# A First Speculation on Cultural Experiments as Design Research Methods

Francesca Valsecchi<sup>1,2,3(⊠)</sup>, Roberta Tassi<sup>1,2,3</sup>, and Elena Kilina<sup>1,2,3</sup>

<sup>1</sup> Tongji University College of Design and Innovation, Shanghai, China francesca@tongji.edu.cn, roberta.tassi@polimi.it, lena.kilina@gmail.com
<sup>2</sup> Politecnico di Milano, Milan, Italy
<sup>3</sup> UNICAMP, Campinas, Brazil

**Abstract.** This paper offers a reflection on design research and its forms and methods of cultural interventions, with the aim of contextualising it into the frame of complexity. The paper seeks to restate culture as a necessary element in the construction of a qualitative analytic that informs design discipline, in a contemporary moment where the strategic insights and discoveries valuable to innovation are more and more associated with artificial intelligence in its variety of forms, and cumbersome data processes. In the first part, we discuss the definitions of transculturality, context, and story, within the frame of design and complexity and, specifically, in the methods and tools we use to conduct design research, both in the way of developing the research process and conducting original design inquiries in the field.

In the second part, we discuss culture practices in design research, presenting four experiments that we have been conducting in a transcultural context, and framing which use of culture is necessary to the production of research insights. The examples are discussed as ethnographic exercises in which transculturality is a process of subjective negotiation, when relative and progressive framing defines the context, and where stories include pluralism and allow diversity of interpretations. Because we aim to transform these cases of cultural exploration into structured research methods, we will discuss how ultimately they help to inform if and how the design that we do might be genuinely necessary.

**Keywords:** Transculturality · Cultures · Design research · Cultural experiments

This paper offers a reflection on design research and its forms and methods of cultural interventions, with the aim of contextualising it into the frame of complexity, which we acknowledge as the current epistemological paradigm, and to which we grant the scope of being itself an ongoing cultural process. We will do so discussing culture practices in design research, meaning some experiments that we have been conducting in a transcultural context, and framing which use of culture is necessary to the production of research insights.

© Springer International Publishing AG 2017 P.-L.P. Rau (Ed.): CCD 2017, LNCS 10281, pp. 76–93, 2017. DOI: 10.1007/978-3-319-57931-3\_7

### 1 Introduction. Statements on Analytics in Design Research

With daily pace, we observe that strategic insights and discoveries valuable to innovation are more and more associated with artificial intelligence in its variety of forms, and cumbersome data processes. Therefore this paper firstly restates culture (intended as the immaterial set of values connected to social, emotional, and relational environments) as the necessary element in the construction of a qualitative analytic that informs design discipline.

Of course, we do not disavow the relevance of technological contribution at a macro level, but at the same time, we feel the urge to deepen the reflection on how the micro-practices need to be improved as well as intensely studied and implemented.

Analytics is by definition the process of obtaining an optimal and realistic decision based on existing data. If we contextualise this in design research, analytics is the phase that informs design decision, what we produce, and how we deliver it to users. In all the creative discipline, and more recently much more in strategic business and user experience as examples, the word "analytics" is widely used and involves a dichotomy between quantitative and qualitative, between what we can measure and what could be observed. Qualitative and quantitative analytics both are essential to industry, from start-ups to mid-size companies, to inform their decisions, and quantitative information has never been as accessible as in the most recent times. Even small businesses who have been monitoring behaviours on their web platforms for the past one or two years, for example, have suddenly in their hands large set of data that could be explored to understand better their users.

Quantitative analytics looks at actual numbers. It is used to get hard data on how people behave (blurred boundaries between market and business analysis). It can be done with semi-automatic processes regarding data generation and requires to know basics of statistics analysis for the interpretation and use of the information.

Qualitative analytics—this usually means looking at the intangibles. It is far more subjective and interpretative, and you use it to understand why people behave in a certain way (blurred boundaries with user-centered design and applied ethnography). It requires to immerse in the context of interest, and to develop and conduct research sessions and in-depth conversations, to gather stories that can be mapped and processed to inform the innovation process.

They differ in the kind of insights they can provide, often referred as the "what/when/where" in contrast with the "how/why". What people say as opposed to what people truly do, think, and feel. There is an abundance of 'what' 'where' and 'when' of statistics, and thus the deep, actionable insights about the 'why' and 'how' aspects coming from qualitative analytics get often ignored or lost. Using mixed methods overcome the dilemma, combining the rigorous, scientific view of the relationship between two or more variables (quantitative, that yet it doesn't tell us much about why those relationships exist), with the possibility to access to the big picture and what people think and feel (the qualitative - with the limit that we can't really implement and test theories scientifically).

We often define research as a set of activities whose purpose is to inform and inspire the design process where information and inspiration are equally important to establish the vision. Our concern is that relying only on automation of the research process (at the stage of analysis, but also in the application of methods of inquiry) would sacrifice inspiration and reduce the depth of information, as studying human behaviours through analytics is different than immersing in their context, life and motivations. Big data and artificial intelligence can illuminate certain gaps and facilitate initial orientation but needs to be combined with a direct contact with human beings and context to gain deep understanding and inspirations.

