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Politics by design

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Abstract | Digital transformation and biotechnologies offer powerful means, through which autonomy and automatism could lead to new governance models. As institutions failed to timely grasp their profound implications, a concerning disconnection grows between political and social life. As design moves towards social and political gaps, it now participates in social transformation by challenging current habitus. Whether in a contesting or reforming attitude, design agency generates pressure in and out everyday life, impacting the way politics is thought and practiced. Guided by a correlational approach, the contribution aims to frame a field of research in which design acts politically as a “vector of the present” to cope with instability. Embracing the unfinished character of societal artifacts, design fuels contradictions as vital functions of the democratic discourse, pushing for new conceptions about politics and democracy themselves.

**KEYWORDS | DESIGN ACTIVISM, AGONISTIC POLITICS, SOCIAL INNOVATION,
SOCIAL ARTIFACTS, EXPERIMENTATION**

1. (Re)directions for the XXI century

We live in a time of exceptional turmoil and, at the same time, of dramatic disorientation. This is the time of posteriority of great events that shaped history, returning a vague, undefined present and foretelling an uncertain future as well: it is “a natural habitat of legitimate hopes and expectations, [that] becomes home for nightmares” and widespread nostalgia, ending up framing an exclusive dimension of reality, the “retrotopia” (Bauman, 2017). It appears to be the perfect time to act.

An informatics and technological revolution has been unceasingly shaping the world over the past twenty years: although its achievements comforted the world with an optimistic message, it now gives rise to a sense of shared fear and concern. Acting as a force of change, such a revolution is going to shake the historically consolidated status quo significantly. However, it would not be the first time: as Fulvio Irace (2014) says, “every progress in science coincides with the proposition of new technologies, which certainly produce tools for use, but also, and above all, new lifestyles and new worldviews”.

Technological progress goes on at an unparalleled pace now, making it even harder to keep up (Kurzweil, 2004). The fertile combination of the technological and biological front is going to shape tomorrow in a new, radical way¹: a powerful interweaving that will blur the already thin boundaries between the digital and organic/physical worlds (Schwab, 2017). Such a scenario unfolds the opportunity of designing products and services by borrowing adaptive and evolutionary behavioral patterns directly from biology. The resulting outputs would benefit from an “organic intelligence” (Gerasimov et al., 2019), wherein algorithms will evolve their processing and predictive models through adaptive and combinatorial patterns, proper to organic beings. Such hybrid technologies offer powerful means to support alternative development models, where autonomy and automatism could lead to new governance models: their first implications foretell an unprecedented cultural and economic impact, such that “acting” in the XXI century will mean operating within cybernetic biomes, machine-to-machine systems, where digital transformation requires careful and thoughtful intervention by political actors *in primis*, historically charged to guide their transition and consolidation.

However, even if governments and institutions have traditionally provided tools and models to secure the complex balance among the biosphere-technosphere-sociosphere, on the other hand, it is important to remember that design itself has always acted as a catalyst for innovation aimed to bend technology towards preferable futures. Moving from “making stuff” to “making something” (Sanders & Stappers, 2013) for people and their lives, design offers the sensitivity to research and take action in a moment of a historical transition, marked by deep global issues.

The paper aims to trace how design enters the political dialogue, as a source of constant

¹ As shown by recent MIT Labs activities focusing on the intersection among generative design, computational design, synthetic biology, digital fabrication and materials science (Oxman, 2010; Hays et al., 2015).

destabilization, generating solutions that consent, compete or even dissent with the established order, offering new chances of dialogue among the society-market-institutions system, wherein digital transformation suggests and promotes the (re)shaping of worldviews and the formulations of new governance paradigms for men and things. Today design enters the whole societal context, engaging with “politics” and the “political”, a distinction theorized by Mouffe (2005), which triggered a significant debate in political philosophy over the last decades: designers are participating in the debate too, whose practices, discourses and intents happen to raise “questions about their agency and potentiality to challenge our *habitus*, generate alternatives and create positive societal change” (Fuad-Luke, 2015).

