Restructuring Civic Engagement: Meaningful Choice and Game Design Thinking
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The digital world brings new questions for the design of civic life. We are redesigning some of the structures of civic contribution -- from how to volunteer time, to how we advocate for change, fundraise, and learn from one another. In this chapter, I argue that we must look beyond the red herring of new civic tools, and borrow a broader systems approach from the analytic frameworks of game design. This is quite different from the recent hype to "gamify" civic action with points and scout-like reward badges[2]. Instead, I propose to ask how game-like *thinking* can shift civic design and strategy, especially around meaningful choice.

This essay is grounded in my experience as a practitioner, in addition to the scholarly literature. I have gone through a journey which informs this analysis: after prototyping civic activities including games, I worked in the policy world of foundation funding. In what follows I weave some of my practitioner grounding, partly to help synthesize across the traditional silos of technical code, participatory culture, and civic impact.

Which Civic Engagement?

This is an exciting time to analyze civic media. Technology aside, the very definition of "civic engagement" is broadening, and the term is simultaneously becoming more popular among funders, schools and government (Levine, 2007). Credit for this expansion goes in part to scholars of participatory culture, including several authors of this book. Traditionally, civic analysis focused on political acts like voting and joining civic organizations. But scholars of participatory culture have helped pull the civic into an analysis of everyday life. Participatory culture itself may depend on low barriers to civic engagement, according to the definitions of Jenkins et al. (2007).

Simultaneously, the field of political science is beginning to question its traditional definitions of civic engagement to account for more "global citizens" and

[1] The author expresses his gratitude to Henry Jenkins' Civic Paths research group and to Tracy Fullerton, both at the University of Southern California, for their formative discussions and feedback on drafts of this paper.

[2] As a bellwether of this trend, the Serious Games summit at the largest annual gathering of game developers dedicated one of its two days to investigating the rising trend of "gamification" – or the "sometimes questionable process of building game-like incentives into non-game applications, to address issues like productivity, health, marketing, and so forth" ("Serious Game Summit at GDC," 2011).

transnational activism. In the education sector, there is new momentum to recognize "moral citizenship" (e.g., Haste & Hogan, 2006). And the spectrum of civic acts is also broadening, such as adding to boycotting the act of the buy-cott (to reward good companies, instead of simply punishing the bad; e.g., see Stolle, Hooghe, & Micheletti, 2005).

Such broadening amplifies the need for civic analysis, yet ironically also makes our analytic tools less precise [3]. It is harder than ever to compare any two people, and say which is the more civically engaged. Clearly this blur makes life difficult for those who evaluate the impact of civic media. Most importantly for this paper, it also raises a profound design challenge: how do we imagine civic activities online, if our conceptual models for them are simultaneously in flux? My practitioner training would suggest that we temporarily set aside abstract model debates, and consider the problem from the perspective of everyday life choices.

Toward "Meaningful Choice"

For better and worse, our time can be subdivided across more causes and civic modalities than ever before. The problem is particularly poignant online, where the civic palette now ranges from tracking international micro-credit loans, to online mentoring for youth activists. More tools means greater civic choice, but that is not necessarily a good thing.

Expanding choice makes it harder to know which choices are most important. Psychological studies of satisfaction have shown that an expansion of choice can actually undermine happiness (Schwartz et al., 2002). The initial decision can seem simple (e.g., "I want to donate to fight poverty in India"), but when that decision also necessitates selecting between 20 possible nonprofits, the burden of maximizing impact shifts to the participant. How many of us have the time to fully investigate each choice? As a society, we cannot simply design *more* civic tools, without offering participants more *meaningful* choices.

Meaningful choice is at the center of a new discipline: game design. This will sound strange to new ears, who have primarily encountered the discourse of games in popular culture debates, and heard games lumped with television as diversions that

[3] Peter Levine insightfully observes that the term "civic engagement" thus becomes a Rorschach blot of "benign connotations" (2007, p. 1).

distract from civic life.[4] Even those who have seen so-called "games for change" may not have recognized the paradigmatic utility of game design *thinking*.

This cognitive mode is hidden by our own typical analyses of games, which are blindly focused on content. Ironically, this problem seems even worse with so-called serious games, which largely seek to distribute or teach civic messages (Raphael, Bachen, Lynn, Baldwin-Philippi, & McKee, 2009). However, focusing on messages and content delivery misses the distinctive power of games to create meaning through real-time play. Most importantly, games do not play themselves – they demand participation to unfold. This is an important historical shift. For the first time, we can create media that offer participants meaningful choice, iterative improvement and immediate feedback.

