

DESIGN AS A SERVICE INCUBATOR FOR SOCIAL INTERACTION AND INNOVATION. THE 'OFICINA SOLIDARIA' MODEL FOR THE ROCINHA FAVELA IN BRAZIL.

ABSTRACT

This paper presents the 'Oficina Solidaria' research project, which was developed in 2013 for an urban redevelopment programme for the Rocinha favela in Brazil. In this project, which was carried out as a 'workshop/laboratory in progress', design was positioned as a critical and technical tool for the development and implementation of initiatives oriented towards social growth. In particular, the whole of these actions—which together form a kind of start-up based on methods connect to 'collective co-working'—entails the active, shared participation of the residents of Rocinha. In fact the people called upon to take on, alternatively, the roles of designer, small business-owner, artisan and end user, become the directors and interpreters of all of the phases aimed at the creation of the furnishings that they need to overcome conditions of clear residential privation. These goals, following a discipline-based path developed on the levels of basic and applied research, are pursued in the theoretical passage from Social Housing to Social Design, but above all, interpreting principles of social cohesion. These principles to encourage, among active participants, a 'Collaborative Economy' capable of translating itself into 'Social Entrepreneurship'. Highly equitable entrepreneurship that assigns the various levels of design called into play the task of activating and configuring the entire system such that all of its different parts can develop coherently and with a high level of concreteness.

KEYWORDS

Social design. Participative design. Collaborative economy.

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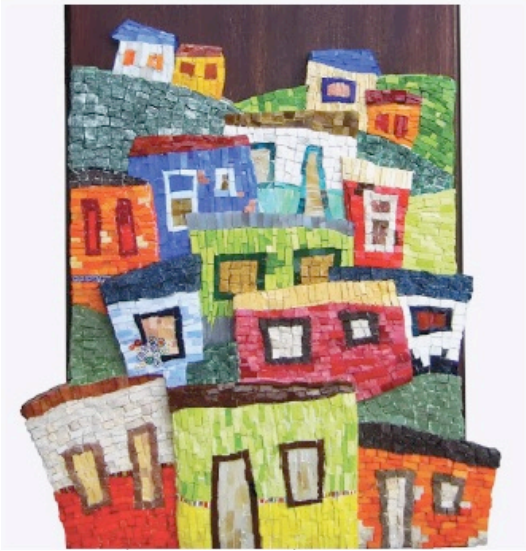


Figure 1 Patchwork of Rocinha expressing its aggregate chaos and free use of colour.

INTRODUCTION

The focus of this paper is to define a method for the incubation, interaction and participation of design for social innovation, through the presentation of a research experience.

The research project 'Oficina Solidaria' (Heads of Research, Professors Vincenzo Crisallo and Sabrina Lucibello), emerged from collaboration between Italy and Brazil in the context of the participation of the University of Rome 'La Sapienza' and the Universidade Federal do Rio de Janeiro in the programme 'Scienza senza Frontiere CSF - Italia' (Science without Borders). This collaboration involving the creation of an exchange network for students, scientists and scholars. In the context of this collaboration, the two universities entered a public competition, FINEP Chamada pública mct/mcidades/finep/at - Saneamento ambiental e habitação - 06/2010_Seleção pública de propostas para apoio a projetos de pesquisa científica, tecnológica e inovação nas áreas de saneamento ambiental e de habitação. Theme 2.4: 'Desenvolvimento de tecnologias sociais para construção, recuperação, manutenção e uso sustentável de moradias, especialmente de interesse social, bem como para a solução de problemas em áreas de risco ambiental' (figure 1).

The Sapienza research unit, worked on the drafting of an experimental project (Oficina Solidaria) for creating the furnishings needed for the new residences. For this project, which was carried out like a 'workshop/laboratory in progress', design acted as an interpreter and factor of economic and social innovation. The Oficina was thus configured like a kind of start-up based on methods proper to 'collective' co-working, where the residents of the favelas—who were called upon to take on the role, alternatively, of designer, entrepreneur, artisan and end user—were active participants in all of the phases oriented towards the creation of objects designed to improve life and everyday activities (Sanders, 2006).