2. A technological challenge to politics

The context framed so far in terms of technological advance will produce profound implications on the political dimension, as long as digital technology offers new enhanced tools to deal with complexity, generating new perspectives about dwelling in the future world.

The forces of change acting today feature asymmetrical evolutionary rhythms, so that the deep connection between technology and politics is not easily detected. Nevertheless, there is a growing need for political theory to investigate and address the radical effects of emerging technologies (Susskind, 2018), now more than ever. Institutions today react to technological innovations with either slow, outdated measures, or short-term solutions, constantly overlapping and contradicting the older ones. Contemporary conceptual, methodological, and instrumental apparatus result unsuitable to properly frame and understand the current technological actor (Accoto, 2019).

This troubling scenario can be read on a deeper level, where the present is the field where the clash between future and past paradigms unfolds: technology is laying a posteriority character on democracy (Bartlett, 2018), wherein politics misses to embrace the digital within its domains, because of an outdated perception of the “technological” as other from “the political”. However, as Susskind (2018) writes, the digital is inherently political. Digital technologies naturally fragment and spread power to all the nodes of its deeply networked structure (Naím, 2013), affecting significantly communication and information systems: the digital transforms the political because it targets political life at its foundations, altering the way politics is made and how and where political action takes place.

Current political systems missed a timely grasp of the incoming digital disruption, triggering a growing disconnection between political life and social life: on one hand, the technological front progressed undisturbed, on the other, society proved to be extremely receptive, facilitating the absorption and diffusion of technological innovation. Runciman’s (2018) “technological takeover” is challenging indeed, since he recognizes a strong participation of digital technologies in the failure of current political systems, democracy included. However, while the very idea of failure is anchored in outdated conceptions, it is undeniable that technology is hardly pushing for a mutation of political thought and action. The term

"politics" suffers from outdated conceptions too, especially when they stem from institutional discourses.

The meaning of "politics" is not a question that resolves in a single take, but a site of ongoing contestation, where any shared assumptions tend to be relatively local and temporary. Embracing its dynamic nature is crucial, because it encourages the stance to discover new theoretical and practical spaces for alternative discourses and functional conflicts. This resonates with the various interpretations that literature offers, among which Mouffe's (2005) work about democracy as agonistic pluralism stood out, tracing a discourse about democracy as a form of collective life that involves unresolvable differences and conflict. Rancière's (2015) work also enters the conflictual theme, agreeing with the agonistic struggle among adversaries, where the instability of the resulting order is vital for conflictual political relations to reemerge. Mouffe (1993) calls this potential "the political" and Rancière (1999) uses the term "politics" or "democracy", but both understand the political friction, disagreement, and disruption as the essence of democratic politics: as a result, whenever the agonistic attitude is missing or consensus overcomes political difference, democracy is lost.

Conflict and dissensus display in an environment where political action is a collective activity expressed in the public realm. Technology is enhancing such expression, thanks to the empowering and auto-organizing effects offered by social platforms and community-oriented services, in which the involvement of institutions to answer social problems does not coincide with a primary need. Acting politically as well as acting through designing in these times means thus moving in a space of possibilities, where freedom and creativity is experienced in a way that can never happen in private, thus embracing the political sphere by giving it new dimensions.

3. Design as catalyst: from value to power

Ubiquitous design relies on digital technologies as accessible means through which people's capability of *voice* is amplified and extended to a wider range of individuals and communities. Such empowerment gives the chance to self-organize and deal with societal - and political - problems acting within everyday life. This cultural shift has been possible thanks to a broader diffusion of design culture and attitude in the past decade, besides its evolution and subsequent politicization.

