# Playing for Impact: The Design of Civic Games for Community Engagement and Social Action

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**ABSTRACT**

In light of calls that civic participation is declining, efforts are underway to replace outdated, unproductive forms of citizenship. With the majority of Americans now connected to the Internet, community leaders see the digital realm as the new frontier for promoting engagement. Increasingly, digital games are being designed for the express purpose of promoting community engagement and social action. My thesis examines this emerging practice of civic game design.

Within this thesis, I analyze several cases wherein games have served as successful tools for fostering civic learning and promoting further civic action. An analysis of *Darfur is Dying* (2006) reveals how casual serious games can deliver short, persuasive messages that compel players to take direct action outside of the game. *Participatory Chinatown* (2010) shows how a locally networked online game can transform a face-to-face community meeting through the use of digital role-play.

I ground this analysis historically by looking to the 1960s and 70s for examples of non-digital civic games. *Fair City* (1970) helped local residents understand and navigate the complexities of a federal urban development program, and *The Most Dangerous Game* (1967) shows the sophistication of designers of this era with a serious game that reached thousands of players though the use of television and phone networks. Together, all of these games point to a growing field of design and research that will continue to influence how everyday citizens engage in civic life.

# Acknowledgements

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# Chapter 1: Introduction

## More Than Entertainment: A Case for Civic Games

Just over a decade ago, the bulk of the conversation about digital games' potential for impact skewed negative, centering on debates such as the connection between videogames and violence (c.f. Anderson & Dill 2000; Sherry 2001) or the addictive nature of online games (Griffiths & Hunt, 1998; Kandell 1998). Proponents of games argued that these alarmist debates had "garnered a disproportionate share of attention in the press" (Squire, 2002, n.p.) and overshadowed an undercurrent of new games research on the benefits of gaming.

Other discourse, including canonized texts in the field of game studies, has argued that play and games occur in a context distinct from the player's real life. For example, Huizinga (1949) makes an argument for the superfluous nature of play, while Caillois (1961) discusses play as a "waste of time" (5). Pearce (2006) argues that these inherited concepts of play need to be broadened in light of the evolving relationships between games and their players, noting, "The boundaries between play and production, between work and leisure, and between media consumption and media production are increasingly blurring" (18). Indeed, scholarship has emerged on topics as diverse as game-based economies (Castronova, 2001; Dibbell, 2007), labor practices in game worlds (Yee, 2006) and the growing industry of professional computer gaming (Taylor, 2012).

Of particular interest to this thesis is the idea that games can operate in service of serious issues and topics, which also challenges assumptions about the unproductiveness

of games and the negative impacts of gaming. In 2002, game designer Ben Sawyer released the whitepaper *Serious Games: Improving Public Policy through Game-based Learning and Simulation* in which he argued that organizations engaging the public in public policy could create better learning models and visualizations by looking to the commercial gaming industry for guidance (Sawyer, 2002). Sawyer's work is considered a highly influential flash point in helping establish and popularize the concept of *serious games* (Djaouti et al., 2011). Formal definitions of the genre have emerged, with Zyda (2005) calling serious games "a mental contest, played with a computer in accordance with specific rules, that uses entertainment to further government or corporate training, education, health, public policy, and strategic communication objectives" (26). A more simplified and widely accepted definition is that serious games are "(digital) games used for purposes other than mere entertainment" (Susi et al., 2007, 1).

Beyond the creation of definitions, emerging communities of practice in serious game design have provided structure for the field by: bringing together once disparate game projects; providing channels for critical discussions on serious games; and promoting the use of serious games by the public. The most notable of these organizations is Games for Change, a New York-based non-profit founded in 2004 to "facilitate the creation and distribution of social impact games that serve as critical tools in humanitarian and educational efforts" (Games for Change, 2013a, n.p.). Since its creation, Games for Change has launched a widely attended annual awards competition for serious game design, organized numerous serious games conferences, and established international chapters of the organization on four continents (Games for Change, 2013b).

As these activities and definitions suggest, the uses of serious games are far-reaching, touching upon many industries and disciplines. In this thesis, however, I will focus only on one such application of serious games: the relationship between games and civic engagement, particularly in cases where games and gameplay are intended not only to inform players about civic causes and ideas, but also to enable real civic actions outside the game itself.  My interest in these games is rooted in several ongoing conversations about changes in civic life, the ubiquity of digital games, and the civic potential of games. I briefly characterize each of these discussions below.

*A declining civic sphere*—Many critics and scholars have claimed that American's civic life is on the decline (c.f. Oliver, 2001; Putnam, 1995; Putnam, 2001; Skocpol, 2003). For example, in *Bowling Alone* (2001), Robert Putnam argues that participation has steadily decreased not only in national politics, but also in local communities—that citizens are just as disinclined to vote in a presidential election as they are to join the neighborhood PTA. Putnam's methodology has been contested, however. Some scholars argue that Putnam invokes a "largely mythical past" of vibrant civic engagement (Skocpol and Fiorina, 1999, 10). Fischer (2005) adds that Putnam's work dismisses contradictory evidence that suggests the public might simply be engaging in new ways, such as attending local sporting events. Nonetheless, Putnam's work, in particular, has proven highly influential in igniting discussions about civic engagement in the United States.[1]

A series of "increasingly desperate" campaigns to engage voters over the last two elections (Schulzke, 2011, 355), such as "Rock the Vote" and "Vote or Die" have helped

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[1] A Google Scholar search for *Bowling Alone* reveals that it has received 24,365 citations since its 2001 publication. (Search performed April 1, 2013.)

increase voter turnout among young voters, but have not made a wide-scale impact on political involvement (Schulzke, 2011; Vargas, 2004). Macedo et al. (2005) argue that this is because "the design of our current political institutions and practices turns citizens off" from participating (2), and that new innovations are needed to reverse this trend. Similarly, urban planners and other public officials who regularly engage citizens are looking to increase participation by replacing passive community meetings with more participatory methods using new technologies (Gordon, Schirra & Hollander, 2011).

*The rise of videogames*—Over the past decade, the video games industry has posted steadily rising sales figures, with a staggering $16.6 billion spent on digital games in 2011 (Entertainment Software Association, 2012). Industry analysts have estimated that serious games in particular account for $2 billion in yearly revenues (Serious Games Association, 2012).

