Design as Common Good

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Design & Permaculture. Shifting paradigms to build food sovereignty in Tunisia

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Abstract | The catastrophic effects of the Anthropocene ie of human action on the planet are becoming more and more evident. However, different movements in both the Global North/West and the Global South/East are challenging the status quo, as new forms of governance and collective action are concretely implemented by communities to protect and maintain the shared resources entrusted to them. The permaculture movements offer in this sense alternative means of organization in response to the Anthropocene. In Tunisia, where several voices are calling for a real change in the trajectory of the economic model and the agri-food system to build food sovereignty, we have also seen the emergence of a network of permaculture practitioners. In parallel, the oasis of Jemna has become the symbol of peasant resistance and the practice of commoning; recalling the concept of autonomous design.

Keywords: Design, Permaculture, Common Good, Resilience, Anthropocene

1. Introduction

The catastrophic effects of human action on the planet are becoming increasingly evident and the term Anthropocene indicates the current geological epoch where our species have become a primary driver for global environmental change and the main geological force on Earth. However, Williston (2015) refers to the Anthropocene as a project, going beyond its specification as a geological epoch; in that way it would be a call to place our industrialized present in a time frame that is both evolutionary and geological. In fact, many are not satisfied with the term Anthropocene, considering it as reductive, hiding the real question that is what politics anticipate the catastrophe sufficiently so that futures stay open. Some prefer the term Capitalocene (Moore, 2016) —pointing directly to the political economic system—, when others choose the one of Eurocene or Technocene (Sloterdijk, 2015) — conjuring the technological revolutions of the modern age and their side effects , which, should be billed to the account of the European civilization and its technocratic elite—.

In Tunisia, the collapse is very concrete and its effects have increased dramatically in recent decades especially since the Arab Spring. Recent literature clearly links migration to the challenge of food security and climatic changes (David, 2018; FAO, 2018). Bettini (2019) speaks about (Climate) Migration as a symptom in the Anthropocene, joining the criticism of others regarding the lack of political will in tackling the Mediterranean's core problems with policies that addressed symptoms rather than causes (Engelke et. al, 2017). Numerous voices call for a drastic change in the trajectory of the economic model, to reflect of new pathways for the development of the agri-food system in order to build food sovereignty and remedy the effects of dependent (colonized) and exporter agriculture (Schwoob and Elloumi, 2018; Labidi and Riahi, 2019). This is in line with the discourse advocated by Permaculture movements, which, because of their combination of local, situated design practices and underlying social and political philosophies, provide alternative ways of organizing in response to the Anthropocene (Roux-Rosier et. Al, 2018). In this context we noticed the emergence of several citizen/academic initiatives promoting permaculture in Tunisia. The permaculture movements offer in this sense alternative means of organization in response to the Anthropocene.

In this same context of the Anthropocene, design is called upon to reinvent itself; Its responsibility is questioned because it is at the heart of unsustainable systems of production/consumption. On the other hand, in many of its contemporary forms, it carries the problematic ambition of improving the habitability of the world as a projector or corrector (Bonnet et al., 2019).

In parallel, the oasis of Jemna has become the symbol of peasant resistance and the practice of commoning. It was the theater of the emergence of a local and pluralistic civil society, the learning of participatory democracy and a pioneering experience in Tunisia, obliging the state to create a new legal framework for social and solidarity economy recently. This is recalling the concept of Autonomous Design (Escobar, 2018) or what Manzini (2015) defines as diffuse design talking about the widespread capacity of people and social groups to solve

urgent and most felt problems in their social environment. Our research would question the support role that designers can play in relation to these diffuse capacities on the territories and how to couple design and Permaculture approaches to overcome these issues for the common good. Thinking about the work of Ostrom (1990) on Commons, the idea would be to understand the role of design in helping to shift paradigms from an extractivist economy of growth to an economy of resources; a design attached to situations instead of objects.

2. Anthropocene: An era of mutual aid

With the concept of Chthulucene, Haraway (2016) instead sought to develop "a kind of timeplace for learning to stay with the trouble of living and dying in response-ability on a damaged earth" (p.2) as opposed to the Anthropocene. Indeed, some Scranton (2015), speaks about the need to learn to die — as a civilization — in order to adapt to this strange new world, have new ideas, new myths and new stories, a new way of thinking our collective existence over and against capitalism. Servigne & Stevens (2015) make the link between Anthropocene and the notion of collapse in order to make it even more tangible; seen as certain, the collapse thus loses its tragic dimension. Paradoxically, they consider that we are soon entering the era of mutual aid. The disappearance of the social order in which we live would not lead to disaster, chaos or panic, as, most humans exhibit extraordinarily altruistic, calm and composed behavior after a catastrophe.

