

Community + Culture features practitioner perspectives on designing technologies for and with communities. We highlight compelling projects and provocative points of view that speak to both community technology practice and the interaction design field as a whole. — Christopher A. Le Dantec, Editor

Civic Media Art and Practice: Toward a Pedagogy for Civic Design

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What does it mean to be a civic designer? Second-wave thinking in HCI brought a lot of attention to cooperation, learning, and participation, with a distinct focus on participatory methods in well-defined spaces for user interaction, including the workplace and home. But as Suzanne Bødker defines it, the third wave of HCI has directed attention to “rest of life” technologies, including spaces of civics and culture, where interaction with technology tends to be more distributed [1].

The space of civics, where individuals and communities interface with public life through advocacy, dialogue, protest, and participation, sits squarely within the domain of the third wave. The designed object goes well beyond facilitating a discrete interaction and is typically embedded within an overdetermined social system and complicated institutional landscape. These include applications for reporting government corruption, technologies that enable public dialogue around policy, or social media campaigns that encourage youth expression around complex issues of identity. We categorize these objects as *civic media*. As two of the authors state in their book of the same name, civic media are the “technologies, designs, and practices that produce and reproduce the sense of being with others toward common good” [2]. The negotiation of common good is a distinctly complex context in which all civic actions take place.

When a person votes in an election or advocates for policy change, they are motivated by achieving a common good, for a specifically imagined group or community that extends beyond their intimate sphere. So while second-wave design approaches can effectively address the social dynamics of a specific interaction, the civic context demands an interrogation of the social, cultural, and political structures that underlie civic participation. As a result, it demands a different pedagogy.

In 2016, we launched a 12-month M.A. program called Civic Media Art and Practice (CMAP) at Emerson College in Boston. The program was built to address the specific demands of third-wave HCI in the civic space by connecting the study of digital media, the study of politics and culture, the partnership with a civic organization, and the design of a new tool or process. Students emerge after a year with a functional prototype that is co-designed with a partner organization and tested in a real-world context. This is a tall order for an accelerated graduate program, in that it embraces rest-of-life technologies and in-the-wild research design, with a firm grounding in

both the theoretical frameworks that underpin such inquiry and the unique sociopolitical context in which civic interactions take shape. As the demand for new methods of citizen engagement with civil society institutions grows, there is a need for designers who can navigate social and political systems, understand the needs of diverse populations, and create technologies for dialogue and participation. Several graduate programs exist in this space, notably the Citizen Interaction Design (CIXD) program at the University of Michigan (recently described in these pages [3]), the Center for Civic Media at the MIT Media Lab, the Master of Arts in Social Design at the Maryland Institute College of Art, or the long-running Designmatters program at the Pasadena ArtCenter College of Design. All of these programs fit into a category that is best described as *civic design*. The pedagogy of each of these programs blends research and design, encouraging students to apply design and research methodologies to interrogate and understand the changing landscape of civic life. Our recently launched CMAP program is particularly focused on training civic designers, providing an immersion into the full range of process: from partnership to ideation, iteration, evaluation, and implementation.

THE CMAP PROGRAM

The CMAP program produces civic designers that have the ability to enter civic organizations and shape technology use or invention. CMAP intentionally combines liberal arts

Insights

- We describe a unique pedagogical framework for civic design that includes a critical process orientation.
- Necessary skills for civic designers include co-design, sideways thinking, prototyping, and measuring value.



CMAP students during research presentations in the fall 2016 Civic Media Seminar.

and design approaches, aiming to produce “ethical practitioners” who can straddle the critical and applied to negotiate the complex and ever-shifting space of civic life.