In the United States in particular, these high sales figures are tied to a high ownership rate of gaming devices, with the average household owning at least one dedicated game console, personal computer or smartphone (Entertainment Software Association, 2012). Using these devices, the average player spends about eight hours per week playing online games (NPD Group, 2010). Critics have argued for that this enormous amount of time spent on gameplay could be directed toward civic engagement (McGonigal, 2011).

*The "civic potential" of games*—Using data from a national survey of 1,102 teens, Kahne et al. (2008) studied videogame use and its relationship to civic life. Their

analysis showed that videogames did not diminish civic engagement; in fact, the researchers drew many parallels between engagement with game communities and engagement in civic life. For example, players who participated in online websites or discussion groups related to their favorite games were more likely to seek out information on political topics or discuss civic issues with friends. Many scholars have also noted the kinds of persuasive, public writing and knowledge production that is supported by online gaming communities (c.f. Colby & Colby, 2008; Jenkins, 2006; Johnson, 2008). Jenkins (2006) has also identified "play" as a required 21st century literacy, describing it as "a mode of active engagement, one that encourages experimentation and risk-taking, one that views the process of solving a problem as important as finding the answer" (24).

Taken together, these ongoing conversations about games and civic life point to a social context in which: 1) public institutions have identified a clear problem with current forms of civic engagement and are looking for innovative solutions; 2) the infrastructure for—and interest in—digital gaming exists in most American homes; and 3) digital games have an observed potential to align with the tenets of an engaged citizenry. In short, these discussions point to a critical moment for the study of games and civic life (Burak, 2011; Williams, 2006).

## Goals and Guiding Questions

Games for Change Co-President Asi Burak (2011) has stated that this is still a challenging time for designing games to impact civic and social issues. In particular, he says, these efforts have been hindered by exaggerated claims about the positive impacts

of serious games, which have contributed to a general disinterest by the wider videogame community: "The hyperbolic premise that games will 'change the world' works well as a press headline, but it's less effective with those who understand the limitations of the media and how difficult it is to create a compelling game, let alone a game with a purpose" (n.p.). He argues that more discussions about the use of games in the civic sphere—grounded in discussions of limitations and challenges—could help bridge the divide between the gaming community and the NGOs, non-profits and government agencies who wish to use games to further their civic work. (Burak, 2011).

In this thesis I respond to this call for research by looking critically at games designed to improve and enable civic participation among their players. Rather than thinking only about the *potential* for games to impact civic life, I analyze games that attempt to embed themselves into a range of civic practices—in local and online contexts and across historic periods—from games that help players make donations to social causes online to games that are played in local town-hall meetings. In particular, I am interested in how games are designed to connect with civic causes, and how the rhetoric surrounding the development and usage of these games is fueling wider discussions about games in civic life. Below, I discuss three questions that guided my analysis and how I engage with them throughout the text.

- *How are understandings about games and civic engagement framed and understood through popular and critical discourse?*

  While theory provides us with a set of mental tools for understanding the phenomenon of games in civic processes, the ways governments, designers and

critics think about—and talk about—these games with wider audiences has a profound impact on who plays them and how they are used. I am interested in the ways in which discussions by game makers, funders, players, and critics collectively carve out a space for games in the civic sphere.

- *How do these understandings translate into game designs, and what do they look like?*

  With an understanding of the potential for games to impact civic life guiding game design, I am interested in what kinds of mechanics and stories work their way into these civic games, and what channels are provided to players to take civic action. What is the range of these activities, and how is the opportunity to take action presented to the player?

- *How have these practices changed (or not) between digital and pre-digital ages?*

  As the two definitions of serious games presented above illustrate, the idea of bringing games into civic life is characterized as a novel phenomenon supported by the affordances of digital games. I wish to challenge this notion by looking at pre-digital games that sought to serve a similar purpose, and in doing so broaden our understanding of games and civics. How can these past projects help us design better games today, and are we repeating old mistakes?

I use a mixed-methods approach to investigate these questions throughout the text. Most notably, I engage with this topic through the lens of composition studies by using

contextual rhetorical analysis. This kind of analysis attempts to "understand communications through the lens of their environments" (Selzer, 2004, 292) with a particular focus on "the social circumstances that call rhetorical events into being and that orchestrate the course of those events" (292). As such I characterize the wider debates surrounding the use of games by synthesizing a variety of sources, including archival materials, historical texts, scholarly and popular discourse, personal interviews and my own experience designing civic games. Within each case study, I also analyze the game systems themselves as part of this ongoing conversation. Taken together, these discussions help us better understand the potential of games to impact civic life. In providing some answers to these key questions above, I hope to answer the call for more grounded research into civic games. Below I discuss some of the key literature in this area of study.

## Related Work

The work of this thesis is in conversation with much ongoing scholarship into games in the civic sphere. Game designer and scholar Ian Bogost has authored two influential books on videogames as a persuasive medium. In *Persuasive Games* (2007), Bogost argues that, as computational, rule-based systems, videogames exhibit a *procedural rhetoric* that allows for the "authoring of arguments through processes" (29). This concept has been particularly salient to the rhetorical study of games, as it provides a framework for understanding how game designers persuade their audiences through the thoughtful creation of rules and systems. More importantly, it acknowledges that writing computer code is in itself a persuasive act.

Bogost has also proposed the term "persuasive games" as an alternative to serious games, arguing that the former better encapsulates the way that videogames (even entertainment-oriented games) persuade players by presenting procedural arguments that reinforce existing societal structures—or challenge them. (Bogost, 2009). In a later book, *Newsgames* (Bogost, Ferrari & Schweizer, 2010) the authors apply this understanding of games to the journalism industry, arguing that games could provide an innovative way for journalists to rethink the process of reporting and editorializing and a more interactive way for readers/players to get their news.

Game designer and scholar Gonzalo Frasca was an early influence on the study of games as a persuasive medium. In his master's thesis Videogames of the Oppressed, Frasca (2001) argued that digital games could serve as sites of social commentary, and that games and simulation systems, through their underlying rule structures, can both represent and recreate the behaviors of real-world systems.

Similarly, in *Critical Play*, game designer and artist Mary Flanagan (2009) provides an analysis of games, playful art pieces, and social experiments across the centuries that challenge the norms of the traditional gaming industry. She presents a theory of avant-garde game design to investigate artistic pieces that are "designed for artistic, political, and social critique or intervention" (2) and are designed with and without the use of computers. She considers games about political and social issues a form of "digital activism" that challenge assumptions that games "must only be entertaining and fun" (247). Central to the theme of this thesis, Flanagan acknowledges that civic engagement and activism occurs through a constellation of playful practices that include digital games, but are also carried out in other related mediums.