2.1 Emergence of new forms of collective action: Permaculture between commons and new materialism

Many scholars denounced the unsustainability of capitalism and the neoliberal model, in addition to its inability to give solutions to the various crises it creates (Kempf, 2013; Klein, 2014), suggesting the "commons" as an alternative model and mode of organization for a transition towards a post-capitalist economy (Ostrom, 1990; Dardot & Laval, 2014; Hardt & Negri, 2014; Rifkin, 2014). Commons movements propose forms of governance other than privatization or statization, as they are concretely implemented by the communities to protect and maintain the shared resources entrusted to them. Capitalism would be at the very origin of its own fall because of the spontaneous rise of collaborative production using network technology (Rifkin, 2014). Mason speaks about "the educated and connected human being" as "a new agent of change in history" (2016, p. xvii).

One could also evoke different environmental activist movements both in the Global North/West and Global South/East of the world. These movements merge and aim to anticipate the end of fossil fuels, climatic disturbances, or disruptions in the food supply. The idea is to build small, resilient systems at the local level that will better endure future economic, social and ecological shocks. These systems and movements are defined by Schlosberg and Coles (2015) as "new materialist movements".

In the North, the Degrowth movements, inspired by Meadows (1972) and the Transition Town Network originally launched by permaculture designer Rob Hopkins (2008), are considered as political alternatives that fit into this imaginary of collapse. Speaking about Permaculture, Centemeri (2018) considers the latter "both as a new materialist movement and as a commons movement. Its distinctive trait is that it conceives the response to basic needs by creating multispecies commons". Permaculture movements, which, because of their combination of local, situated design practices and underlying social and political philosophies, provide alternative ways of organizing in response to the Anthropocene (Roux-Rosier et. al, 2018).

From the Global South, alternative societal concepts are also to be considered in the debate, including Buen Vivir (Merino, 2016), Ecological Swaraj (Kothari et al., 2014) or the one of Via Campesina, a transnational social movement defending peasant agriculture for food sovereignty (Martinez-Torres & Rosset, 2010). Some also call for reconsidering the question of North-South relations from a new angle, especially when considering the differences in consumption between them. However, the consequences of global warming will be much worse in the countries of the South, precisely those which have contributed the least to greenhouse gas emissions.

2.2 Food sovereignty and Permaculture: The Tunisian context

The southern and eastern rim of the Mediterranean are the most vulnerable, as the MENA region is the most arid in the world. In Tunisia, climate change is expected to have major impacts on the country's agriculture, economy and households (World Bank, 2013) intensifying the already significant poverty and unemployment. Further efforts to develop Tunisian agriculture, downstream value chains and associated infrastructure in marginalized rural areas could be levers to contain migration. More and more analyzes show the importance of the role played by the agricultural sector for the economy and employment, in particular in the southern Mediterranean countries (CIHEAM and Plan Bleu, 2009).

In Tunisia, several voices call for a real change in the trajectory of the economic model, to think of new avenues for the development of the agri-food system to build food sovereignty. Local/territorial development is here considered as an inclusive alternative where it is a question of rethinking cultural practices by adapting the technical aspects to the physical and climatic structural difficulties of Tunisia, thus moving away from the methods advocated by the Green Revolution (seeds, pesticides, fertilizers). Recently, an exercise aimed at developing a detailed repertoire of the conditions for achieving a transition to a real transformation of systems was carried out (Schwoob and Elloumi, 2018) with local players in 2017 and made it possible to identify three priority challenges and objectives for a transition of the Tunisian agricultural system: (1) the preservation of natural resources (water and soil); (2) improving food security (with its different dimensions); (3) the development of socioeconomic services provided by the agri-food sector.

Issues and objectives that closely resemble what Mollison (1979) puts down as an ethical basis for permaculture speaking about three main principles: (1) care of the earth: provision for all life systems to continue and multiply; (2) care of the people: provision for people to access those resources necessary to their existence; (3) setting limits to population and consumption. From the perspective of a given individual, permaculture can be seen as a design system for ecologically responsible home economics. From a scholarly perspective, permaculture is a notoriously multi-faceted approach, evolving aggressively from its agricultural origins to culture-wide applicability by allowing shifting definitions to suit particular needs.