In fact, design culture has experienced a continuous transformation as historical phenomena of change gradually disclosed new domains for its theories and practices (Jones, 2014). Assuming a designing approach - "using human power to conceive, plan, and realize products that serve human beings in individual or collective goals" (Buchanan, 2001) - means promoting better living conditions in a counter-intuitive perspective over reality. Moving from material to human systems (Buchanan, 2001) and from affirmative to critical practices, design culture deeply engaged in social systems, resulting in new operational fields like experience design, organizational design, and service design. These approaches aim to tackle

complex problems by gathering various stakeholders - end users, citizens, employees, partners - in charge of "experts of their experiences" (Sleeswijk Visser, 2005 in Sanders & Stappers, 2008), in order to conceive better outputs to improve lifestyles.

Thus design becomes ubiquitous, as the many-to-many approach involves an extensive range of social players, from professionals to citizens, who happen to apply design thinking, processes and approaches finding themselves managing the designed output directly (Fuad-Luke, 2013; Manzini, 2015).

This leads to the growing fields where design is deployed for social transformation: new social demands match with governmental "inaction", where grass-rooted movements and initiatives aim at filling the resulting social gaps. This trend gains particular relevance in those developing countries, where human rights are not fully recognized². Such design practices, however, intensify even where democracy is a historicized condition.

The structural crisis of the neoliberal paradigm calls for new expressions for social, economic and environmental sustainability: such critical scenarios offer design culture the favorable terrain to renew itself and to address its efforts in the production of artifacts within social movements, experiencing a shift in its aims and methodologies. According to Julier (2013), crisis in the neoliberal paradigm coincides with a spark of activist impulses in designers, so that they embed their practices "into everyday life through intervention with real people in real places" (Julier, 2013), lending their "power of resistance from being precisely a designed way of intervening into people's lives" (Markussen, 2013).

The efforts underlying co-design and social innovation practices are a whole new way in which design channels positive results in the attempt to "design for democracy"³. These are recent challenging practices, relevant in triggering new approaches to power through design. By expressing stronger activism, design culture appears to be charged with growing awareness and responsibility, thanks to its strong contribution in the fundamental processes of reality production: given the ubiquitous presence of designed outputs and systems, including the possibilities that digital technologies offer, design activists are challenging the "distribution of the sensible" (Rancière, 2015) to bring light on new perceptions and actions, opening up the public sphere to active participation.

Moving from design culture to design activism, designers participate and amplify an "agonistic revolution", as they enter into various modes of action starting from the free choice of which power structures to work with, for or against: their pluralist and agonist

² Design Studio For Social Intervention and Design that Matters provides few examples of a strong design action to support social justice within disadvantaged communities and developing countries. Retrieved February 6, 2020, from <https://www.ds4si.org>, <https://www.designthatmatters.org>

³ In their "Open Letter to Design Community: Stand Up for Democracy, Ezio Manzini and Victor Margolin state the need for designers to conceive, develop and connect new possibilities to support democracy and all that it should embody. Retrieved February 6, 2020, from <http://www.democracy-design.org/statements/>

agenda is the product of a non-alignment, pushing for a participatory concept of democracy (Fuad-Luke, 2015). Acting as a social compass, design activism ensures an extended participation, encouraging responsibility while disrupting and diversifying the existing habitus. Fuad-Luke (2015) traces the levels of the teleological force in design activism propositions, setting them within agreement, agonist or even antagonist attitudes⁴. (Re)orienting systems and local realities is thus possible thanks to design's stimulation of common will and responsibility, channeled in a path toward *radical* change of institutional and cultural practices and languages.

3.1 Reframing design practices: a political view

Since innovation lies also in the perspective chosen to observe problems within the hosting system, it is worth recalling Fuad-Luke's (2015) framing of social design as the "weaker" form of design activism, due to its roots in the current neoliberal representative democracy. Here, he argues, designers are constricted in a consensual agenda, pursuing public good to re-shape the system from within. Perhaps this is also the reason why there is a widespread tendency to depoliticize most of the social design practices - especially from the outside -, where it is often shrunk to a humanitarian inclination: "the ability of this type of 'do-gooder', socially oriented design to address questions of social justice and inequality is very limited (Chin et al., 2016)". Although these authors refer to some specific humanitarian designs⁵, this perspective has helped to cast a shadow over the actual connections between politics and social design.

