interview from Desis Lab Aveiro, and considered as wrong orientation by the interviewee. Despite of it, mostly all the examples are focused on having funding from the market. Normal businesses do it this way; and most of the attention is set on how to gain profits. Leaving less time to focus on how to diversify the solutions to attend better the social objective. In some examples, the fact that social interactions could be replaced, increased or reduced as part of Social Innovation, is not even considered.

One of the critics done in the Social Innovation Index 2016 (Kondo, 2016) is that people in Social Innovation focus more on how to make money and less on the solutions. This is one of the aspects that professional designers could help in; by taking care of generating solutions matching the social objectives established, while seeking ways to connects with actors who could financially support the projects.

In the example of Speak Social, their platform offers ways of interaction, but it is not fully integrated to the courses and events they offer, at least not in a way that it would help match their goal of helping migrants in a city to better integrate, yet having such a good platform seems to be paying as they are already establishing partnerships with the government, which could eventually help in freeing them to develop their platform in ways that are closer to their objectives.

Examples of initiatives like CAIS Recicla, Somos+ and Zé Picole -one of the projects being accelerated in Porto Social Impact Factory- show that it is possible to have a materiality -or specific product that works in a conventional way- as part of Social Innovation. And it can be done by introducing a product or line of products to the market, to generate revenue that supports other social goals.

The appearance and characteristics of these products can be proposed by professional designers. It already happens in CAIS Recicla; although, designers don't participate in the process of creating the solution for the objective they attend (giving an opportunity to overcome a situation of vulnerability through a job).

In these examples, designers play a role through the products presented to the market. But, there may be room for designers to work with the other professionals in those teams. And it can be by establishing ways to show how the solution works, so others can also join as partners, or by making the solution scalable. Similar social innovations can be enacted by offering different products and attending different communities -people in a situation of homelessness, women with low education, ex-convicts, etcetera-.

The attended communities are benefitted but not well integrated into the process of creating a solution. Even, the products manufactured and sold are usually defined by the entrepreneurs. The current situation of the benefitted ones is taken as the problem to solve, and it is done without a dialogic process; excluding what they might want or not. Although, the example of CAIS Recicla is a bit different, as they also provide the benefitted ones with a socio-psychological treatment and follow-up, which goes far from just giving a job.

The proposal role for Design for Social Innovation that Manzini (2015) presented can also be validated by some of the examples on Portugal. This proposal is based on creating guides or tool kits to escalate and reproduce social innovations. The examples - mentioned in the previous paragraphs- can be a good resource for the generation of a tool kit aimed at those seeking to give opportunities to others in conditions of disadvantage, by allowing them to enter a better state of life through a job. The solution is based on establishing social businesses which manufacture and sell products. Designers could help in establishing this solution as a model to be replicated, by visualizing steps for success.

Design can also offer support for the study of technical feasibility of Social Innovation projects. In two of the examples from Portugal it can be inferred how it could help. In the case of the platform MyFarm.pt from Beja, a lot of their time went into thinking about how to make it work; they used their first months into prototyping ideas that were well fitted for the consumers' needs; but were not in line with the capabilities of the producers (community being attended); which meant a redirection of their effort. While the project seemed to lose the focus on their main objective -that is to reduce depopulation of rural areas-, and only one solution was being tested. Although, a good aspect is that it evolved when the voices of the local producers were included. Consequently, they went from the idea of creating virtual farms -that was consuming too much time and efforts- to having an online store for producers to sell baskets of products.

The shift on approach shows that instead of focusing on solving problems that are technical, the first step should be to recognize what are the capabilities of all involved actors, especially of the benefitted community -if they are the ones that will be working on production-. Design can help in reconciling the goals of a project with its context and available resources; to propose paths for action, but to do so, the awareness about the participation and collaboration of all possible actors is necessary.

EKUI is a social business that sparked from a product made to educate children with diverse communication abilities -such as the lack of sight, hearing or speech problems-. This is an example of a tool designed for one goal, that evolves to become more, by raising awareness about the diversity of human capabilities. It was originally thought as a method for teaching, not a product. And, it evolved to be a product and a socially innovative solution. The set of cards can be fully integrated to the normative educational system, and enable kids with disabilities to share the same education space that is used by any other kid without disabilities, allowing them to interact.

