The Disconnect Between Design Practice and Political Interests: The Need for a Long-Term Political Engagement as Design Practice

BOSCH GOMEZ Sofia and QAZI Hajira*

Carnegie Mellon University, United States
* corresponding author e-mail: hmq@andrew.cmu.edu
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Long-term, sustainable transitions cannot occur without working at the political level to address the serious, global political challenges we are facing today. However, the capacity of design as a rigorous component and complement of the political world is yet to be seen. In this paper we discuss surveys we conducted, showing that there is a clear discrepancy between how designers engage in the political process as citizens and as professionals. We also discuss a subsequent workshop which allowed survey participants to explore these questions of roles and agency in greater depth and offered insights into barriers and opportunities. We found the workshop to be an effective method of helping designers identify leverage points and courses to intervene within both the designer's sphere of influence and sphere of concern. In so doing, we might begin to draw more designers into the critical work of designing for a transition towards more inclusive and equitable socio-political futures.

Keywords: political participation, civic engagement, Transition Design, policy design

Introduction

Langdon Winner's oft-cited paper, "Do Artifacts Have Politics?" (Winner, 1980) is frequently used to argue that design is an inherently political act, and that our role as designers is an intrinsically political one. Yet, the presence of designers in the sphere of political and civic engagement is notably thin. Indeed, our research has shown that designers tend to view their role as active citizens as being entirely distinct from their role as designers. Though designers do engage in the political process, they struggle to reconcile that sense of political agency with their design work, and tend not to leverage their design expertise to facilitate political understanding and rapprochement through activism. The capacity of design as a rigorous component and complement of the political world is yet to be seen. Considering the designer's expertise in changing perceptions, facilitating conversations, and "imagining... new ways to live" ("Imaginaries Lab" n.d.), we view the arena of political participation as untapped potential for designers to facilitate and be involved in a transition towards more inclusive and equitable socio-political systems. Our research explores the absence of concrete political work in the realm of design and derives methods for how the design community might begin to bridge that gap.

Perhaps now more than ever, it has become imperative for designers to find ways to design interventions that foster healthy, resilient, participative and strong political constructs. One need not scroll far into a news feed to recognize that political systems all over the world are declining into increasingly volatile, precarious structures that are nearing a tipping point towards destruction. We have already seen once-stable countries in Africa and the Middle East devolve into chaos and violence (Boghani, 2015). Now, strong Western democratic

powers such as the United States and United Kingdom are also faced with rising nationalist and populist movements that threaten the very foundations of those democracies, such as Donald Trump's "America First" campaign slogan and the Brexit movement in the UK (Abbott et al., 2018).

The slow corrosion of democracy has created a sense of polarization and uncertainty on both sides. In the United States, these divisions have been kindled by a series of sociopolitical measures by the Trump administration that have consequently triggered a new wave of activism and civic awakening. An estimated 113 million voters participated during the November 2018 U.S. midterm elections, a record number in its history (Vesoulis, 2018). In addition to massive voter turnout, demonstrations have been pervasive since the recent change of government: news-making events were the Women's March in 2017 and 2018 upholding women's rights as human rights; the March for Our Lives in 2018, a demonstration in favor of gun regulation; and the March for Science 2017 in response to the skepticism from the Trump administration regarding climate change; amongst many others (Dockray, 2018). The aforementioned demonstrations all took place in the course of the past two years, some of them ranking as some of the largest protests in American history (Dockray, 2018). What is most notable from 2017 to the present is that people are rising to the challenges of our time. Regardless of the cause, it seems political participation is rampant in an age where apathy has been perceived to be the norm (Dalton, 2008).

State of Affairs

In spite of such critical shifts in politics, designers still seem to be reluctant to fully take on these challenges as part of their work. An increasing interest in political discourse gives the impression that a new field of "design for policy" is emerging/rising. We see this in universities, as service and strategic design courses are now present in the curricula of many design programs, and in the development of new programs such as Design for Government at Aalto University in Finland by Ramia Mazé (Mazé, 2017). Academic research done by Lucy Kimbell at University of the Arts London (Kimbell, 2015), Nicolás Rebolledo at the Royal College of Arts (Laboratorio de Gobierno. (n.d.)), Lara Penin at Parsons (Penin, 2018) and Christopher Le Dantec at Georgia Tech (LeDantec, 2016), amongst others, offers a new vision of how design and designers could contribute to the realm of politics and public innovation.

Beyond academia, we see the development of public sector initiatives driven by design (such as the Public Policy Lab in New York, the Lab OPM—part of the U.S. Office of Personnel Management—and the Lab@DC, both based in Washington, DC; the San Francisco Office of Civic Innovation; and the Los Angeles Innovation Team in California; amongst many others in the United States alone) ("Mapped," n.d.). Nevertheless, the explicit commitment of young designers has still been relegated to the technical and remains the interest of a minority in the design guild.

Perhaps the lack of political engagement in design work comes from the misinterpretation of two distinct terms: politics and government. In a conversation with Bryan Boyer, founder of the Helsinki Design Lab and board member of the Public Policy Lab, he referred to politics as "a vision"—the spearheading idea that stirs political decision-making in particular timeframes and negotiates a multiplicity of values and agendas.[1] Government refers to the machinery, the form in which that vision is implemented through the work of thousands of public servants and policy-makers. The need for a transition towards more sustainable futures will come hand in hand with political transitions, and these will require designers to be active political actants. By this we mean leaders of these new visions as well as practical operative implementers. We thus aim to explore the political side of the equation—how design and designers can be involved in the creation of those "visions" that nourish the governing apparatus. How might design become a pivotal instrument in the political rather than just an operative tool?

Envisioning Alternative Futures

The seriousness and expensiveness of the political climate today can be overwhelming and paralyzing for many. The sociocultural impact of politics can be considered what essayist Elaine Scarry calls "world-destroying" (Scarry, 1985, p. 29). "World-destroying" is the narrowing of a vision and of the possibilities of imagination and future portrayal by the infliction of daily pain which demands present and total concentration.

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[1] Boyer, B. (2018). Personal interview with the authors.

How can we envision the future when the present is in pain, aching, and requires our full attention and concentration?

As innovative makers, envisioning alternate futures is precisely where designers excel. Designers' expertise lies in materializing imaginaries—bridging what we know, how the present is and what it "ought to be" (Simon, 1981, p. 5)—in order to enable new futures and possibilities. This worldmaking ability is not limited to the creative, but extends to socioeconomic and cultural phenomena as well (Bodker, 1999; Docherty, 2017). Design is the conceptual and physical connector providing tools for what Scarry would refer to as "making-up"—the ability to creatively imagine alternatives to present realities—and "making-real"—materializing those alternatives (Scarry, 1985, p. 280).

Politics is also an envisioning discipline in which the need to actively create future imaginaries is essential. The contribution of design to the political sphere, then, is rather straightforward: designers have the means and possibility of creating new, abstract, speculative and hypothetical possibilities (Candy & Dunagan, 2016) and the pathways by which those possibilities could then be materialized. Moreover, because of design's malleability and permeation into everyday life, designers are uniquely positioned to have political agency and influence as well. In that sense, designers' personal vision of their work coupled with their political scope enables them to advance or deter particular agendas.

Implications for Transition Design

For this reason, politics is a critical component and powerful tool for Transition Design. Transition Design is an emerging and growing field of research that "is based upon longer-term visioning and recognition of the need for solutions rooted in new, more sustainable socioeconomic and political paradigms" (Irwin, 2015, p. 230). Transition movements argue that traditional approaches to problem solving are insufficient for our increasingly complex world of entangled, wicked problems (Irwin, 2019, p. 150), and thus new strategies will be necessary in order to transition through the precarious now to a sustainable future (Irwin, 2019, p. 149). The aforementioned global political climate—with the rise of fascism, threats to the environment, and greater marginalization of vulnerable populations—has set the stage for an even more unstable and volatile global backdrop, making the need for a transition that much more urgent but also more arduous.

Many transition movements argue that change must begin at the local level, with groups of like-minded individuals banding together to forge experimental communities rooted in transition principles such as sustainability, local cosmopolitanism, and collaboration ("What is Transition?," n.d.). Though these grassroots movements do have impact, without macro-level, large-scale policy change and the support of the political entities in which they exist, transition communities' influence remains relatively localized. A more expansive and inclusive transition towards a truly sustainable future would require policy change and buy-in from government at all scales—from local to federal. Hence, we argue that long-term, sustainable transitions cannot occur without working at the political level to address the serious, global political challenges we are facing today.

Though an oftentimes slow and arduous process, policy change is arguably the most effective means of infrastructuring change. In "Steps toward an Ecology of Infrastructure," Susan Leigh Star and Karen Ruhleder outline the "dimensions" of infrastructure, explaining that infrastructure "has reach beyond a single event or one-site practice,...links with conventions of practice," establishes standards, and is "built on an installed base," which, in the case of policy, is the system of government itself (Star & Ruhleder, 1996, p. 113). Infrastructuring, then, is the process by which isolated changes become widespread, long-lasting societal shifts.