Basically, design is designing something for someone. Starting from everyday life, design has always been conveying values and messages aimed at (re)defining reality: design can be persuasive as designing a chair is a matter of defining what "sitting" would be like (Redström, 2017). Thus, design is a participating actor in the production of worlds and, as such, "operates in the space between poietics and politics" (Redström, 2017).

Today social design expresses its poietic ability to support democracy, which now lives in a sclerotic condition. However, despite the "weaker agonistic character" traced by Fuad-Luke

⁴ Fuad-Luke (2015) lists some case studies working as "spatial agency" and offering counter-narratives, counter-dialogues and counter-actions in public spaces. As for the agreement section the pedestrian bridge designed by Zones Urbaines Sensibles is an example of participatory crowdfunded urban-making. Agonistic approaches are traced in Collectif Etc works, whose built interventions, street furniture or even conferences serve as propositional artifacts, raising questions about public issues. Antagonism is found in *Recetas Urbanas* by Santiago Cirugeda, a project offering downloadable models to trigger political negotiations with exercises of urban allegiances.

⁵ Several NGO's are working with designers in this sense. MigrationLab is now running projects in six european cities. The goal is co-creating opportunities with and for migrants, refugees and locals to meet, interact, inspire each other and collaborate through the transformation of urban spaces. Retrieved February 6, 2020, from <http://www.migrationlab.org>

(2015), social design plays a strategic role for democracy as-is since they share the same structural language: *incremental* change. This is the case of Helsinki City (Berglund, 2013) where several design interventions were later absorbed, adopted and adapted by the city municipalities themselves⁶. Such social progression is supported by a *prototyping-suggesting* attitude of social designers, a stance which seems to facilitate the permission of design intervention into urban and civic environments by those municipalities who are open enough to let the experimentation take place.

Gazing into the future, looking for “preferable” scenarios (Fry, 2010), design implements practices that generate positive alternatives to the current status quo. Social design as a political action stands for this purpose, occurring as a form of activism which “rather than being resistant, is mostly generative” (Thorpe, 2011). Far from an opposing and protesting approach, such design interventions feature a reformist action of the present, or, rather, of all those approaches and perspectives that have contributed to generate the unsustainability of today’s world. In fact, social designers enact reflections through the direct involvement of institutions or by addressing their structural issues to return better opportunities of dialogue. Improvement pushes institutions forward, so that urban and civic environments, as well as public services, will look for more creative processes to innovate themselves.

Carl DiSalvo’s contribution (2010) on adversarial design offers arguments for further discussion on such design approaches, establishing a meaningful connection among digital technology, society, and institutions. Following Mouffe’s discourse (2005), DiSalvo traces a field for design action intercepting both “politics” and “the political”: the former stands for the means by which cohesion within a state, organization or social order is achieved; the latter refers to a condition of social life, whose experience and expression no longer occur according to the old models of protest and debate. The distinction between politics and the political in design practice leads to different kinds of design outputs, depending on their combination and final goals:

- design for politics⁷, focusing on improving structural transparency and functioning;

⁶ Helsinki’s DIY-urbanism, urban tactical experimentations and prototyping show as practices where design engages with official urban policy, fueling an “urban vibe”, where citizen-led initiatives inspired by degrowth economics met administration - sometimes cautious - support. Such results were meaningful to activists as their actions were rewarded with an empowering institutional acknowledgement.

⁷ Horizon 2020 Framework Programme of the European Union founded several laboratories aiming to design open government strategies to improve the governance culture. Here is provided an example of toolkits designed to ease this kind of innovation. Retrieved February 6, 2020 from <https://oecd-opsi.org/guide/open-government/design-an-open-government-strategy-or-initiative/>

- political design in the agonistic approach⁸, aiming to reveal and confront power relations;
- design for policy⁹, where public administration is led with a service innovation approach.