Another social innovation that sparked from an already made solution is the project Terra a Terra, from the entity managing wastes in the Greater Area of OPorto (LiPor). In this project, the aim is aligned with the intentions of the company, which seek to generate awareness and a communal relation with the participants. Yet, the materiality and training provided by the company, is restricted only to those who live in houses with gardens; which diminishes the widespread of their main goal which is “avoiding organic waste”. In this project, they also have a strong institutional background, which makes it easier for them to connect with the community. Despite, an opportunity may be wasted by not including those who live in houses without gardens, such as people in apartment buildings. Designers participating in a project like this, may generate solutions to involve even those who are not considered by the initiative, by providing material solutions according to it.

The previously mentioned two examples; present opportunities for Design to provide solutions that directly and indirectly relate to the objectives of these projects. Designers can help in shaping the means for the social innovation to happen, by improving what already exists or by providing new tools. However, the involved ones must be fully aware of the knowledge and capability to adapt of the different actors. In EKUI, it meant providing training to school teachers on how to use the cards as part of their classes. And, in Terra a Terra it means providing education on how to manage organic wastes at home and how to create compost. These kinds of processes are also part of what designers should have in mind when proposing new solutions.

The common roles of designers are focused on providing solutions -product or services- that can go straight to markets. In most of these examples, it seems to be the same case, even if the community is deeply involved, the easiest way to generate self-sustainability is by approaching it with a market mindset.

In the example of Project TASA, the participation of professional designers is linked to giving new value to manufacturing techniques by proposing new products. But it is only a minor effort compared to the work done for establishing a network of designers and artisans who work together using the ancient techniques. It shows that designers can make a project feasible when they harmonize the activities of different actors. It is a task that requires making sense of the relations and resources available.

In Portugal, the field of Social Innovation may not appear as a match for professional designers. Furthermore, it entails personal compromises and a set of skills that are not technical -like the capacity to deal with people and complexities- and maybe not in the toolset of many designers. Yet, adaptation may be attained by attracting designers to help others as part of a business.

Focusing the case of Portugal, it can be understood as: Social Innovation is still a new field. And as a new field it is still driven by only one paradigm; the paradigm of social entrepreneurship and social businesses, which as described by Mulgan (2007) is one of the many spaces from which Social Innovation can emerge, but not the only one. Yet, in Portugal, markets are the preferred space for gaining the required funding.

Design as a process for solving problems, most specifically Design Thinking, is present, and is being used for problems similar to social innovations, but not directly regarded as part of Social Innovation. It is exemplified by MindShake, their work includes the application of a Design Thinking model in a wide variety of spaces and fields. For instance, in the European project Design Thinking Applied to Education & Training (www.d-think.eu). This project has the aim of changing how tertiary education is conducted by applying Design thinking as a framework, although not formally recognized as social innovation, it is changing the status of the institution of education, a social space.

Social Innovation driven by Design research is another face of social innovation in Portugal. Predominantly in the example of DESIS Lab Aveiro, which through the University of Aveiro counts with a specialization in Design for Social Innovation as part of their Master Degree offered in the field of Design. Yet, in Portugal Design for Social Innovation from research seems to be confined only to academic exercises. As professor, Dr. Teresa Franqueira from DESIS Lab pointed out: “some students continue in the field after their studies, but it requires compromise”. The same interviewee pointed out that in Portugal the problem is not Design, but the fact that the society is not active in solving their own problems. For her, the government is not capable of solving all the problems, which calls for the need of private actors to take actions as well. Usually without the endorsement of other social society participants. Thus, leading to a mindset that is more in line with the idea of “helping others”. Resulting in solutions that are created without the participation of members of the communities. It happens in the examples that are identified as Social Businesses.