The Multi-Level Perspective (MLP) is a theory of change that can be used to explain the process by which infrastructuring takes root. As explained by Frank W. Geels, the MLP "views transitions as non-linear processes that results from the interplay of developments at three analytical levels: niches (the locus for radical innovations), socio-technical regimes (the locus of established practices and associated rules that stabilize existing systems), and an exogenous socio-technical landscape" (Geels, 2011, p. 26). The niche is where novel ideas with the potential to shift systems first emerge (Geels, 2011, p. 27); the regime is made up of practices, beliefs, laws, and policies (Geels, 2011, pp. 26–27); and the landscape is the level of more rigid "material and spatial arrangements of cities, factories, highways, and electricity infrastructures" (Geels, 2002, p. 1260). As explained by Hargreaves, Longhurst and Seyfang, "a 'transition' is said to have occurred when there is a major

change in the way particular societal functions (e.g. energy, water, food etc.) are fulfilled or, in other words, a shift of 'regime'" (Seyfang, Longhurst, & Hargreaves, 2012, p. 5).

Transition policy will need to grant and foster flexibility between the niche and the regime, the micro and the macro without losing view of a larger political arc of detachment from the current neoliberal trend. This will be imperative to socially shift rooted political paradigms at the regime level that have precipitated the breakdown of political systems we see today. A convergent radical move is needed from niche, grassroots movements in synchronicity with top-down institutional hacking. A current ongoing example of this is New York congressional representative Alexandria Ocasio-Cortez, who began her political career as a local Bronx and Queens activist and has risen to be one of the most visible personas in Congress, with proposals such as the New Green Deal and a raise on marginal tax rates as high as 70% (Choi, 2019). With both of these bottom up and top down, significant yet opposing changes happening concurrently, there is a sense of urgency and an imperative to act to shift the balance towards values of equality, justice, and inclusivity that are the foundations of democracy. By promoting civic engagement and policy change, designers can have a direct impact at the niche and regime level and ride the momentum of these wide-spread movements to effect the long-lasting, systemic change that Transition Design seeks to achieve.

Research

Surveys

In order to understand how they can begin to create these shifts, we first needed to take a few steps back and gauge how designers currently think about political participation in relation to design. With the United States midterm elections approaching at the time of this writing and political consciousness at its height, we felt it was an ideal time to research and inquire about designers' stance: do they, either individually or through their work, participate in the political process? What are their motivations to be, or not be, involved?

We felt a general survey was the best means of obtaining a baseline understanding of how designers in a range of industries think about politics. We thus sent out two sets of surveys on October 29, 2018 and November 1st, 2018, and responses were collected up until November 5, 2018, the day before the United States midterm elections. Seeking to gain responses from a range of designers at different points in their careers, one survey was sent to all design faculty, staff, and students at Carnegie Mellon University (CMU) in the city of Pittsburgh, United States, and another, similar call to respond was shared with professional designers via the authors' personal social media accounts, triggering organic replication. Details on survey questions and responses can be found in Appendix 1.

We received 29 responses to date from faculty and students and 43 responses from professionals. Although responses to the survey for professionals came in from all over the world, this research focuses on designers in the United States, regardless of their country of citizenship. Of the 43 responses, 26 were either American citizens or non-citizens living in the United States. Questions focused on demographics (citizenship, age, political affiliation), knowledge about and interest in political and social issues, and the different ways in which respondents participate in the political process. Sixty percent of participants identified as female and 33% as male across both surveys (7% either declined to identify or identified as other). Demographics on race or ethnicity were not collected, as we were specifically interested in discovering how the participants' political agency (be that by means of their party, citizenship, or residency) influenced their approach to politics.

The vast majority of respondents from both surveys indicated that they identify most with the Democratic party, with a handful identifying with the Libertarian, Independent, Republican, or Working Families parties. When asked their level of interest in social and political issues, the majority indicated they were extremely or very interested. Notably, the level of interest did not match the expressed level of knowledge. When asked to rate their level of knowledge about the local political process and avenues for political participation, the majority of the CMU respondents indicated a 3 out of 5 on a Likert scale, with 5 indicating they were well-versed. (A little more than half the respondents who said they have little or no knowledge were either international students or non-American faculty members). Professionals were a bit more confident, with the majority rating their level of knowledge about avenues for political participation at a 4 out of 5.

In spite of the high level of interest in political issues, fairly high level of knowledge, and strong commitment to participating in the political process, very few respondents were interested in or are currently working in the public sector. Although Carnegie Mellon design students and faculty are a select population and may appear to

represent a particular predisposition, we found that their responses were echoed by professionals from all over the world. When asked, "in which industry do you hope to work when you graduate?" only three students checked the public sector as an option. 53.5% of students were interested in working for design consultancies or tech firms when they graduate, and 21% said that entrepreneurship or self-employment was an option. Similarly, of the 26 professional participants living in the United States, only four are working in the public sector, whereas 53.8 percent of respondents work either in tech or a design consultancy. Professionals were asked to what extent their work intertwines with their political views, and only two individuals responded that their politics greatly influence their work. Fifty percent stated that their work and political views are completely or mostly separate.

Workshop

Clearly, there is a discrepancy between how people engage in the political process as citizens and as professionals. Though the majority of participants indicated that politics plays an important role in their life, only a few number were inspired to carry that passion into their work. In order to understand why this was, and to incorporate a qualitative component to the quantitative surveys we had done, we designed a workshop that allowed us to explore questions of roles and agency in greater depth. The exercises aimed to understand which roles designers are most likely to enact in the context of political participation and at which points of intervention designers feel the greatest sense of agency and influence.

The workshop was held on campus at CMU. All survey respondents residing within Pittsburgh were invited to attend, including students, faculty, and working professionals. There were seven people in attendance, five of whom were current students. Participants were not actively recruited; self-motivation and interest in the topic is what sparked their participation.

First, participants were given a set of cards with different roles related to political participation written on them, such as "change perceptions," "educate and inform," or "be an activist." They were then asked to do a card sort to rank and number the roles in order from most to least important, with the option of adding their own roles or discarding whichever felt irrelevant. Next, they were given an adaptation of a mess map (Horn & Weber, 2007), in which they were asked to list potential points of intervention, ranging from where they felt they have the most influence and agency (innermost circle) to the least influence (outermost circle). We then asked participants to place the numbers of the various roles onto the map, visually connecting the roles to the points of intervention. For example, if they felt they could most easily change perceptions at the university level, they would place that role at that point of intervention on the map (Figure 1b). See Appendix 2 for step-by-step visuals of this process.

Figure 1a. Map design for the workshop for participants to place their roles within self-determined concentric areas of intervention

Figure 1b. Workshop sheet completed by a participant. Roles are ranked on the left side of the sheet, while concentric points of intervention are indicated on the right side. The numbers indicate which roles were most appropriate at which intervention point. See also Appendix 2.

Finally, participants were asked to choose a particular social or political issue that was important to them, and then design an intervention for that issue utilizing a particular role at a single intervention point. If, for example, someone indicated that gun control was important to them, and they stated that the role of "changing perceptions" was most appropriate at the university level, they would devise an intervention that can change perceptions of gun control around the university.

At the end of the workshop, we offered feedback forms for participants to remark on what they most valued from the workshop and what they would change. The feedback suggested that we needed to revise our question prompts, but also confirmed that the workshop provoked participants to recognize means of intervening that they may not have considered otherwise.

In order to reach a larger audience that could participate remotely, we converted the revised in-person workshop experience to a series of digital questions and exercises using SurveyMonkey as a tool. (See Appendix 2 for screenshots of the digital workshop). For the digital version, all survey respondents residing in the United States who were not able to attend the in-person workshop at CMU were invited to participate. To date, we have received seven responses to the digital workshop, for a total of 14 workshop participants (whether in person or remote).

Due to technical limitations, there were some challenges in translating the mapping exercise to the online survey. Nevertheless, this did not detract from the quality of responses received or insights gained for that portion of the exercise. However, relative to the digital version of the workshop, we found that participants devised more robust and detailed interventions when doing the exercise in analogue format. In person, participants were allotted 15-20 minutes to design an intervention; we conjecture that an online activity may not afford dedicating that same amount of time to the exercise.
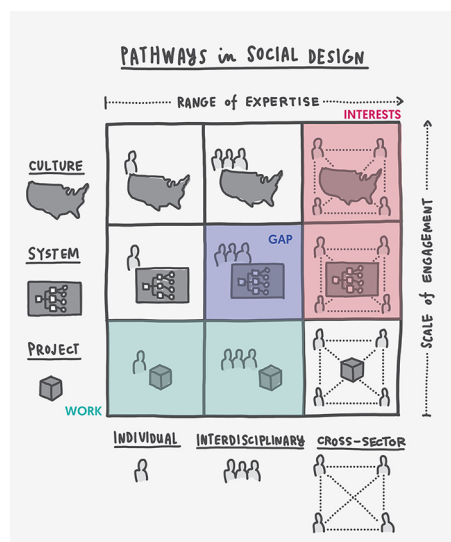
Response

Method

Figure 2. Adaptation of Social Design Pathways matrix developed at the 2013 Winterhouse Symposium. Source: socialdesignpathways.com

When synthesizing the responses to the surveys and workshops, we used the Social Design Pathways matrix ("About," n.d.) as a practical tool to situate the participants' area of work in contrast to their area of interest. Their work, mostly project based and most often either individual or interdisciplinary, can be situated in the lower left corner of the matrix. However, their political interests overfly systems-level cross-sectoral change in the top right of the matrix.