Flanagan, Frasca and Bogost touch on an issue central to the argument of this thesis—that games are an impactful medium through which artists and designers can challenge existing social and political norms, as well as persuade players to think the same. Mitgutsch and Alvarado (2012) build upon this notion by stating that these games have intentions beyond persuasion—that they instead carry an impact-driven purpose, "designed to have a purposeful impact on the players' lives beyond the self-contained aim of the game itself" (122). While the authors contend these impacts can range from providing information to challenging prejudgments, within this thesis, I focus specifically on cases where the intended purposeful impact is to encourage real-world civic action.

A recent surge of advocacy has also helped spur new discussions about the potential for games to influence civic life. Most notably, game designer Jane McGonigal has cast a spotlight on the work of serious game designers. In a provocative talk at the 2010 TED Conference, McGonigal argued that the billions of hours of weekly gameplay could be harnessed to solve the world's most pressing problems if games could be designed around social causes (McGonigal, 2010). She expanded this thinking *Reality is Broken* (2011), examining the ways games motivate their players and how these design ideals could be used for real-world impact. This work has served as a catalyst in bringing discussions of games and social issues into the mainstream.

## Key Terms

I use two key terms throughout the thesis that warrant defining. The first is "civic engagement." Because I see this term encompassing a very broad set of practices and activities, both in local communities and on a national scale, I align myself with the

definition provided by Macedo et al. (2005) of the Brookings Institution, who call civic engagement "any activity, individual or collective, devoted to influencing the collective life of the polity" (6). They argue that we cannot separate the term civic engagement from political engagement, as "vibrant politics depends on a vibrant civil society" (7). I often use the term "community engagement" to describe civic engagement as it relates to localized communities, both geolocated and online.

When I speak of direct civic or political action, I align myself with Stokes and Watson's (2012) definition of *direct-action games* wherein they discuss the ability of games to "catalyze very specific [civic] behavior, such as guiding participants toward targeted organizations" that can have a tangible, "immediate impact" on civic life (1-2). In other words, the game inspires and provides the means to take direct, outward action in achieving a civic goal defined by the game. Where I differ from Stokes and Watson is in their assertion that these kinds of game experience can only function on the local or regional level. Indeed, many of the games I discuss throughout the thesis were designed for a specific region or neighborhood. However, as I discuss in later chapters, these immediate impacts can also be achieved in online-only contexts as well.

## Thesis Framework

In Chapter 1, I have briefly described the contemporary origins the term "serious games" and the potential for videogames to influence players' lives beyond the game itself. I also characterized ongoing discussions about declines in traditional forms of civic engagement, an increase in the use of videogames, and the opportunity for direct action games to assist governments, non-profits and NGOs in furthering their missions of

engaging citizens in civic action. Finally, I discussed key questions guiding my analysis of these games, situated my work in light of other scholars in this area and defined key terms used within the thesis.

In Chapter 2, I ground the direct action games phenomenon historically and challenge the novelty of civic games by discussing a movement in the 1960s and 70s to bring games into everyday civic processes. These non-digital games were designed specifically to help stakeholders learn about the complexities of public policy and urban planning and encourage more informed participation in civic life. First, I discuss the historic context of these games, rooted in policies implemented after the Great Depression to get the public involved in agency rulemaking processes. Next I provide an analysis of two games used in this era to enhance civic engagement—*Fair City* (1970) and *The Most Dangerous* Game (1967)—while drawing connections between current and historic game design practices. I conclude by arguing that greater efforts must be taken to bring discussions of these highly relevant and like-minded games back into ongoing discussions of civic game design.

In Chapter 3, I look at the ways in which digital games have been brought into everyday civic practices. First, I look at the emerging practice of viral engagement, which provides users with simple, sharable methods to get involved with civic causes. Though an analysis of *Darfur is Dying* (2006), I argue that serious casual games can provide a successful framework for facilitating viral engagement, providing a persuasive narrative experience that helps the player learn a civic issue, then provides a direct path to participation by allowing the player to make a donation or contact their elected representatives. As a second example, I look at a class of games designed specifically for

use in community meetings. These games are meant to disrupt traditional forms of citizen participation by bringing role-playing and networked games into local discussions on urban planning and public policy. For each set of games, I analyze their design and mechanics, discuss their relationship to existing civic practices and their potential for impact, and highlight challenges and opportunities for improvement.

Finally, I conclude by discussing future directions for this work. These games, while, offering much promise, still have many challenges to overcome before they can be put into wider use.  I argue that putting less emphasis on new technologies would allow digital and non-digital games to be studied together, providing a larger corpus of work for understanding how games can enhance civic practices. Additionally, though there is a growing body of research on the design of these games, there has been little research focusing on the players themselves. Surveys and questionnaires can provide some larger indicators about how players respond to these games, but deeper, qualitative work is needed to understand how players use these games in their everyday civic lives.

# Chapter 2: Early Serious Games in Urban Spaces, 1960–1975

## Introduction

In the previous chapter I discussed definitions of serious games around which today's game designers have coalesced to define their work. Despite the current focus on the digital affordances of online serious games, this phenomenon has a much longer history. In 1970, game designer Clark C. Abt published *Serious Games*, in which he made the case for serious game design. He noted that "these games have an explicit and carefully thought-out educational purpose and are not intended to be played primarily for amusement" (9), adding that this type of game could offer "a rich field for a risk-free, active exploration of serious intellectual and social problems" (14).

While the similarities between Abt's early work and today's serious games would suggest a deep historic influence, these two bodies of work are largely disconnected. Ian Bogost (2007) argues that that the term serious games reemerged "fairly spontaneously" (55) when Ben Sawyer (2002) selected it as the title of his Wilson International Center paper, and later in his creation of the Serious Games Initiative. The Wilson Center's notion of serious games—though nearly identical to Abt's—has instead been the major influence on today's digital game designers.

The focus on "digital" as a definitional attribute of serious games has created a kind of bifurcated history—one stemming from the pre-digital era and another from modern videogame design. This disconnect shows a loss of historic context between the

two eras, meaning that many of the historical cases of games used to engage communities in civic engagement have been ignored. For example, Djaouti et al. (2011) found that when adhering to digital-centric definitions of serious games proposed by Sawyer (2007), Zyda (2005), and Chen and Michael (2005), only 27 games produced before 1980 could be classified as serious games. In addition, noting 2002 as the "starting point" for modern-day serious game design, they characterize the bulk of the previous serious game work as "edutainment" (34).