At the core of the cohort-centered program are two yearlong courses: the Civic Media Seminar and the Civic Media Design Studio [4]. The seminar is focused on reading critical scholarship and analyzing case studies, while exploring a range of research methods, including participatory action research (PAR) and ethnography. The studio provides hands-on experience with design and prototyping methodologies. At the end of the first semester, students in the seminar produce a document that maps out their problem space and research questions; in the studio, they choose their community partner, establish shared value propositions with the organization, and articulate initial design ideas. The spring semester is focused on prototyping, deepening understanding of related scholarship and practice, and designing an

evaluation framework. In the summer, students implement, evaluate, and teach, with a final, public “festival of ideas” in August.

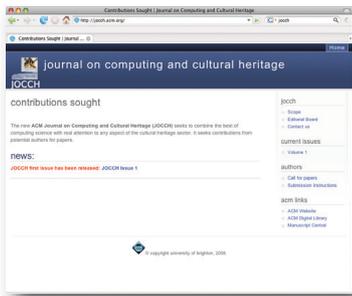
Two fundamental structures guide CMAP’s mission and orientation: partnerships and critical process orientation.

Partnerships. Every thesis project is co-created with an external partner organization. Within the first month of the program is a partner fair where organizations pitch problems. Shortly thereafter, students begin conversations with partners and start

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the process of negotiating their own research questions with the needs of practitioners. They quickly realize that practitioners often need concrete problems addressed immediately. Partners need a website; they need a reporting app; they need a playful curriculum. But the CMAP thesis cannot be the implementation of a previously conceived solution. The relationship that CMAP seeks to foster between students and partners is rather one of collaboration, research, and development, where students and partner organizations work together in a process of co-design to clarify a problem statement so that appropriate tools and methods can emerge organically. And while the end result may be a reporting app, the process of arriving there and understanding all the factors leading to it is essential. Students provide partners with the time and space to conduct in-depth background and design research. They introduce partners to a co-design process that centers the voices of

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their constituents. Partners provide students with their valuable time and expertise in a problem space as well as access to end users. And partners help to “ground-truth” student-led design solutions that would otherwise lack context and specificity.

Critical process orientation. CMAP is rooted in concepts of constructionist learning and critical pedagogy. In the tradition of John Dewey and Seymour Papert, learning happens when knowledge is put into practice in the social world [5]. And “striving for the common good” involves the emancipatory orientation of educators such as Paulo Freire and bell hooks, who seek to challenge the status quo to work toward a more inclusive future [6]. In CMAP this is represented in the parallel tracks of the seminar and studio, where deep learning through discussion is activated by practice. What motivates this dialogue is the belief that the making of objects, informed by critical discourse, transforms into what Matt Ratto calls *critical making*, where the act of making is itself a form of critique [7]. This process orientation, well rehearsed in the contemporary discourse of digital humanities, can lend reflection and criticality to design.

Because of the nature of civic design, we believe that process orientation is necessary. The space of civics goes well beyond the function of and interaction with public institutions. It is inclusive of all the ways people make meaning and take action in public life, from connecting with neighbors to advocating for the rights of migrants. Civic life, as opposed to political elections, for example, is not a matter of winning or losing; it is a matter of meaningful, connective interactions. Henry Jenkins et. al. use the concept of *civic imagination* to describe the capacity of people to

“imagine alternatives to current social, political, or economic conditions” [8]. Civic design is not only—or even primarily—for the here and now. It is often about helping people get to the there and then, through collective and coordinated imagination.

BECOMING CIVIC DESIGNERS

What does a civic designer need to know in order to spark meaningful participation and engagement? From the emerging constellation of skills, dispositions, and qualities necessary for a civic designer, we offer five, below, as a way of starting the conversation.

Critical perspective on democracy and participation. Civic systems are complex. Social problems—like homelessness, transportation, incarceration, or climate resilience—do not translate directly to purely technological solutions. Narrowly conceived technical fixes often face problems of adoption and sustainability. Civic designers have a sophisticated, systems-based understanding of power relationships, stakeholders, and participation incentives for any given problem space. They also understand that participation is not simply something to manufacture for a client during a particular campaign but is rather earned through the building of trusted, longstanding relationships between institutions and their constituencies. Civic designers are able to educate their partners and stakeholders to this effect and help them build longer-term participation and engagement technologies.

