

Design & Territories: Emergencies and Conflicts at the Time of the Anthropocene

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ABSTRACT

The aim of the paper is to present a focus on the relationship between Design and Territory, framing it in the contemporary debate about the Anthropocene and orienting the discussion in the direction of emergencies and conflicts concerning the evolution of our artificial world. After an overview about typical issues regarding the relationship between design and territory, the authors interpret it through the concept of “time”, which is the, often underestimate, paradigm at the base of Advanced Design studies. This reasoning will be developed in three phases: how design relates itself with the past of territories; how design deals with the current issues of the territory, in terms of emergences and conflicts; how design anticipates visions of sharable future themes and solutions.

Keywords: Design and Territory, Anthropocene, Emergences and Conflicts, Advanced Design, Time Factor.

INTRODUCTION

The territory is the complex phenomenon that contains us and of which we are part. We are used to interpreting it according to the discipline that belongs to us as scholars. The territory exists as a geographical phenomenon, as an economic phenomenon, as a historical phenomenon, as an anthropological phenomenon, as a political phenomenon, and as a physical-climatic phenomenon. The terrestrial and marine territory in the last two centuries has become a phenomenon ascribable to the realm of the artificial because the entire globe is, we can say, completely designed, manipulated and altered (if only for climatic reasons) by human action. In the last twenty years, we have called this space-time the Anthropocene because it is unquestionably dominated by the human being. For this reason, the relationship between design cultures and the territory today becomes so obvious, intense, emerging and urgent. Ever since design has dealt with territory (Cross, 2006; Hanson, 2000; Celaschi & Trocchianesi, 2004; Ewing & Handy, 2009), we must accept that the complex subject we are

dealing with is ascribed to a commodity, that is, to a set of material and immaterial elements that will be the object of market choice and will have a value, a meaning, a shape and a function (Celaschi, 2008).

Here we are particularly interested in tackling a possible paradigm shift related to an off-the-scale perspective. It is in fact unquestionable that, so far, the territory, in the vast community of designers, has been essentially a matter concerning urban planners, environmental engineers or architects. However, at a certain point, we became aware that, in addition to being artificial, it had become a commodity (Debord, 1967; Augé 1992; Boeri, 2003; Alaily-Mattar, Dreher & Thierstein, 2017). It is experienced, used, bought, sold, communicated, modified, reproduced, designed, exploited, destroyed and recycled, exactly like a product or service on the market. This brought about the situation whereby design, conceived as a process, was called upon to deal with it intensely. This is no longer only regarding its final form, but the ways through which it is intentionally transformed continuously.

In this text we would like to orientate the discussion in the direction of emergencies and conflicts concerning the planned evolution of territories. The territory is a living thing, which contains plants, animals, humans and inanimate substances (air, water, raw materials, earth) and it is, at the same time, the form that cultures take in depositing and stratifying themselves in space. Once altered, these things will react against each other or together with others. The territory is the field in which the system of which we are an infinitesimal part is manifested, extremely powerful and unconscious. It is the container of the Anthropocene and its form is the consequence of an age that we have been exploring for two decades with new eyes and new potentials, but with unchanged biological and cultural thirst for invasion, for conflict, for clashes among identities, races, cultures, interests and genes.

1. TYPICAL ISSUES REGARDING THE RELATIONSHIP BETWEEN DESIGN AND TERRITORY

As we have already mentioned, there is an obvious, but not trivial, problem of scale. The size of the territory embarrasses the designer, who is used to dealing with smaller and simpler assets. This challenging relationship is only partly related to size and is mainly associated with the systemic nature of the territory. It is difficult to circumscribe and isolate it as a fact in itself.

