

## ABSTRACT

*The current challenge in both design and foresight practices is to participate in the creation of open systems by challenging assumptions (Miller et al., 2013; Dunne, 2001) to allow people to better react to change and/or to initiate change. Feared and provoked at the same time, change is the motor of innovation processes. While change raises the feeling of uncertainty, it is this uncertainty with which both disciplines of Foresight and Design juggle when building future discourses. While it has been recognized that trends may limit and constrain the creation of the future (Miller, 2006; Colombi & Simonelli 2005) this paper will examine the potential of reframing tools as a way to produce resilient systems. Overlapping Prospective and Design activity has led to an array of derivative design disciplines such as Design Fiction (Bleecker, 2009), Critical and Speculative Design (Dunne & Raby, 1999) or Experiential Design (Candy, 2010). By converging advised methods and tools of Future studies with "Design's" experiential approach, Evans (2007) intended to free Designers from "mechanical solution or formatic reference". This paper proposes to expand the correlation between the selected fields of anticipation and design by analyzing the reframing activities experienced within the Experiential Futures and Futures Literacy Knowledge Laboratories (Miller, 2011) participatory workshops. Both practices are discussed to set the foundations of an advanced design capable of embracing not material but social transformations (Zamenopoulos & Alexiou, 2007) to trigger adaptive systems for continuous innovation.*

*Keywords: Prospective, Advanced design, Open System, Reframing*

## 1 INTRODUCTION

Along the lines of an advanced design exploration -a practice which recognizes creative activities that manipulate and emphasize the use of future components, "time, space, uncertainty, and complexity" (Celaschi et al., 2011), this paper bridges Design and Foresight activities through their common interest to take part in the complexity of our social worlds. In the first part we will discuss the importance of change as in a motivation for building the future and as in a movement, a wave to ride in order to and act as an agent of change (Petermann, 2014) and catch the emerging novelty. In a second part, the growing interest for revealing the immateriality of design activity and acting at this invisible level provides the necessary content to draw the contours of design as an open system (Folkmann, 2013). The aim is to set the theoretical grounds of a prospective design activity. To make sense of this framework attention will be given to activities that are 1) at the beginning of the creative process, i.e. the

fuzzy front end of innovation and 2) that are at the verge of two disciplines design and future studies.

## 2 CHANGE AS A MOTOR OF INNOVATION

### 2.1 TOWARDS PREFERRED FUTURES

Design and the future have an intrinsic relation that is consolidated through the current design debates. "Design is a central field for practice and research in visioning and crafting the future and facilitating changes that could lead to a better future." (Crafting the Future, 2013) This quote taken from the call for the 2013 EAD conference summarizes the essence of the on-going research in advanced design around the existing and possible exchanges between Foresight and Design studies. The quote refers first to the seeking of change and transformation by viewing, envisioning and visualizing the futures, shared by both disciplines. Secondly, the reference to a "better future" resonates with the frequently cited Herbert Simon's definition of design as an activity attributed to "Everyone who devises courses of action aimed at changing existing situations into preferred ones" (Simon, 1996) and echoes with the aim of Future Studies "to help individuals and organizations better understand the processes of change so that wiser preferred futures can be created" (Inayatullah, 2008). The fundamental statement to take out from the Foresight definition is the search to develop awareness of the people involved in the creation of the future, by developing their capacity to understand and take part in change. Therefore that it be the main actor of the project or one of the many other actors involved, taking part in change requires knowledge on our relation to it.

Rearticulating the design principles, notably by confronting the pioneering work of Simon, Krippendorf (2011) underlines the "need to search in the present for possible ways to move into desirable futures". The aim of a "desirable", "better" or "preferred" future is not an end in itself but a pretext, a way of looking at the unknown. The future is described as a free space for imagination, a free space to make decisions in the present and to constantly reiterate the creative propositions (Inayatullah, 2013). Drawing a parallel between these stated Foresight and Design relations to time, the future represents the "out of the box" space where the present can be enacted to test alternative ways of doing. In this present time, the Design activity deals with the making of tomorrow by grasping ongoing changes and transforming them into malleable physical and/or social experiments. The creation of artifacts, the "materialization" of objects and services, seems to be a way to rephrase the constant mutations, which a society undergoes (Manzini, 2009) within the realm of improving the conditions of life from a personal or more global perspective. What are the signs of change that designers as well as futurists rely on? Attention is given to the phenomenon of change and how it is dealt with within the creative process.

### 2.2 MOVING DESIGN

Design crystallizes change by implementing material and immaterial products that are as many interpretations of the current practices and questions that arise in the present. Acting in the present, the Future oriented practices that are Design and Foresight constantly revise the way things are to take part in the moving state of things. "This kind of "revisionism" is inevitable as men and societies change, and as the dominant values assume a new shape." (Daniel Bell, 1968) The question of balance between the economic and social aspects of

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human life is central to the development of the design activity, which participates in both the economic and social construction of the world.

