

1 Design Experiments in Civics

Games and scenarios, sensors and maps, spreadsheets and apps—these are familiar design things. But their making and use can be put toward unexpected ends. They can be made and used to explore how our worlds are configured, and how they might be configured differently. In addition to providing us with entertainment and information, these familiar things can also provide us with insight and agency. They can be apparatuses in experimental practices of inquiry. My interest is how the making and use of such familiar design things can figure into inquiries about the conditions and experiences of democracy, through what I call design experiments in civics.

Design experiments in civics use creative practices to explore how we might make and experience our communal lives differently. They are a way of doing democratic inquiry through design. On the surface, they are a fairly typical way to bring design to bear on phenomena. They hold on to a belief that design can expand our possibilities for how we choose to structure and fulfill our lives. But at the same time, to appreciate these efforts requires taking different perspectives on the practices and potentials of design. Although familiar things like games and scenarios, sensors and maps, and spreadsheets and apps comprise these experiments, they are wielded unlike much of contemporary design. The commitments and purposes of democratic inquiry are distinctive. These design experiments in civics beget different narratives and theories of design.

My attempt to expand how we think and do democratic inquiry through design begins with making sense of the phrase “design experiments in civics.” In this chapter, I introduce the concept, explain the terms that comprise the phrase, and discuss what they mean in tandem. Admittedly, “design experiments in civics” is clumsy. “Experiments in civics” and “design experiments” are more graceful, but both of those phrases lose an element of what

is in play and what is at stake. When these three terms—design, experiment, and civics—mingle, significant themes and variations, potentials and consequences emerge. Such endeavors are experiments because they are crafted and performed in order to come to an understanding of the conditions they operate within and pose problems for further inquiry. They are civic because they are about forms of democracy “in the small.” They are design experiments because imaginative making is employed to produce artifacts, systems, and services that are both sites and modes of inquiry. While the phrase can be quickly explained, more is needed to develop an appreciation of these design experiments in civics.

From Democracy in the Workplace to the Work of Democracy

Design experiments in civics blend imaginative making and politics. They are a way to envision, construct, and explore conditions and qualities of association between people. The term “making” has been in vogue over the past decade. Activities of making often involve material construction, but one could also speak of conceptual making or composing already existing things as making. Making is fundamental to design, but design is not reducible to making, nor are designers the only ones who make. And designers do more than make things; they also do things. One of the emerging topics in design is the relation between making and doing, which traditionally has been described as different realms of action (Lee 2020; Wang 2015). A theme that runs through this book is the interplay between making and doing. Making can be a way of doing inquiry and politics.

This practice of design experiments in civics springs from methods and philosophies of participatory design. Within participatory design, there is a history of blending making and politics that emerged from democratic concerns at work. The field of participatory design, as developed in Scandinavia in the late 1960s, was spurred by the introduction of computers into the workplace (Kensing and Greenbaum 2012). Practitioners, researchers, and activists asked, “How will these technologies affect democracy in the workplace?” They were troubled that the introduction of technologies of automation, monitoring, and information management would de-skill workers and lessen workers’ voices in decision-making. Early participatory design practitioners were motivated to include people who would be affected by new technologies in the design of the technologies. These advocates

believed that such inclusion would improve the design of systems. Better accounting for the practices and values of the workers through design could be democratizing.

Fifty years later, while some techniques of participatory design are found in mainstream design, it never caught on as a conventional practice. Lack of adoption may be because participatory design is as much a philosophy of design as a method. The origins of participatory design were influenced by Marxist thought (Kensing and Greenbaum 2012). While those Marxist perspectives have waned, there remains among many a fierce commitment to democracy, labor, and equity. And whether explicit or implicit, a Marxist philosophy runs counter to the dominant free-market agendas that most professional design today serves. Above all, participatory design was, and continues to be, political (Beck 2002). As part of those commitments and politics, the methods of participatory design push against the presumed authority of the designer and strive to create pluralistic and inclusive modes of making. Certainly participation is a theme often found in professional design, but it is often decidedly apolitical, limited to techniques merely intended to amplify a designer's creativity and impact. Much of what is touted as "participatory" involves simply enrolling potential users into facile activities of cocreation, without committing to the politics and values embedded in the philosophies of participatory design.

Without a doubt, there are issues with the histories and practices of participatory design. Participatory design originated in societies that were socially progressive, culturally homogeneous, and politically stable. Those conditions and our attentiveness to hegemony have changed, and so too must participatory design change. Much of the work of contemporary participatory design happens in shifting social, cultural, and political landscapes. This pluralism drives current debates about what constitutes participation and who is deemed able to participate (Harrington, Erete, and Piper 2019). There is also an urgent need to decolonize theory and practice in participatory design. The emergence of themes of justice and care in participatory design signals changes in our contemporary condition and the need to respond to those changes (Costanza-Chock 2020; Light and Akama 2014).