Professional designers are not different from the rest of the society, they are also actors, members of the civil society. Not having these professionals actively participating in solving social goals or changing interactions may reflect society in general. Maybe, the education model of Design should as well be reviewed to include ways to make professional designers active actors in their communities - subject for another research-.

The information from the examples interviewed allows the interpretation that social business is the norm for Social Innovation in Portugal. Although this is only one of the many organization models as mentioned by Mulgan (2007). This model (see Figure 4.15.), imposes a series of conditions, giving main importance to gaining financial sustain through sales. Pol & Ville (2009) noted that organizations need funding, and that the overlap of both Social Innovations and business innovation might be a good path for earning the required funds. A focus on profits can divert the attention from the main goals, as found in some of the interviewed examples, in which the attention was focused on gaining a certain amount of money -or having several buyers in a specific period of time-, instead of looking for alternative solutions to reach the desired stated.

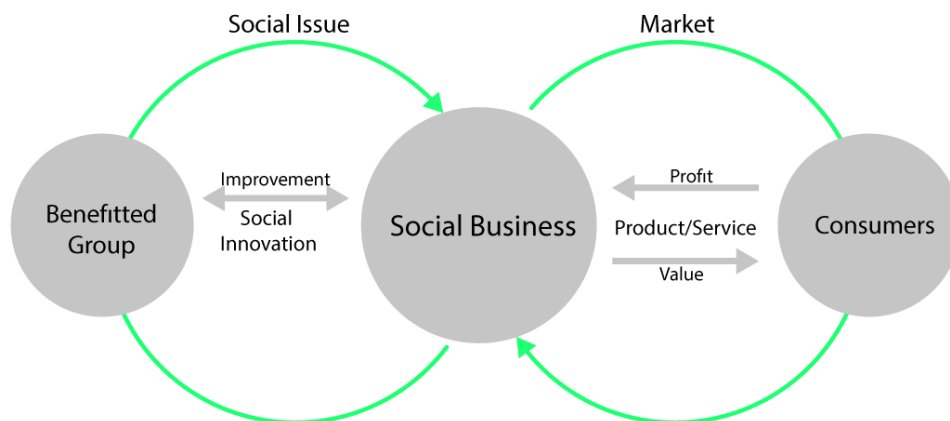


Figure 4.15. *Model of social businesses*

The concern of funding is important. Because, it drives the kind of organization, while also impacts the kind of partnerships considered. Only one of the interviewees mentioned the importance of having partnerships with the public, state or government, as a way of gaining funds. While in other six having the participation of public partners was regarded as a mean to expand their reach, and only in one, public partnerships were completely disregarded. Yet, in almost all examples the participation of private actors, such as other businesses and socially oriented non-profit organizations is predominant, and these kinds of organizations can also act as the originators of Social Innovation.

Regarding the actors involved, it is also necessary to point out that in most of these examples there is a distance between the people working on a project and the people being attended. It is, Social Innovation being enacted as a kind of aid for people with a perceived vulnerability, for whom a solution is found. Only two of the participants mentioned the importance of having people from a specific community being active participants in their solutions, the others assumed the role of generating a solution and handling it to the community. Yet, seven of the interviewees made clear that at some point in their development, products or services changed according to the feedback received from the community they intend to help. One of the interviewees mentioned that the process of generating ideas as: *“it was not really something structured, it was, you know the person who actually cofounded”*.

The process of ideation, that in the literature of Design practices appears as mainly driven by professional designers working alongside members of a community seems to be missing in most of these examples. The ideas about how to implement a social innovation are generated by the central team working on it. It would happen like this in any normal business environment; the enterprises always have the final decision over what is the solution provided to the users, even if it is not in direct relation to them.

Design is also present in most of the examples. But, it is not as a process that crosses all the stages of Social Innovation. It is present only in the implementation stages, providing objects that have some value of market -such as branding, packaging, interfaces and even user experience considerations-. Yet, the assumption that designers can take leadership roles and drive the systemic solutions as proposed by Brown (2008) is not present on most of the examples of Social Innovation interviewed for this thesis.