Game Design as Disciplinary Thinking

I am not arguing here for games as a metaphor, but as a distinct and increasingly useful kind of *disciplinary thinking*. Design itself is often mistakenly assumed to mean "graphic design" (perhaps because the value of graphic design is so immediate, and because skillful designers remain rare). In fact, design *thinking* is broader, and represents a methodology for creative problem-solving, one that is simultaneously systematic and strategic (Erlhoff & Marshall, 2008). Such multi-purpose design thinking is already applied across fields and disciplines, from business management to urban planning. In this paper, I am focused on a subset: the kind of design thinking that emerges from game design, which centers on interactivity and participant choice.

Game design thinking is particularly coherent for evolutionary reasons: game design is incredibly difficult and most games fail. Over time, game professionals iteratively developed their own particular set of analytic questions. Specifically, the discipline of game design has oriented to the delicate balance of *engagement* that makes or breaks a game: if it is too difficult, players quit in frustration; too easy, and players quit because it is boring.

My question is whether such game design thinking has implications for civic engagement.[5] I propose the answer is a resounding yes, and more specifically, that

[4] In fact, the only nationally representative survey to investigate correlations between game play and civic behavior found no broad connections (Kahne, Middaugh, & Evans, 2008). Furthermore, they found that more social games were connected to more civic behavior than single-player games; i.e., what matters is the type of game played, not the fact that the media is in game form.

game design thinking offers a useful mode of strategic planning for policy makers, civic funders and nonprofit executives. In particular, game design thinking can be a kind of methodology for problem-solving engagement through meaningful choice.

Below I introduce two very different innovations in civic media. One more emerges from an actual game, while the other focuses on the transfer of traditional volunteering into an online service.

Looking for Choice -- from Fundraising to Teaching

To understand game design *thinking*, it helps to begin with a game context. In 2004, I was on a team that built a "real life" fundraising Challenge to extend a civic videogame, Peter Packet (for a brief case study, see Stokes, 2010). Among other things, Peter Packet aimed to teach youth about extreme poverty in Haiti, India, and Mexico. Yet our design focus was not on the game. Instead, we asked: what happens *after* and *around* their initial engagement?

We brainstormed. We were tempted initially by the tired strategy of offering content– a "toolkit" containing narratives of injustice, tips on reaching large audiences, and directions for collecting funds and signatures. These dissemination-oriented approaches can be powerful, but are often only accessible to the already committed organizers. So we considered: is it possible to design meaningful civic choices that extend the design approach of the game?

The result was a 10-day civic experiment, featuring the same animated characters from the game (see Figure 2). We offered participants two actions: recruit others to learn about poverty by trying the game, and recruit others to donate for the specific projects described in the game. Although this was a fundraising challenge on the surface, participants were more significantly contributing their voice, since both recruiting options required the player to advocate

Figure 2: Screen shot of the Peter Packet Challenge

[5] Note that this goes beyond treating games as "third spaces" (Steinkuehler & Williams, 2006) – an approach which does advance social science research by legitimizing and reframing the study of digital worlds, but is perhaps less useful for rethinking current civic activities.

via email or in person. We set point values to match this civic mode: 2 points for recruiting another participant, and 5 points for the more difficult challenge of securing a donation of any amount.

Such points provided feedback to participants that their actions were valued fairly: although poor families might make smaller dollar donations, the point structure rewarded them equally – affirming that their advocacy contribution was in securing participation, not in having rich friends. Like all meaningful choices, the options were greatly reduced – participants could not change which actions received more points, nor could they introduce new actions. Yet all participants could see the total money the group had collectively raised. The combination of collective feedback about their impact along with individual points for participation was powerful, according to exit interviews we conducted with a handful of the participants. One 12-year old described her parallel motivations: "every day… I went to check my points and the total money for poverty."

Points provide a powerful demonstration of how game design structures choice. First, points declare a limited zone of action (since only recognized actions can receive points), and in so doing they limit the scope of civic engagement. This is both frustrating and what makes their orienting mechanism so powerful. With Peter Packet, the point system prioritized engagement over the amount of funds raised, and thus enacted a functional definition of civic engagement. Second, point systems are subjective -- there is no "right" way to determine the point values. Of course, prioritization is at the heart of all value systems, but points are insistently quantitative.

Quantifying civic values is a radical shift for most nonprofits, which tend to traffic in rhetorical definitions of civic engagement. In my time co-directing a national industry group for civic games called Games for Change[6], I repeatedly witnessed how the process of game design was transformative for nonprofit staff. In particular, ranking different civic actions quantitatively was painfully difficult. Why? I assert that the valuation process of assigning points directly parallels strategic planning, with all the associated politics and judgment calls. For traditional civic strategists, assigning points remains highly unusual.