At the same time, there is also a problem of timing. The designer is accustomed to intervening and obtaining rapid, measurable and limited results, which can be appreciated in relatively much shorter times than the typical times of territories' evolution. However, as

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regards time, the contemporary city is increasingly the result of actions designed as temporary events (Clarke, 2007; Bishop & Williams, 2012). These transform and occupy space for a period of time and then return to the previous state which, however, in function of the action carried out, is no longer the same as before (Ingersoll, 2006). Finally, time is the parameter through which the territory is increasingly used by those who do not live in it constantly (tourists, city users, travelers, etc.). These are all subjects who are willing to evaluate the attraction of a place as a function of the time needed to be used (Corbin, 1996; La Cecla, 2015). We can refer, for example, to the relationship between major events and the territory (Haydn & Temel, 2006; Essex & Chalkley, 2010; Lauricella, 2015).

There is a problem of objective: what aims does the designer who deals with the territory pursue? The designer is certainly a mediator of knowledge and interests as regards the territory (Florida, 2003; Landry, 2006; Celaschi, 2008). If we operate in the territory-commodity paradigm, we can easily imagine that the designer's aim is to encourage the use of the territory through an intervention on the attractiveness (synthesis and communication) and on the openness and usability (in the sense of intelligibility, ease of use, rapidity of use, contemporaneity of the message, search for user's contribution as a co-producer of value).

There is a client issue: who does the designer who deals with the territory answer to? This theme opens up a very complex debate that we could summarize with the reasoning called "design synthesis in the interplay between different identities dominating the project" or, as Achille Castiglioni would have said, researching the main component of the design process. No single client paying the designer seems to be clearly identifiable in the design of territory. Each time, there is an implicit client of primary importance, who is the citizen: the unaware recipient of any project. This happens both in the short period of the transformation and in the long-term effects of the transformation obtained.

There exists an issue of tools (Landry, 2012): with which technologies and practices does the designer fit into the complex process of altering the territory? We can say that this theme has been ever more relevant since the technologies referred to are those enabling technologies of the digital revolution (Ratti & Claudel, 2016). These technologies are in fact the main culprits, for better or for worse, of the transformation from city place to smart city, that is the shape that the territory takes when it is regulated with respect to the flows of information that synthesize it, which are transformed into data managed by the computer.

And, finally, there is an issue of knowledge: with what attitude does the designer approach such a complex and delicate theme? Who has prepared the designer to deal with the territory

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and to do this by interacting with a corpus of knowledge that is so different from that with which they normally activate in industrial or post-industrial production processes?

2. DESIGN & TERRITORY: PAST

Questioning oneself on the approaches, methods and tools through which design can interact with the territory within a cultural dimension, implies a reflection on the ways in which it relates to the forms, processes and knowledge inherited from the past. The project can, in fact, communicate with the dimension of the past and learn from “things”, in order to produce artifacts capable of narrating a process of assimilation of memory naturally projected into the future. This relationship has a recent history (Irace, 2013) based on the progressive coming together of two apparently antithetical concepts. One is cultural heritage, traditionally associated with the forms and inheritances of the past, and the other, that of design, is linked to the dimension of innovation.

Yet, in the last fifty years, the evolution of cultural heritage has experienced a pathway that has changed its nature, borders, constraints and conceptual proximities, also in relation to design cultures (Lupo, 2009). Our perception of “asset” linked to the past has expanded, taking the place of the more limited concept of “things” to be protected and preserved. Safeguards have progressively moved from the conservation of works of art and individual buildings to entire urban districts, to the landscape, to temporal things and even to the manifestations of intangible cultures, associated with anthropology, oral traditions, cultural stories, rituals and systems of historical interaction with the environment. The intangible dimension of cultural heritage, preserved in the form of knowledge, processes and techniques, can be traced back to UNESCO’S 2003 Convention, in which there is a deeper attention to processes and a more active role for the community (Bortolotto, 2008).

At the same time, it is possible to highlight a progressive complexification of the meanings attributed to design practices in relation to cultural heritage. The role played by design as regards the value dimension of cultural heritage (Design for Cultural Heritage and Design with Cultural Heritage), today, seems to open up to a new responsibility. This involves implications that regard the selective and coding dimension of the cultural heritage itself (Design as Cultural Heritage and Beyond). Let us attempt to articulate these different forms below.