In this chapter, I wish to challenge the notion that serious games should be defined by their use of digital technologies. By adhering to this unnecessarily distinction, much of the earlier work has been left out of the conversation. In doing so, we lose a rich history of innovative game designs and lessons learned that could benefit today's game designers.

In what follows, I offer historical context and two case studies that show why, nearly fifty years ago, governmental and non-profit groups turned to game design as a means to engage the public in civic issues. First, I ground this work by describing historical debates about the quality of civic participation, and how innovative methods of civic education were used to address these concerns. This history is the backdrop for two case studies in the use of civic games. The first, *Fair City* (1970) shows how gameplay was incorporated into the federal Model Cities program to help citizens understand the complexities of urban planning and development. Reports on the game's design show a keen understanding of the affordances of games, as well as the difficulties in staging these early public games. A second case study, *The Most Dangerous Game* (1967), shows that technological innovation in civic games is not only the product of digital

technologies. This early networked game shows how past designers were able to facilitate

civic gaming at a distance to wide audiences through the use of telephone and television

networks. Taken together, these cases demonstrate the wealth of information on game

design practice hidden within the archive.

## A History: Public Participation and Serious Games, 1950-1970

In the aftermath of the Great Depression, the United States government steadily increased

its role in managing the country's day-to-day affairs through the creation of governmental

oversight programs and agencies. As a result, more regulatory power was placed in the

hands of government-appointed officials (Beierle and Cayford, 2002). One criticism of

this this model was its lack of public oversight: agency officials have lawmaking power

over citizens, yet citizens have no power to choose these unelected officials. Thus, the

public lacked a direct method to provide input in agency rulemaking processes.

To address these concerns, Congress passed the 1946 Administrative Procedure

Act to serve as a set of "democratic safeguards"—mandating public involvement in

agency rulemaking to make the process more democratic and transparent (Golden, 1998).

Though the spirit of the legislation was democratic, in practice the public had little

influence over agency rulemaking. By many accounts, these early attempts at engaging

the public were seen as manipulative or therapeutic—but hardly effective. In her famous

piece "A Ladder of Citizen Participation," critic Sherry Arnstein (1969) launched a

polemic against governmental approaches to public participation that offered only the

illusion of democracy. In constructing her ladder (Figure 1), Arnstein described the

various levels of citizen power afforded to the public by the most common public

participation processes. The lowest rungs of the ladder, which she labeled

*nonparticipation*, describe processes that seek only "to 'educate' or 'cure' the

participants" rather than offer a two-way means of communicating with officials (217).

She describes, for example, the formation of Citizen Advisory Committees that "came

into vogue with urban renewal." Despite their name, however, "it was the *officials* who

educated, persuaded, and advised the citizens, not the reverse" (218).
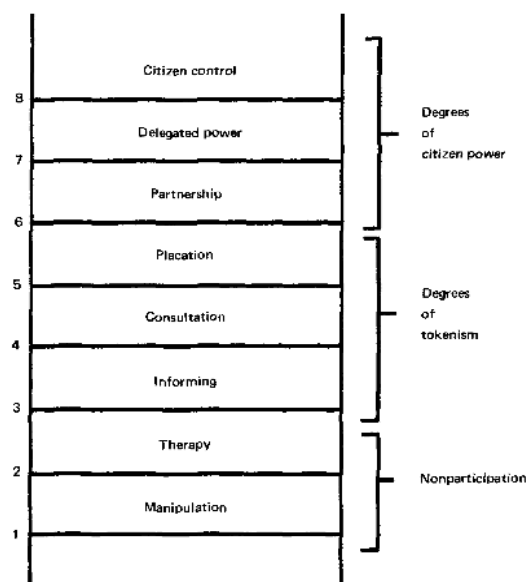


**Figure 1. A diagram of Arnstein's Ladder of Citizen Participation.**

Further up the ladder are rungs categorized *tokenism*, which describe programs

that provide citizen forums to raise concerns, but whose output is ultimately ignored by

decision-makers. In short, they provide the public a means to *feel* heard, but not to *be*

heard. In one glaring example, Arnstein describes a public meeting in New Haven,

Connecticut in which residents were outraged that they had not been involved in drafting

a proposal to decide how federal funds would be spent within the city. According to one

participant in the meeting:

> [The official] told the 300 residents that this huge meeting was an example of 'participation in planning.' To prove this, since there was a lot of dissatisfaction in the audience, he called for a 'vote' on each component of the [already written] proposal. The vote took this form: 'Can I see the hands of all those in favor of a health clinic? All those opposed?' It was a little like asking who favors motherhood. (Arnstein, 1969, 220)

In these circumstances much of the real decision-making is done without any public involvement. The meeting served as a simple ploy to encourage public buy-in for a plan the public didn't help create.

Despite these far-reaching practices, Arnstein described a growing notion of "citizen power," represented by the top rungs of her ladder. In these situations, citizens are given control over decisions typically afforded only to governmental agencies. For example, one city created a neighborhood corporation that allowed the citizens to directly manage incoming federal funding for their communities. Through the corporation, citizens could hire planners and consultants of their choosing, resulting in plans that better reflected the desires of community members. Of course, such an arrangement requires an extraordinary time commitment by community members, as well as an intimate knowledge of the processes that govern the public sector. In many neighborhoods, this level of participation is untenable.

One prevailing tension in the public participation process has been the contrast in knowledge between decision-makers and the lay public. On one hand, there are highly trained governmental employees, well versed in the bureaucracy of urban planning and public policy. On the other, a public with a deep understanding of the day-to-day needs of their communities, but with only superficial knowledge of the systems that govern them. As summarized by Beierle and Cayford (2002): "A fundamental challenge for administrative governance [has been] reconciling the need for expertise in managing

administrative programs with the transparency and participation demanded by a democratic system" (3).

The need to rethink public participation became increasingly apparent during the Cold War as the United States sought to bolster its public image and "win hearts and minds on the international stage" (Light, 2008, 349) After a series of largely unsuccessful programs such as the 1954 Urban Renewal Program (known popularly by critics as the "Negro removal program"), it became clear that government agencies needed to change their approach to community planning. In particular, the harsh impacts of these programs on the nation's poorest residents demonstrated planners' lack of understanding about the very communities they sought to transform. As historian Jen Light (2008) notes, the programs were faulted for their "focus on physical planning and for [their] erroneous assumption that economic and social improvements for city populations would follow from urban physical change" (350).