In this context we noticed the emergence of several citizen/academic initiatives promoting permaculture in Tunisia; they are working with different realities in rural areas with the aim of developing a tangible Community-Centered Agriculture network, the creation of a resilient production and consumption system, as well as the training of farmers to permaculture as a sustainable alternative. For example, the project "Re-Green Tunisia" launched in 2013, in the south of Tunisia heavily impacted by global warming, especially in the southern region of Gabes. The initiative aims to promote a model of agriculture adapted to climate change, notably by creating "oasis-forests" and using traditional techniques of irrigation by jars based on ancestral knowledge and permaculture to enrich the soil naturally in nitrates and phosphorus (Chesnot & Ballanger, 2019).

3. Design and Permaculture: Increasing communities' resilience

Already in the early 70's, Papanek (1971) was sounding the alarm about the need for responsible and sustainable design. Findelli and Bousbaci (2004) suggested social design as a discipline aimed at improving the habitability of the world, also quite close to the analysis of Tomás Maldonado (1976), design as a "total social phenomenon". On a larger perspective, design could support the aspirations of highly vulnerable communities proposing solutions to problems that, according to Manzini (2014), neither the market nor the state have solved. In a highly self-organized context, design becomes a useful tool for understanding and developing social innovation by mediating public and private needs.

3.1 Design as / for Common Good

Cellamare (2019) deals with the different forms of appropriation and re-appropriation of the city and collective and organized urban practices, as forms of latent design, in search of new conditions of mutualism. Public space and common goods — in a context that thrives on the delicate relationship between lawful and illegal — become informal places of change and innovation. One could extrapolate his analysis to any other kind of space/territory.

In this context, Villari (2013) explains that: "the disciplinary perimeter of design is today much more complex and reflects the social and economic changes of our society." Design is no longer a design area associated only with "productive, technological and market dimensions." (2013, p.3). The author proposes a definition of Design for the Territory, as an extension of the disciplinary areas of strategic design and service design, focusing on the enhancement of territorial capital. It is a collaborative, community-centered design approach to designing relationships, strategies, products and services.

This somehow reminds the concept of Cosmopolitan Localism (Manzini, 2014; Ramos, 2017) which is the theory and practice of inter-regional and planet-wide networking between place-based communities who share knowledge, technology, and resources. Speaking of the SLOC scenario (a Small, Local, Open, Connected sociotechnical system), Manzini (2015), reimagines the role of design in addressing social issues and in building a resilient culture, distinguishing between Expert (design professionals) and Diffuse design (people, social groups). Design is strategic in triggering, supporting and enhancing social innovation, where designers become infrastructurers to support initiatives for autonomous communities (Morelli e Sbordone, 2018).

The same concept of Cosmopolitan Localism is followed by Transition Design (Kossof, 2019), a new area of design research, practice and study, aimed at seeding and catalyzing societal transitions and systems-level change, that argues design and designers have a key role to play in these transitions. Transition Design was inspired by the Transition Town movement, which refers to grassroot community projects that aim to increase self-sufficiency to reduce the potential effects of peak oil, climate destruction, and economic instability. Speaking about Service Design and Design for Social Innovation, Irwin proposes Transition Design as a third new approach. It is based upon longer-term visioning in order "to address twenty-first-century wicked problems such as climate change, loss of biodiversity, depletion of natural resources, and the widening gap between rich and poor" (2015, p. 229).

Some (Busch & Palmås, 2016; Nussbaum, 2010) mention the risk of falling from the dark side of the social. They state that leveraging the social level may well produce unforeseen negative societal outcomes. They criticize a certain idealism of the designer and oppose a more realistic vision of design for social innovation, as a means to prevent social practice-informed design from generating negative outcomes; designers ought to acknowledge the limits of idealist "what if" starting points. In order to balance such idealism, designers ought to place more focus on the realist question of "who whom?"— who benefits from the social innovation, and who pays the price for the change. (Busch & Palmås, 2016, p. 287). A vision that corresponds to that of Myerson (2016), who calls for a new way of thinking in scaling down and reverse thinking rather than seeking to systematize solutions.

In this context some call for decolonizing design from the tyranny of cold, "Western" abstractions (Tunstall, 2013; Ansari, 2016; Schultz, 2017; Fry, 2017) to initiate a real dialogue between designers from the Global North and Global South in order to develop a paradigmatic shift from a Eurocentric vision of design to a pluriversal one (Escobar, 2018).