2.1. Design for Cultural Heritage: Awareness, Observation, Interpretation, Valorization

With the progressive broadening of the definition of cultural heritage, design practices have been called upon to activate processes aimed at raising awareness, observation,

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interpretation and study. Through the conception and creation of exhibits, installations, institutional communication and events, design has been able to “valorize” existing assets. Through a process of stratification of value, it has been possible to superimpose, on the real and documented consistency of the asset, devices for the production of “added value” capable of narrating and representing its multiple meanings and forms (both tangible and intangible).

2.2. Design with Cultural Heritage: Activation, Fruition, Co-generation

Alongside the cognitive and narrative dimension, further contexts of application of the relationship between design and cultural heritage look at the relationship with end users, also involving the contribution of digital technologies (Lupo & Trocchianesi, 2013). Not only design puts itself forward as an interpreter of material and immaterial cultural heritage and a generator of new systems-products with high cultural value, but acts as a facilitator of participatory processes (mediator between knowledge, needs and community) and as a popularizer of knowledge to the wider public (Celaschi & Trocchianesi, 2004; Lupo, 2009).

The relationship between the user, the asset and the context therefore becomes central and is expressed through the development of new forms of cultural experience, to the point of achieving a pro-active dimension, in which those who normally act as users turn into producers. As Alessandra Spagnoli reports, “it is possible to interpret an imbalance in the profiling of cultural users towards increasingly emotional and relational aspects, linked to the sphere of the construction of identity of the self” (p. 29).

The cultural heritage thus needs to be lived as an experience in which the subject is an active part in the process of building knowledge and fruition acts in a transformative way on the users, impacting on their cognitive, sensorial and emotional balance (Pine & Gilmore, 2011). In this sense, the communicative and interactive effectiveness of the enabling technologies allows the creation of new models of knowledge, of unprecedented levels of interpretation, of unusual points of view and forms of immersion, which act in continuity with the aim of enhancing the cultural heritage, through a plurality of appropriately chosen channels

2.3. Design as Cultural Heritage and beyond: Identity

Finally, the progressive expansion of the concept of cultural heritage opens the proposed reflection towards an extension of sense and meaning, in which design itself takes on a role in the process of selection and codification of cultural heritage. The attempts to historicize the path that led “design and, more generally, applied arts and material culture” to be recognized as a cultural asset - worthy of protection, conservation, display and fruition - are

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part of it (Bulegato et al., 2019). In this sense, objects, understood as “cultural artifacts” (Lubar, 1993; Kingery, 1996; Daston, 2004), represent a “form of time [...] a visible portrait of the collective identity, be it tribe, class or nation” (Kubler, 1976, p. 18). At the same time, there is an interest in coding craft as a distributed heritage, or as a knowledge-centered cultural process, in which design can act as a mediator to link references to traditions, local identities, skills and technical knowledge to the new post-industrialism production chains (Lupo, 2019).

But there is yet another direction that seems to be moving embedded, which as to do with the concept of “living cultural heritage” (Rampello, 2019), that is, “another heritage, less known and less valorized”, closely linked to the manual work of man. It is “that set of activities that has transformed the territory into the outcome of agriculture and results of breeding; which has revived the materials in crafted products; which has been able to combine tradition with innovation, across the centuries, up until today” (Carnevale, 2019, n.p.). The intergovernmental organization ICCROM, for example, launched a programme on Living Heritage Sites in 2003, as part of its Integrated Territorial and Urban Conservation (ITUC) activities, in order to highlight the living aspects of heritage sites. According to this direction, it is possible to imagine a progressive extension of definitions that transcends the consolidated criteria, to look at new contexts of application. Man returns to the center of the project, not as an object, but subject, animator, fulcrum of the concept of cultural heritage itself. Attention is therefore placed on the way in which, “in people’s stories, the trade, the life, the places, the memory and a personal idea of the future are linked and have given a new meaning to the words ‘tradition’, ‘innovation’ and ‘quality’” (Carnevale, 2019, n.p.).