The government pushed harder for "domestic reforms to improve the lives of racial minorities" (Light, 2008, 349) through new sources of federal aid. Some programs sought to improve the *quality* of public participation by educating poor residents about urban design. The rational was simple: if underrepresented communities had a deeper knowledge of planning, they could better assist experts in solving their community's most pressing problems—and experts would be more inclined to listen to what they had to say. If the groups worked together, perhaps they could achieve the social and economic improvements the designers of urban renewal had hoped for.

Advances in computation were influential in the design of these educational programs. As complex simulations allowed private industries to tame complex scientific

and mathematical phenomena, many officials wondered if the same computational framework could be applied to the problems of cities. As Light (2008) explains, this obsession with systems thinking quickly spread from the military-industrial complex into the public sector:

> According to this view, a healthy democracy required the systems approach not only at the center of its high-tech defense and aerospace industries, its efficient business, and its rational government offices. In a period when scientific mastery was perceived as essential to good citizenship, and when maintaining homeostasis in urban contexts was a federal priority, it was a required centerpiece of citizens' work to achieve the most robust civic life. (371–372)

Alongside more conventional methods of public education, such as distributing informational literature and holding public hearings, many non-profit and governmental organizations turned to simulation games as a method for training citizens in systems thinking skills. Much like scientific simulations, they saw games as a way to represent a complex idea as something more tangible—a rule-based system that could be contained and easily taught. And, unlike written texts, games could create a context for learning in which residents could *experience* these systems first-hand.

For example, in the 1968 game *Tradeoff*, St. Louis residents—of both the middle and working class—were split into teams, given a budget and asked to create a redevelopment plan for their city within that budget. Using foam blocks to represent buildings, players replaced problematic structures, such as vacant lots and decaying schools, with new ones, such as renovated public housing or health centers. (Berkeley, 1968). Each new structure came at a particular cost, however, so teams had to be strategic about which buildings to replace and which buildings to leave in place.

After finalizing and sharing their initial designs, the teams received bad news: their city's development funding had been cut, and they would have to revise their

designs accordingly. "Now come the hard questions," wrote one reviewer. "A park, for instance, versus a clinic" (Berkeley, 1968, 56).

Here the game's designers intentionally confront players with the fundamental challenge of urban development: you can't have it all. Using local data for the game's building prices and locations helped solidify the game's connection to the community's real problems. And in having to make these hard decisions firsthand, players were also confronted with "the psychological problems of powerlessness" felt by St. Louis's poorest residents as the city adjusted to rapid suburbanization (Berkeley, 1968, 61).

In *Tradeoff*, players were confronted with the harsh consequences of the changing the urban landscape, though on a small scale. Because the game was team-based, an individual player's decisions were constrained not only by the game's rules, but also by the team's priorities. Thus, players had to negotiate their personal desires with those of the group, demonstrating that planning isn't about meeting the needs of one individual, but instead the needs of the community at large.

Games such as *Tradeoff* were not just isolated experiments; all across the country, at almost every major university school of design and architecture, gaming became an accepted and widely taught method of public engagement. Federal programs such as Model Cities helped fuel this trend, providing an influx of grant funding for gaming projects to universities and consulting firms. In what follows, I provide a case study of one such Model Cities game, which demonstrates both the designers' careful consideration of civic game design, and also some of the challenges faced by designers as they brought this new form into the public meeting.

## Case Study 1: *Fair City* (1970)[2] and the Model Cities Program

In 1966, under the Johnson Administration, the Model Cities program was a social, physical and economic planning process initiated in 150 cities across the United States. It was hoped that this "marriage between science and urban affairs" would correct for many of the mistakes perpetrated by earlier attempts at urban renewal (Light, 2008, 349). Providing a more robust framework for public engagement, the government hoped to create trust and cooperation between federal and local agencies and the public. If they could properly educate the public about the complexities of a major federal development initiative, they may be more inclined to work alongside planners and inject their knowledge into the process. Bringing the community in at the early stages of the program would not only provide the desired buy-in from residents, but might also result in more robust plans that improved upon the mistakes of earlier initiatives.

In 1970, the Department of Housing and Urban Development (HUD) released a request for proposals, RFP-H-42-70 for "A Study and Provision of Technical Assistance through Simulation for More Effective Citizen Participation in the Model Cities Program." The RFP asked companies to propose games that "would abstractly but usefully and realistically represent the activities, procedures, and decisions involved in Model Cities decision-making systems" (CONSAD Research Corporation, 1971, 1). The RFP received 72 responses, with the funding eventually going to two companies, Abt Associates and CONSAD Research Corporation.

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[2] Discussions with archivists and librarians from Abt Associates and the Department of Housing and Urban Development revealed that neither organization had maintained a long-term archive of primary materials related to the game's development. The bulk of the analysis in this section is based on a close reading of a detailed, 88-page report on the game prepared by the project's principal investigator, Allen Cameron of Abt Associates.

Abt Associates in particular would become a major force in the development of simulation games. Founded in 1965 as an interdisciplinary social science research firm, Abt Associates did most of its business with governmental agencies such as the Central Intelligence Agency and the State Department. In the 1970s, however, the company's business model shifted focus to "transferring defense-related technology and systems to civilian application" (Abt Associates, 2013, n.p.).

The same year the RFP was released, Abt Associates' founder Clark C. Abt would coin the term "serious games" in his now-famous book of the same title, *Serious Games* (Abt, 1970). As an ad for the book in the *New York Times* makes clear (Figure 2, below), Abt saw games as an organizing strategy for solving all of life's problems—from marriage issues to war to education.

In the simulation games business, his firm was one of the most respected and successful. And in winning the Model Cities RFP, his company would have the chance to develop a game with national implications. As HUD set up the contract process, winning firms would partner with regional and local HUD affiliates to develop a simulation game that would be broad enough to serve as a participation tool for multiple communities. If the games proved successful in providing the necessary technical assistance, the firms could receive a second (more lucrative) round of funding to scale their efforts. In other words, the companies had a large financial stake in demonstrating the usefulness of these games.

Though simulation games had grown in popularity by 1970, this technique was still unfamiliar to HUD representatives working at the national and regional levels. This led to a rather problematic game development process for Abt Associates as the team

struggled to find institutional support at every step. As this case demonstrates, developing games at this scale comes with an additional array of financial, political and logistical barriers.