The participants interviewed revealed that Design takes a role that fits classical industry or business mindsets. Designers participate in the final processes by adding the layer that has a value of market -increasing or allowing sales-. But, designers don't participate in strategically solving the problems of a community, or by offering a wide variety of solutions for the issues approached. Also, some tools of Design research may help in engaging with the community as part of the Social Innovation processes, furthermore, designers may use research to gain awareness of the contexts of the communities.

4.5. A Proposed Description

One of the interviewees expressed that civil society in Portugal is weak and that it has an impact on the spread of the field of Social Innovation. People don't participate actively in the solution of their problems, and the government authorities cannot solve all their problems. This is not a topic present in any of the other interviews. Although, it reveals an important insight: in the other examples, the solutions are generated by people who take an entrepreneurial attitude to solve a problem identified, and do it with little participation of the community. These two aspects are connected, as they could mean that there is a shift: the help is not only requested from the public sector, but also from the private one, and it is done in the form of social businesses. This shift, also models how Social Innovation is organized and conceptualized.

The current stage in Portugal can be described like this: Social Innovation is commonly started by private parties, such as non-governmental organizations and companies looking at developing social responsibility programs. The common way is by establishing a social business, that sells a product or a service to financially support other social activities, and it goes hand in hand with the creation of a socially recognized "good" action brand. The private party organizations provide the first seed money, but it is through a business market-oriented mindset that the social businesses gain self-sustainability. See Figure 4.16.

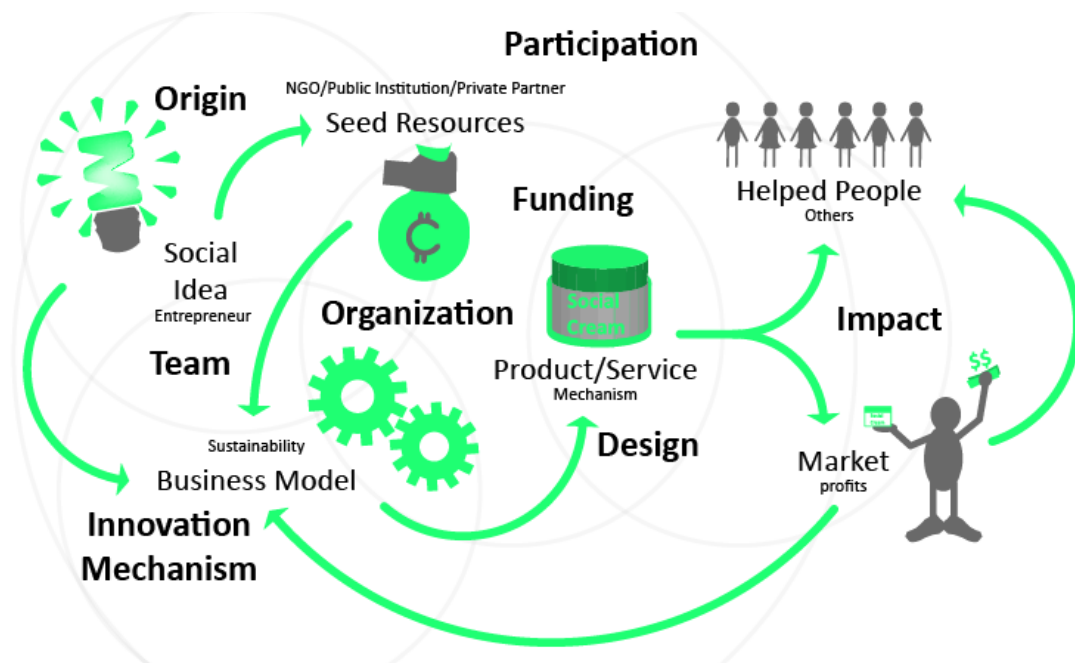


Figure 4.16. Social Innovation in Portugal

The creation of these social businesses begins with the work and ideas of entrepreneurs; with low involvement of the people they intend to serve, as there is still a mindset fixed on the notion that providing a social solution is helping others and not making them participants of their own solutions. It is understandable as the work is done by people involved in this kind of work -charity, social work- as their previous experiences.