But can we go beyond this vision? Living cultural heritage may not only be those related to man and his know-how, like part of an extended vision of the territory made up of material and immaterial elements. Using a biological metaphor, the entire biosphere falls within this vision. As Paola Antonelli (2019) argues, “person-centered design in reality reflects an antiquated and anthropocentric vision of reality” (p. 21).

And here then, we could cite the work of Paola Bay and Paolo Bruni (2018), in which they re-imagine the concept of “Reliquaries” including natural elements, with the aim of extending the dimension of heritage to the living and the organic. Proof of this trend is demonstrated also in the “Resurrecting the Sublime” collaborative project by Alexandra Daisy Ginsberg, Sissel Tolaas, and a team of synthetic biologists (2019). Thanks to the support of the biotechnology company Ginkgo, they, firstly, extracted DNA from specimens of three flowers stored at Harvard University’s Herbaria, then resynthesize gene sequences that might

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encode for fragrance-producing enzymes, and, finally, reconstruct the flowers' smells. As they say, "the project allows us to smell extinct flowers, lost due to colonial activity".

These few examples invite to look beyond the existing concept of living cultural heritage and open new scenarios for the designers' activity: in the Anthropocene we should be aware that what we do not conserve will not leave a trace, with the possible consequence that we will progressively lose memory of what really happened to our mind/body, to our artificial word, but also to the territories, in terms of natural macro-environment and micro flora and fauna. These reflections belong to emergences and conflicts we must be conscious of.

3. DESIGN & TERRITORY: PRESENT. DESIGN AS SATELLITE SENSOR

The variables identification that allows to draw the current state of the territory in order to extract key issues to be approached in a multidisciplinary way, this can only be possible from the design perspective as a monitoring axis that understands its field of action as a complex system. In this way, the territory must be understood at different scales, from the common events that move the planet to the variation or particularity of a specific region, that is, an inclusive global level to give a referential framework and a local scale that points to the peculiarities of the territory.

In a first stage/scale, the world system can be understood thanks to technological development and the communications network that yield data from the monitoring of massive events that convergent draw strong lines of intervention. The events that are news on a daily basis are the result of large factors that, related to each other, have chain impact and, in a particular way, in each of the regions of the planet (Figure 1).

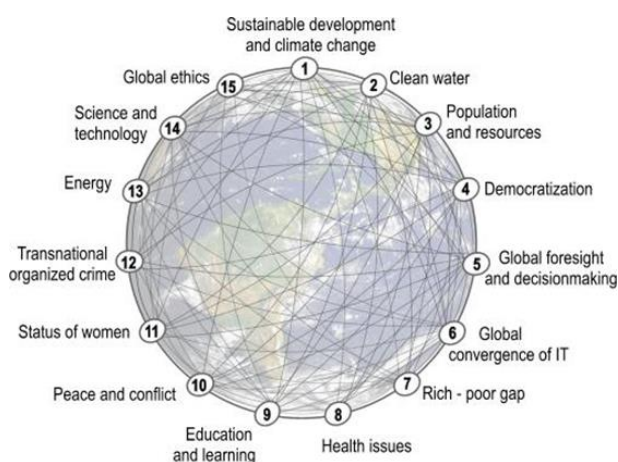


Figure 1. See as an example, the big issues and global challenges identified by the "Millennium Project" (2020).

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Each challenge is a sea of opportunities that directly become key issues to intervene from contemporary design to improve the perspective of humanity, but also, each challenge contains questions and data that stimulate the global analysis from a strategic approach.

Take as an example the questioning of how can sustainable development be achieved for all while addressing global climate change? It is clear to assume that the outline of general actions to achieve goals that reduce negative impacts would only be the beginning of the road.