Escobar (2018) speaks about "a design imagination centered on autonomy and the realization of the communal" (p. 186). In the same way Fry (2010) declares that designers should answer this challenge by transforming themselves into politicized change agents who can overturn many long established and deeply entrenched political, economic ideological and technological foundations.

3.2 Design and Permaculture convergence

In his book Fuad-Luke (2009) considered Permaculture as particular form of ecological design/ design activism. Permaculture design, particularly in terms of vocabulary, is undergoing a transition from being very specific about landscape configuration to a much more general usage. "It must be stated at the outset that I regard permanent agriculture as a valid, safe, and sustainable, complete energy system. Permaculture, is defined here, claims to be designed agriculture, so that the species, composition, array and organization of plants and animals are the central factor. In that sense this is not a gardening book." (Mollison, 1988). It is here defined as set of design principles centered on whole systems thinking. It uses these principles in a growing number of fields from regenerative agriculture, rewilding, and community resilience.

This joins the claims of Barbero (2018) when speaking about the Systemic Design approach; in the most recent evolution, is particularly attentive to the territorial implications and valorizations. In that sense, we can call it systemic design for sustainable rural development, where the management of local resources and wastes can generate new territorial businesses to guarantee distribution of wealth to local communities (Barbero, 2018).

Cassel & Cousineau (2018) make the link between Design and Permaculture. They state that the formulation of permaculture as a design discipline can be partially credited to Mollison's reading of Papanek and discussions with that work's author. They also consider that the latter has made many contributions to systemic design, including simple-to-remember lists of guiding ethics and principles; a vocabulary of categories that allow the discussion of interactions; a toolbox of design methods for selecting and assembling systems of elements; overall design processes; and some agroecological and social system design insights. However, this exchange of ideas could go both ways, and design could assist in the current challenges of permaculture "including forming stable objectives, assessing appropriate technology, stakeholder engagement, and launching viable projects.

4. The Oasis of Jemna: Which Design?

The oasis of Jemna in the south-west of Tunisia, in Nefzaoua more precisely, the main region producing date of the country, is thus to quote; as the oasis has become the symbol of peasant resistance. A few days before the fall of the regime, the inhabitants of the oasis took over part of the land and introduced a new model of social and solidarity economy. At a time

when citizenship in Tunisia is going through a deep crisis linked to the weakening of the State and the de-structuring of social bonds, the initiative has been perceived as a political and civic lesson to the center of power. Part of the income was invested and served to improve the situation of the oasis through various local investments.

For Kerrou (2017), Jemna's experience is exemplary in terms of the emergence of a local and pluralistic civil society, the learning of participatory democracy and the pioneering experience in Tunisia of the social and solidarity economy. The community, however, faces several difficulties that could hinder the perennity of the model that it proposes. We noted the will to return to traditional modes of organization and ancestral irrigation techniques but also the recognition in permaculture of a sustainable alternative towards transition in facing climate change.

There, a collaborative design experiment following an approach rooted in the present, emancipated from the notion of project and the ambition to improve the livability of the world, would help to re-configure the forms of collective action and relations between the active entities, within the situations in order to repair the land of life and to re-emerge the socio-cultural bonds of the community of Jemna.

5. Conclusion

Given the aforementioned premises, the research project aims more specifically, through the analysis and direct application to the cases of the oasis of Jemna and Re-Green Tunisia project, to confront the approaches of Design and of Permaculture in the first place, then highlight/question their role in supporting/implementing practices generated locally, and in autonomous manner.

Following an inductive reasoning our purpose is to develop and propose a specific approach, helping permaculture practitioners (starting from the example of the oases) to be able to create a strong link between design knowledge, technological potential and cultural and social values. Solutions related to agriculture and food security in a context of water scarcity, such as the Tunisian one, allowing to increase the resilience of rural populations. The idea is not to stop in designing only solutions to respond to an emergency but to develop a constant network of effective actions, working on a new and lasting approach to a constantly evolving problem.

Sustainability is the only narrative for a possible civilization; but the question would be: How can we design and spread the idea of urgency to activate and conduct conversations about the future? Designing together to think in a more pragmatic way would be one of the ways, speaking of community centered design capable of uniting different stakeholders. The designer could orchestrate these kinds of conversations and increase our collective sensitivity about how we live and contribute to civilization.

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Safouan Azouzi research interests focus on the relationships between design and socio-political issues, in particular the theory of the commons and its relationship with the territory and the resilience of communities to climate change.