The goals established at the beginning of a project are usually different from the work being done when taking it to action. The businesses require paying attention to other problems; such as sales and value of the product. It is for that matter that the community is integrated to fulfill the value of the market -by manufacturing or being buyers-.

The participation of Design professionals remains the same as it would be in any business. They are experts who shape visual solutions for marketable products or services that are sold to gain financial stability. Yet, design is present in the attitude of the entrepreneurs as they follow a process to generate a solution that fits their goals, and do it by testing and continuously modifying their offer, but it is done under market aspects. See Figure 4.17.

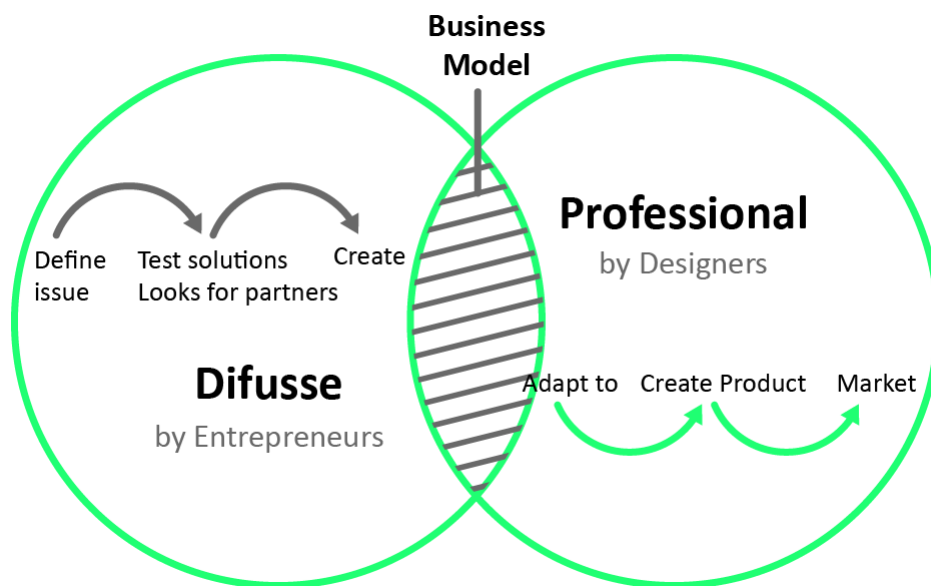


Figure 4.17. *Participation of Design on the examples*

It can be argued that by not having designers as major and relevant participants on Social Innovation in Portugal, the solutions are reduced to creating new businesses. Which, means focusing the field of Social Innovation into one of its approaches, that is to fulfill the needs unattended by the market, forgetting others, like institutional changes.

Designers could assume the role of guidance, with an attitude based on working with others. Which could lead to having more and better ideas on how to solve social issues by changing interactions and including the voices of all the actors. A task that should be supported by the active participation and collaboration of community members. Design should not only provide product or services to be sold, but ways to make the social initiatives valuable for partners -private and public-, who could fund the projects and keep them away from market competition. Social impact should be the only revenue of the project, an improvement should be waited for a long-term in social indicators, and not in terms of profits. Also, solutions should come from the same community, which may result in a more active civil society.

The situation of Social Innovation in Portugal can be studied by using the concepts from the reviewed literature, in contrast to the aspects that could be changed to better integrate designers into this field. In Table 4.10. the current stage of Design and Social Innovation in Portugal is compared to what could be improved by including designers.