The need of both of them is evident, and we read widely in academic and dissemination publications that data scientists love numbers, yet not all data is numerical. In design terms, qualitative analysis is the scientific study of data that can be observed, but not measured: it includes the analysis of context, human behaviour, emotions and other factors that are hard to digitise without losing any meaning; in fact, it concerns with cataloguing the qualities of what is studied. Quantitative analysis is the study of data that can be measured, the quantities of a category of data. Often in design the need of stronger qualitative analytics is affirmed, because it allows us to measure things we can't count and define in numbers, like the overall user experience - where undoubtedly knowing "the how and why" people behave, is more crucial than what they do.

In design terms, to include culture framing as one of the assets of qualitative analytics, help to ultimately overcome one of the most common myths: that it would be useful only for academic researchers in selected fields such as social sciences and marketing. Instead, by looking at the complex world, almost all innovation problems have a qualitative aspect, and thus, quantitative analysis alone would never be able to tell the complete story and frame complexity in an understandable way. Methods and tools for qualitative analysis inspired by the ethnographic practice have been widely applied as a way to engage people in the design process (whether you refer to a design thinking, user-centered design, user experience or service design methodology), with the idea that knowing the user in depth is the only way for companies to acquire a competitive advantage on the market and to push the boundaries of technological innovation. But methods and tools are not exhaustive, not enough, to enable any person to conduct qualitative inquiries - they can guide and support, but a shift in the perspective is still needed to develop useful insights and capture interesting stories.

As a consequence, in a moment in which we are assisting to a desperate run after users to discover their behaviours and needs, we are also experiencing a reduction of quality of research and stories we hear, which flatten the way in which we see the world around us, reduce our projective possibilities, and raises concerns about the relevance of research itself. "Just because you can measure something doesn't mean it is important" it's becoming almost a meme (that can be widely found in online citations) in the literature and conversations about how balance quantitative and qualitative. "Things that might be" should be the new meme – if we limit this projective capacity of design research, we are limiting the analytics (possibility of taking the informed decision) with the analysis (comprehension of existing structure and components), reducing the creative power of interpretation, and narrowing its relevance, as described in the following elements:

- Adjust the value proposition in design which information is more or less meaningful may not emerge directly from analysis, whereas one of the assets of the researcher is the capability to highlight interesting connections between data points and raise attention to what is more relevant to drive design decisions, without getting lost in less valuable (yet measurable) details. What information matters most?
- Choose the appropriate language for them the audience we are communicating research insights to, and the purpose that brings us in the field may assume a predominant role in the study: instead of feeling in the position of capturing and representing the unknown, researchers may get stuck into what the audience expects to hear or is expecting to question. Is that what we really heard?
- Methods and tools have become a commoditised vehicle research is not merely a matter of conducting interviews, building journey maps and listing user needs to proceed to the next step in the design process. Research requires a shift in perspective and deep understanding of the importance of establishing a connection with people, to design for and with them, and tweak existing tools according to our scope. What is our real research objective?
- There is little space for cultural nuances the speed imposed to research and all of the listed things above result in an inquiry practice that scratches the surface of behaviours and doesn't have time (or interest) to pay attention to all those elements that can't be immediately understood or easily mapped into existing frameworks. Are we discovering and then saying anything new?

Analysis and analytics are ways to think in terms of past and future. Analysis looks backwards over time, providing a historical view of what has happened, existing models and practices. On the other side, analytics typically look forward to shape the future or predict a result, highlight a pattern and project a behaviour. Sometimes design research limit to produce analysis but not analytics. In these considerations, we believe the role of culture is essential to criticise and challenge existing practices, by embracing that culture is evolutionary and so oriented to the future by nature. Plus of course culture cannot be measured. Still, we are using it here as a generic term, that we want to unfold into a few crucial definition when we consider culture into design research (in the next paragraphs, through a combination of instances of theory and practice). We believe that the way in which we conduct research, and we teach it, has to be redefined and continuously criticised. Are the insight we determine really useful? Are they useful to what extend and towards which purposes? How can we improve the dialogue between quantitative and qualitative information to fully leverage their potential bridging analysis with analytics?

## 2 Key Concepts for Design Research

The paper reflects on these definitions within the frame of design and complexity, and specifically, in the methods and tools, we use to conduct design research, both in the way of developing the research process and conducting original design inquiries in the field. We believe that to do relevant, valuable, insightful research, we do need to

embrace diversity instead of oversimplifying reality, and look at culture as a powerful concept, a conversation to be continuously unfolded among global and local complexity. We therefore propose statements of meaning that help to frame these ideas, namely (1) transculturality, (2) context, (3) stories.

The concept of transculturality is lent from anthropology, where it has been established as the paradigm through which looking at cultures (Valsecchi 2015): it overcomes the prefix of inter- and multi- by suggesting a playground where (cultural) differences can encounter and further transform into an alternative entity. In previous publications, authors underlined the importance of trans- as a prefix with creative power.