The general goals of the project were the following:

- 'Localised Development': social cooperation activities carried out by residents in a common, shared space set up for carrying out artisan and proto-industrial activity;
- 'Collective and Collaborative Economy': constant cooperation among residents in all of the activities typical of design activity, goals and phases of implementation. Out in the field, 'Collective Economy' transforms into 'Collaborative Economy', meaning interaction between people in order to learn, transform, produce and consume together;
- 'Social Design': design, in both its versions, product and service, is positioned as a tool for participative democracy towards obtaining, through targeted actions, access to consumer goods and living standards of clear functional and aesthetic quality;
- 'Sustainable Ready-Made': triggering common-sense, concrete processes for recovering and recycling materials, with the goal of contributing to the theme of environmental sustainability through lasting practices that can be implemented over time (Lucibello, 2014).

1. COLLECTIVE CHANGE. THEORIES, EXAMPLES AND DESIGN PRACTICES FOR

BUILDING A COLLABORATIVE MODEL

1.1 From Social Housing to Social Design

The particular economic juncture the world is going through right now makes it indispensable for design to confront the problem of residential privation. This problem, no longer concerns solely those habitually in conditions of poverty but also large segments of the population now economically fragile and socially vulnerable. If, in fact, the aim of design is to improve and simplify all of the everyday activities, it seems clear that it is necessary to imagine that all urban redevelopment projects (Social Housing) need to provide for complementary activity in the area of furnishings. These programmes can be implemented to provide a complete answer to the 'need for home', based on the quality of services and products (figure 2).

So the inclusion, the social interaction and the participation are the key words of a project brief that uses measured interventions to reduce 'urban poverty' through actions suggested by design culture, like 'the design of experiences' and 'social design'. This means developing projects where the quality of the living environment is the result of collective behaviours oriented towards the social and cultural emancipation of vast segments of the population subjected to old and new poverty (Sanders, 2006).

As suggested by Victor Papanek—who was among the first to put the question in contemporary terms—in his 'little green book', subtitled 'Human Ecology and Social Change' (1971), the theme ranges from living conditions to differences in class and income, and must therefore be confronted from a broad angle, evaluating as much the problems tied to environmental responsibility as those tied to social issues.

But while it is true that changing the world, both globally and locally, is the aspiration held in common by all forms of design, it is also true that talking about 'Social Design' is, in strategic terms, an even clearer choice, reinforcing its participative value. Social design in fact encloses within it a series of markedly 'outward-looking' approaches (Antonelli, 2012), for example 'activist design' (politically militant, partisan, opposed to the commercial aspects of industrial products), 'humanitarian design' (in response to crisis situations and catastrophes), 'collective design' and 'design in the public interest' (Mollison, 1988; Norman Blaikie, 2002)..

Examples of this particular way of understanding design in social terms are found in the work of 'Participle', a London-based organisation founded by Hilary Cottam (an expert on the issue of urban poverty) together with Charles Leadbeater (an expert in innovation strategies) and the entrepreneur Hugo Manassei, the project units of which include ethnographers, psychologists, social science experts, economists and others. 'Participle' works with diabetes sufferers, the incarcerated, dysfunctional families, at-risk youth, the elderly and the obese, focused not so much on designing objects for a better world as making positive events happen through collaborative and participative activity. This method is characterised by a creative approach to problem solving, supplying a 'transparent and very clear definition of service design, one of the fundamental ingredients of social design' (Antonelli, 2012). Work along similar lines is done by Live|Work, WeAreWhatWeDo and Elemental, a Chilean firm that provides residents with a basic base on which to create



figure 2 The Rocinha favela, which ideally contains the 'Oficina Solidaria'.

customisable houses that may be aggregated for future expansions.

The common denominator uniting all of this work is, therefore, collaboration and social participation in the activities of designing and realising. Looking at it the other way around, it is precisely the openness and sharing of the whole 'design process' that works especially well towards the creation of a community spirit, providing incentive for socialisation behaviours based on concrete democratic actions (Whitely, 1994).

It is innovation 'from below', based more on people and relationships than on technology, and yields its returns from the perspective of solidarity, but also in terms of market expansion and image. This perspective, encourages global networks like 'Architecture for Humanity' and giants like Philips (with the Chulha stove project) or IDEO (with its network dedicated to design solutions that have a social impact, ideo.org), to embrace the philosophy.

1.2 A possible model for popular planning

In the sphere of the themes contained within the principles of socially sustainable and popular planning, 'Oficina Solidaria'—being a mainspring for the transformation of living space and support for good practices for coexistence within populations—stands as an articulated proposal for the realisation of a physical space for the development of local communities. In the context of the research aims, this goal materialises through the possibility that furnishings can be created in these places for residences and for shared public spaces that act as a connector between them. The group of anticipated activities is composed using a contemporary typological and formal vocabulary that, through the active participation of the population, can equally integrate the methods and use of artisan processes that draw on tradition. The 'Oficina Solidaria' is thus configured as a kind of 'start-up' that, using the sharing tools proper to the social system and the planning tools proper to design, proposes the launch of a prevalently systemic form of innovation that aims to simplify processes and create a habitat that is productive, aggregate and experiential as well as material (figure 3).