Table 4.10. *Portugal's case seen from the literature review's abstracted concepts*

Concept	Variable	Current stage in Portugal	Driving Social Innovation by Design.
Roles of Design	Orientation:	Technical- commercial. (Profits)	Strategic/networks of actors.
	Solution:	Objects/visuals	Strategies/Processes
	Actor:	Designer is not part of the solution, but an eventual collaborator.	Designer guides the process.
Social Innovation	Goal:	Help others.	Work with others.
	Origin:	Entrepreneurs (but it is not bottom-up)	Community needs and community actions.
	Funded by:	Self-sustain. Market practices.	Self-sustain through partnerships (E.g.: Government budget)
	Organization:	Social Businesses	Several social organizations, not reduced to businesses.
Design and Social aspects	Vision:	There is no widespread vision from Design.	Design is a shared process that is present from the beginning.
	Social context:	Is inferred from the perspectives of others.	Participation is required, to avoid inferring the contexts of others.
	Relations:	Not in the scope of Design.	Important to stablish work models.
Practices of Design	Type:	Non-participatory	Participatory.
	Outcome:	Non-Collaborative (insights)	Collaborative.
	Solutions:	One time solutions (sales)	Solutions change (Goals)
	Space:	Commercial	Social space (users) and interactions
	Designer's proximity:	Distant (provides solutions)	Close: the solution is owned by the people it serves.

5. CONCLUSIONS

This chapter presents some answers to the goals of this thesis. They are prepared from the reviewed literature and from the perspective of the case of Portugal.

1. Involvement of professional designers in Social Innovation.

From the literature review, it can be assumed that designers are now more aware of their capacity to solve social problems and that they can bring tools and ways of action to Social initiatives. In the examples from Social innovations in Portugal, it appears that the activity of professional designers is minimal. They provide one-time solutions to problems, but without collaborating deeply with communities or projects. Although, design (diffuse) as an attitude is present, and is managed by people who enact it out of an interest in helping others. It can be argued that in Portugal, people in Social Innovation are not aware of the potential of Design. And, it is also a result of having a field of Social Innovation that is driven by notions coming from the business space. Thus, it has a market orientation. Resulting in a perspective of designers as technical creators of products or brands that are sold to support the business, and not as strategic thinkers for better solutions to reach the intended goals.

2. Participation of the community.

In the literature review, social innovations can be started from three fronts a) institutions (top-down) b) communities (Bottom-up) c) entrepreneurs (hybrid), and it means that different ways of approaching a solution can be implemented. Therefore, the participation of designers should be coherent to the origin of the initiative. In the case of Portugal; the norm seems to be entrepreneurship, which means, people who see an opportunity to solve the problems of others, but who are not obliged as public or private institutions would be by an ethical frame, nor are directly affected by the problem, so they are free to provide a solution in accordance to their own perspectives. In the examples, the communities are usually given the solution and tested, to see if they integrate well with it or not. These communities are integrated by multiple actors, in some cases governments and private parties -like companies and associations- are also tested or approached as part of the process. Professional designers may help in leveraging the voices from community members, by boosting bottom-up solutions through Design research tools, and methodologies, such as the ones for Collaborative and Participatory Design. It requires a compromised participation of the designers and institutions providing the resources, which can be done by approaching markets or by avoiding them.

3. Design as part of Social Innovation driven strategies.

The presence of Design in the field of Social Innovation is minimal. In the examples in which Design has a participation, it provided one-time solutions for specific products; and was not part of the strategic or systematizing processes. In the examples from academia it can be found that Design has a more relevant role on defining of aspects of a socially viable solution; but outside those spaces, Design is not seen as a main driver for change. What the field of Social Innovation in Portugal is missing by not integrating designers, is the opportunity of proposing solutions outside the realms of market and businesses, which are the apparent focus. Design can help in the generation of valuable diverse solutions to meet markets while raising social awareness.

How could designers be better integrated into Social Innovation? The answer to this question seems to be already resolved in the literature review chapter. It is by using participative and collaborative Design methods and letting Social Innovation be a real social activity, led by designers. It requires integrating together all the possible actors of a community, to provide solutions for their own problems, and by changing their interactions and the institutions that define their status.

In a country like Portugal, it may also be necessary to give such tools to social entrepreneurs. By doing so, they would be capable of testing multiple solutions and not going straight by the path of establishing a social business. This may require the adoption of a design attitude as described by Michlewski (2008), so that designers might help in bridging solutions through prototyping, and these solutions could be funded with the participation of private companies and public institutions, or by setting work models in which the participants are owners, without having to compete in markets.