Contemporary participatory design remains committed to democracy, labor, and equity, and the scope of attention and action has broadened beyond traditional workplaces. Over the past several decades there has been a concerted move among designers to consider work in the public realm

as a distinctive site of inquiry and practice (Bannon, Bardzell, and Bødker 2018; DiSalvo, Clement, and Pipek 2012; Huybrechts, Benesch, and Geib 2017a). In addition to examining how technologies affect work in factories, hospitals, and schools, the field of participatory design has expanded to examine how to sustain democracy in government offices, activist organizations, and neighborhoods. Whereas the origins of participatory design were concerned about democracy in the workplace, contemporary participatory design takes up the question “What is the work of democracy?”

Thomas Binder, Eva Brandt, Pelle Ehn, and Jochaim Halse (2015) offer the phrase “democratic design experiments” to characterize emerging practices of participatory design that retain a strong political agenda. As they state, “Democratic design experiments work by making issues experientially available to such an extent that ‘the possible’ becomes tangible, formable, and within reach of engaged yet diverse citizens” (163). These democratic design experiments emerge from participatory design, and they expand to become the basis for modes of designing that are profoundly collective, beyond the usual concerns of design. In the process they complicate our understandings and expectations of both design and democracy: “Democratic design experiments are, above all, committed to continuously finding new forms of emerging publics and aiming to enrich the repertoire of democratic forms of expression” (163). Undeniably, this book and the projects within are inspired by, and indebted to, their concept of democratic design experiments. The phrase “design experiments in civics” is my attempt to provide specificity to their concept, to focus it on and refract it through the contexts and events of the projects described herein.

The phrase “in the small” is often used to characterize these experiments as “democratic design experiments in the small” (Binder et al. 2015; Ehn 2017). Labeling work as “in the small” bounds design in a way that is at odds with most contemporary design discourse, which casts design as universal in method and scope. There seems to be no limit to how design is employed to solve problems or foster innovation. Global design consultancies regularly work with national governments and civil society organizations to develop programs, strategies, and policies. During an era of “big data”—when everything must occur “in the large”—the work of design and democracy can also be more modest; the context of the local and mundane is also important. At the same time, I am not claiming that working locally is preferable to

working globally. Working “in the small” is not more desirable than operating “in the large.”

Work at one scale or another, then, is not inherently more worthy. Rather, working at one scale or another is important because it focuses our attention on particular conditions, practices, and politics. The conditions, practices, and politics I am choosing to attend to are simply more local and mundane. My choice to work “in the small” was motivated by my belief that democracy occurs through our local actions and environments, just as much as national and global equivalents. I gravitated toward “the small” because I believed that design was not universal in method and scope, and it was important to identify and appreciate design’s limitations and shortcomings. Perhaps most significantly, my choice to work “in the small” was motivated by my own desire for a more intimate practice and inquiry. Within this moment, particularly in the public realm, democratic participation is often co-opted as a strategy to feign engagement. Too often democracy is proffered as an ideal good without explanation, meaning the very idea deserves inquiry and scrutiny. For me, that scrutiny took place within the closeness of civics.

Civics as Democracy in the Small

I use “civics” as shorthand for “democracy in the small,” to describe situated experiences that strive toward forms of togetherness that enable collective agency and communal life. My understanding of both democracy and civics is informed by theories of agonistic pluralism and pragmatism, which conceptualize experimentation as an activity that cultivates and sustains democratic conditions and potentials. Democracies have always been fraught with inequity and injustice, disputes about rights and responsibilities, and challenges of collective action. One way to approach democracy is to consider these situations and the tensions they produce as defining the democratic condition. In such a view of democracy, what is important is not the resolution of problematic situations. Rather, what is important is the ongoing exploration of varied courses of action to address issues through the formal and informal institutions of our communal lives. Both theories of agonistic pluralism and pragmatism share this perspective and can productively meld together.

Agonism is based on the idea that democracy is characterized by the capacity to question, challenge, and refuse (Arendt 2013; Connolly 2002; Honig 1993; Mouffe 2013). In this way, agonism resists interpretations of democracy as consensus, because consensus is too often achieved through assimilation or the silencing of difference. Of course, there are practices of consensus that work in fair ways. But from an agonistic perspective, it is important to maintain the capacity for “perpetual contest” (Honig 1993). Contestation is perpetual because our social and cultural conditions are in constant flux. Amid ongoing change, beliefs and values shift, which affects our lived environments and experiences. The work of agonism is to continually identify and counter hegemony, which keeps open possibilities for differently configuring our communal lives.