The dependent variables implicit in each of the presented data, make clear multiple ways to establish new challenges from the design perspective. Each aspect mentioned, can have behind a systemic and adaptive brief to global movements and changes, but also a specific and own brief of the same problem, in a particular region. A redefinition to address problems, identify opportunities for action and propose solutions connecting in each region the social, economic, political, cultural aspects, etc., is essential to be able to undertake local impact actions, linked to global reality. In this way, the focus on specific territorial scales allows to draw development path maps from the competencies of a strategic designer. In this regard, continuing with the example, an evaluation of the global considerations of Figure 2 in Latin America and nearby, in each of its countries, would show particular lines of action and with different traits to the evaluation of the territory in Europe, Asia or North America.

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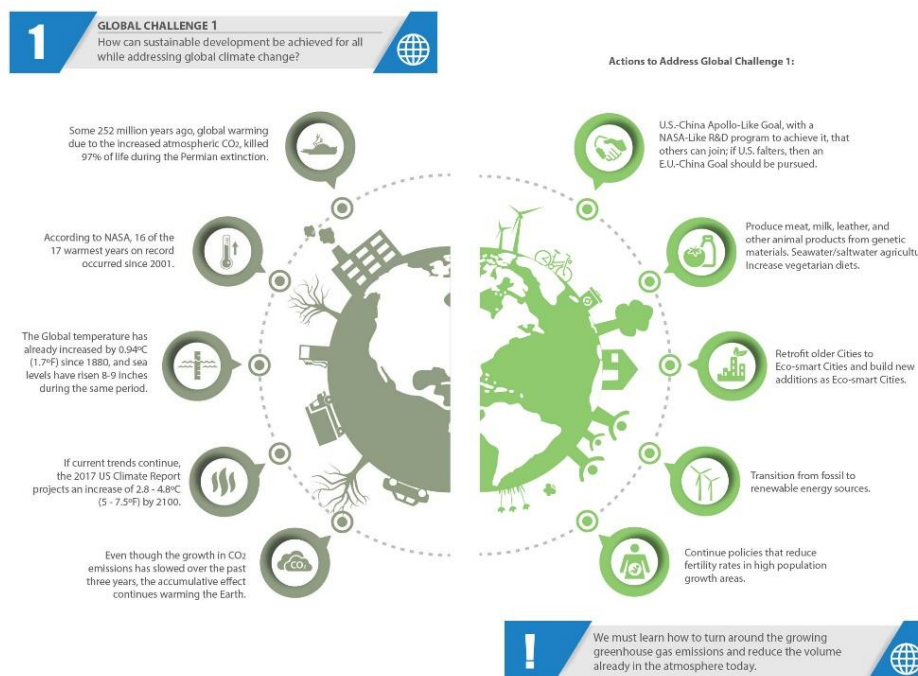


Figure 2. Global Challenge 1. How can sustainable development be achieved for all while addressing global climate change? The Millennium Project (2018).

The designer has the ability to handle complex scenarios, dialogue with all actors and entities, while identifying traces to work in the fields of anticipation.

To determine the emergencies through which we can photograph the current state of the territory and extract a series of key issues for contemporary design, it is necessary to understand data, such as: network of connections, signs and rituals, which each territory has manifested through its own characteristics and needs, marked by concrete signs that must be solved from the consideration of local changing scenarios, highly connected to the globalized world.

3.1. Design as an emergency sensor

In the previous approach, design is taken as a satellite that connects, relates and hierarchizes the information coming from the events on a global scale identifying in a general way and through anticipation tools, great ways of intervention to draw strategic maps of action. Similarly, it is discussed the need to manage a second scale already landed in each of the elements identified in the global macro system, in order to distinguish the variation or

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particularity of the identified pathways, in each of the studied regions, that is, a local scale that points to the particularities of the territory.

In this regard and as a first instance, it is necessary to study the role that design should play in social processes and activism, in defense and vindication of human rights, in the search for the reduction of social inequality and the concentration of wealth. As Oxfam International states, the gap between the poor and the rich is disproportional where the richest 1% of the world's population has more than double the wealth of 6900 million people. But inequality not only occurs in terms of wealth and well-being, it is impossible to describe and understand a territory in which the study of the transformation of gender inequality and the power relations that they generate, is not addressed, as the UN (2019) exposes, gender discrimination occurs mainly in access to health, education, political representation and the labor market.