The results from this thesis shouldn't be generalized, considering that a quantitative study with fewer questions and considering only aspects of Design in Social Innovation initiatives could be conducted to have a better glimpse on the actual state of the country's field. Also, it must be pointed out that there may be many other actions of Social Innovation that are not recognized as such, and that Design could be contributing to them without being identified.

5.1. Recommendations

Considering the two sources used for this thesis, the reviewed literature and the field studies. An answer to the main objective can be given in the form of a path of action recommended for designers who want to participate in Social Innovation. A path of action for design might help in leveraging the participation of professional designers in the field of Social Innovation.

First, it must be stated that Social Innovation is not completely different from the space of industry, as it depends on the paradigm taken about what Social Innovation entails. If it is considered as changes in institutions, behaviors or interactions, then the outcome awaited from designers should deal with innovations aimed at impacting those aspects, which could also have a repercussion in the general welfare. But, other paradigms of Social Innovation can be considered, such as considering it an endeavor to serve communities unattended by the markets and public institutions, by helping them reach a better state of life through cheaper products/services; or by gaining profits from sales, then a more business wise mindset should be expected from designers.

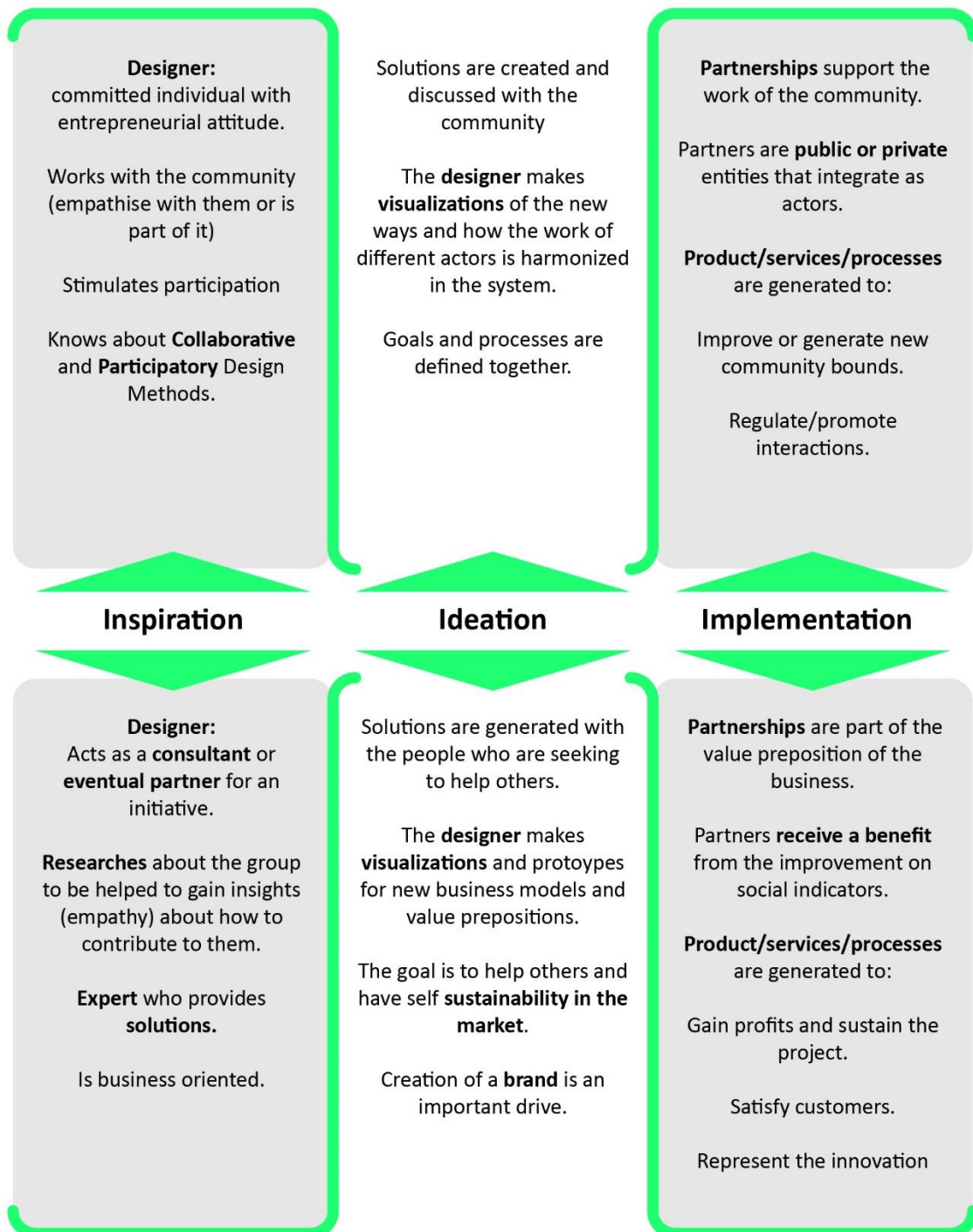
The examples on Portugal showed that the model there is the organization type of businesses. It follows the second paradigm of Social Innovation, and that although changes in relations and interactions are promoted, they seem to be less important than gaining profits for sustaining a project, a result that is expectable if the logic of businesses are the central component.