Based on feedback and the results of the workshop, we have found the workshop to be an effective method of helping designers begin to identify courses to intervene to begin to broach the top-right of the matrix. By having participants design an intervention for an issue of personal interest, in a role where they have some sense of agency, and in a domain where they feel they have some degree of influence, they are able to identify a point of intervention at a greater scale of engagement that is meaningful to them and has minimum barriers to entry. Moreover, they are able to leverage the skills for which they have been trained to further a cause that is of personal significance to them. Through this method, we are able to demonstrate to designers that, using their unique set of skills, they have a much greater degree of power to influence politics than they may have imagined. In so doing, we hope to inspire designers to find some ground where their work and politics may coalesce to create positive, sustainable change in our political systems.

Some may resist designers entering the realm of politics, arguing that this shift may take designers beyond the scope of their present expertise. However, we contend that designers already possess many of the skills needed to design for systems-level political change. As a point of illustration, we outline below five competencies of designers that can be leveraged across the spectrum of engagement and expertise of Social Design Pathways. For example, storytelling and communication skills used to advocate for a new app interface or to communicate to clients can just as easily apply in the political arena to advocate for policy change and communicate to representatives. We believe that building on the mastery they already have will enable designers to develop the confidence to advance their work from niche, project-level interventions to landscape-level political change.

1. Storytelling and Communication

Designers, especially those trained in visual and interaction design, are adept at storytelling and communication. As politicians are well aware, this is a powerful tool that, at its most basic level, can be used to **educate and inform** the public about issues of concern. Through that education, one begins to **change perceptions** by challenging assumptions, dismantling false narratives, and bringing awareness to issues that may be ignored or even covered up. In so doing, we can **advocate for the underrepresented**, the marginalized, and the conveniently forgotten communities that oftentimes lack but are in most need of a political voice. By doing all of the above, we can **mobilize the public** to become more civically engaged to ensure their voices are heard.

2. Facilitation

Designers of every capacity work in interdisciplinary contexts, and therefore must be able to negotiate between the oftentimes conflicting needs and demands of various individuals and teams to achieve a single, unified goal. Designers can very easily translate this skill to the realm of politics, where oftentimes divisive and polarizing views hinder progress forward. By establishing **platforms for conversation** among individuals, designers can help conflicting groups arrive at some common understanding which may then pave the way for collaboration on issues that are of shared concern. By facilitating important discussions and offering safe spaces for people to voice their concerns, designers can help **break down barriers** among groups in conflict. This is particularly needed today with the ever-expanding political divide.

3. Design legibility

Policy is an invisible infrastructure that few people understand but by which all are affected. Design plays a significant role then in changing how policy is communicated and understood by the public that it impacts. The lack of understanding of a policy often results in the public rebelling against it, even when the proposed change is in their better interest (Bosch, 2016). Design can be effective in changing people's perceptions of governments and policies by **increasing "legibility,"** that is, increasing transparency but also making policies more understandable to the general public. Increasing legibility goes one step further than transparency by making policies *understandable* so as to invite greater engagement and agency, which in turn prevents governmental abuse and ensures that policies are made in accordance with the public will.

4. Creation

What unifies designers of all backgrounds is their propensity to create something from nothing. Designers have the tools and the skill set to identify gaps in systems and create interventions that fill those gaps. Web

and interaction designers, for example, can **create digital platforms** for activists, politicians, and creatives to network, connect, and share information, which fosters an environment of dialogue, collaboration, and mutual understanding. Thus, in creating interventions, designers are **agents for change**, acting as the catalyst that materializes the type of world that people envision yet are unable to create. This is a powerful and unique skill that enables designers to have profound impact in how our political systems function.

5. Innovation

At the highest level, designers are visionaries whose ability to envision **novel ways of seeing and doing** can help society break free of destructive and toxic cycles of behavior. Designers are especially proficient at reading a complex situation and identifying several different approaches to intervening in that situation. As such, they are particularly needed in the realm of **policy-making**. Though we do not propose that designers must necessarily themselves design policy, their unique ability to find innovative solutions to complex problems would be a breath of fresh air in what is often viewed as a stuffy and stagnant political atmosphere.[2]

Areas of further exploration

Our research shows that there is a clear gap between how designers understand their civic role as individuals and as designers, and that our workshop is a promising tool that can be used to bridge that gap. The long-term impact of the workshop as a method remains to be seen. Further research would include following up with participants to understand if their motivation for political participation has been changed, exacerbated or deterred by the midterm election results and by going through the workshop.

Diversity

It would also be fruitful to engage with a more politically diverse pool of participants. As we have remarked before, most participants identified with the Democratic party; thus in order to broaden the understanding of political participation, having conservative designers partake in the series of exercises would offer insight into particular political ideologies within the design discipline, how and why designers relate to particular political discourses, or why they choose to practice design in a certain way.

As noted above, our research focused only on designers living and working in the United States. Interviewing and carrying out similar exercises with designers in other parts of the world is an area of research that we hope to explore further in order to determine whether designers in other countries are more or less active in politics, what their motivations or barriers are to doing such work, and in what ways their politics manifest themselves in their work. In so doing, we may gain additional insight into different approaches to inspire designers in the United States to become more politically engaged.

Pedagogy

Though the workshop may be an effective means of changing designers' mindsets in the short-term, we still feel that a long-term, cultural and pedagogical shift in design is needed in order to bridge the gap between where designers currently work and where their political interests lie. In a sense, a method that provides designers with the scaffolding and the confidence needed to traverse the shift between project-level interventions to systemic, political change is needed. What is still lacking is a culture in design pedagogy and industry that supports the work of designers in the realm of politics, and gateways for designers to establish fruitful careers in this arena.

In that sense, the workshop tool could be refined as an educational exercise to encourage design students to reflect upon their input—both visible and invisible, and personal as well as political—in their design work. Students in particular would benefit from it as a form of career-path decision-making or as a form of identifying inflection points of political intervention early on in their careers, such that they become comfortable with the notion of using design to influence political change.

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[2] See the example of Restaurant Day in Finland (Weijo, 2018). Although Restaurant Day may not have changed policy itself, its widespread reach and establishment as a regular festival created its own de facto policy in the country.

This can be reinforced in the classroom by encouraging a strong, confident generation of emerging designers to work intensely on wicked problems (Buchanan, 1992; Rittel & Webber, 1973) from a holistic approach. Encouraging eye-bird view approaches that are later on complemented by technical skills depending on the particular design proposal they would want to pursue. Without these, designers will continue to be able to produce and operate others' visions, but not have the potential to rally others on theirs. Preparing students early on to recognize their political agency is an essential component to creating the cultural shift in design that is needed. Educational spaces therefore become social leverage points (Meadows, n.d.) where scalable systemic approaches to complex problems are taken from early on, engaging and making students comfortable with future challenges.

Future Transition Designers will need to make radical career choices and commit to their transitional practice in an ideological way. Speaking about her particular place in government, Chisnell admits: "[...] I *never* thought I would end up here doing design and research in the federal government. I'm a career opportunist, meaning that I've always just done the next thing that looked interesting, rather than having a long-range plan" (Amatullo, Boyer, Danzico, & Shea, 2016, p. 128). This nomadic or "career opportunistic" approach to design practice is oftentimes the norm, yet makes large spatio-temporal arcs of change especially challenging. An internal reflective shift within the discipline will be crucial for designers to become the long-term standard-bearers we need.

Design Research

This research, however, just begins to broach the lacuna of research into how design intertwines with politics. Other researchers might delve deeper into how design can combat neoliberalist disillusionment with the political process, using design as a form of civil disobedience and resistance, or participation in the form of co-imagining alternative futures with the publics. We invite designers to take up these and other potent areas of research to better understand how design can play a more significant role in stabilizing our rapidly changing political structures.

Conclusion

Much like our environment, our systems of government and politics are the foundations upon which nearly all other aspects of our lives rely. Without a healthy, resilient, and robust political system that ensures the safety and wellbeing for all people, transitions to more sustainable and more equitable futures lie on precarious footing. Leveraging the expertise and competencies they already have, designers can play an important role in correcting course and working towards political systems that truly represent the voice of the people. Our research has shown that helping designers identify intervention points within both their sphere of influence and sphere of concern can help overcome initial barriers and inspire them to act on social and political issues of personal significance. Given the significance and urgency of this work, an active pedagogical push to prepare and equip designers to design for political change is called for. With more designers beginning to take on this important work, we may begin to see a transition not just within the field of design, but within the world as well.

References

"About." Social Design Pathways. Accessed January 19, 2019. http://www.socialdesignpathways.com/about/.