Co-design practices. Civic designers use participatory and co-design methodologies, including PAR, to meaningfully involve different stakeholders in a design process. Co-design differs from user-centered and human-centered design in its emphasis on not only consulting with end users but also involving them in generating design ideas. Co-design also aspires to empower users throughout the process, particularly those whose voices have been marginalized by existing civic systems. In this model, the end users’ explicit and implicit knowledge of the problem is valued as a primary form of expertise. The civic designer works to create opportunities to elicit those voices and ideas, ensure they are heard, and advocate

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for them with stakeholders who wield resources and decision-making power.

Sideways thinking. The communication process around designing technologies and media that engage the public and various stakeholders on an issue is not always linear. Civic designers leverage creative, affective methods—humor, play, provocation, novelty, spectacle, and beauty—borrowed from the arts that can create non-linear approaches to exploring civic voice, agency, and participation. Creating these types of experiences involves “sideways” thinking, making metaphors and creating symbols that help to activate people’s civic imaginations and spark their creative contributions.

Design and prototyping. Civic designers need a wide range of design and prototyping skills to help craft solutions that appropriately respond to a problem, a context, and an audience. In this sense, civic designers need more design breadth than depth since they must be able to choose from a range of technologies and media rather than being experts in one type of design (i.e., to avoid being the hammer in search of a nail). In order to arrive at the appropriate medium, civic designers *are* deep experts in collaborative prototyping methods such as sketches, paper prototypes, and wireframes. Once the co-design process has identified the appropriate end product, the civic designer pulls in fellow designers with medium-specific expertise into the production and implementation process.

Measuring value. There is increased pressure to articulate evidence of the effectiveness of civic media interventions. However, as the work of civic design is often about process and collective imagination, it is difficult to apply traditional metrics to assess value. The value of a civic media object may be in the sense of community it creates, the ability for people to engage in meaningful dialogue, or the creation of feelings of personal or collective efficacy. Unlike other design interventions, value may not be located in increased numbers or cost savings. Civic designers should employ co-design methods, specifically PAR,

early in a design process, so that the value of an intervention is informed by the stakeholders themselves. When measuring value, the designer is measuring the ability of the intervention to achieve the outcomes expressed by users, not the outcomes that fit into existing quality metrics. Accordingly, civic designers need to be creative in the way they represent value back to users and to other stakeholders, such as funders. If numbers don’t talk, the designers have to tell the story of successes and failures in ways that highlight the importance of process.

CONCLUSION

Civic design is a growing field. As governments, NGOs, newspapers, and activist groups are feeling increased pressure to effectively employ media and technology to engage or mobilize constituents, what used to be standard communications or information technology positions are demanding different skill sets. These positions, sometimes reframed as “innovation,” require a level of creative problem solving and critical thinking, as well as comfort with participatory methodologies, that didn’t exist before. Civic designers *will* be at decision-making tables. Communications *is* no longer an afterthought in the civic space—it is not about doing something and then telling people that you did it. Communication is civic work, and as such, civic designers will be central to the programmatic work of civic organizations.

The GMAP program at Emerson College is building capacity for this growing field. We are enthusiastic about joining with other civic design programs, and scholars and designers in the field, to further articulate the unique demands of civic design and the kinds of creative pedagogies we need to employ to support them.

ENDNOTES

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3. Lampe, C. Citizen interaction design: Teaching HCI through service. *Interactions* 23, 6 (Nov.-Dec. 2016), 66–69. DOI: <http://dx.doi.org/10.1145/2991895>
4. The third course each semester is reserved for an elective that students choose to take from any other program at Emerson College. They are encouraged to find a course that provides depth to their specific context, or that teaches a skill set that they believe will help their design process.
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