With these in mind, two paths can be proposed, one aimed for designers who wish to act on the first paradigm, and one for designers convinced about the necessity of establishing business models to secure finance and continuity of their projects. In both cases, products, services as well as system processes can be the outcome of Design, but they may accomplish different goals. In Figure 5.1. a set of recommended aspects to be considered by designers when taking actions departing from both paradigms are presented in terms of the spaces of Design Thinking (Brown, 2008) as a general framework.

These two paths require a set of different skills and knowledge. The first path requires professionals who are connected to the work of the community, able to deal with people to bring them together, which is not part of the common skill set of designers. The second one requires the acquisition of knowledge referent to business innovation, and value creation, for example knowing about business generation models; for example, the work of Osterwalder & Pigneur (2010) which can be adapted to social businesses.

Paradigm 1.

Social Innovation as changes in institutions, behaviors and interactions.



Paradigm 2.

Social Innovation as businesses with social aims.

Figure 5.1. Aspects to be considered by designers

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APPENDIX

Interview Guide

ROLES OF PRODUCT DESIGNERS IN SOCIAL INNOVATION: CASES FROM PORTUGAL

Interview Guide (Tool)

The tool selected to gather information from examples of Social Innovation in Portugal is unstructured interviews, which means that an interview with no specific questions or plan will be conducted with the participants, as the most important is to gather as much information as possible without restricting it to certain topics. Yet a guide had been created to have some uniformity in all the interviews.

A total of 10 interviews were done using this guide.

1. How did the project come to be?
<ol style="list-style-type: none">1. How was the project initiated? How is your project different from other socially oriented projects?2. Who started this project? Who are the involved partners or actors?3. How is the project funded? Do you get financial help from any private or public program or organization? Does the project intend to be self-sustainable?4. When you started, who participated in the ideation process, professionals from which areas were involved?5. How many people work in the project and what are their professions?6. Who takes the decision, and how do you decide what comes next?
2. How do they measure their impact?
<ol style="list-style-type: none">7. What is your main goal?8. For how long have you been working? What have you experienced?9. What are you giving back to the community?10. What is the principle aspect you measure?11. How is the project in terms of sustainability?12. Is it a business, an initiative, or what?13. What will happen once the project finishes? Is the life cycle of the project part of the planning? Are there phases or steps to reach?14. Who are the people being benefitted?15. This project could be reproduced in other communities. What would be necessary to do it?16. After implementing the project, are things being done differently? Do you consider there is innovation on your process? If so, what is it?
3. What is the participation of Design?
<ol style="list-style-type: none">17. In terms of your process who came with the idea?18. Do you have designers working for you?19. Who designs your products/interfaces/graphics?20. How do you communicate with the community you serve?21. How do you integrate the different actors on the process?22. Does somebody else enacts design (other than a professional designer)?

RESUME

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