DiSalvo's (2012) analysis helps provide design criticism about the relationship between political expression, computation and the processes/products of design.

Such experiences can be traced in a "reformist attitude" of the political system as-is, where design works within the current paradigm. Despite the "weaker" impact on the system - not a disruptive one -, these kinds of interventions gain a character of "feasibility", which designers use as a means to trigger an internal innovation. Here consensus produces a meeting point between realities that suffers from distance: political and social life.

In this way social design exploits certain conditions of neoliberalism - where it stemmed -, to recycle and reprogram them: it is worth noting that this concept aligns with Julier's (2013) concept of design activism, so that applying design to politics to improve its structural issues is still a contestation, as it intercepts a problem needing a solution that conventional approaches to political issues have not offered yet.

Thus design activism occurs in different theoretical and practical spaces, seemingly fueled by two complementary tensions: the activist-disruptive and the social-incremental one.

Together they discover new meanings for democracy.

4. Politics by design

Design as a significant driver in building future realities seems to embody a new kind of political force, defining a promising field in which it would be possible to implement "the transformation of the entrenched cultures of unsustainability towards pluriverse practices" (Escobar, 2018). By creating "worlds within the world, mutually transforming each other" (Fry et. al, 2015), design discovers itself capable of generating not only new entities and interactions within political life, but also new political entities and interactions.

The paper relies on the complementary interplay between the agonist revolution and the reformist attitude of design acting politically as a promising path leading to the expansion of the conception of politics, compared to the current one.

⁸ The Sweden city of Malmö instituted a dedicated laboratory for participative initiatives to perform social innovation. Activities are carried out through a design practice-based approach which entails long-term engagements with different social actors, leading to significant impacts on city's settings. Retrieved February 6, 2020 from <http://medea.mah.se/malmo-living-labs/>

⁹ Italian studio Oblo Design, part of government's digital team, provides a quick example of design for policy performed with the direct engagement of citizens. Together they designed a platform aiming to ease the access to public services, with all actors receiving reiterative feedbacks. Retrieved February 6, 2020 from <https://io.italia.it>

Thus, design agency generates pressure in and out everyday life, impacting unavoidably the way politics is thought and practiced. Fuad-Luke's (2015) concept of design activists crucial positioning as "non-aligned social brokers" along with the social designers "working from within" suggests a well outlined space for contradictions, stemming from the very nature of design problems and, therefore, of design as a whole. According to Cross (1982), design problems are always ill-defined due to time and/or resource constraints. The wicked feature results in the impossibility of an exhaustive analysis supporting the correctness of the preferred solution, but the designer is still asked to produce a precise solution within a given schedule. Designers, then, cope with complexity by imposing themselves limits to contain the problem and manage it better. Such a process calls for high responsibility, which designers know to hold as practitioners of a poietic activity that always works with internal and external instability: as Julier (2013) notes, designed outputs are unfinished, multifaceted - as they exist either as sketches, prototypes, updates - subject to reiterating reshaping and repositioning. Furthermore, since designers work in complex networks of actors that constantly influence themselves mutually, designed outputs are subject to external constant transformations too, occurring at all levels from meaning to value.

This is why designers are used to thinking critically about the problem at hand, mainly questioning which designing process to adopt from the very first step (Hegeman, 2018). The lack of generally viable models and methods is the key to the *designedly* ways of *design*. Every problem encountered and the way it is positioned from time to time within a specific contingency results in the design of the designing process itself: in these terms design culture seems ready to offer a meaningful contribution to the *plungingly* ways of *politics*. Coping with contradiction helps assuming uncertainty as a foundational feature of reality, something to embrace as it appears in its chaotic beauty, where collective thinking and actions offer a fertile ground for new lifestyles and worldviews. Such shift is taking place as some institutions are recently showing a growing interest in design approaches too, even with weak signals - whether they be the adoption of designing tools to better inform decision-making processes or the diffusion of experimentation through civic participatory workshops -, in order to speed up their regulating actions: guided by design's proactive attitude, they are questioning their own schemes to keep up with contemporary global issues in an anticipatory approach, which should be far from a linear and coherent projection of the present into the future.