More importantly, it is movement that is referred to through the inquiry of the mutual constitution of social and material worlds. "The social –relations, institutions, conflict – is woven by lived human bodies in everyday practice and in conjunction with other non-human bodies (organic, inorganic, and imaginary)" (Lazzari, 2005). The reciprocal exchange between people and the world, between matter and mind is what builds the everyday life. This interaction is reinforced by a world that the author further refers to as "a texture to sense and to use" "a live fabric of rhythms and relationships understood through praxis." The actions performed in everyday life are necessary to develop an understanding of one's environment, placing movement in the center of the creative process.

The process, widely examined in Advanced Design practices, is more important than the final result says Paul Klee; "Form is the end, death. Form-giving is movement, action. Form-giving is life" (Paul Klee, 1973) Set in motion, the action makes visible the ongoing transformations of the world. Further to this idea, the preface of Michel de Certeau's book, *Plural Cultures*, evokes the determining role of movement for gaining knowledge on the environment praising the author's life quest "to open up potentialities, to spare a moving space from which freedom can arise." (Giard, 1993). The text further implies that in this moving space, reiterations position oneself in the face of beginnings, and that position may be the most difficult but also the most fruitful. Continuous innovation bears the need to consciously take part in the social flux and emphasizing the importance of starting over.

### 2.3 ACCOUNTING FOR CHANGE AT THE FUZZY FRONT END

To reflect on this idea of beginnings, it is useful to address the fuzziness of the starting point of the creative process that exists in both Design and Foresight disciplines. Sharing the use of the future to motivate the perception of what tomorrow may hold both disciplines require anticipation skills, and in order to speculate both practitioners turn towards signs of change, manifested by trends. These trends come in different shapes and intensities and have been considered challenging to identify hence the term "fuzziness", for its "ambiguous and often chaotic nature" (Sanders & Stappers, 2008). Nourished by iterative and constantly renewed information, this step is where the mentioned above revision of current state of things takes place.

Commonly termed as the Fuzzy Front End of Innovation, the pre-phase of the design process gathers the many activities that inform and inspire the exploration of open-ended questions that will direct the project by assessing its valid baseline. That they be ignored or manipulated (Muir, 2010), trends are purveyors of emerging issues and movements pointed towards the future. Both quantitative and qualitative data is collected, as many signs of change that provide narratives for the decision making steps that act on the building of the future. The trends are organized to build a story, but the subjective and tacit identification and manipulation makes forecasting a controversial method. Indeed, «Forecasting is one of the major tools by which the future is colonized. No matter how sophisticated the technique...forecasting simply ends up by projecting (the selected) past and the (often privileged) present on to a linear future. » (Sardar, 1999) Although trends make change visible and motivate

transformations, this paper distinguishes a space for actively taking part in change by constantly challenging one's assumptions and decolonize the future.

### 3 FROM COMPLEXITY TO OPENNESS

The open work, title of a book from Umberto Eco, discusses how contemporary art operates to open paths for meaning through an interplay between the known and the unknown, constituting the « very essence of the open work » through « an oscillation between rejection and preservation » (Eco, 1989). While design is commonly understood as a closed system involving the creation of objects that are made to serve a specific function, the current design landscape transgresses the materiality of the object. The diversification of design positions; "sustainable", 'humanitarian', 'critical' or 'social' » expresses the assertion of the growing role of design in «socially- and politically-engaged» spaces of inquiry. (Ericson and Mazé, 2011). It is in this context where Design is recognized not only for the making of objects of everyday life, their function and aesthetic, but moreover, for taking part in the building of social and cultural values, that an open design takes shape.

Design acts within a system of entangled networks and liaisons. "When we buy an automobile, we no longer buy an object in the old sense of the word, but instead we purchase a three to five year lease for participation in the state recognized private transportation system, a highway system, a traffic safety system, an industrial parts replacement system, a costly insurance system, ..." (Bell, 1968) In this context, Design has a role to play within the growing complexity of the world. Drawn as a trajectory of artificiality by Krippendorf (2011), who articulates "five major classes of design problems", from the production of products to the one of discourses, that challenges the need for design to create new social or technical solutions. "For the Discipline of Anticipation, it is this complexity that calls for a greater awareness of anticipatory assumptions" (Miller). Leading to the need to reframe to develop the capacity to adapt to constantly changing situations.

To reinforce Design and Foresight's common grounds, the next part will describe two case studies that acknowledge and put in practice their role as agent of change and part of an open system.

### 4 CASE STUDIES

At different levels, the following examples underline the power of imagining the future in order to open up spaces for awareness and grasping of change. From a workshop model built within the framework of the Discipline of Anticipation to the development of a card game, in the midst of Design and Foresight conversations.