For over seventy years anthropology has been studying the concept of transculturation, how the specificity of multiple, variable, dynamic and unequal statement identity of the modern man clearly manifested, located in the complex relationship with the general known and legitimised acculturation (cultural contact) model. Most scholars interpret transculturation as a process of changing the material of culture, customs and beliefs of a particular socio-cultural group, which takes place when it is a prolonged close contact with another group – an adept of their cultural traditions (Malinowski 1944). In the term "transculturation" there is the important Latin prefix "trans" which means "above", "super", "through", "on the other side" (Beals 1955). The last two values are particularly relevant, because they imply the inclusion of none, but several cultural reference points, the intersection of several cultures, between them and the running of a special state of cultural state- according to the individual that experiences this condition. By Ortiz's definition, "acculturation" is the acquisition of culture in unidirectional process and transculturation involves two phases - the loss or deculturation and the creation of a new culture (neo-culturation). Thus, it is equally important the destruction of cultural elements and the creation of the new cultural alliances (Ortiz 1995). Following this reasoning, in design, the anthropological notion of transculturality come to place when we think of cultures as dynamic entities whose encounter allow creation: in this sense transculturality implies the respect of diversities before their analysis (knowing before the analytics, and not vice-versa, when analytics is used singularly toward the knowledge production/decision making – perhaps this is this a design specificity).

Here it comes the definition of context, crucial to design discipline, and to situate creative actions into reality. Bounded contexts inform and allow the design to take place and impact. Thus design actions boundaries do not overlap with context framing. John Gero, quoting and elaborating on Benerencetti, reminds that although it is very common to say that representation (in the form of research activity or design projection) are context-dependent, the contents of such representation cannot be established solely composing the parts together. In some way, context also includes what we decide to discard, to leave aside the impact of design projection, being this process completely determined and intentional, or simply outside of the scope of actions. Research should bring us "outside of the box": Gero and Smith recall that "something inside the box is context-dependent when you need something outside of the box to determine what it means" (Gero and Smith 2007). They underline that context is not the abstract external projection of a situation, but it's the result of representations that

include design agents (in this case, designers acting research). Framing the context is a necessary step to understand where the deconstructive and reconstructive moments of culture emerge: there is where we can actually study them, and there is where decisions take place at first. What we think, what we discover belong to defined contextual framing, as well as what we would produce and create. Globalisation may enlarge the design scope but gives no help in breaking the boundaries where knowledge and actions can be indeed unfolded. A sophisticated use of context as a design notion implies recognising the role of sensitivity and respect towards localism and specificities as what help us to frame our actions - yet also determine their limit.

Finally, the definition of story, or storytelling, as it is recently acknowledged as a general, often the preferable, design outcome. Often we look at stories as an authorial contribution, as an easy-to-be-consumed form of creative ideas, as a trigger to "users engagement", and we value stories for their marketing value because they collect attention to pre-determined propositions. We have been discussing already in previous publications (Valsecchi and Tassi 2016) that the designers capacity of telling stories is rather an interpretative outcome, which conveys the result of an action of active listening, and whereas ultimately stories can articulate common ground is because they give voice to the alternatives that have been captured in reality. The meaning of designing stories is to respect pluralities rather than offering the univocal narration. Each of us is the narrator; we use stories to communicate with others, to convince them, inspire or simply entertain. For designers creating stories - it is an essential part of the creative process, because the story is what determines the interaction with the users, and how effective this interaction will be. While experimenting with different ways of how to integrate storytelling into design, we gradually framed our view of the storytelling approach. Understanding and framing under the influence of an interdisciplinary research team consisting of the areas of design services, fine and visual arts, social sciences, media and communication. Particular emphasis has been put on the different areas of application and characteristics of storytelling. Yiannis argues that "stories open valuable windows into emotional, political and symbolic lives in organizations". In addition, the stories can be called "one part of the process of adoption of sense" and that "the truth of the story is not on the facts, but in the meaning" (Yiannis 2000). Our goal is to experiment with different ways of how to integrate storytelling and storytelling inspired approaches to design. We want to experiment with different applications and features of the narrator in the course of the projects, switching focus between the story that we tell (as creation), and the stories that are happening (as discovery).

# 3 Cases from Teaching and Research Practice

Underlining that the relationship between culture and research has to be unfolded through a transcultural practice, by the development of stories from the culture, and within a contextual frame of those, the primary focus is to reflect on how culture intensely affects our design activities. Moreover, we want to highlight how designing within complexity means much more than designing in or for a global landscape: it means to design within the continuum of cultural transformation.