In fact, on the one hand, through material, systemic and technological simplification and, on the other hand, through the recovery of topicity, also understood as local tradition, 'Oficina Solidaria' is a possible model for a new kind of popular planning capable of offering the economic model we have defined as 'collaborative and participative'.

The key words for this model include:

- 'Simplification': the objects are gathered into systems and create a simplified approach capable of generating, through a few, easily manipulated variables, complex, integrable and updatable systems (simplicity as a tool for managing complexity);
- 'Harmonised topicity': objects as tools that narrate and are identifiers of a place since projected to give shape to the encounter between different cultures and, as such, use the materials, colours, manufacturing traditions and characteristics of a specific place (place as home);
- 'Conscious production': an ethical and aware production system that seeks a balance between entrepreneurial needs and social needs in relation to real needs;
- 'Sustainability education': projects as the study of solutions that consider all of the aspects involved in the production of homes,

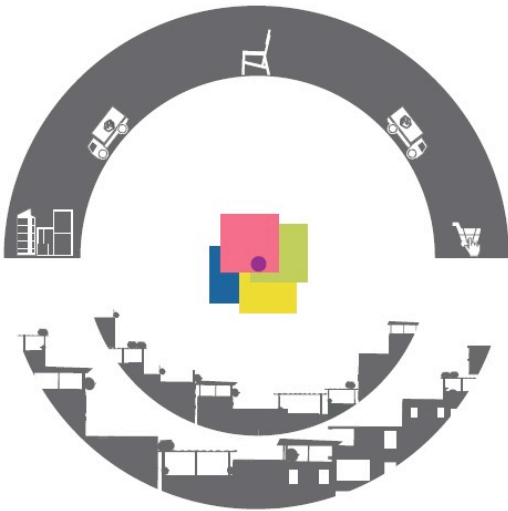


figure 3 From Social Housing to Social Design

products and services that are sustainable on the social, work and cultural levels and the production of processes and systems. In other words, a focus on sustainability education as an opportunity to propose aware ideas, lifestyles and production methods that are respectful of places, people and available resources.

2. THE LAYOUT OF COLLECTIVE CHANGE. SKILLS, ECONOMIC MODELS AND SOCIAL PLANNING FOR SHARED PRODUCTS

2.1 Persuasive bases for the 'Oficina Solidaria'

What can be defined as the tangible result of the 'Oficina Solidaria' project is positioned within a process of social development supported by the new meanings to be attributed to the concepts of 'skill' and 'social economy'.

Jacques Delors located the theme of 'skill' within one of the four fundamental pillars for the twenty-first century education system: 'learning to do'. The other three pillars are 'learning to know', 'learning to live together' and 'learning to be' (Delors, 1997). Delors' aim was to offer a few strategic coordinates to the rich and poor 'knowledge-based society' presently being constructed. But what is important to underline in this case is that the concept of 'doing' in the third millennium will be quite different from what we have understood it to be up until now. In fact this concept, will be closely connected to the supremacy of the cognitive-informative element as a key factor of systems for the development, generally speaking, of technology and production criteria. We all know that with the end of industrial society, the idea of 'professional ability', in relation to the abstract capacity for simply carrying out a task, is destined to definitively fade, stepping aside for 'versatile skills' (Delors, 1997). An even more pressing condition if we consider areas of the planet that need to pass from a state of real poverty to real emancipation in a relatively short period of time, respecting everyone's needs. This is why design of this kind can become simultaneously both a model and a tool: since its operation as a system can make examples of 'social enterprise' possible that are based on the reinstatement of meaning and use of aspects like management, production processes, market geographies, development of human resources and the formal and cultural emancipation of services and products (Stappers, 2006; Cristallo, 2010).