In *Adversarial Design* (DiSalvo 2012) I explored how design might do the work of agonism by focusing on how the objects of design might express and enact agonism. In a sense, design experiments in civics continue an exploration of how design might participate in agonism. However, this current work broadens what is considered the activities and outcomes of designing as a situated practice, and takes a more humble approach to design. This move was informed by compelling critiques of the limitations of political design (Keshavarz 2018; Kiem 2013), shifts in my own practice, and the growth of work exploring agonism in the context of participatory design (Björgvinsson, Ehn, and Hillgren 2012; Hillgren, Seravalli, and Eriksen 2016; Kraff 2020; Sawhney and Tran 2020). In the context of participatory design in the public realm, some designers seek to create what Chantal Mouffe refers to as “agonistic spaces” (Björgvinsson, Ehn, and Hillgren 2010; Hernberg and Mazé 2018; Mouffe 2013). These agonistic spaces may be based in a physical space, but are better understood as an environment of material resources and social relations gathered together to prompt and sustain the exploration of the possibilities of difference. This bundling of resources and relations enables people to think and act toward diverse civics, even in constrained circumstances. The idea of contestation often brings to mind dramatic acts. But a notable characteristic of the work described herein is that contestation can also be subtle. This is not the same sort of contestation as street protests. Nor is it the same sort of contestation often expressed through political art. Many agonistic spaces foster a circumscribed, partial, provisional, often fragile contestation, akin to what Tau Ulv Lenskjold, Sissel Olander, and Joachim Halse refer to as “minor design

activism” (2015). Within the scholarship and practice of making agonistic spaces we find projects occurring in community centers, neighborhood organizations, so-called hackerspaces and makerspaces, sometimes in collaboration with municipalities, sometimes in opposition to municipalities—in that realm that I label as civics.

Without a doubt, “civics” is a tricky term. Its traditional definition is bound to notions of citizenship that are often exclusionary and exercised to reproduce dominant ideologies. As children, we learned about civics in school to become responsible and productive members of our city and nation. Thus, civics is often directly connected to serving statehood and other formal institutions of government. But there is no need to capitulate to standard and stultified connotations of civics. We can reject impoverished notions of civics that demand we yield to the state and only encompass the presumed rights of those deemed citizens. Instead, we can embrace the concept as multifaceted, reflecting the complexity of contemporary conditions. There is value in “staying with the trouble” with civics (Haraway 2016). Design experiments contest civics as we know it. They envision and explore how we might refigure governance and governmentality. This endeavor of participating in and contributing to diverse civic imaginaries and practices is part of the work of democracy.

I use the word “diverse” to refer to varied conditions and experiences, not to groups of people. In other words, I am not using “diverse” as a shorthand for Black, Indigenous, or people of color. Nor am I using the term to label disabled people, women, or LGBTQ+ people. Such identities and subjectivities are crucial to my work, but I am not categorizing them under the label of “diverse.” My striving toward diverse civics is informed and inspired by the work of J. K. Gibson-Graham and their engaged scholarship on diverse economies (1995, 1996, 2006, 2008). Gibson-Graham argued that too often we speak of “the economy” as if it were singular. We take the economy to be typified by contemporary free-market capitalism, mostly as we encounter it in Western industrialized and postindustrial nations. This is a problem for multiple reasons. First, it limits our thinking, making, and doing. Second, it is inaccurate; there is not one immutable economy. There are many kinds of markets, modes of labor and exchange, and nonmarket valuing practices. Examples of such diverse economies include worker cooperatives, consumer cooperatives, bartering, volunteering, informal lending, self-provisioning, and gifts. Gibson-Graham encourage us to recognize and appreciate this

diversity of economies. Pertinent to this book's concern with civics, they locate possibilities in practices that could also be characterized as "in the small." Gibson-Graham turn their gaze to sites such as farmers' markets, foraging collectives, and community time banks as examples of diverse economies. These diverse economies depend on recognizing and appreciating diverse economic subjectivities—the multiple and distinctive ways of becoming and performing collective economic identities and practices.

This diverse approach to economies can be extended to civics. If we want to envision diverse civics, we must begin by understanding the myriad ways that individuals, groups, and communities cultivate, express, and participate in different social and political environments. At first glance, taking insights from work on economies and applying them to civics might seem dodgy. The confounding of the free-market ideologies with government is a destructive quality of our contemporary condition. But I am not arguing for a confounding of economies and civics. Instead, I follow Gibson-Graham's work methodologically. Gibson-Graham's work is compelling because it is based in a staunch refusal to yield our imagination to singular concepts of economic structure, action, and affect. We can follow Gibson-Graham's lead in refusing to acquiesce to a singular and domineering notion of civics. To resuscitate civics, we should purposively seek out, study, and engage with unfurling civic subjectivities and attendant practices. Rather than considering one dominant mode of civics, we should embrace a pluralistic perspective on how we might structure and experience our communal lives. This process of seeking and understanding diverse civics can be performed through experiments.