We would like to discuss here some unconventional practices of cultural exploration, considering if and how they might be developed into more structured research methods that helps accounting for transculturality, context and stories. Namely, they are:

- (a) a tea house occasionally built as a TAZ of conversation based on tea gifting and performed in public spaces;
- (b) a series of qualitative media and communication actions that act in the domain of cultural heritage inside the contradiction of past and future urban development;
- (c) a programme of workshops by which citizens are called to participate in the activity of envisioning and produce imagery of future cities based on subjective beauty;
- (d) "For us by us", a design process used to stimulate a dialogue between residents of informal settlements to discuss and conceive tech-based solutions to everyday risks in their neighborough (e.g. fire)

These practices have been developed as teaching and research activities in a setting itself transcultural (authors writing as foreigners living in not motherland countries, and with students and participants of different intellectual, geographical, and social background). Three of them have been developed in mainland China, grounded therefore on local settings but with a view on their possible impact. One story comes from Africa, and enlightens how we can orient research towards community empowerment and the design of sustainable solutions with their end-users (not for the end-users).

#### (a) Serendipitea

In China, the habit of drinking tea is not only a consumption; it is often connected to rituals that involve emotional and spiritual communities, family tradition, and healthcare wisdom - for instance, think about family gathering during festivity, as well as ceremonies in temples and sacred occasions. Everybody is familiar with tea rituals, and everybody is able to appreciate the quality of good tea, its importance not only as a product but in the capacity of carrying the values of a whole production chain (including workers, techniques, and environment). Serendipitea is a friendly and gifting-based tea house that has been created as an intimate performance for art festivals with high community spirit, festivals that cherish a DIY approach, and that practices decommodification: the efforts of organising, maintaining, and performing are collective and collaborative although mostly played by strangers. It has been ideated by a group of friends with deep knowledge about tea production, to share the pleasure of excellent quality teas, to contribute to the spirit of inclusive gathering, and to offer a space where new forms of a community could emerge. It looks like a simple table with a tea set, installed for a few hours or days, as a quiet spot where people can stop, have a seat, and taste the brews as well as the conversation with the other passer-by. We have been performing the tea house in a few festival situations, that in design terms we can recognise as communities of practice, but still, they are gated communities. Then, the thought of expanding the context of this performance emerged, along with the desire to offer the pleasure of this temporary setting outside the festivals' boundaries; by this we aimed to push the goal of the spontaneous conversations beyond the serendipity forms in which they happen, towards a more explicit interest in knowing people and their how

and why. We moved Serendipitea to public places, and we performed it as a TAZ of conversation based on tea gifting, that is the ultimate core value that we want to pursue. Gifting is a ritual, often demonised as waste, it's a practice hidden - if not disowned - in current consumerist society: conversation, also, is often an opportunistic encounter, in the society where creating networks is valued for the material benefit they bring and out of a sense of pleasurability. Cities are open spaces, yet often empty of the value of the real discovery since efficiency and productivity drive their development and wealth. In the interest of provoking this mainstream status, we moved serendipity in the middle of urban parks and city gathering, to be an occasional temporary open tea-house: it become an open set-up that is public in its existence (it wouldn't have any meaning without the participants) and scope (it wouldn't have any meanings without a free, unselfish, and undriven pleasure in the sharing). By opening a space of spontaneous conversation, and creating the condition of listening to these conversation without the need of orienting them to specific research goals, we are collecting fragments about how surprisingly citizenry can be, and how various and multiform it appears. We achieve to know better the city through the experience of its creatures. More structured research questions are emerging from the open interaction with the humans being in the city; the forms in which the tea-house is being put in place is gradually evolving to give more space to activity, to interact with the context in which is performed, and to welcome more exchange (sometimes someone brought sweets and candies to share, crafts and games to play, tools for storytelling, etc.). We have been performing the tea-house in 2016 about ten times, being able to expand significantly the perception of how city inhabitants looks like - people we would have never met anywhere else - and we are using this immaterial knowledge for a more reflective ground - about what "users" can represent, not only as a stakeholders of design plans but firstly as inspirators of creative actions that still need to be unfolded (Fig. 1).



**Fig. 1.** The installation of Serendipitea in Kenting, Taiwan, performed at Springscream festival, April 1–4 2016

#### (b) "From Material waste to Cultural Energy". Archaeology of the future

This project has been developed in the context of an MA design studio course at Tongji D&I in winter 2016<sup>1</sup>, as a series of qualitative media and communication actions in the domain of cultural heritage, leveraging on the contradictions among past and future within urban development. This design studio belongs to a series exploring the potential of communication design tools in approaching, understanding, and talking about the complexity of urban changes. In particular, it aims to reflect and design around cultural and social issues, building a strong connection with the physical environment and experimenting with field research.

Students have been sent to look for abandoned objects in areas of the city where great transformation is undergoing, navigating the city across the traces of the past and its decadence, and the landmarks of the future and its opulence. They had to search things that have been forgotten, leftovers, fragments, items from the material culture that could inspire us to find deeper stories within the urban transformation. The brief of the studio was to find those objects, using them as the trigger for more in-depth research and inquiries, and as the spark of a storytelling activity about the present of Shanghai. The role of archaeology is metaphorical: which kind of story do we tell if we could choose to pass on something to the future? Which is the message that we can dig out from the complexity of the present, and that is worth to preserve? How many layers of reality and transformation can we observe, or discover, or appreciate, when we invest time in wandering around, crossing the discontinued boundaries between old and new?