Amatullo, M., Boyer, B., Danzico, L., & Shea, A. (Eds.). (2016). *LEAP Dialogues: Career Pathways in Design for Social Innovation*. Pasadena, CA: Designmatters at ArtCenter College of Design. Retrieved from http://www2.artcenter.edu/leapdialogues/

Bodker, S. (1999). Scenarios in user-centred design-setting the stage for reflection and action. In *Proceedings of the 32nd Annual Hawaii International Conference on Systems Sciences* (pp. 1–11). https://doi.org/10.1109/HICSS.1999.772892

Abbott, D. et al. (2018, November 1). Bolsonaro and the Rise of the Far Right. *The Guardian*. Retrieved from https://www.theguardian.com/world/2018/nov/01/bolsonaro-and-the-rise-of-the-far-right

Bosch, S. (2016). Design's Role in Policymaking. In L. Pipkin (Ed.), *The Pursuit of Legible Policy: Encouraging Agency and Participation in the Complex Systems of the Contemporary Megalopolis* (pp. 89–94). Mexico City,

Mexico: Buró Buró Oficina de proyectos culturales, S.C. Retrieved from http://legiblepolicy.info/designs-role-in-policymaking/

Boyer, B. (2018, November 12). Interview [In person].

Buchanan, R. (1992). Wicked Problems in Design Thinking. *Design Issues*, 8(2), 5. https://doi.org/10.2307/1511637

Candy, S., & Dunagan, J. (2016). The Experiential Turn. *Human Futures*. 26.

Choi, M. (2019, January 4). Ocasio-Cortez Floats 70 Percent Tax on the Super Wealthy to Fund Green New Deal. Retrieved January 19, 2019, from https://politi.co/2F7H93a

Dalton, R. J. (2008). Citizenship Norms and the Expansion of Political Participation. *Political Studies*, 56(1), 76–98. https://doi.org/10.1111/j.1467-9248.2007.00718.x

Docherty, C. (2017). Perspectives on Design Thinking for Social Innovation. *The Design Journal*, 20(6), 719–724. https://doi.org/10.1080/14606925.2017.1372005

Dockray, H. (2018, March 27). The Largest Protests in American History are Happening Right Now. Retrieved November 15, 2018, from https://mashable.com/2018/03/27/largest-protests-american-history/#6FxcehfUYsqN

Geels, F. W. (2002). Technological Transitions as Evolutionary Reconfiguration Processes: A Multi-Level Perspective and a Case-Study. *Research Policy*, 31(8), 1257–1274. https://doi.org/10.1016/S0048-7333(02)00062-8

Geels, F. W. (2011). The Multi-Level Perspective on Sustainability Transitions: Responses to Seven Criticisms. Environmental Innovation and Societal Transitions, 1(1), 24–40. https://doi.org/10.1016/j.eist.2011.02.002

Horn, R. E., & Weber, R. P. (2007). New Tools For Resolving Wicked Problems: Mess Mapping and Resolution Mapping Processes. MacroVU(r), Inc. and Strategy Kinetics, LLC. Retrieved from https://www.strategykinetics.com//New_Tools_For_Resolving_Wicked_Problems.pdf

Imaginaries Lab | Carnegie Mellon University. (n.d.). Retrieved November 16, 2018, from http://imaginari.es/

Irwin, T. (2015). Transition Design: A Proposal for a New Area of Design Practice, Study, and Research. *Design and Culture*, 7(2), 229–246. https://doi.org/10.1080/17547075.2015.1051829

Irwin, T. (2019). The Emerging Transition Design Approach. *Cuadernos Del Centro de Estudios de Diseño y Comunicación* No73, (73), 149–181.

LeDantec, C. (2016). Designing Publics. Cambridge, MA: The MIT Press.

Kimbell, L. (2015). Applying Design Approaches to Policy Making: Discovering Policy Lab. Brighton: University of Brighton.

Laboratorio de Gobierno. (n.d.). Home. Retrieved January 24, 2019, from https://www.lab.gob.cl/

Mapped: The Innovation Labs Transforming Government - and How to Get in Touch. (n.d.). Retrieved November 14, 2018, from https://apolitical.co/government-innovation-lab-directory/

Maze, R., et. al. (2017), Design for Government, Exhibition, Designmuseum, Helsinki.

Meadows, D. (n.d.). Leverage Points: Places to Intervene in a System. Retrieved November 16, 2018, from http://donellameadows.org/archives/leverage-points-places-to-intervene-in-a-system/

Penin, L. (2018). *Designing the invisible: An introduction to service design*. London: Bloomsbury Publishing.

Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a General Theory of Planning. Design: Critical and Primary Sources, 4(2), 155–169. https://doi.org/10.1007/BF01405730

Scarry, E. (1985). *The Body in Pa*in. New York, NY: Oxford University Press.

Seyfang, G., Longhurst, N., & Hargreaves, T. (2012). Understanding Sustainability Innovations: Points of Intersection Between the Multi-Level Perspective and Social Practice Theory. *Science, Society, and Sustainability*, 3–25.

Simon, H. (1981). *The Science of the Artificial*. London: MIT Press.

Star, S. L., & Ruhleder, K. (1996). Steps Toward an Ecology of Infrastructure: Design and Access for Large Information Spaces. *Information Systems Research*, 7(1), 111–134. https://doi.org/10.1287/isre.7.1.111

Vesoulis, A. (2018, November 13). Donald Trump Drove Record 2018 Midterm Election Turnout. Retrieved November 15, 2018, from http://time.com/5452258/midterm-elections-turnout/

Weijo, Henri A., Diane M. Martin, and Eric J. Arn*ould. "Consumer Movements and Collective Creativity: The Case of Restaurant Day."* Journal of Consumer Research 45, no. 2 (January 2018): 251-74.

What is Transition? | Circular Model & Reconomy. (n.d.). Retrieved November 15, 2018, from https://transitionnetwork.org/about-the-movement/what-is-transition/

Winner, L. (1980). Do Artifacts Have Politics? *Daedalus*, *109*(1), 121–136.