Experiments

So far, I have used the term "experiment" loosely. That is a problem, given the history of the term. Usually, "experiment" is used in relation to science. This might lead readers to wonder if I am making an argument that design experiments in civics are scientific, particularly given that there is a field of design science and decades of literature on the science of design. Design experiments in civics are not science, at least not in the way we tend to characterize science. This is not to denigrate science, only to recognize and appreciate a plurality of ways of knowing. Science is one way of knowing. Design, along with art, craft, writing, and other forms of imaginative making are other ways of knowing. All these fields have modes of

inquiry that are experimental, which strive to understand “what might be” through investigative endeavors, the outcomes of which are not known. Experiments, then, are not limited to biology or physics or psychology; any intentional endeavor that trials ways of knowing and doing in order to produce knowledge and spur action might be called an experiment. At the same time, while design experiments are interpretive and exploratory in character, I am not suggesting that simply labeling something an experiment or experimental eschews commitments. Experiments do not evade consequences or excuse carelessness in thought or action.

Before going any further, it is crucial to acknowledge that experimentation can be grossly abusive. The history of experimentation is also a history of manipulation and exploitation. The Tuskegee experiment and the Stanford prison experiment are two well-known examples of how people can be horrifically harmed in the pursuit of knowledge. And most often, the people who are exploited are Black, Indigenous, people of color, neurodiverse, disabled, women, or LGBTQ+. In other words, experiments tend to be performed on those who are already subjugated by dominant and oppressive social and cultural norms, re-entrenching structural inequalities. Such manipulation and exploitation also occurs in the small; to this day, communities are beset upon by well-meaning researchers, designers, artists, and others who seek to study and even sometimes serve these communities. However, they do violence when they extract insights without ensuring enduring benefits to the community.

I recognize the problematic association of experiments with science and the potential violence of experiments. Other forms of experiment are possible, forms in which the experiment is undertaken as conjoint inquiry (Binder et al 2015; Dixon 2018; Steen 2013). As I develop this concept and practice of design experiments in civics, constant attention is given to issues of power and privilege, and the purported benefits of these design experiments are called into question. These are not experiments on people. They are collaborative explorations of the conditions and experiences of democracy, as those conditions and experiences are and as they might be. The inspiration for these design experiments in civics comes from pragmatism, in particular the work of Jane Addams.

Pragmatism provides a distinctive philosophical approach to experimentalism, oriented toward the social conditions and practices of democracy. In pragmatism, democracy and experimentation go hand in hand.

Furthermore, democracy and experimentation are experiential. Much of this thinking is usually credited to John Dewey, who believed democracy is always more than just a set of governmental structures. As he stated:

Democracy is belief in the ability of human experience to generate the aims and methods by which further experience will grow in ordered richness. Every other form of moral and social faith rests upon the idea that experience must be subjugated at some point or another to some form of external control; to some “authority” alleged to exist outside the processes of experience. Democracy is faith that the process of experience is more important than any special result attained, so that special results achieved are of ultimate value only as they used to enrich and order the ongoing process. (1988b, 229)

The stipulation that experience is central to democracy aligns with work “in the small.” In the closeness of local and commonplace encounters, experience comes to the fore. Democracy, then, is not an abstraction nor a set of formal organizations and procedures. Democracy is something we are involved in making, feeling, and doing. We encounter and construct democracy. And one way we do so is through experimentation. Continuing with Dewey, “The very foundation of democratic procedure is dependence upon experimental production of social change; an experimentation directed by working principles that are tested and developed in the very process of being tried out” (1988a, 273).

Pragmatism, and Dewey in particular, have long influenced design. The work of Brian Dixon (2018, 2020) and Marc Steen (2013) are especially important, as they weave together concepts central to this idea of design as democratic inquiry. Steen argues for understanding codesign as a practice of collaborative inquiry and imagination in which people come together to explore the possibilities for what could be, “so they can be creative and jointly bring about change” (2013, 29). Dixon offers a detailed and compelling interpretation of Dewey in relation to design research, drawing out how practices of design become practices of inquiry and how such practices of inquiry might be transformational. Through such work “we can contribute to knowledge on the basis of changing the situation and, consequently, changing the ontological baselines upon which we operate” (2020, 162). Pragmatism also runs throughout the concept of democratic design experiments (Binder et al. 2015), both in terms of the role of experimentation and that of publics (Le Dantec 2016; Lindström and Ståhl 2014), which is another point of connection between design and Dewey.