In communication design theories, we called macroscopes the visual artefacts that convey knowledge about a complex, social issues (data visualisation are as such, together with mapping and storytelling tools, and co-creation devices). The course produced macroscopes that talk about the transformation of heritages along the process of the transformation of the city and would build narratives about the forms, the aesthetics, the participants and the meanings of how such change is happening.

Abandoned places and objects indicate the "deadness" of modern architecture, and they hide unexpected forms of life. We discovered that the diversity and beauty of Shanghai are nothing but a creative use of space. Limited resources and population density make people adapt the city to themselves. The activity in the design studio has been conceived to break the rules of time, space, and linear communication between message and users. Instead of producing media for a commercialized user-scape, the stories created used media in a very broad sense: students produced artefacts that embed the complexity of the present, and transfer it in a synthetic way into forms to be received and consumed in the future, building messages that can generate resilience, overcoming the disruption of time, space and culture. By producing outcomes for the future, we aim to use media and design tools to focus on the nature and the quality of the messages, reflect on the contradiction between preservation and innovation, and disrupt the constraint of the aesthetics using instead the transcultural environment of urban development as a stage where new (design) languages can occur.

<sup>&</sup>lt;sup>1</sup> Tongji University, College of Design and Innovation - MA Design Studio 1/2016 - Projects names: Memories of Shanghai, Hidden in the City, Lilong's Memories, Lights and Shadows, See Me - projects will be available online by the time of the conference.

Research had been the stage to re-frame the relationship between the message and the possible recipients: the devices discovered, being abandoned, unused, trashed, wasted, forgotten, dismantled, are out of a cycle of life and use, whereas they enter a new cycle of possible symbolic meanings. Media wasn't the catalyst of descriptive narration. Instead, they serve the purpose to research beyond the sense of displacement that urban change naturally embeds, and they led to a critical analysis of the potential transculturality that urban change may unfold: "Producing knowledge about the loss that is happening. Give to the loss of history a meaning. Building knowledge out from memory. Activate envisioning and share visions. Transform the abandoned in preferable" (course syllabus).

Finally, a temporary exhibition of the projects had been created inside one of the most ancient traditional residential neighborhood of Shanghai, currently under demolition (manifesting itself at the edge of a private area and public place of interest), where they serve as scenography for the storytelling of Mr. Chen, the last member of a family living there for more than one hundred years. He is currently opening the house to passers-by, displaying numerous and ancient heritage relics and fragments, books, newspapers, pictures, unassembled pieces of a history that are not only in the people living there but in all the architectural and material elements of the surrounding. It would be fair to say that by living in the city, no one can avoid the use of public places. Furthermore, this means that it is impossible not to visit them as social scene, although it is not focused, and sometimes unwillingly. Urban public space is a constitutively social situation, especially considering the interactions among urban residents. It is also a historical phenomenon, which means that it varies over time depending on the social and societal conditions. City streets, parks, squares, are regarded as symbols of collective well-being, and they represent the opportunities to discuss the progress and the utility of public management; they are sites of public discourse that facilitate the growth of civic culture and the awareness of political debate and reforms; thus the role of public space within the increasing urbanization and the consequent social problems has changed.

Generally speaking, at the end of the nineteenth century under the influence of the significant economic, political and cultural changes, the city became a place for a new phase of modernization, as the urban population rose, internal migration and movement within the city grew, and new forms of social and cultural interaction between space and people appeared. Public space is defined when it's not private, when it has facilities available for public access, and exists without a commercial basis and not under the control of state power authority; places where people meet each other, regardless of their social status or role in society (Smith and Low 2006). The issues of place, belonging, and citizenship have been highly debated in the intellectual agenda since the early 1990s, yet most of these studies take "the West" as their focus point. The Asian turn may urge us to rethink these notions with the emergence of alternative functions of some spaces, and the re-imagination of public space by what it may be named global modernities. Although citizenship has always been defined as a legal and political relationship between the subject and the state, recent studies propose a broader concept of the citizenry: "the dynamics underpinning the way in which globalisation affects placemaking can be seen as articulating new definitions of cultural citizenship" (Fox 1977). Though there are continuous changes and transformations in how public and private places are categorized, as values that they possess, always depending on their contexts, the distinction of public/personal space can be hardly recognized because one

space can become a part of another. With this action, our media contribute to return to the city an active public space, whose value can be out of its physical borders and there can be an emotional value that creates the connection between the status of the space and its inhabitants (Figs. 2 and 3).



Fig. 2. Students presenting two of the group projects during the final temporary exhibition in the traditional house of Mr. Chen



Fig. 3. Discussion and interaction in Mr. Chen house

#### (c) Cities After Cars. Imagining, designing and visualizing future city spaces.

Cities After Cars is a research project<sup>2</sup> started in 2016 and with approved funding for 2017. It is a programme of workshops by which citizens are called to participate in activity of envisioning, imagery producing of future cities based on subjective beauty.