The contract outlined that Abt Associates was to partner with two communities in its initial design process; however, this proved to be a daunting task. As Allan Cameron, the lead researcher on the project would note, "Regional personnel were initially unaware of the project, were unable to comprehend its nature and purpose, and were openly suspicious of the use of simulation gaming techniques in the Model Cities Program" (Cameron, 1971, 6). Given the project's low priority in the grand scheme of the program, and the reluctance of HUD's Government Technical Representative (GTR) to establish partnerships on Abt Associates' behalf, the company wasted two months trying to find even a single development partner. In sum, Abt Associates was faced with "the problem of selling a product (the use of gaming techniques) which was unfamiliar, largely untried and, by its very nature, both threatening and relatively low priority on the scale of local needs" (Cameron, 1971, 6–7)

The firm reluctantly moved forward with the game design on its own, with no input from the communities or local planners as to what areas a game could assist in their citizen participation processes. Once a cursory version of the simulation was ready for testing, they tried once again to gain support from local officials by hosting a playtest at their headquarters in Cambridge, MA. Not only did this attempt fail to produce the minimum number of players required to play the game, but Abt Associates also noted that in calling to cancel the meeting, several of the registered participants "had absolutely no knowledge of their supposed involvement" (Cameron, 1971, 9) And though Abt

Associates had to host the first full playtest internally with its own staff, one fortunate

side effect of the canceled playtest was that several cities (Manchester, NH; Holyoke,

MA; and New London, CT) had agreed to serve as future test sites, giving Abt Associates

the opportunity to test its design with real citizens.

The resulting game, *Fair City*, simulated, in a matter of hours, the process of

planning a local development process, "with particular emphasis on the problems of the

City, the objectives defined to confront those problems, and the specific operational

mechanisms (projects) which can be adopted to bring about improvement" (Cameron,

1971, 16). The game was designed for 36 players, five of which play elected officials,

with the rest broken into eight teams, representing interests such as City Government, the

Board of Education and Model Neighborhood Residents. Each individual received a card

with his or her role and interests, and each group is assigned objectives. Much like a real

planning process, the action in Fair City unfolds over a series of planning and negotiation

phases, wherein each group tries to best meet its objectives and maximize its score at the

end of the game. In determining which stakeholders should be represented by teams in

the game, Abt Associates thought it particularly important that the game represent not

only federal and local (neighborhood) interests, but also to consider the city in which the

redevelopment was to take place. As they noted:

> the relative success of the Model Cities Program rests not so much on the ability
> of the CDA to plan, but rather on the ability the CDA [City Demonstration
> Agency] and its supporters to have that planning accepted by ultimate decision
> makers (i. e., the City Government and other local interests) outside the Model
> Neighborhood and for whom the Model Neighborhood is not the only area of
> importance. (Cameron, 1971, 13)

One of chief challenges in designing the game was a kind of thoughtful abstraction

process wherein layers of complexity are removed, but only in the service of making

Model Cities more approachable for the lay public. And as some of the later difficulties with the game suggest, striking that fine balance—helping the public gain a robust understanding of the process while also making the game as easy to play as possible—can mean the difference between a game's ultimate success or failure.

The developers put much thought into the relationship between simulation and gaming—not only the affordances of each, but also how both the game an its underlying simulation worked in concert to create a successful teaching tool. A first consideration is noting the ways in which games and simulations are incompatible. A pure simulation, for example, would represent the Model Cities process as accurately and faithfully as possible, thus ignoring any outside factors that might add a certain playfulness to the process. On the other hand, focusing only on the "gaminess" might come at the expense of remaining true to the real-life processes governing Model Cities.

The designers decided to temper this incompatibility by making the game "enough reflective of the real world to be believable," while "not so accurate that the essence of playing a game for fun is lost" (Cameron, 1971, 18). Just as a pure game might lead players to behave irrationally with no grounding in the real-world problems of their community, merely duplicating reality in Fair City could be just as unproductive for players. The developers worried that if the game were too realistic, players would simply "behave according to preset patterns" (Cameron, 1971, 18). Again, with the right balance players would understand the process as realistic, but still feel they have the freedom to act playfully within the process—innovating rather than simply reproducing.

To help make this distinction within the game, they asked players to pretend that they lived in a fictional place called, as the name suggests, Fair City. Using Trenton, NJ

and Poughkeepsie, NY as examples, they devised a city generic city that was new, yet familiar. Instead of trying to develop a one-size-fits-all solution to a game that would possibly reach all 150 of the model cities, the designers decided that the game would need to be tailored to represent each city's existing power structure, rather than having players learn a foreign system. (For example, some cities are run by a governing council and mayor, and others by a city council and city manager.) The Abt Associates staff reminded itself that, "the object of the Game was not to teach participants ... about different kinds of cities, but to inform them about a problem-solving process" (Cameron, 1971, 20). Making such distinctions allowed the designers to drastically reduce the amount of instruction needed for players because the process was modeled after their city's existing governmental structure.

Even as an abstraction, however, Abt Associates considered that "the Game could very easily serve as negative reinforcement" if the Model Neighborhood Residents Team were to score poorly in the game, in that it cast residents as powerless actors within the Model Cities process. They decided to give the Residents team "certain advantages in scoring (which are not generally apparent to the players during the Game)" (Cameron, 1971, 34) In other words, they would rig the game in favor of the Residents to give the illusion of a process in which residents could not "lose"—despite the Residents' clear lack of power in the grand scheme of planning decisions. And so, hidden within the seemingly "objective" rule structure of the game was this "distortion of reality" serving to "demonstrate the effectiveness of working within the existing system" (Cameron, 1971, 44).

Despite many attempts to reduce the game's overhead as much as possible, they found that even to explain the game in the most basic terms required 45 minutes of in-person instruction. (They had attempted to send out the materials in advance for players to read before they arrived to play, but "as it turned out the materials provided in advance were not read" (Cameron, 1971, 46).) Additionally, even despite a major effort to simply the game's rules and mechanics, the game still took over six hours to play. In fact, "simplification of the Game did not reduce the time required to play it; it simply meant that players tended to take the same amount of time performing a more simple exercise more completely" (Cameron, 1971, 23). This was, of course, compounded by the fact that the game was played in real life, on real players' schedules. As a face-to-face experience, this meant that all the players had to arrive promptly, ready to play. However, "Abt Associates found that it's *never* possible to start on time because the participants *never* appear on time," which meant a half-hour of "dead time" preceded each game. (Cameron, 1971, 24).