While Dewey provides a theoretical starting point to unite democracy, experimentation, and design, I do not want to dwell on Dewey (Rosner 2018: 26–27). Even more than Dewey, design experiments in civics are indebted to the work of Jane Addams and other feminist pragmatists. Addams worked together with Dewey and others who were members of the Department of Sociology at the University of Chicago and established what came to be known as the Chicago School of Sociology. Her work and writing are foundational to pragmatism. Addams, however, was not a traditional academic. Her pursuit of democracy took other forms. She put the concepts of pragmatism into action. In 1889, Addams and Ellen Gates Starr established Hull-House, a boarding house for immigrants in Chicago. It did more than just provide rooms; Addams developed ongoing programs of everyday learning for residents. Many of her programs revolved around what we would now call “making.” For example, there were classes in bookbinding and crafting homemade soft drinks. She also pioneered experimental social services. As one of many cases of such experimental social services, in response to concerns of eviction for striking women, she created a boarding club—a kind of cooperative hostel.

At a meeting of working girls held at Hull-House during a strike in a large shoe factory, the discussions made it clear that the strikers who had been most easily frightened, and therefore first to capitulate, were naturally those girls who were paying board and were afraid of being put out if they fell too far behind. After a recital of a case of peculiar hardship one of them exclaimed: “Wouldn’t it be fine if we had a boarding club of our own, and then we could stand by each other in a time like this?” After that events moved quickly. We read aloud together Beatrice Potter’s little book on “Coöperation,” and discussed all the difficulties and fascinations of such an undertaking, and on the first of May, 1891, two comfortable apartments near Hull-House were rented and furnished. (Addams [1910] 1990, 110)

This brief example of the boarding club expresses the character of the work of Hull-House and Addams’s feminist pragmatist approach to democracy. The boarding club was a caring collective. Not only was it situated in the lived experience and everyday challenges of women workers in late nineteenth-century Chicago, it was also responsive to those experiences and conditions. And that responsiveness was creative: through original and resourceful action, Addams, in collaboration with others, constructed an alternative institution and service.

Addams and residents of Hull-House also participated in extended and involved research, sharing that work as evidence of current conditions. One

such example is *Hull-House Papers and Maps*, published in 1895. These maps depicted statistics of those who lived in the neighborhood of Hull-House and included data on the nationalities of residents and their wages. This data was collected by Florence Kelly, who was employed by the United States Bureau of Labor, together with residents of Hull-House. Taken together, this work is an early example of community-based participatory research and the use of community-collected data and maps for advocacy. The research took years for Kelly and the residents of Hull-House to complete, because it was conducted across multiple projects with different sources of funding. Once completed and the maps produced, they were later used in a Bureau of Labor Statistics report.

For Addams, projects such as the boarding club and maps were part of an experimental practice. As she stated, “The Settlement . . . is an experimental effort to aid in the solution of the social and industrial problems which are engendered by modern conditions of life in the great city” (Addams [1910] 1990, 98). As Charlene Haddock Seigfried notes, Addams’s experimentation was distinctly collective; Addams sought to “make experience continuous beyond the individual” (Addams [1899] 1982, 186–187; Seigfried 1999). The work of the experiment, like the work of democracy, is not the isolated work of an individual but rather a communal endeavor. This communal characteristic of democracy and experiments continues to resonate in feminist pragmatism today. It is a characteristic that distinguishes feminist pragmatist democracy and experimental practices from other modes of action—including design—that all too often emphasize the allegedly epic efforts of a single person.

Though there was a strong and enduring collaboration between Jane Addams and the University of Chicago, Addams carefully managed this institutional relationship. She did not want Hull-House to become merely a laboratory for sociology, because she opposed “the detached view of knowledge that was gaining strength in universities seeking to emulate positivist models of science” (Seigfried 1999, 219). Addams believed that situated work in places like Hull-House set the standard for what we should understand as an experimental approach, not the work done in laboratories at universities (Gross 2009). I believe this tension with the university is productive for this inquiry. The connection between these design experiments in civics and academia are undeniable. In addition to explorations of what else civics might be, design experiments in civics are attempts at reconsidering what

else academic design might be. Similar to Addams's push against reductive notions of science, I am resistant to positivist and universal notions of academic design.