Appendix 1: SURVEY

Conducted via Google Forms
Practitioners: 43 respondents
Carnegie Mellon School of Design: 29 respondents
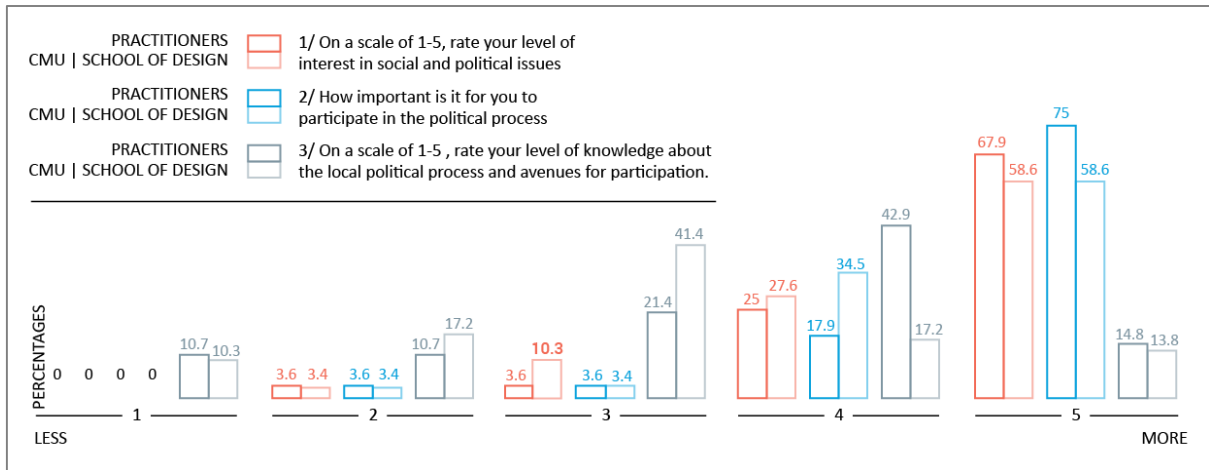
Figure 1: Responses from practitioners and students. Comparison of the importance given by participants to social and political issues, to their participation in the political process, and their knowledge on the local process and avenues of participation.
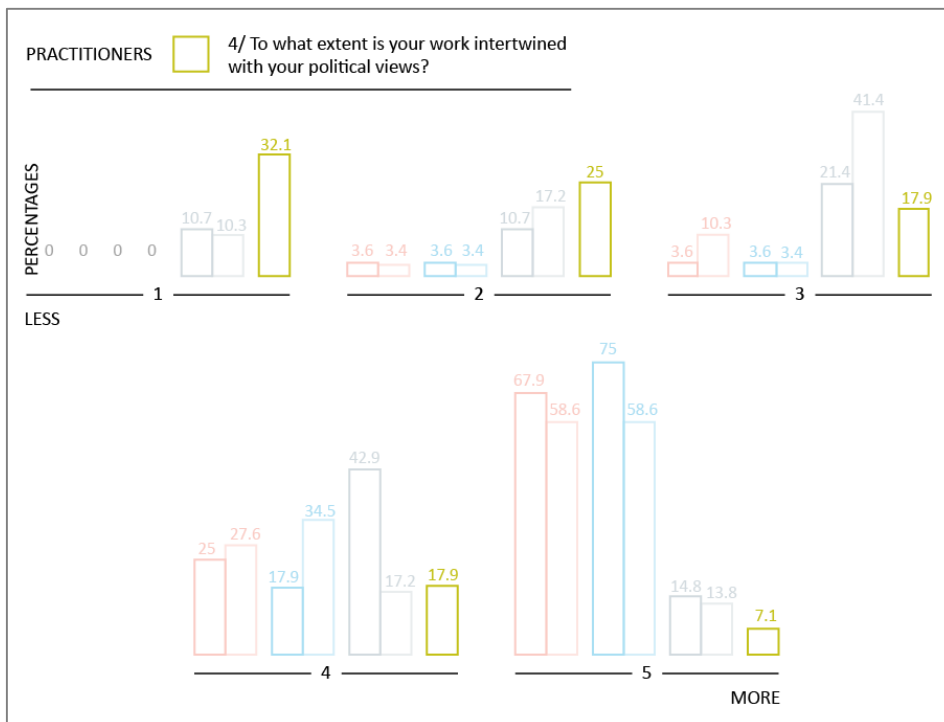
Figure 2: Comparison between responses to questions 1,2 and 3, and the extent to which participants viewed their work intertwined with their political views.
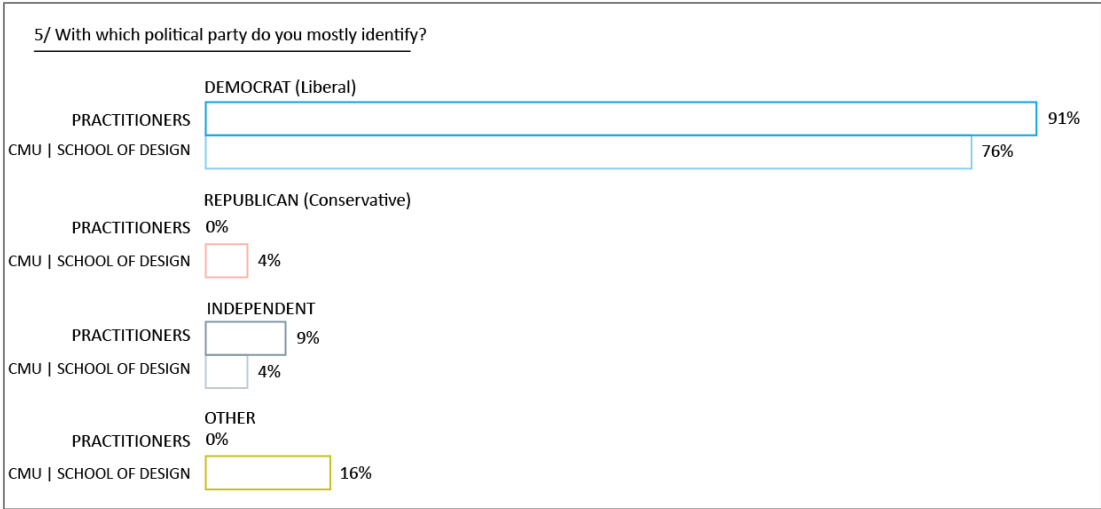
Figure 3: Political Party participants identified with.
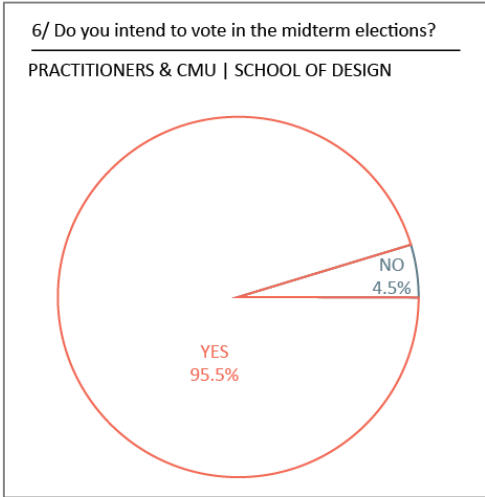
Figure 4: Intention of participants to vote on the midterm election.
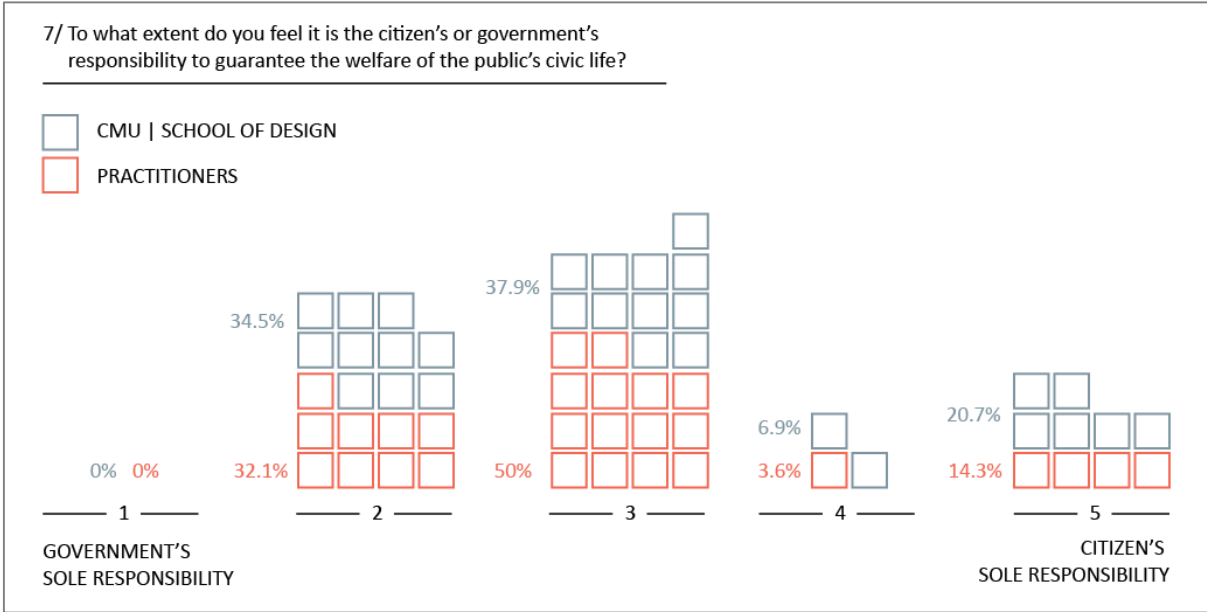
Figure 5: Participants intake on government versus citizen responsibility on the welfare of civic life.

8/a In which area/industry do you hope to work when you graduate?
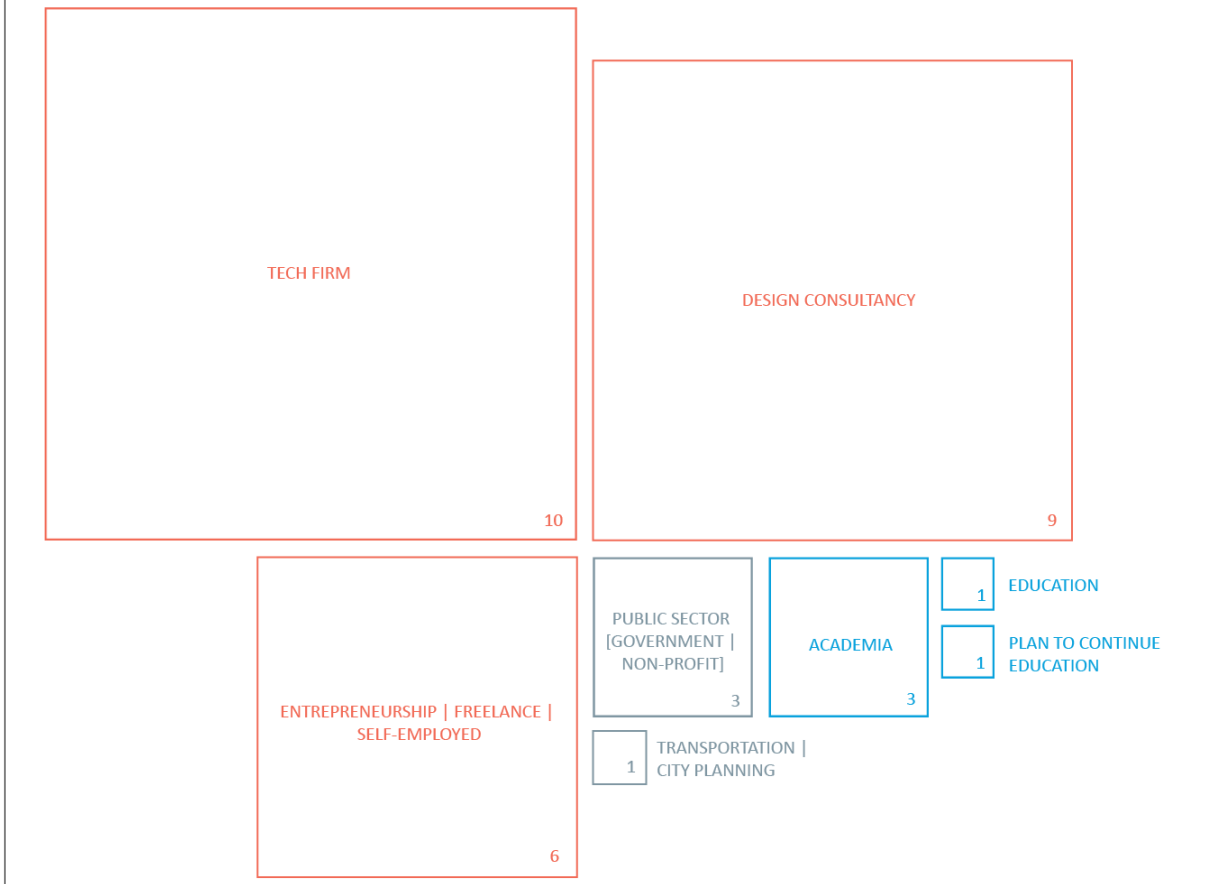
CMU | SCHOOL OF DESIGN: 23 respondents