The lens of game design can also help online civics to become more conversational. By this, I mean to support the kind of conversations that take place so

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[6] More information on Games for Change's history in the emerging practice of making civic videogames is available on Wikipedia at http://en.wikipedia.org/wiki/Games_for_Change

naturally offline at events like repainting a local school, or during walk-a-thon fundraisers. Such conversations are invaluable. Through conversation, we develop the social ties to sustain participation. Through conversation, we reflect and build the skills and identities to become more effective in civic life. What does this look like?

In the Peter Packet Challenge, we turned the methods of game design toward the goal of increasing conversation. Our breakthrough came in realizing that "functional" messages could also embed conversation catalysts. Here's how it worked: youth used the system to recruit participation from both other youth and adults by email (see Figure 3). These recruiting emails are co-authored by the Peter Packet system, which embeds some additional text for recipients. When contacting adults– perhaps a relative or teacher—the system not only gives donation details, but also prompts the adult to start a reflective conversation offline with the sender (e.g., asking why they want to fight poverty, and why they are competing for points). The Challenge thereby invites an offline conversation in the participant's existing social network, providing a prompt for civic deliberation in everyday life.

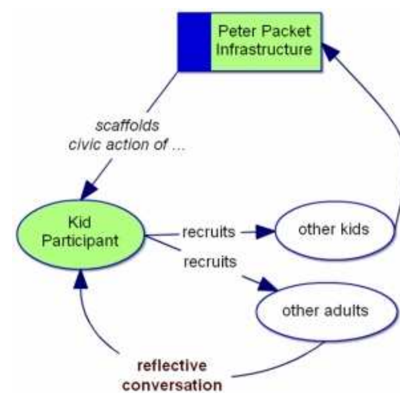

Figure 3: Actions available in the Peter Packet Challenge

Currently, many social networking websites and civic systems send notification emails, e.g., "your friend has accepted your request." Yet designers often fail to recognize the potential for turning these small moments of interaction into a conversation. Game design thinking pushes us to move beyond "notifying" our participants, which is typically an endpoint, and instead to demand that we give feedback to drive further participation. "Friend" notifications are particularly powerful design spaces because we can embed reflection and spark conversation inside existing social relationships – which is where more substantial behavior change more often occurs.

<u>Contrasting Case: Online Volunteering</u>

Since my claim is not about games per se, but meaningful choice and game design thinking, then it is vital to consider a case without a hint of games. So as counterpoint, consider the United Nations' "Online Volunteering" service in its formative years circa 2003. Volunteering is a powerful example because it grounds

digital uncertainties in an accessible cornerstone tradition of civic contribution, i.e., giving labor and time. Volunteering is also noteworthy as one of the few areas of civic growth that almost everyone agrees on (Levine, 2007), and today more than 25% of Americans volunteer with organizations annually (Bureau of Labor Statistics, 2010). In this example of migration of volunteering into online spaces, we will see the emerging parallels with game design thinking.

The Online Volunteering service first appeared in 1999, as a joint project of the United Nations Volunteers (UNV) and technology giant Cisco Systems. It was the first global effort to match the skills of people who could work from home to international organizations in poor countries. For example, a bilingual volunteer in Alaska might translate a South African organization's brochure into a funding proposal, to help raise money to fight HIV/AIDS. By 2003, more than ten thousand hopeful volunteers had registered, and requests for their time had come in from nearly three hundred nonprofits in sixty countries (Dhebar & B. Stokes, 2008). At face value, this was a civic marketplace to coordinate the exchange of volunteer time.

The service worked very well for some online volunteers. In 2003, I interviewed dozens of both volunteers and host organizations from around the world, randomly chosen based on their levels of participation with the service (*ibid*.). Volunteers reported great satisfaction when they felt their contributions were valued. In fact, we were surprised to discover that many volunteers were willing to significantly delay volunteering in order to appropriately determine the value of their work. They actually requested that more organizations refuse to place volunteers until they had completed "trial work," such as re-translating an old document before being invited to translate the new brochure.

Although our analysis did not approach the Online Volunteering service from the perspective of participatory culture—the framing of Jenkins et al. only emerged years later—the parallel of "appropriately valuing contributions" maps neatly onto Jenkins' definitions of participatory culture. In fact, there are broad similarities between Jenkins' criteria for participatory culture and volunteering: strong support for sharing, low barriers to engagement, and some form of social connection. The primary divergence in volunteer communities is the greater role for institutional management (like nonprofits and schools), whereas participatory cultures are more autonomous with less formal mentorship between newcomers and experts.