Inspired by pragmatism, then, by democratic inquiry I mean the cooperative investigation of our communal conditions as they exist now and as they might be differently arranged and lived. To call this inquiry "democratic" is not to refer to specific mechanisms, such as voting, nor specific structures of government, such as a representative democracy. Rather, democracy is "primarily a mode of associated living, of conjoint communicated experience" (Dewey [1916], 1997, 93). Those associations are pluralistic and concerned with the welfare of the community. Bringing theories of agonism into this, those associations are also continuously disputed. Democratic inquiry thus works to cultivate and sustain pluralistic and caring associations, and does so in ways that are collaborative and just, while also nurturing contestation and dissent. How our lives and experiences are associated is not fixed; it is matter for experimentation. That is, experimentation is a way of doing democratic inquiry. This is where the work of Jane Addams becomes so important. Through Addams we can see a philosophy of democracy as it is lived out through experimentation: an experimental approach to democracy is performed throughout her life's work. My approach, inspired by Addams but with nowhere near her breadth of work, is to similarly explore how an experimental approach to democracy might be performed and lived out, as told from the perspective of contemporary design practice and discourse.

It is also important to acknowledge that experiential perspectives on democracy were not limited to those we think of as pragmatists. Ideas uniting democracy as experience were also present in the work of W. E. B. Du Bois, an originator of sociology who founded the Atlanta Sociological Laboratory and what became known as the Atlanta School of Sociology (Wright 2017). As Seigfried discussed, for Du Bois "'the real argument for democracy' is its recognition of the worth of each person's feelings and experiences as an invaluable resource for the community and consequent belief in the inherent capacity for learning of its members" (Seigfried 1999, 211; see also Du Bois 1975, 144). While the approach of the Atlanta Sociological Laboratory employed a more scientific model and was not situated in the same way as Hull-House, Du Bois's practices of data collection and representation are prescient. In the late 1800s and early 1900s, Du Bois collected extensive data on the lives of Black people in the United States, which he used to

create stunning and compelling charts, diagrams, and maps. Shamefully, this first school of sociology has long been underrecognized (Wright 2017).

Contemporary philosophies of pragmatism continue to struggle to balance the limitations and potential of experimentalism. There is a persistent tension between pluralistic notions of experimentalism and regarding the experiment as a positivist endeavor that requires verification. In addressing the question “What Is a ‘Democratic Experiment’?” Chris Ansell (2013) rejects the conclusion that what is meant by experiment and experimentalism in the context of pragmatism is a traditional positivist experiment. Rather, he situates pragmatic experimentation as “provisional, probative, creative, and jointly constructed” (165). Ansell’s pragmatist experiment is strikingly similar to what I call a design experiment.

My concept of a design experiment brings Ansell’s concept of a pragmatist experiment together with Jane Addams’s Hull-House, as a prototype of sociopolitical experimentation through making. However, associating design and pragmatism requires returning to ongoing developments in design to enrich our working concept. When Ansell compares the pragmatist experiment to the design experiment, his point of reference is actually design science, drawn from the work of Herbert Simon. In *The Sciences of the Artificial* (1996), Simon asserted the role of design in the study and invention of the made world, as opposed to the discovery of the natural world. Simon was one of the foremost thinkers of the twentieth century and set the groundwork for design research. But Simon’s reliance on positivist notions of science threatens to thwart more expansive conceptions of experimentation in and through design.

My thinking about experiments is also deeply informed by the work of sociologist Noortje Marres (2016), who studies “living experiments” with a keen eye toward design. Marres is similarly informed by pragmatism, and she approaches her scholarship into contemporary experiments in living as a mode of social research. That is, she believes that experiments can be studied from the perspective of social theory and that living experiments can be cast as a kind of social research. Marres’s area of focus is sustainability, and the experiments she studies often prompt reflection on living sustainably, ranging from individual actions aimed at lessening one’s carbon footprint through online communication to public engagement events such as eco-homes that model collective approaches to environmentally responsible dwelling. What is distinctive about the social experiment, according to

Marres, is that they provide “a format or ‘protocol’ for exploring and testing forms of life” (2012, 78). Marres states that “experiments in sustainable living can be said to undertake the modification of habits and habitats according to a fixed procedure; they are a way of implementing changes in everyday routines and living spaces according to a protocol” (78). As exemplified by the range of activities and things Marres studies, these “formats and protocols”—the devices of living experiments—can take many forms.

Marres is not alone in her scholarship on experiments in and as social science (see Gunn, Otto, and Smith 2013; Lezaun, Marres, and Tironi 2017; Lury and Wakeford 2012b). What seems to be emerging in the fields of the social studies of science and technology are hybrid practices of sociology, anthropology, and design. At times, these practices skew more toward one field or another, but there are commonalities across these evolving methods. As described by Xavier Lezaun, Noortje Marres, and Manuel Tironi (2017, 195), “Deploying settings, devices, and/or things experimentally makes it possible to curate novel forms of participation, eliciting expressions or accounts of public issues that would otherwise remain underarticulated or exist only *in potentia* (Lury and Wakeford 2012[a]; Marres 2012).” Such perspectives and practices at the overlap of the social sciences and design greatly inform my work. Indeed, we might consider design experiments in civics as akin to the material experimentation that Marres describes and that continues to be elaborated upon from within the social sciences, articulated in a complementary manner from within design.