At the same time, the increase in the displacement of people due to climatic emergencies and water scarcity, which also concentrate on the poorest populations, is an urgent challenge for the design practice, whether as emergency care measures for the increasingly frequent climatic disorders, in prevention and alert systems, or in processes of water collection, sanitation and optimization.

On the other hand, the precarization of employment as a labor scenario for young people, as Santamaría (2018) suggests citing Laval and Dardot (2013), focuses on “increasingly individualizing and eroding employment and weakening social protection systems, by transferring the competitive rationality of the economic market to all social spheres”. This precarization is concentrated in young people under 30, with low-income, temporary and part-time jobs, with the subsequent postponement of the development of their personal life project, in addition to the reduction of their contributions to country social security systems, which puts the future sustainability of these systems at risk; this is a scenario that young designers must also face.

The lack of regulation or the lag in its formulation and implementation by the states, to adapt, mitigate or avoid job insecurity due to the rise of online service platforms (taking UBER as a paradigm), where the “Gig Economy” model (Kessler, 2018) or the “small economy” tasks generates important conflicts within the economies of most countries, leading to the displacement of services from the traditional sectors to these “new sectors”, but without the corresponding responsibilities and obligations in labor, environmental and social matters.

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It is also determinant to activate design, as an action that promotes occupational transition scenarios in post-labor dynamics, this as a result of the rise of information technologies (robotics and artificial intelligence, among others) and the gradual population aging (increase in life expectancy, reduction of birth rates, etc.); requiring the designer to address issues based on improving people's aging experience.

In this same direction is the so-called Gentrification process, which causes the displacement of the habitual inhabitants of urban areas, due to the increase in housing costs and the transformation of community spaces into trade/tourism. This event breaks the bonds and networks (social, economic, cultural, etc.) between the inhabitants of the neighborhoods, transforming the stories and imaginaries of small societies and imposes the model of "Fast-moving consumer goods" to the public and private space of these communities. The consequence in many cases is the "corporatization and privatization" of public spaces, which limits access to the entire population and can only be accessed by those who can afford it. This is a scenario in which design has participated as a driver of this transformation in the configuration of attractive environments, but it is time to stop.

Additionally, the design is immersed in the conflict between the protection of intellectual property and the dynamics of "open source" and DIY, within the framework of the reduction of the concentration of wealth, the urgent discussion about the concept of property (Piketty, 2019) and the strengthening of sovereignty for well-being (food, cultural, environmental, etc.).

These are key issues in the contemporary design scenario, the most urgent and decisive in any discussion about the territory; in this sense, it can be affirmed that each one of the points mentioned, represent in themselves a starting point to detonate strategic frameworks of innovation and development guided by design.

Finally, it should be noted that the determination of incidents through which we can photograph the current state of the territory in order to extract key issues for contemporary design, will always involve understanding design as a viewer of complexity and therefore as a sensor of emerging issues. It is important to understand, more than ever, the discipline of design as a powerful tool for change that, from a critical point of view, assumes social and ethical responsibility to transform society and ensure sustainable collective well-being.

4. DESIGN & TERRITORY: FUTURE

Time has been an intrinsic construct in design, not only in the instrumental way that could be the very pragmatic approach of the design processes dealing with the time-to-market dynamic, but also in including time as a conceptual paradigm that broadens the scope and approximations of design and produces wider frameworks for tackling problematics.

Including the long-term into the design project gives a wider perspective not only in the approach, but also in the outputs of its processes. Time as a design factor has been moving the design approaches from the traditional focus of the discipline on the spatial variables (morphology, aesthetic perceptibility, dimension of things, and relationship to the human body) to practices that include the time variable on a more central way, and enable discussions on future socio-technical or socio-political paradigms (Iñiguez Flores et al., 2019); this practice might include the spatial variable too, but the time variable opens the possibilities of design practices to get in discussions of a different nature, the future nature.