TECH FIRM

10

DESIGN CONSULTANCY

9

ENTREPRENEURSHIP | FREELANCE | SELF-EMPLOYED

6

PUBLIC SECTOR [GOVERNMENT | NON-PROFIT]

3

ACADEMIA

3

EDUCATION

1

PLAN TO CONTINUE EDUCATION

1

TRANSPORTATION | CITY PLANNING

1

Figure 6: Industry in which students responding to the survey wish to develop a career after graduation.

8/b In which area/industry do you work?

PRACTITIONERS: 43 respondents

DESIGN CONSULTANCY

TECH FIRM

15

13

2
CORPORATION

IN HOUSE ART
DEPARTMENT
1

STARTUP/
ARTISTIC INCUBATOR
1

AD AGENCY
1

PUBLIC SECTOR
[GOVERNMENT |
NON-PROFIT]

7

ENTREPRENEURSHIP | FREELANCE |
SELF-EMPLOYED

13

1
STUDENT

2
ACADEMIA

2
EDUCATION
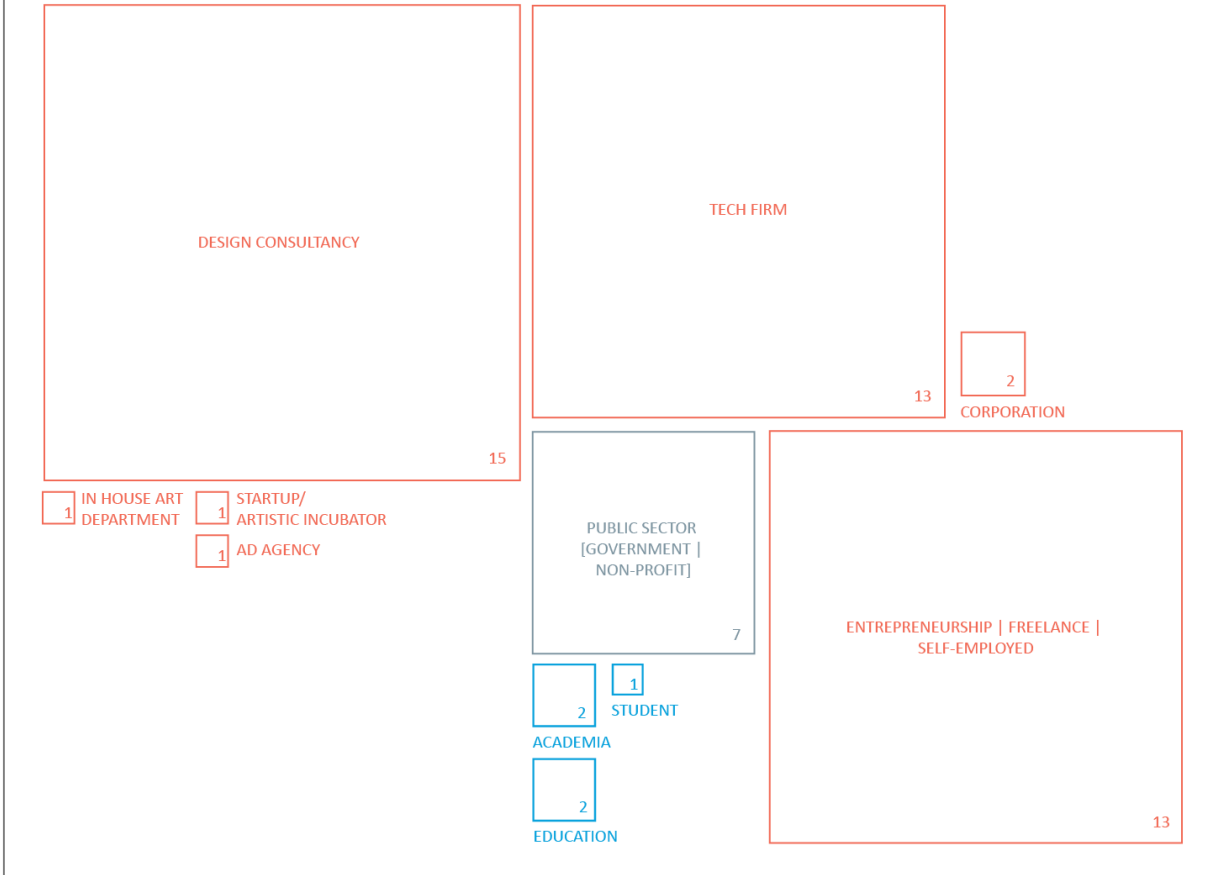
Figure 7: Industry in which practitioners responding to the survey work.
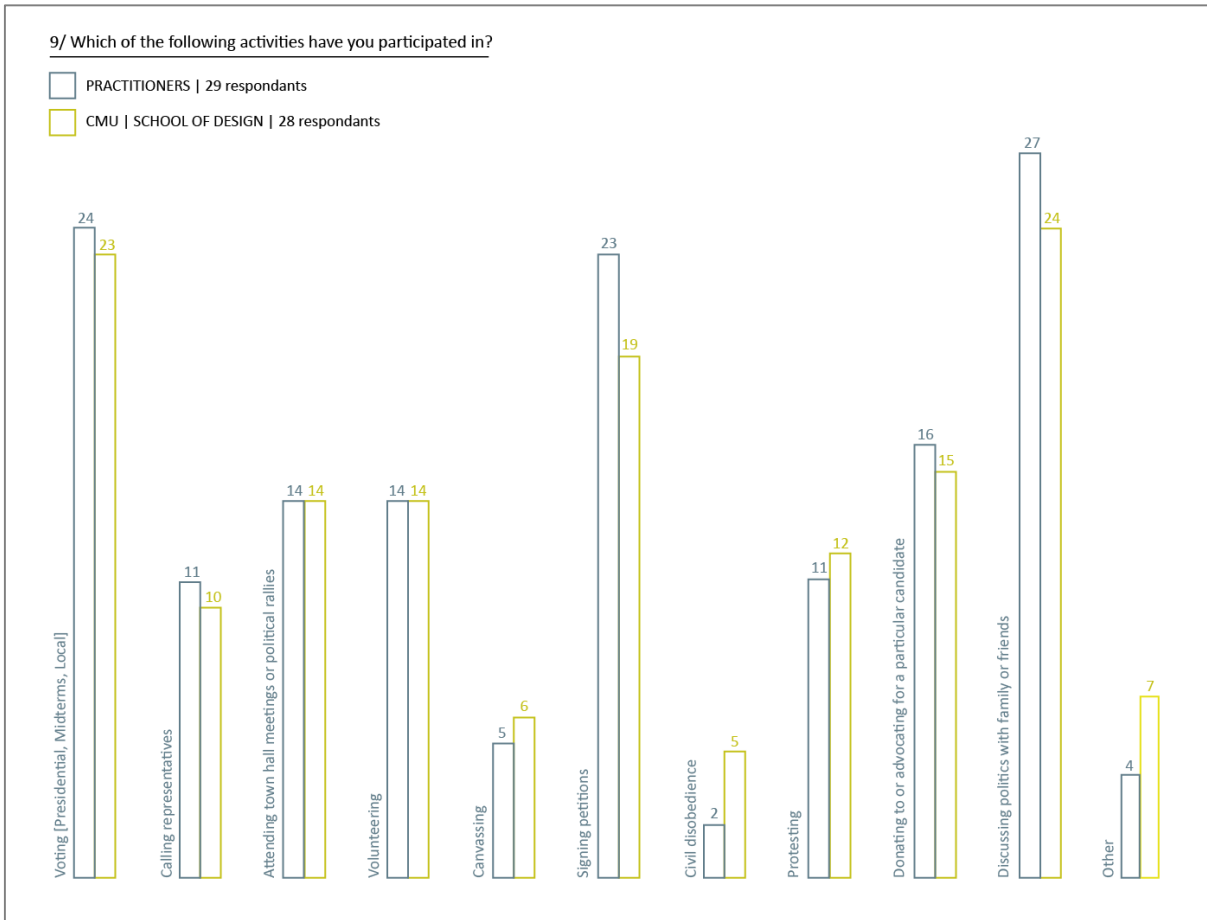
Figure 8: Political activities in which responders have participated.