While design experiments are not science strictly speaking, there are insights into the experiment that can be drawn from the philosophy of science. In particular, Isabelle Stengers’s work on the experiment as event helps conceptualize the experiment as something made and experienced (2000). That is, Stengers’s conceptualization of the experiment as event provides entrée to consider the experiment as a designed thing. Notably, Stengers also draws upon pragmatism in her philosophy—in particular, the work of William James. Stengers’s explication of the experiment as event does not reduce the experiment to positivist conventions. Rather, she interprets it as a happening that prompts further inquiry. From this conception of the experiment as event, Mariam Fraser (2006) develops the idea of the event as “inventive problem-making.” Fraser’s idea of inventive problem-making is fundamental to design experiments in civics. As part of the work of democratic inquiry, what design experiments in civics do is construct problems

within our democratic conditions and experiences. Design experiments—as inventive problem-making—identify and articulate problems that should be addressed, perhaps by people other than designers.

Imagination and Care

Design experiments are distinctive because they stimulate our imagination through practices of making and use. And imagination can vary and expand our repertoires of action, of how else we might configure and experience democratic conditions (Binder et al. 2015; Steen 2013). A rich history of scholarship exploring the relationship between the imagination, society, and politics forms the backdrop for this inquiry. C. Wright Mills (1959) famously described the sociological imagination as enabling “its possessor to understand the larger historical scene in terms of its meaning for the inner life and the external career of a variety of individuals” (5). To Mills, the imagination was activated based on the structure of society, “the mechanics by which it is changing” (6), and prevailing “varieties” of individuals of the period. Arjun Appadurai (1996) conceptualized the imagination as shaping both individual and collective identities, describing it as a “constitutive feature of modern subjectivity” (3). He saw the imagination’s rise in relevance under modernity as being distinct from mere fantasy. To Appadurai, the imagination was a “staging ground for action” (7). Design experiments are just such a staging ground that help visions of society take form by activating the civic imagination through making and the use of made things.

Technology can play a powerful role in encouraging publics to imagine alternate presents and potential futures. The role of the technological imagination has historically been viewed with skepticism (Ames 2019; Barbrook and Cameron 1996), because scholars often think of the imagination as synonymous with technocracy or a way to describe the coercive aura of technology. There is substantive reason for such skepticism and concern, and such critique is important. I take a different route, treating the relationship between the imagination and technological practice as a way to imagine other ways of living together. Specifically, I draw on Sheila Jasanoff and Sang-Hyun Kim’s (2009, 120) notion of “sociotechnical imaginaries,” which they describe as “collectively imagined forms of social life and social order reflected in the design and fulfillment of nation-specific scientific and/or technological projects.” They regard sociotechnical imaginaries as able to articulate differences, explaining why technologies are imagined

to be useful for entirely different ends. Pushing back on earlier universal sociological visions for the imagination, they describe the sociotechnical imagination as “collective, durable, capable of being performed . . . [and] temporarily situated and culturally particular” (Jasanoff and Kim 2015, 19).

For pragmatists, imagination is essential to making democratic conditions and experiences vibrant. Erin McKenna’s (2001, 83) feminist pragmatist approach to Utopia provides a compelling understanding of the role of imagination in striving toward other worlds. She argues that what distinguishes pragmatist politics is that it is process oriented—that is, “There is no end state at which we must work to arrive, but a multiple of possible future states which we seek and try out.” Envisioning and trialing these future states requires imagination: creativity, inventiveness, and resourcefulness of thought and action. Furthermore, for McKenna the pursuit of Utopia as a feminist practice is also as an experimental practice. As she states, “We need to see life, and our visions of what could be possible, as an experimental process . . . of coping with conflict and difficulties” (3). It is no wonder, then, that McKenna draws upon writers such as Ursula Le Guin to exemplify the capacity of imagination to express and explore how we might differently configure our social and political relations.