#### 4.1 "THE FUTURES LITERACY UNESCO KNOWLEDGE LABORATORIES"

Foresight's integration at UNESCO aims to 1) offer a space turned to an external audience to discuss about possible futures by confronting views of different with experts, 2) to work along with the organization's Bureau of Strategic Planning to inform the decision making processes of the internal services.

In the past couple of years the UNESCO Foresight section has been working in collaboration with the Rockefeller Foundation on a research intended to

understand the way in which global, regional and local actors make use of the future. The long term program, "Scoping Global/Local Anticipatory Assumptions", intended to test the principles of "The Discipline of Anticipation" (Poli et al, 2012), a theoretical outline that aimed at consolidating the dispersed Foresight practices, further led to a series of hands-on workshops, "Futures Literacy Knowledge Laboratories". The workshops performed within communities of practice at an international scale, participate in building collaborative and collective intelligence to inform the theoretical outline. The events invite people from diverse professional and cultural backgrounds to take part in a participatory experience that will reveal the models by which they anticipate to direct their everyday personal and professional actions. Every workshop follows a three-step format: 1) revealing anticipatory assumptions, 2) reframing and 3) set out new questions. Held over two days, the process gives the opportunity to the participants to understand that the way they relate to the future alters their relation to the present.

#### **4.2 "THE THING FROM THE FUTURE"**

The "thing from the future", is presented here as a way to acquire awareness of the present through an "imagination game". For Jeff Watson, who created this game along with Stuart Candy, "Games are semi-regulated situations that unfold over time and resolve based on the creative participation of one or more players." Games offer keys to build narratives outside of the boundaries of reality, prompting the use of inventive tricks to provoke and envision alternative futures. Formulated by John Cage, playing acts as a sort of "purposeful purposelessness"(Kostelanetz). His conception of games extends to "an affirmation of life – not an attempt to bring order out of chaos nor to suggest improvements in creation, but simply a way of waking up to the very life we're living." The thing from the future can be played by anyone, in any context, to open up discussions about alternatives and trigger scenarios of the future. Based on the the idea that what shapes the future is the way people are able to imagine it, James Dator (Dator, 1981) identified the most common relation people hold with the future. These four categories: continued growth, societal collapse, a conserver society and the transformative society, are used as a basis on which to build the narratives. The particularity of "The thing from the future" is that it introduces an "object" card, which links the story to a concrete element, allowing to get away from generalization by focusing on narrative details which paint a better picture of the future.

#### **4.3 LEARNINGS**

The fundamental lessons that can be taken out from the "FL UKnowLabs" and from "The thing from the future" are that 1) spaces for discussing new possibilities are made accessible through reframing activities, and that 2) there is a need to develop awareness of the underlying constraints of our creative capacity by developing futures literacy.

Reframing; on the one hand, interest is given to the identification of the need to create a space for deconstructing the models that we use to think the future, a reframing step. The idea of reframing leads to this idea of open-system where a constant renewal of established views allows to deal every day with spontaneity and uncertainty (Mallol. 2010) In the creative process, this step could take place before the gathering of trends and before the making of scenarios, or it could be a new space outside of the commonly borrowed path of project creation. The

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purpose of this space is to open up to different levels of reality by confronting the anticipatory assumptions that may constrain us into a linear way of thinking and reductionist stance.

Futures Literacy; on the other, the challenge raised by both case studies underlines the importance of the beginnings. As informed by the previously stated workshops, the approaches to the future are products of social practices and the way in which we deal with the future –the future here is understood as being in the present, has a direct impact to our capacity to imagine and create novelty. The concept of Futures Literacy has been employed in Future Studies to describe people's capacity "to question received ideas about the most appropriate response to a given future, and better able to imagine alternative ways for events to play out" (Sandford, 2013). As demonstrated by the current activities (Z33), Futures literacy has recently been resonating within the design field.

## 5 CONCLUSION

When choosing versions of the future, a multiplication of the language of imagination is required for the interlocutors, for the designers, for all actors involved in the project. Within the topic of navigating the contemporary the idea of decolonization is expressed: "his ethnographers are "sailors not settlers" who weave webs of relationships in the form of liaisons ... he (the anthropologist) slowly unfolds complex arrangements, settings, and situations and makes them "conversational"."(Krauss, 2011) In the same way, the challenge that the advanced design practitioner is facing today is to take part in change by constantly tackling the limits of the constructed realities allowing him to play with the emergence and uncertainty and to play a role in the growing complexity of the world. Integrating the experience of a reframing practice and of a futures literacy capacity, as proposed by the current debates raised by the meeting of Design and Foresight interests, promises strong foundations to meet the needs of humanity while embracing creativity.

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*Reframing at the fuzzy front end of innovation: a prospective proposal*

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