A six-hour game is daunting—not only in terms of holding players' attention for so long a time, but also in terms of how the game can be integrated into a city's planning process. Abt Associates had hoped they could run the game in four hours from start to finish, making it feasible to be played with residents after work on a weeknight. The game's six-hour running time meant that it could only be played on the weekends, requiring a large commitment from residents who would have to devote half their weekend to participate. In other words, even if a potential resident was interested in playing the game, was she interested enough to devote half of her weekend to it?

A final logistical concern stems from the sheer amount of players necessary to stage the game. Abt Associates experimented with various numbers of players—ranging from 30 to 45—and determined that any number in that range would suffice, though 36 provided the best balance. Considering that each of these players would have to be recruited, it could prove a challenge for an understaffed or overworked planning office. The firm defended its decision to require so many players, arguing that "one of the most exciting and interesting parts of the Game was the great complexity and intensity of interaction produced by the number of players," adding, "a CDA which could not produce 36 players for a major training exercise had rather serious problems" (Cameron, 1971, 25)

Given these challenges, gaining a strong buy-in for the game—both from HUD officials and the communities themselves—was critical. If community leaders with strong local connections could be convinced of Fair City's value in educating the public, they could much better facilitate recruiting participants than could an outside contractor with no ties to the neighborhood. Given that games were still a fairly new method of engagement, this was not always simple. For example, before the Manchester playtest was to occur, "the citizens' group made known in advance that its members would not play the Game without pay" (Cameron, 1971, 59), requiring that the game was instead used with governmental staff instead of actual community members. Another misunderstanding happened before the playtest in Holyoke, when an "unfortunate" headline in the local newspaper—"Holyoke Officials Play Games"—had "sensitized political officials more than was desirable" (Cameron, 1971, 67), leading to the city's mayor declining to play the game.

Perhaps the most unsuccessful attempt by Abt Associates to promote the game to HUD was during its fourth and final playtest in Washington D.C.—planned specifically for HUD personnel. As Abt Associates' Allen Cameron (1971) would later summarize: "The attempt was nearly a disaster" (72). To start, only one-third of the attendees showed up, leading to "some frantic telephoning and recruiting" which produced 20 additional people—four hours later, at which time, "a very short, understaffed, and hectic test play was conducted" (73). The City Council meeting that concluded the game was "largely a shambles," mostly because the game's Mayor had left sometime in the middle of the game, and the Council itself had begun the game "by closeting itself and engaging in much internal politicking" without consulting other stakeholder groups (73). Surprisingly, even in light of these setbacks, HUD employees still seemed to understand and appreciate the premise:

> Despite the overall poor quality of the Game, which was particularly upsetting to Abt Associates staff, the reactions of the participants were highly positive, reflecting at least in part an understanding of the difficult conditions under which they took place…Participants felt that the level of interaction, the demonstration of the relationship of the Model Cities process to other considerations, and the depiction of the difficulty in undertaking comprehensive planning in the urban context were well demonstrated. (74)

Indeed, in its final report, Abt Associates identified several areas in which they felt the game succeeded in providing technical assistance to the Model Cities process. When community members were able to role-play as other stakeholders—especially as elected officials who had to consider their decisions in light of their political impacts—they gained a broader understanding of the external factors that complicate the decision-making process. (The Mayor, for instance, had to run for reelection at the end of each game, and a considerable amount her points depended on securing a majority of the

votes.) "In fact," the designers noted, "the Game may understate the degree to which political considerations dominate over considerations of 'pure' planning and objective need" (38) At the very least, this mechanic revealed why the most pragmatic decision were often neglected in favor of those that were more politically advantageous.

Abt Associates also found that the community's approach to redevelopment in the game defied their expectations. One underlying assumption in the game was that the players would opt for more superficial improvements—focusing on real estate development, for instance, versus innovative policy changes. (In other words, the same type of bad choices that led to the poor outcomes of Urban Renewal.) However, the designers were surprised that this was not the case. "The construction of new housing was relatively ignored in favor of things like expansion of job training, improvement of health services, and increasing available social services" they noted (41). While the game's chief purpose was to educate the public, it also educated the game designers themselves—as well as the public officials who played alongside the community. Officials who played as Model Cities Residents were forced to work within the limited power afforded to everyday citizens.

In its final report to HUD, Abt Associates urged federal officials to learn from the problematic process of the game's development and see that simply developing a game is not enough—that, without buy-in from local and regional officials, the games could never be effective tools for community participation. They recommended setting up special instances of the game for key personnel, "given the difficulties of gaining acceptance of the technique and willingness to use it" (86).

In the end, despite Abt Associates' recommendation that HUD both "undertake widespread utilization of the Games developed" and move forward with the second half of the contract, "with work to commence as soon as possible," the project received no further funding (86). CONSAD Research Corporation, the other contractor, suffered a similar fate, despite achieving far greater success than Abt Associates in securing buy-in from local and regional offices.

Perhaps the most illuminating piece of the *Fair City* report comes as its designers expressed the game's overall value as an educational tool in the Model Cities program. Despite Abt Associates' desire to both have their game adopted on a national scale and secure a second round of funding, they did not want to overstate the role of games in improving citizen engagement. As they admonished HUD in their report:

> It is clear, however, that the utilization of the Games developed under this Contract or of Similar Games, is not going to solve basic problems nor in and of itself provide an adequate training program for residents and staff. The most effective utilization of simulation Games in the Model Cities Program, as in other areas, continues to be integration of this technique with other training and educational methods.

Coming back to Burak's call for grounded research, *Fair City* represents a case in which games were not seen as the ultimate solution to everyday civic problems, but can be seen as a process that is most beneficial when used alongside other methods.

**Summary**

In this case study, I have presented *Fair City*, a civic game commissioned by the federal government to enhance citizen participation in the Model Cities process. By requiring citizens to take on the roles of government agencies within the game and make collective decisions, the designers hoped that players would learn about both the complexities of

decision-making and interconnectedness of stakeholders in a civic process. Through the game, the developers were able to help players understand how the needs of the public are negotiated in light of wider political and bureaucratic concerns. As a surprise to the designers, the public was able to manage a complex planning process with much more savvy than expected. Despite the thoughtful design of the project, *Fair City* demonstrates the challenges of bringing games to a wider audience. As an unfamiliar process to many government officials, the use of games was seen as a low-priority task considering the other complicated work of managing a large-scale decision-making process. Within the communities who did play, however, the developers noted that the game had the desired impact. As an example of historic civic game design, *Fair City* serves as a reminder about the challenges of launching civic games in communities as an outsider. Buy-in from community leaders is essential to success.