Future practices on design have been described under the notion of Advanced Design (Celi, 2015) as the practices of design that imagine future perspectives by envisioning future products and processes, the practices of design are able to anticipate future paradigms and create possibilities for the future, a future defined by the long-term that can sum years or even decades. The creation of future visions has been present historically in the becoming of the design practices, from the design utopias to the speculative practices (Dunne & Raby, 2013), passing for the managerial approaches of design as a vision (Borja de Mozota, 2003). Design has been creating a very diverse portfolio of methods and processes oriented to create new visions and, during the last decade, this has been particularly true, there has been a rising interest around how design can contribute on creating futures, and how design can be the platform for developing common-places, scenarios, paradigm shifts and criticism.

Several initiatives worldwide (connected or not with the design scene) have stressed the importance on the reflection regarding futures, many of them arguing that in the face of complexity and polarization that we are living, the future might be our only common place for mutual understanding and shared values (Poli, 2010), this is particularly relevant when we are approaching a complex task such as the territory, the more complex the design problems are, the more time becomes a crucial factor to deal and be aware of. Having future visions where we can all converge (or have evidence of disagreement) help us to lead with uncertainty, and create the frameworks for new paradigms emergence, exploring futures adds into the discussion the possibility to embrace complexity.

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The territory as a subject is a multi-factorial issue, the degree of uncertainty easily may result in ambiguity and overloading of information, several disciplines when approaching the territory do that under the heritage and tradition of the scientific method, Prigogine (1997) criticize how the predominant paradigm of science tackling issues has been deterministic and that leaves out the idea that “events” in future are not predictable but shall be considered in a wider (complex) approach to them; design as a non-deterministic discipline is able to deal with practical and procedural approaches that deal with the unpredictability of interaction behaviors in systems (Iñiguez Flores, 2016); in this sense design has becoming more and more relevant as a discipline that facilitates processes that deal with the complexity of the territory. The non-deterministic character of design might play a significant role when the project requires to stress out the long-term in order to create future possibilities.

We have already mention that design has an enormous potential when tackling territorial issues because it is able to deal with the complexity through its approaches, and a second factor that adds to the potential of design is that it is able to set the discussion regards the territory in the future because it produces new visions, these two potentialities of design may conduct the central inquiries: which would be the design approaches that deal the complexity of the territory? And, which would be the visions that enable the paradigm shift for a positive (or sustainable) future? To approach these questions (and use of the two design potentialities already mentioned) it would be necessary to set a framework of the possible futures, there are many references to do that, one of them could be the consensus work of the World Economic Forum developed in their Global Risks Report (Collins, 2019) that presents the following list of possible scenarios of “Future Shocks”:

Weather Wars: Technologies capable to manipulate the weather are getting more accessible and feasible in a large scale, this could cause tensions between countries, besides the effects on climate change.

Open Secrets: Personal and organizational data might be in danger because of quantum computing, this technology makes obsolete the traditional security information technologies.

City Limits: The later years migration from the rural to the city could arrive to a point of where there would be the biggest distance (in terms of wellbeing, resources, economic and political) that we could manage as a society.

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Against the Grain: Given the climate change, food-supply could create tensions between communities and countries, how to create a more resilient (and equitable) food chain.

Digital Panopticon: Biometric technologies might increase the possibilities for services and security at the territories, but it increases the surveillance also.

Tapped Out: Cities are facing the risk of water scarcity, in the future there could cause tensions between territories, and may social problems such as migration, hygiene, and hungry.

Contested Space: The low earth orbit has more and more traffic, the space race is getting very competitive too, this might create new geographies of tension in the future.

Emotional Disruption: Artificial Intelligence is opening a new landscape on the way we interact with our world, it can predict behaviors and respond emotions, it might be very helpful to society but it could create new risks and possibilities for harm.

No Rights Left: The polarization and diversification of values is creating more authoritarian governments; the social stability might be the excuse for a declining on individual human rights.

Monetary Populism: Instability and polarization might provoke that bank policies tend to centralize and control, and might question their independence from government.

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