Through the workshops, we engage groups of citizens in a visionary, hands-on experiment to re-visualize those urban spaces currently organised around cars;

<sup>&</sup>lt;sup>2</sup> Refer to http://citiesaftercars.org for a complete project outline.

imagining an open canvas where unexplored communal aesthetic perspectives and landscapes will be built. Cars are not simply the first mobility instruments of contemporary society; they remain the most powerful symbol of what citizens everywhere in the world call 'development'. Car-based mobility, however, should not restrict the way we think about the cities we'd like to live in. Changing the conditions of current urban reality in China and beyond requires developing new ideas and imagined possibilities for future cities. The research engages citizens and civil society stakeholders into a process of envisioning and self-positioning in such a car-free future, and ultimately to develop policies and guidelines that can serve government and industries interest in developing future mobility services, as well as plans for public space management.

The research is currently in the phase of data gathering through the workshops and will be followed by data dissemination through public exhibitions, and data analysis through policy guidelines development. The research will eventually benefit civil society groups through the activity of engagement, citizens at large through public dissemination, and political and industrial stakeholders through the implementation of strategies for urban change.

We define this research as experimental because the workshops are based on a cultural challenge, and are grounded on research as a way to activate cultural inquiries. In fact, regardless best practices and innovation in sustainable mobility that is getting introduced across urban settings, a car-free future is not yet on the global agenda, neither in the industry nor political trends. Instead, cars are still markers of industrial, economical, and personal wealth. That means, we believe there are so many cars around us because people want them; or, they are unable to think otherwise. Through the workshops, participants are on the front-line of city imagination: they are encouraged to consider beauty over functionality, to cherish meaningfulness versus convenience, as well as to reclaim individual wishes and collective inspirations over technical needs and necessities. Workshops represent a systematic exercise of the "what if" through which the city after cars can be imagined, unfolded, and – eventually – created by the inspiration of minor alternatives, and without the uniformity of the major technological systems. We believe this research can largely affect design implementation of urban planning: talking about beauty in cities can be considered as utopian; thus rather we express the interest of exploring the vision of how a city without cars might spring not from planning or management point of view, but in the choice and imaginary of its citizenry. Motivated by cases study and ongoing experiments all over the world that reduced cars, we acknowledge that intimate and collective visions cannot exclusively derive from planning: they have to be stimulated in order to transform the hidden dreams into actual needs, and then they need to be integrated into it.

Moreover, workshops are experimental because they are not concerned with services or mobility systems. Research yet is leading to language based design outputs, aiming to advance imaginary and vision by the production of visual representations – in the form of postcards, posters, sketches, collage, pop-ups, models, etc. – through images and craft tools. How to fill the spaces not utilised for car-based mobility? What would everybody like to see? How do we find, diffuse, and inject beauty at the micro level of the city landscape? How do these aesthetic visions overlap or converge?

Each workshop will produce a series of images that will be collected into a gallery of visions of future cities as seen through the eyes of their citizens and the workshop participants; reflecting upon these outcomes provides a vibrant starting point to raise innovative collaborative research questions and actions about aspirations for future cities. By running the workshops in urban settlements of different scale, nature, and geography we will collect a variety of visual artefacts that are the seeds of a conversation about what the city we want might look like. Produced artifacts are being coded through grounded theory, and insights will be produced about the qualities that individuals and social network embed with the vision of the future, including needs, aspiration, and missing values. The dissemination of this material in the form of public exhibition will stimulate discussion and critique of the insights whereas they can be developed within a common ground of values and qualities that can be taken into account into future strategies of urban planning.

These language-based design outputs are devices of further design research. Regarding visual disciplines, they are discussed as a toolkit of visual ethnography; as contents, they are coded into narrative patterns and visual taxonomies. They can be modelled to assess the efficacy of envisioning methods in citizens' engagement and scenario building, and this would contribute to a very active literature and practice in the global debate about design for social innovation: referring to the cone of Potential Futures developed by Joseph Voros, a role for emotional - rather than cognitive and informational – knowledge is reclaimed as asset in designing with positive impact. From urbanism point of view (and mainly urban design), it will be discussed how these visions of beauty and possible new space configurations could realistically be integrated into the existing urban landscapes and design. The main focus here would be on the three critical spatial dimensions of 'visual', 'social' and 'perceptual'. The study would also link to theories developed by Jan Gehl, on the progression from occupied space (mainly by cars) towards reclaimed space (primarily by users). From this perspective, we conduct studies on two/three distinct zones in the studied cities, with same parameters for comparison. From a social science point of view all materials can be employed to inquire into "socio-technical imaginaries" (Jasanoff 2016) of urban infrastructures: replacing the car opens up a chance to redesign the city, so how do large scale infrastructures look different? What kind of wishes, hopes, values, etc. about physical infrastructures and urban spaces does this envisioning reflect and provoke? What is the cultural identity ordinary citizens are looking for in urban infrastructures (after the cars)? How do these socio-technical imaginaries of beauty help to rethink future metropolitan design as a social construction of urban space?