As concerns the economy in its social version, the 'Oficina Solidaria' is based on the principles of a 'Collective Economy' with the goal of eliminating inequality and promoting development that is not just shared, but wholly practicable (Manfredi, 2003; 2013). This type of economy is concerned with building a sense of collective responsibility and social cohesion founded on equity and justice (Muhammad, 2010). The 'Collective Economy' generates the 'Collaborative Economy' when factors of interaction are triggered, among those adhering to it, for learning transforming, producing and consuming together, and even incubating rudiments of enterprise. Finally, from 'Collective Economy', through 'Collaborative Economy', one accesses 'Collaborative Consumption', which is founded,

according to research conducted by Rachel Botsman and Roo Rogers (2010), on:

- renewed faith in the importance of community and the recovery of the meaning of 'friend' and 'neighbour';

- mobile collaboration, meaning a 'social network' flow and real time technologies;

- new resources that never run out but that instead multiply with use: like ideas, creativity, knowledge, technology and networks.

Also according to Botsman and Rogers, from these preconditions one accesses the 'Collaborative Market', which is founded on:

- 'Redistribution markets': taking a used product and shifting it from a place where it is no longer needed to another where it is (using the five 'R's: reduce, reuse, recycle, repair and redistribute);

- 'Cooperative lifestyles': sharing resources like money, skills and time in such a way that, in a few years, phrases like 'co-working', 'couch surfing' and 'time banks' will become part of our everyday language;

- 'The value of experience': a system that goes from the product to the service offered by the product. This means paying for the benefit of the product without fully having the product, and so not having the things, but instead the experiences that they provide.

This kind of culture is also changing the concept of ownership since, as held by Kevin Kelly, the editor of *Wired*, 'access is better than ownership' (Botsman & Rogers, 2010).

In conclusion, and this is what the 'Oficina Solidaria' project intentionally maintains, to make the 'Collaborative Economy' practicable, it is necessary to:

- promote the full use of local resources, material and creative, favouring access rather than ownership and reuse instead of acquisition;

- consider the business as a place for experimenting with products and services as the result of a shared and collectively verified process. Company as platform that enables different skills;

- put collaboration in the centre of the relationship between equals. Through these relationships, people enter into relation with one another by collaborating. One can therefore say that collaborative platforms always have social value, even when the exchange is mediated by money (as, for example, with Couch Surfing);

- give the digital and its technologies (websites, mobile apps) the necessary value accessible to everyone.

2.2 Implemental bases for the 'Oficina Solidaria'

'Oficina Solidaria' is an initiative with origins in the principles of 'Collaborative Economy' aimed to develop a model of 'Social Entrepreneurship' that assigns design the task of configuring and activating the entire system such that all of the different activities in play can develop coherently. The idea of 'Oficina Solidaria' is therefore that of an open, shared laboratory where the community of residents itself produces and builds the furnishings for its own residences and common areas.

In a theoretical manifesto, its goals can be summarised as follows:

- make it possible for the residents of favelas to realise their own furnishings using a working manual (production processes and assembly), drawn up for this purpose by local designers;

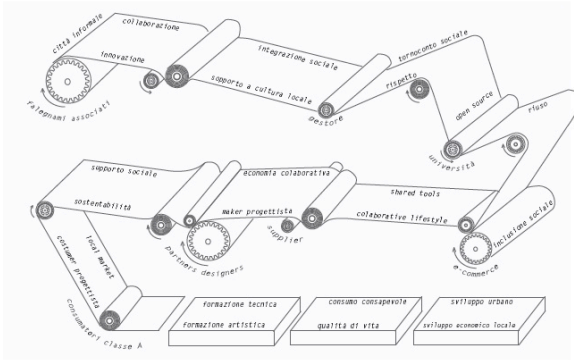


figure 4 Layout of the 'Oficina Solidaria'.

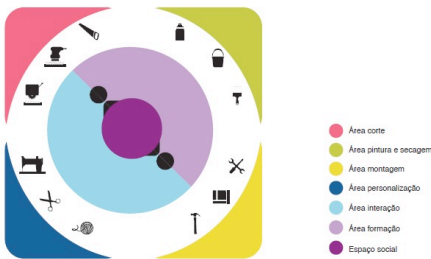


figure 5 Tools and areas of the 'Oficina Solidaria'.

- launch models for the development of local micro-economies through the possibilities offered by the production and sale of self-produced furniture;
- contribute to reducing environmental impact, using local materials, including discards from industrial processing;
- support the cultural diversity found in favelas, generating products that can interpret the features, including symbolic ones, of the place;
- use the workshop activities to provide incentives for social inclusion and professional training programmes.

The layout of the 'Oficina Solidaria' is similar to that of a proto-industrial carpentry workshop, with clearly defined spaces and functions: cutting, varnishing, assembly and customisation (figure 4), but at the same time capable of hosting within it areas for professional training and creative workshops (Red Area: cutting and smoothing; Green Area: varnishing and drying; Yellow Area: assembly; Blue Area: customisation of products with colours and fabric; Central Area: socialisation space; Accessory Areas: services, storage, finished products) (figure 5).