Appendix 2: WORKSHOP

Conducted in the School of Design at Carnegie Mellon University and via Survey Monkey
Paper based workshop: 8 participants
Digital exercise: 7 participants

EDUCATE AND INFORM

ADVOCATE FOR...
_____

CHANGE PERCEPTIONS

BE AN ACTIVIST

CREATE PLATFORMS

FACILITATE
_____

DESIGN POLICY

MOBILIZE CITIZENS

BREAK DOWN BARRIERS

REPRESENT
_____

BE AN AGENT OF CHANGE

CHALLENGE HEGEMONY/ AUTHORITY

NAME:
_____

1. CARD-SORT RANKING

NUMBER | ROLE

2. MAPPING LEVELS OF INTERVENTION
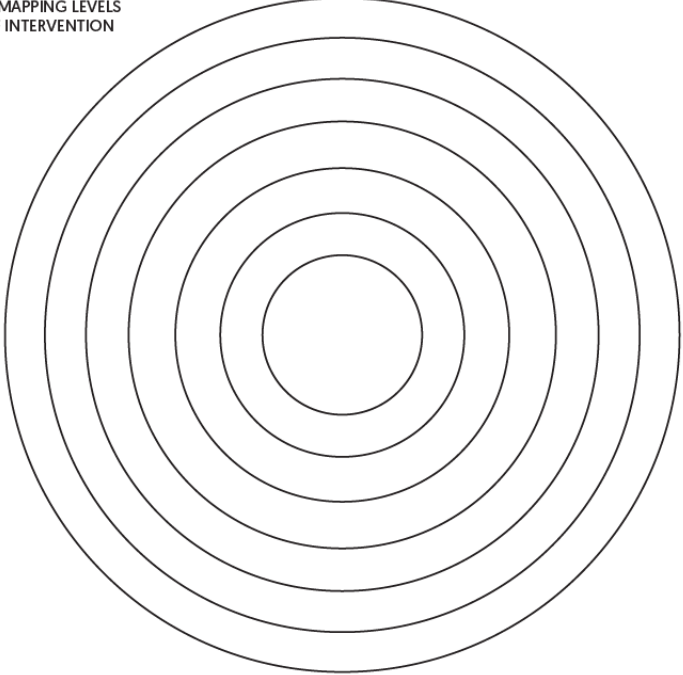
Figure 1a: Paper-based workshop material, cards and map, used during the workshop.

NAME:

1. CARD-SORT RANKING

NUMBER | ROLE

1a	Change Perceptions
B	Educate + Inform
2	Design Policy
3a	Advocate for Environment
B	Represent the unfamiliar voiceless
4	Be an agent for change
5	Be an activist
6	Mobolize Citizens
7	Facilitate behavior change

2. MAPPING LEVELS OF INTERVENTION

Figure 1b: First step of completing the workshop worksheet, with roles related to political participation ranked and numbered on the left.

NAME:

1. CARD-SORT RANKING

NUMBER | ROLE

1a	Change Perceptions
B	Educate + Inform
2	Design Policy
3a	Advocate for Environment
B	Represent the unfamiliar voiceless
4	Be an agent for change
5	Be an activist
6	Mobolize Citizens
7	Facilitate behavior change

2. MAPPING LEVELS OF INTERVENTION

International Policy
National Organizations
State Agencies
Local Organizations
Local Individuals
Students + Faculty
Workshop Participants

Figure 1c: Step 2 of the workshop sheet, with participants listing points of intervention, ranging from where they felt they have the most influence and agency (innermost circle) to the least influence (outermost circle).
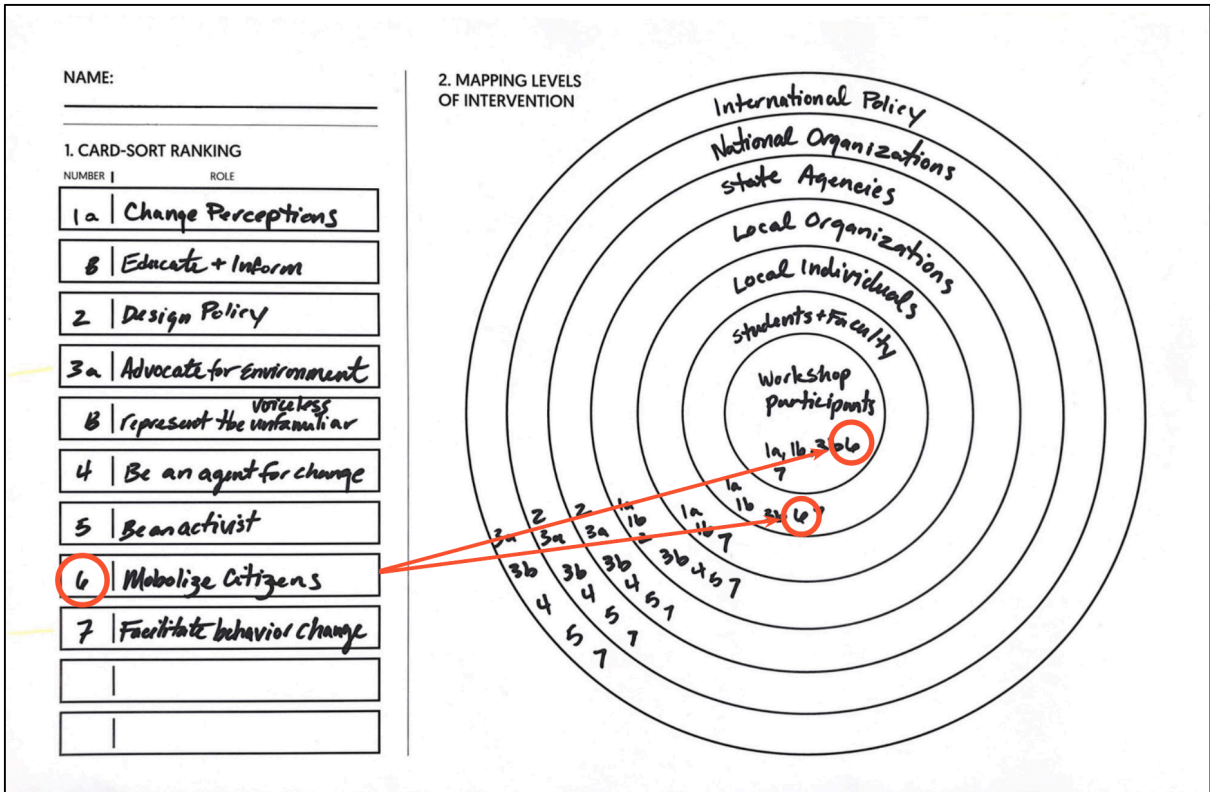
Figure 1d: Fully completed workshop sheet, where participants were asked to place the numbers of the various roles at intervention points on the map where they felt that role was most appropriate, visually connecting the roles to the points of intervention. (Red lines added here for illustration purposes).

As a final exercise, participants were asked to choose a particular social or political issue that was important to them, and then design an intervention for that issue utilizing a particular role at a single intervention point on the worksheet. If, for example, this individual indicated that gun control was important to them, they might choose to devise an intervention that can mobilize citizens around the university to lobby for gun control.

*5. How do you perceive your participation as a designer within the following roles? Rank the roles from how you are most to least involved. Please add your own if needed and mark as N/A whichever are irrelevant.

⋮	⬍	Be an activist	☐ N/A
⋮	⬍	Facilitate conversations	☐ N/A
⋮	⬍	Change perceptions	☐ N/A
⋮	⬍	Advocate for the under-represented	☐ N/A
⋮	⬍	Create platforms	☐ N/A
⋮	⬍	Educate and inform	☐ N/A
⋮	⬍	Design for policy	☐ N/A

*7. List at least 3 potential points of intervention from where you feel you have the most influence and agency (1) to the least influence (8). Examples: family, university, city, country, world.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

*8. **DESIGN EXERCISE**

Think of a political or social issue that is important to you. Then, select a point of intervention from those that you just listed, and the designer's role where you are most involved. Devise a way that a designer in that role might intervene in the political or social issue you chose.

For example, if gun control is important to me, and the university is where I feel I have most agency, and I stated that the role of "changing perceptions" is where I am most involved, I will devise an intervention that can change perceptions of gun control around the university campus.