Imagination is, of course, not new to design. There is a history of design that blends imaginative making and politics. Of particular interest and influence is the confluence of practices and discourses of participatory design and critical and speculative design. Melding together the artistic aspects of critical and speculative design with the engaged and political aspects of participatory design foments novel forms of inquiry (Sanders and Stappers 2008, 2012). Increasingly, designers are contesting and remaking these practices and discourses, articulating new practices and broadening discourse by engaging decolonization, Afrofuturism, feminism, and queer theory (S. Bardzell 2018; de Oliveira and de O. Martins 2019; de O. Martins and de Oliveria 2016; Harrington and Dillahunt 2021; Sengers, Williams, and Khovanskaya 2021; Winchester 2018). The issue for design, then, is not so much the limitations of imagination, nor a crisis of imagination, but rather the need for practices and discourses that are inclusive and expressive of more diverse subjectivities both within and beyond design. And, in fact, one way to cultivate and explore such diverse subjectivities is through imaginative making.

Other design theorists and practitioners have similarly explored the relationship between design, the imagination, and politics. Dan Lockton’s (Lockton and Candy 2019; Lockton et al. 2019) work on imaginaries is

essential in this domain, looking at how design can contribute to imaginaries that shape possibilities for change, even toward societal transition. Daniel Opazo, Matías Wolff, and María José Araya (2017) draw upon Cornelius Castoriadis (1997, 2007) to consider the political qualities of imagination and imaginaries in the context of designing public spaces in Chile, noting, “To think about design in terms of imagining the world otherwise—and act accordingly to change it—already involves an evident political edge” (Opazo, Wolff, and Araya 2017, 75). Recently, Paola Pierri (2020) has brought together the work of Cornelius Castoriadis and pragmatism to explore the role of the imagination in designing for democracy, proposing an idea of design for the radical imagination “which has—as its main ambition—the creation and the nurturing of a collective subject that can interpret and change the world politically” (5).

Imagination alone does not characterize these design experiments in civics. They are enacted; they are events that occur and that have effect. One of the reasons Jane Addams’s work is so compelling is that experiments she pursued unfolded in the world. Not only is democracy experienced through such experiments, imagination is also experienced. In some cases, this imagination may be spectacular. For instance, Black Quantum Futurism, based in Philadelphia, has hosted a series of workshops that bring Afrofuturist themes into community settings, sparking radical imaginations of how alternative temporalities can be expressed and employed toward more just and equitable Black futures. Acts of imagination can also be events that tinker and differently attune our everyday conditions. The Creative Reaction Lab in St. Louis provides examples of just such efforts of grounded and engaged practices of imaginative democracy toward developing capacities in communities and across generations.

The design experiments in civics that I describe in this book find their place among these practices and discourses that blend imaginative making and politics. Imagination is essential to the ongoing renewal that democracy demands. And experimentation is a method for sparking the imagination. That is, experimental practices are imaginative *and* they incite our imagination. What distinguishes design experiments in civics is that imagination is given structure—at least momentarily—such that it might be experienced.

Finally, I want to bring care into this discussion. At this point, that may seem afield. But there is an argument that care is, or should be, fundamental to how we structure and experience our communal lives. Care provides

a principle that gives purpose to these experiments. For Joan Tronto (2013), care is a way of conceiving democracy philosophically. Caring, according to Tronto, is how we should judge our formal and informal democratic institutions. The concern for Tronto is how care is allocated in society. Annemarie Mol (2008) offers a complementary perspective on care. Mol's perspective is ethnographic and situated in medicine rather than democracy, but it similarly offers care as an orientation toward others. For Mol, care is reflected in collaborative, relational processes of attunement. Both Tronto's and Mol's perspectives share a commitment to a way of ordering our relations that prioritizes communal life. They strive for a relationality that is attentive to and sustaining of togetherness. At the same time, both their perspectives recognize fluidity: whatever notion of "good" that care implies cannot be static or universal. Both perspectives, then, offer care as a value and an endeavor. Drawing these concepts together into a theme, one purpose of design experiments in civics is the care of the possible (Stengers 2011)—a practice of tending to diverse civic imaginaries and practices through the ongoing cultivation of possibilities.

Toward More Diverse Civics

It is tempting to claim that there is a particular urgency in thinking about civics and democracy in this historical moment. Such claims imbue writing with a sense of vital importance. But both pragmatist and agonistic theories of democracy stipulate we always and forever need to examine, contest, and renew our democratic conditions. Democracy is an ongoing endeavor. Whether or not we are in a moment of crisis, our democratic conditions and experiences require inquiry and experiment. The work of keeping democratic possibilities vibrant is constant and never complete. In the following chapters, I describe a series of design experiments in civics that blend democracy, imagination, and care. From these experiments I draw out themes, connect those themes to theory and practice, and elaborate on their implications. In doing so, my hope is to develop a shared appreciation for how such design experiments contribute to ongoing discourses of thinking and doing design otherwise, and also contribute to keeping democracy vibrant by contributing to diverse civic imaginaries and practices.