If politics calls for coordination, cooperation, control, and management skills within this framework, then facing the high complexity of the coming future - in which time exerts increasing pressure - will mean activating a more elastic transdisciplinary dialogue, made up of as many voices as communities hold. Complexity shows to be the main driver of unfinished products, as long as solutions are actually prototypes meeting the contingent need of a delivery in an everchanging reality. Therefore, politics would develop a deeper sensibility about uncertainty and, most of all, the unfinished feature of societal artifacts, whose experimentation would leave marks and traces to build up f(r)ictions (Mallol, 2011; Fuad-Luke, 2016) as vital sparks of collective life.

Such a combined approach outlines the field of research of "politics by design", which

proposes to investigate the *designedly ways of making political plans*, which embrace parallel and contradictory answers to socio-political issues as a result of a contingent attitude to manage complexity. Design culture is therefore believed to be capable of disclosing experimental areas in which political, digital, and social life can interact and reiterate themselves at deeper levels, where challenges could be faced by many to many. New spaces for free, public and creative expressions would rise, where design as a “vector of the present” would encourage a growing awareness in shorter and longer-term horizons, exerting multiple divergent forces while speaking the language of change in both incremental and disruptive declinations.

5. Conclusions

Correlations examined so far show the need for a more extensive dialogue, whose gravitational point is crossing the plain transposition of instruments and models from one knowledge domain to another, from theory to practice. As discussed before, the hyper-complexity of current systems is not problematic in itself, although it needs a new perspective to be tackled properly. According to the old approach, machine-to-machine interactions would be outlined through a technocratic view. Even so, interactions are inherently human-related: hence a human perspective is needed to unravel the knots, because meaningful interactions take place every time objects and human beings connect. Aristotle wrote that social life is realized thanks to the innate sociality of man, in which he exercises the *logos* as a means of confrontation.

It is in language that *inter-esse* unfolds, the in-between space where interests clash for their acknowledgement first, rather than unfolding in group conflicts about opposite positions. As long as words and actions infuse each other, they produce Mallo's (2011) “commonplace”, the ubiquitous social material assemblies which everyday life is made of. These artifacts work together in the definition of - many - possible and divergent worlds, where disagreement stands for a stance, an approach of inquiry and practice: setting the stage for dissensus means reframing the configuration of problems both from a theoretical and operational perspective from time to time, while heterogeneous contributions amplify unpredictability. Thus, the capability of voice empowered by design enhances the interplay between revolution - the disruption of habitus - and reformation - the slow yet more feasible advancement. Such tensions dialogue in an agonistic way, never excluding each other, so that choices and decisions for further regulations will entail an ever-growing responsibility, which needs to be reframed too - along with other political conceptions - since the technologic actor is rapidly gaining less marginal roles within new governance assets. Design seems to be in an ideal position to make a significant contribution, by developing counter-narratives which reframe everyday problems as possibilities that address contingent realities. The specific way in which designers can develop their own thinking and practice gives them the ability to intervene on the sensible layer of reality, where ethics and aesthetics intertwine in such a phygital world, leading to new worldviews and *modus*

vivendi. Here, as Redström (2017) notes, design practices explore and influence some future directions, discarding the others despite their viability. Therefore, the act of choosing which alternative would be the preferable one is full of social, economic, political responsibility. Design is a defining practice and, as such, a philosophical operation, but also and above all, a political one. The responsibility of designers as makers of worlds is significant, urging a reflection about their own ontological potential and how it is perceived from other disciplines, in order to develop a deeper awareness of their moves and their roles in the society of the future.

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