_____

Figure 2: Digital adaptation of the workshop sent out via Survey Monkey.
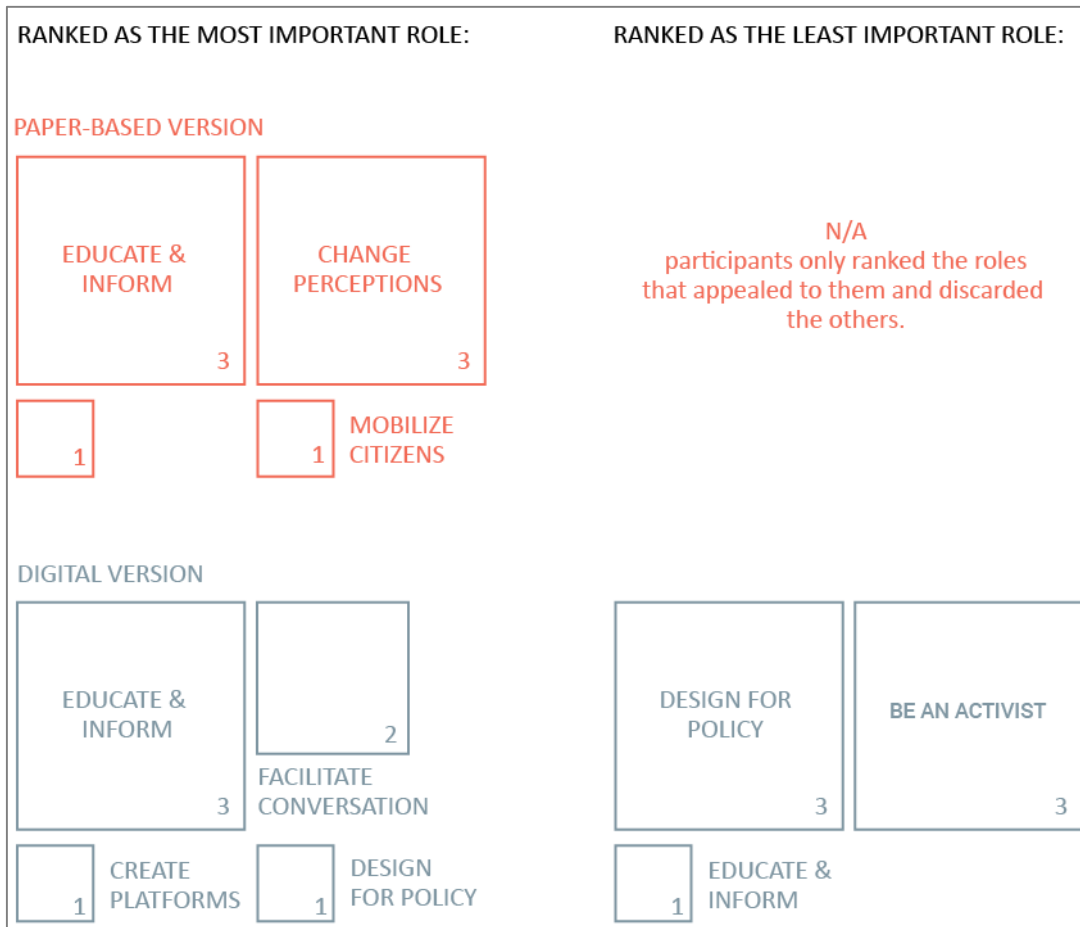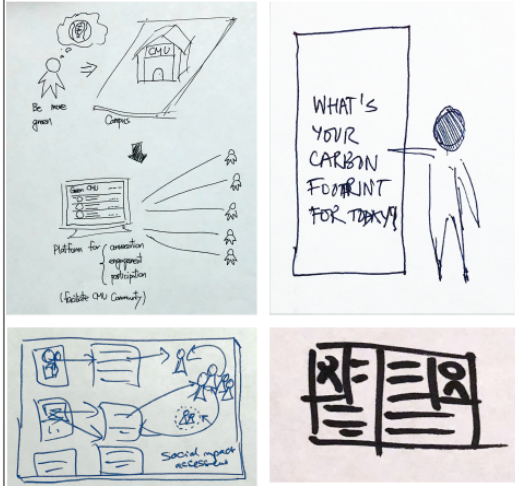
Results

Roles

Figure 3: Roles given out during the workshop and in its digital adaptation. Participants were able to propose new roles according to appropriateness.

RELEVANT ANSWERS FROM THE DIGITAL VERSION |
Practice-based approaches with sketching
and drawing involved.

RELEVANT ANSWERS FROM THE DIGITAL VERSION |
Recurrent variations of "Educate and inform"
and "Facilitate Conversations":

"I think that as an educator I have a natural opportunity to educate and inform, but I also think that I don't view these items as separate from one another (neither the roles, nor the points of intervention)."

"I envision an intervention in which the creation of artifacts serve as a way to facilitate conversations among members of a specific community."

"[...]see what the school's official stance is and to do a educational campaign around gun reform."

"I feel I have the most agency with family and work activity to change perceptions by facilitating conversations. I'm actively working to build a platform [...] that will create a broader reach for this agency."

"I could educate students about the issue through a course assignment using data/interviews from those affected by gun violence as a way of showing students the impact that policy has on individuals."

"I think it's the role of the designer is to facilitate conversations between people from all sides of the debate to see where there is common ground and where there is not."

Figure 4: Roles ranked as the most/least important by participants.

Intervention points

	GIVEN ROLES:	PROPOSED BY PARTICIPANTS:

PAPER VERSION	> EDUCATE AND INFORM
	> ADVOCATE FOR _____
	> CHANGE PERCEPTIONS
	> BE AN ACTIVIST
	> FACILITATE _____
	> CREATE PLATFORMS
	> DESIGN POLICY
	> MOBILIZE CITIZENS
	> BREAK DOWN BARRIERS
	> REPRESENT _____
	> BE AN ANGENT OF CHANGE
	> CHALLENGE HEGEMONY/AUTHORITY
		> REPRESENT A MINORITY
		> ADVOCATE FOR THE ENVIRONMENT
		> FACILITATE CONVERSATIONS BETWEEN
		  DIVERGENT OPINIONS
		> ADVOCATE FOR DESIGNERS TO BE MINDFUL
		  ABOUT POLITICAL AND POLICY IMPACT OF THEIR WORK
		> REPRESENT MINORITY VOICES,
		  ESPECIALLY FEMALES + ETHNIC GROUPS
		> ADVOCATE ACCESSIBILITY AND REPRESENTATION

DIGITAL VERSION	> EDUCATE AND INFORM > ADVOCATE FOR THE UNDER-REPRESENTED > CHANGE PERCEPTIONS > BE AN ACTIVIST > FACILITATE CONVERSATION > CREATE PLATFORMS > DESIGN FOR POLICY	> GRADUATE STUDENT ASSEMBLY OUTREACH > COLLABORATE WITH KNOWLEDGE EXPERTS > CREATE AN OPEN ENVIRONMENT FOR VARYING POLITICAL PERSPECTIVES > VISUAL ARTICULATOR

Figure 5: Most recurrent points of intervention with the most/least amount of influence/agency.

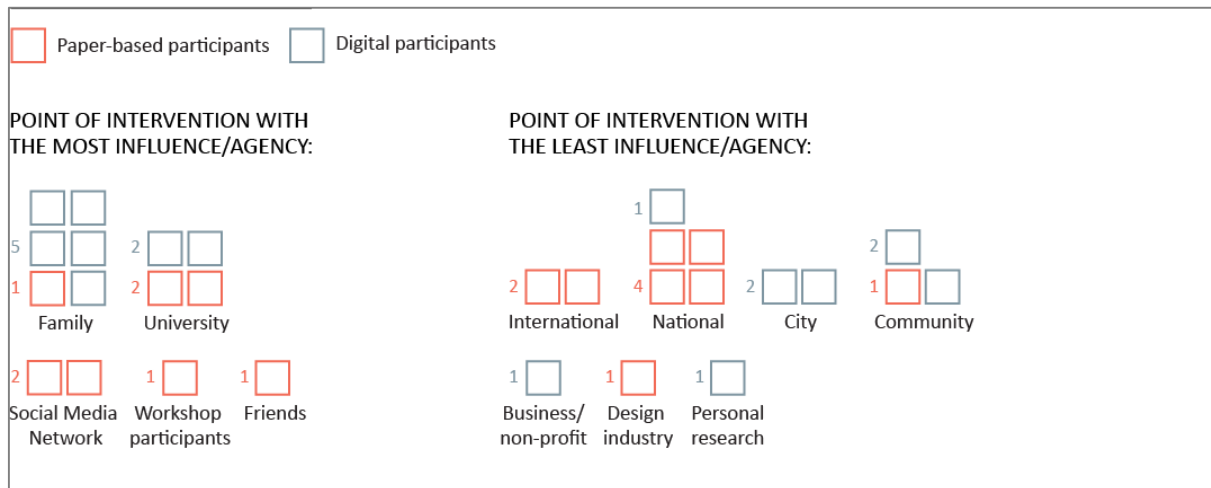*Overlapping roles and intervention points*

Figure 6: Participants were asked to choose a wicked problem of their preference. To tackle it, they needed to locate overlapping roles and intervention points determined in part 1 and 2 of the workshop (Figures 1 and 2). Finally, they had to propose a design-led form to intervene in those overlapping nodes in regards to their wicked problem.