At the current state of the art of the project, approved funding will cover the workshops phase (about ten workshops until summer 2017), and more applications are being submitted to extend the workshop into policy feeding actions. Although the factors affecting climate change are systemic and cannot be reduced to car consumption in the cities, the social role of cars affects in a very direct ways citizens behaviours: re-discussing the social need of cars in urban environment will build awareness of individual and participative roles into climate change related actions. Without doubts, the reduction of vehicle mobility will directly mitigate climate change and offer practical evidence of how behavioural changes are at the root of larger urban development actions. By building visions of cities without cars, the promotion of sustainable consumption patterns and the activation of citizens in the process of city management are swifted. Having the citizens engaged in directly tackling climate change embeds the

cultural challenge of connecting individuals with urban stakeholder, as well to connect their emotional needs to the system of resources and implementation policies that might help the vision to become a reality. The analysis will be discussed and integrated into urban local strategic priorities and reorientation into current business practices and network. While cars are an ever-present landmark that shapes urban landscapes, best practices and disruptive cultural innovation in sustainable mobility could be introduced across urban settings to develop a car-free future, and a citizens supported urban management (Figs. 4 and 5).



**Fig. 4.** Projects discussion among participants at the end of Cities After Cars (Shanghai Himalayas Museum, December 11<sup>th</sup>, 2016)



Fig. 5. Participants in action during Cities After Cars workshops

# (d) For us by us - community engagement to bring tech-based innovation in informal economies

A design process structured around three key phases of work with community groups to help them designing their own design solutions, with the intent of making affordable tech-based services available to populations that typically don't have access to innovation. The process aims at enabling communities not only to shape the service model around the new tech product, but also to define how the business model could work in order to make that innovation sustainable and scalable in their reality, so that it can really improve their lives on regular basis (instead of relying on donations and humanitarian aid). This fully integrated in-field research and design approach shifts research from exploration to action, and the design researchers themselves become tools for the community to express their needs, challenges and desires, and turn them into tangible solutions.

The process was tested in the context of a project around fire sensors promoted by American Red Cross with the communities of Mukuru (Nairobi) and Khayelitsha (Cape Town) and has lead to the creation of a full service (named Fire Club) that is now piloted in several cities across Africa and Asia. The For us by us process don't just give to people ownership and control on what services are provided and how - but can generate learnings during the process that have direct influence on the life of those individuals and groups.

When we were working on the fire project, all the activities we did together with the more motivated community members contributed to raise awareness about the specific problem, and distributed information that then stayed within the communities themselves (Cisero and Tassi 2016). For example, during the fire sensors workshops, people learned how to prevent better fire outbreaks and what to do to extinguish them, save their belongings and protect their kids. The groundwork had been set for a potential multiplicative learning approach as some of them promised to start training peers and increase their fire prevention awareness. As an organization, it is possible to also deliver training certificates along the journey that legitimize what the community members are doing and learning, which could potentially help them find jobs (e.g. a training certificate on fire response or human-centered design training certificates to the students who have been working with us to moderate the participatory design sessions) (Figs. 6 and 7).





**Fig. 6.** Experience Mapping and Role Playing exercises during a community workshop in Cape Town (November 2015)



**Fig. 7.** Fire safety service simulation in Nairobi (December 2015): community members studying their role based on a scenario they elaborated in a previous workshop, and then acting out the response journey.

#### 4 Relevance and Discussion

In design industry and curricula, there is a general practice of anticipating the concept and ideation phases with research, but we are here discussing that design research is more than users engagement, and is different that performing interviews seeking for insights. We send students to talk with people, although often those inquiries are the dry repetition of techniques through which students, in reality, search for confirmation to concept pre-sets more than achieve fundamental discoveries. Tasks are accomplished, but insights are shallow. This can happen sometimes also in ready-to-made research in industry and business. It's not a critique to competences, whilst a reflection on the reason for research, that shouldn't serve ideation, rather it should ground it. In this sense, we discuss how research produces analysis but is not sustained by adequately meaningful analytics. When research is performed as a reductive implementation of tasks, it ultimately doesn't get too far. It limits in fact to be a technical exercise with no criticism. It produces stories as a way to silver lining what we already have in mind; it considers context as a way to frame where we already are; it discusses cultures from the limited perspective of a language-based setting (whether nationalities, origin, social status). Pragmatic qualitative research is done through a variety of methods (Creswell 2013): while some of them are simple such as surveys and interviews, the very crucial ones seem to be complex structures of ethnography and phenomenology, they are not composition of task, rather systematic implementation of reflective and critical practice. Moreover, in design research, thus practice are consolidated, the toolkit is mutable and adaptive to the complexity of the research settings and scope: therefore we claim that research and development upon practices and methods is the fundamental step to enter the journey towards discovery and insights. Considering complexity as the framework where design can take inspiration from, but also has to give a contribution to, we value the middle ground between the micro and macro perspective. Designers can work in a complex world (the "what") because they do start from recognising the complexity of the inner possibilities (the "how"); thus in being researcher within a creative domain means performing exploration rather than applying technical procedures. Our first challenge is to imagine and finalize tools that may help in framing the complexity and setting the boundaries of possible, and meaningful understanding. The value of research is not amounting to the data collected – either quantitative or qualitative – but in understanding which the right question might be, and in which language it can be posed. Therefore, the examples are discussed as ethnographic exercises in which transculturality is a process of subjective negotiation, when relative and progressive framing defines the context, and where stories include pluralism and allow diversity of interpretations.