Curiously, as volunteering moves online, the parallel to participatory culture may be increasingly necessary. Our research found that only a small percentage of online volunteers went on to complete a second assignment. In fact, retention was probably the greatest shortcoming of the service. The cause? Interviews indicated frequent shortcomings among host organizations in volunteer management.

We found that preexisting managerial deficiencies seemed aggravated online, especially around basic communication and feedback. Volunteers reported being upset with a troublingly common occurrence: organizations appeared to forget about them, as if they were simply a project buried on a busy desk – treatment that would be culturally unacceptable when volunteering face-to-face. Yet we can also sympathize with host organizations, as they simultaneously struggle to manage staff in the physical world and provide services on shoestring nonprofit budgets.

For game design, some amount of uncertain tension between the needs of volunteers and hosts is actually a good thing. Games take as a prerequisite some unpredictability; solved problems do not invite play. By contrast, hard problems can be incredibly compelling – but only if our effort feels productive. We need the feedback loops that give us clues to improve performance, and to remind us of our goals. Thus the tensions in volunteering described above can be healthy; they only become problematic if there is insufficient opportunity to improve.

This is an unusual methodology for analyzing volunteer management. More traditional best practices would simply critique the performance of the manager. Now with digital services, we need methods to also critique the volunteering service – not as a "tool," but as a structure of participation. In this case, we have been applying a touch of game design thinking to re-articulate the management problem in terms of the feedback loops given to staff and volunteers.

Managers can only make meaningful choices if they know when volunteers are feeling neglected, or whether volunteers are clueless about contextual details like the size of the organization.[7] (Surprisingly, volunteers we interviewed often had no idea whether the organization had a staff of 10, or closer to 1000.) Game designers call these important cues "state information," and believe that omitting them is not only unfair, but a failure of the design process. Good management training is difficult, and for too many volunteers in our interviews, it was hit-or-miss. One solution is to demand more

[7] Beside being demoralizing, such weak organizational culture is known to decrease employee coordination, social glue, and sense-making (Ojo, 2009).

of our civic services online, to approach them as structures of participation rather than simply tools, and to optimize them with the analytics of game design.

Lessons from Game Design

Again, I am not talking about building actual games – which are an ancient form, with a long history offline in education, military strategy, business planning, economics, etc. Rather, my focus is on applying the thinking of game design to civic engagement. This is increasingly possible as game design itself becomes better theorized, but also as the professional practices of game design become more coherent.

Game design is taught increasingly in professional programs at universities that draw from departments as diverse as computer science and film studies, engineering and social psychology. All of us use design thinking to some extent[8], but the practice of game design in particular is increasingly recognized as a specialized one, with the potential for increasingly refined methods and expert skills.

Here are the three components of game design thinking, borrowed from curricula taught increasingly in game design schools, which I think have the greatest value for civic engagement:

(1) *Meaningful Choice* – as a method of engagement. Focused on presenting carefully optimized problems for participants to problem solve. In the civic domain, people themselves are part of the fabric (Light & Miskelly, 2009), and so the most meaningful choices and feedback loops are often social. Curiously, the choice to be part of something bigger than ourselves is both an attribute of civic life, and a reason people play games (McGonigal, 2011).

(2) *Play* – which is how humans often develop mental models, test hypotheses, and even build social ties[9]. Here it is important to shift from a narrow focus on play as 'fun,' and instead to consider 'engagement,' because play for serious players is constantly testing their limits – whether in chess or athletics – which is not light fun, but rather an engagement that is constant and compelling. Designing to actually encourage the right kind of failure is

[8] In an everyday sense, design thinking is the "liberal art of technological culture" (Buchanan, 1992). Our modern lives give us many choices, and we design how they fit together to structure our lives – we each can design how we will communicate with our friends online, where we will post our digital pictures, how we construct our digital identities. The proliferation of choice in modern life increases the importance of design as both a literacy and a practice for all citizens.

[9] It is no coincidence that Putnam's influential book *Bowling Alone* addressed civic engagement around a sport league (2001).

counter-intuitive, but central to the craft of master game designers like Will Wright (e.g., see interview in Crecente, 2009).

(3) *Iteration to Build Coherence* – probably the most overlooked component of games, iteration is the secret *how* for designing interactivity; this is how games achieve their profoundly challenging integration of storytelling, experience, engineering, and visual aesthetics. There are no formulas for problems at this level of complexity. While iteration is also mirrored in the obsessive editing of film and poetry, for game design, the iteration is about shaping *choice* by optimizing the delicate feedback loops that guide participants -- ensuring that just the right kind of information arrives at the right time. These cycles of performance help players develop new identities and even new worldviews (Squire, 2006).