As with any business, in this case as well one must deal with the variability of employees (permanent and seasonal) and the number of participants in the local community in virtue of object quantity and number of activities undertaken during the year. Nevertheless, the totality of these activities, in the context of differentiated and updated production, also contributes to the safeguarding of traditional trades tied to using wood for civil residences.

The role of e-commerce, which is to say the series of transactions for the commercialisation of goods and services between producers (supply) and consumer (demand), is of central importance. This is why the 'Oficina Solidaria' entails creation of an online platform that can fulfil the aims of product circulation in accordance with logics of participative and collaborative exchange through the principles of crowd-sourcing, including hosting a database of open-source and 'maker shop' furnishing projects.

The website can also be a useful tool for creating a community database for the promotion of events and workshop/laboratories. The guidelines of 'Collective Design' are consistent with furnishing models founded on principles of absolute performance, starting, as has already been emphasised, with a participative planning and production process that sees the individual user (or group) simultaneously become designer, producer, artisan, assembler, purchaser and final user. This type of 'socialisation project production chain' expresses a cultural and applied research model that makes the aims proper to 'social design' clear (Thorpe, Gamman, 2011; King, Conley, Latimer, Ferrari. (1989).

The concept for the furnishing system involves the use of a horizontal grid on a square base positioned at the ceiling, where vertical, telescopic, slotted poles converge, matching along both directions and designed to receive and in turn support wooden panels, furnishings, support brackets and lighting. It is like a chessboard that can vary in size, horizontally and vertically, according to the specific case, to support various configurations of the furnishing system, conceived specifically to fully integrate with the 'grid' model. The furnishings are designed to create a functionally coherent layout and above all one that can be transformed, corrected and implemented over time.

CONCLUSIONS

The 'Oficina Solidaria' project for the Rocinha favela is an exercise oriented towards understanding how design—considering its technical and cultural nature, which by tradition can create and accompany models of social development—can act in extremely impoverished environments with a high degree of effectiveness, resulting from the desire to translate theoretical models into working practices and objects that reflect concrete needs.

This process, which we can define as the passage 'from abstraction to feasibility', has a problematic nature in terms of specifications, due to the complexity always faced by design when defining and codifying the transition between strategic projects and their solutions, called 'products'. All the more so when its activity is oriented towards promoting development and progress in areas lacking healthy economies and social equity. This is why the 'Oficina Solidaria' case study represents an opportunity for verifying the directions of a theoretical experiment that, differences duly noted, can then be transferred to other areas.

These directions substantially fall into two categories.

The first derives from recognition of the technical and cultural context in which our speculations originated. Meaning having grasped, on an ideological basis, the content of 'Social Design' where this needs to translate into actions that are understandable, programmable and, above all, shareable. This is why the concept of 'Social' has only minimally included the culture of 'Makers' and self-production today seen as an economical solution for updating modern production with excessive ease in every part of the world, whether rich or poor. The attempt, at least from the speculative perspective, was instead to test solutions for providing incentives for collegial, community actions that are also open in terms of the exchange of roles so that the exchange of skills can be a real way of circulating the principles we hold so dear, which we identify as popular planning and creativity. In this way, a kind of 'Social Cohesion' can probably emerge that encourages a form of 'Social Entrepreneurship' that can aspire to becoming a real and long-lasting 'Collaborative Economy'.

The second draws on the 'quantity' of design to be proposed in a context where complex, prolonged hardships prevail and where it is difficult to place one's trust in predetermined practices. This is why the first task of design that wants to take concretion action needs to be knowing how to 'narrate', in the sense of portraying the elements and values found in a given area, meaning rendering, like in a script, a subject in a form suited to representation. Using these methods, one can more easily focus and create incentive for the 'productive habitat' potential of a place. But, an instant later—and this was also the task we set for ourselves—it is necessary proceed following a 'manual' containing an identifying, typological, formal vocabulary drafted with the active participation of the residents who, where involved as principle players, bring their traditions, rituals and tangible and immaterial needs, to all stages of the process, beginning to end. The project has seen the interest of the inhabitants of the favelas and especially of a little group of young students (Fernanda Petrus and Pedro Henrique Bitencourt) that, on the basis of

some examples already underway - such as the Workshop Solidária, Cooperativa De Solidariedade Social CRL in Santa Maria da Feira - are working to collect the interest on the part of some local partners. The project is ongoing.

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