A lot of writing is being produced about the limits and the inutility of design research, as a large slice of budget that does not get to the point of innovating the industry itself (Courtney 2017; Miller and Daly 2013). We agree, only in the sense that research methods is what need to be questioned and advanced, not research purposes and scope. We claim that better design research can emerge from fewer interviews to users, and more conversations with human beings; better insights when valuable data from automatic analytics can be integrated by meaningful documenting of the complexity of design problems, recognizing in this way that the value of research transcends the goal of having efficiently profitable outcomes. Design might serve innovation but it also has a social and cultural role on offering dense and critical outlooks on the nuances and the variety of the realities that exist. For this purpose we have been describing experiments where typical qualitative interviews are substituted by visual conversations, open setting for strangers exploration, values based confrontation, and tools for handling the immaterial, the psychological, the visionary; all elements of culture of which we can say very little outside of subjective perspective of the researchers, yet elements that define the reality of what we research in a very situated way. We believe automatism and repetition of methods should be discouraged in front of complexity because they inform the design that we want (or that we have to do, as students or practitioners) but not at the all the design that might be genuinely necessary. Instead hypothesis are the creative agent of any meaningful decision and can be inspired by unconventional research practices. The cases discussed are not established methodology yet, but all are useful to give value to qualities over quantities, to diversity over similarities, to the specific over the generic: these are all feature that we believe are pertinent of a healthy look into complexity with a beneficial impact to social knowledge before the innovation growth.

#### References

Beals, R.: Acculturation. In: Anthropology Today: An Encyclopedic Inventory, Chicago (1955) Cisero, C., Tassi, R.: Market creation through community engagement: combining ethnographic and business thinking to bridge life-changing technologies to emerging economies. In: Ethnographic Praxis in Industry Conference Proceedings, vol. 2016, issue 1 (2016). Accessed 29 Nov 2016

Courtney, J.: User Research is Overrated (2017). https://medium.muz.li/user-research-is-overrated-6b0fe101d41#.ywt19qvca. Accessed 20 Feb 2017

Creswell, J.W., Creswell, J.W.: Qualitative inquiry and research design: choosing among five approaches. SAGE Publications, Los Angeles (2013)

- Fox, R.G.: Urban Anthropology: Cities in Their Cultural Settings. Prentice Hall, Englewood Cliffs (1977)
- Gero, J.S., Smith, G.J.: Context and design agents. In: Kokinov, B., Richardson, D.C., Roth-Berghofer, T.R., Vieu, L. (eds.) CONTEXT 2007. LNCS (LNAI), vol. 4635, pp. 220– 233. Springer, Heidelberg (2007). doi:10.1007/978-3-540-74255-5\_17
- Miller, E., Daly, E.: Understanding and measuring outcomes: the role of qualitative data. White Paper, IRISS (Institute for Research and Innovation in Social Services) (2013)
- Ortiz, F.: Cuban Counterpoint: Tobacco and Sugar. Duke University Press, Durham (1995)
- Malinowski, B.: A Scientific Theory of Culture and other Essays. University of North Carolina Press, Chapel Hill (1944)
- Pu, M.: Public Places in Asia Pacific Cities: Current Issues and Strategies. The Geojournal Library. Springer, Dordrecht (2011)
- Smith, N., Low, S.: Introduction: the imperative of public space. In: Low, S., Smith, N. (eds.) The Politics of Public Space, pp. 1–16. Routledge, New York, London (2006)
- Valsecchi, F., Tassi, R.: The listening capability: three insights around and about a design way to storytelling. In: Bertolotti, E., Daam, H., Piredda, F., Tassinari, V. (eds.) The Pearl Diver: The Designer as Storyteller. DESIS Network (2016)
- Valsecchi, F.: Cultural translations as design capability. Lessons learnt from the European-Asian encounter in understanding and creating embedded meanings. In: Meroni, A., Galluzzo, L., Collina, L. (eds.) The Virtuous Circle: Design Culture and Experimentation, Cumulus Conference Milano, 3–7 June 2015. McGraw-Hill Education, Italy (2015)
- Yiannis, G.: Storytelling in Organizations: Facts, Fictions, and Fantasies. Oxford University Press, Oxford (2000)
- Jasanoff, S.: The Ethics of Invention: Technology and the Human Future. W. W. Norton & Company, New York (2016)