The resulting discipline – game design thinking – is a particular cognitive approach for problem solving. It has distinctive perspectives, interpretations, heuristics, and predictive models. For hard problems, it is unlikely that any one cognitive approach alone can provide solutions, but a diversity of cognitive frameworks might (Page, 2008). Game designers are not replacements for nonprofit management– they are members of the team, and desperately need other perspectives too (in particular, I have met very few game designers with anything beyond a very rudimentary understanding of social change strategy).

As a society, we need the right kind of cognitive diversity to design the next generation of online civic experiences – largely because the underlying societal problems are profoundly difficult – from urban redevelopment policy, to climate change and public education priorities. Design failure can come from both ends: experts on a social issue far too often override good design with literal solutions; and conversely, designers often fail to select game mechanics that fully embody deep models of social change. Teams can better navigate such conflict by more formally recognizing game design as a disciplinary orientation, not just a technical skill set. Yet we also need to develop more deliberate design processes that rotate attention not just between power stakeholders, but between cognitive perspectives that include game design thinking.

Strangely Akin to Strategic Planning

Beyond the outcomes, the process of game design can itself be transformative. I saw this repeatedly in my years organizing the field of civic games – whether the result was a finished game or not. In particular, nonprofits described the process as surprising. Game design seemed to force an unusually systemic reflection on an organization's goals. Unlike the work with games in Entertainment Education (e.g., see Wang & Singhal, 2009), which tends to focus on raising awareness or motivating beliefs, games can also be about offering your audience a useful problem – not for solving, but for the experience of tackling that problem. Initially, many organizations fall victim to the temptation of offering their values as the "right solution" – but such games are rarely playful or able to retain participation.

Facing this dilemma, organizations must reflect on how to recombine their content, reward structures, and choices with a new goal: to make their values emerge as natural consequences of problem-solving. Of course, traditional community organizing also revolves around problem-solving, by listening to communities and empowering them to act. For the first time, civic media can begin to communicate this experientially: training communities to spread feedback loops to *experience* their perspective, not just their voices. Such efforts are inherently imperfect, but over time may become preferred strategies for communicating world views through interactivity.

Opening Designs across Civic Platforms

Funders play a critical role in encouraging platforms to open for cross-campaign engagement, and more creative structures of participation. As the Peter Packet Challenge demonstrated, it is increasingly possible to remix the experience of basic civic acts like fundraising. Yet this is only possible when visual interfaces can be created with some autonomy from the underlying databases that track donations and petition signatures. Few nonprofits open their databases to third parties, effectively excluding remix over the civic experience. This barrier is significant, and deserves attention at the level of sectoral strategy. In particular, funders can encourage broader thinking in their grantees. Allowing for modifications to the experience ("modding" in the language of games), can allow various participatory cultures to each make the experience more meaningful, according to their distinct values. For some civic actions online, there may even be an ethical imperative to leave open some of the content framing and experience for remix.

All Together Now

Incorporating game design thinking demands an unusually systemic approach to civic engagement. It begins by appropriately valuing participants' contributions. As seen with online volunteering, the formal contribution might quietly rely on an obscured civic mode: what seems like the giving of time (volunteering), can depend on sharing organizational knowledge (teaching). In the case of the Peter Packet Challenge, contributing funds (donating) can demand that participants use their voices to recruit others' participation (advocacy). If Jenkins is right that participatory cultures thrive on valuing members' contributions, then designers must also seek to maximize meaningful choice for the civic modes that matter most to participants.

In this article, I have particularly discussed two kinds of iteration on meaningful choice. The first is about process: how designers integrate the multiple dimensions of civic engagement (from aesthetic, to technical, to ensuring political impact). Second, iteration is also a goal for the product: to keep participants returning for meaningful choices and problem-solving. Compared to traditional civic strategies for online "retention," iteration shifts our attention to the feedback loops we provide participants. Such loops are how participants learn to improve their strategies, and optimize their civic skills – and this learning process is itself engaging.

Game design thinking can be helpful if it injects more strategic and system-based planning into the development of civic media platforms. Especially if this design process is participatory, odds increase for more equitable design goals and outcomes. The inherent focus on meaningful choice will also be helpful, pushing designers to go beyond what is "good for" disadvantaged populations, and toward designing experiences that are meaningful in the terms expressed by communities themselves. Funders and policy makers can multiply these opportunities by pushing civic services to open their tools, and allow others to remix the feedback loops for everyday civic life.

The quality of a democracy can be proxied to the meaningful choices it offers participants. For an increasingly digital world, we may need the practice and cognitive perspective of game design to redesign civic engagement.

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