In the next section, I present a second case, *The Most Dangerous Game* (1967), as an example of civic game work developed by non-profit organizations to similarly help foster better public participation. As an early example of a networked game, this project demonstrates the technological sophistication of historic projects—the study of which can greatly benefit our understanding of civic games for mass audiences.

## Case Study 2: "The Most Dangerous Game" (1967)

Outside the realm of urban planning, non-profits institutions such as the Foreign Policy Association (FPA), also sought to harness the affordances of games to further their educational outreach goals. If the case of the FPA, an organization founded to "serve as a catalyst for developing awareness, understanding, and informed opinion on U.S. foreign

policy and global issues" (Foreign Policy Association, 2013), they thought simulation

games to be a promising tool to generate public excitement for, and meaningful

engagement with, public policy. According to Roger Mastrude, vice president of the

FPA, the need for such an intervention was urgent:

> The public has shown an invincible unwillingness to go to meetings or to inform itself by conventional modes of adult education. But the sheer difficulty of comprehending world events has never been so great as it is today, and democracy will become a polite fiction unless we can find new ways for citizens to learn about public issues. (Mastrude, 1967, November 16 †)

In 1967, while putting together initiatives for an educational program called *Analysis and Judgment-Making in Foreign Relations*, the FPA had partnered, incidentally, with Abt

Associates to develop a series of simulation games based on contemporary foreign policy

issues for classroom and community groups.

In a report to the FPA on its proposed simulation game, Abt explained that a

foreign policy game's scenarios should "demonstrate to players the important variables in

international situations and the process by which the actors of the situation consider these

variables in making decisions" (Abt Associates, 1967, 1†) Much like *Fair City*, Abt

Associates' prototype game required that players review information on a specific

"historic moment," take on a role the scenario, and consider a series goals and

motivations to inform the decision-making process. Some of the first historic moments

selected for game scenarios included the League of Nations, the Marshall Plan, the

Recognition of Israel and the Cuban Missile Crisis.

Much of the FPA's outreach efforts to date had focused on working with

established community groups, from local organizations such as the League of Women

Voters, to churches and schools. Their main goal was to create a context for large groups

of citizens to debate issues of foreign policy, in hopes that they would both understand both the complexity and magnitude of world affairs. After some early playtests in which they observed the excitement with which citizens played the game, they wondered, *How would these games work as a television show?* This led idea to discussions between the FPA and executives at a non-profit television station in Boston about their idea.

In 1967, television producer Rick Lee would receive a telegram from his boss Bob Larsen at WGBH Boston. In it, Lee was asked to meet members of the FPA in New York and see if their public policy game could potentially develop into a television show. As one of the earliest non-profit television stations in the Northeast, WGBH was looking for innovative educational programming ideas, and no station had yet experimented with developing a simulation game for television audiences.[3]

At the height of the Vietnam War, as citizens felt "remote from the processes by which our society debates and arrives at major decisions" (Mastrude, 1967, November 16†) providing the public opportunities to interrogate the seemingly irrational realm of public policy through games could provide "a modest intellectual equipment" that it could in turn apply to its understanding of current events (Mastrude, 1967, June 16†). Encouraging the public to think in more complicated ways about international problems was a priority for the FPA, given that "public opinion affects the choices and programs which the President and Congress undertake" (Mastrude, 1967, June 16†).

The partnership between the FPA and WGBH was particularly important for Mastrude, who saw televising the FPA's work as the next major step in expanding the audience of its targeted local outreach efforts. In a population of three hundred million, he argued, there was no longer a proper a way to "recreate the small, inclusive world of

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[3] Phone interview with Rick Lee, 28 August 2012.

the New England Town Meeting," and that new forms of participation must be found

(Mastrude, 1967, November 16†). He wished to learn "how to use the TV screen itself as

the recruiter of learners" and how "to multiply the teaching value of TV by persuading

the viewer to get up out of his chair and involve himself" in active learning (Mastrude,

1967, June 16†). If a televised game could provide the proper catalyst, he believed that

groups of players would "from year to year continue to meet and analyze current

problems of foreign policy" (Mastrude, 1967, June 16†).

To help envision the final product, Mastrude conceived two possible ways

television could facilitate a game in which an at-home audience could play an active role.

In one scenario, interested players could pick up game information kits at local stores,

study their contents and organize gatherings—both at home and within larger community

organizations. The game would begin on television with a group of in-studio players.

After thirty minutes of play, the televised game would conclude, leaving the at-home

groups to pick up the game and continue "until the situation is resolved by making peace,

by a truce, or by the beginning of World War III" (Mastrude, 1967, June 16†) In another

scenario, remote viewers could engage in a kind of metagame—watching players

complete the simulation in the television studio, then participating in a "phone-in

competition" in which they would try to accurately predict the actions of the studio

players based on their analysis of the televised discussions (Mastrude, 1967, June 16†).

Of course, the ultimate fate of the game rested with WGBH. Fortunately, Rick

Lee and his boss Bob Larsen were so impressed by and Mastrude's proposal for the

project that they immediately began adapting the idea for television. Larsen praised the

FPA for its innovative approach to education, and bragged that taking on the production

of such a television event was his team's "cup of tea" (Larsen, 1967, May 31†). As Larsen would write in May 1967, the game's pitch had come at an opportune time for his TV station: that they were in the midst of launching a new special services channel, WGVX-TV, and were in need of programming. Moreover, because WGVX's programming was broadcast over UHF frequencies at a time when most TV sets were still VHF-only, their show would have a small and manageable test audience. "We were approaching a privileged moment in a broadcaster's career," Mastrude would write. "We had no audience to lose; we could afford to experiment!" (Lee, 1968, 475).

Developing this game would also allow WGBH to test new models for making its programs interactive for at-home viewers. "There seemed to be evidence," Larsen said, "that radio and television audiences are no longer content to be passive receivers—that they want to participate and interrelate with their programs." (Lee, 1968, 475) The creators wondered whether they could capture the engagement of a face-to-face simulation game through the television. If television could serve as "a useful conduit between player and game," they could dramatically reduce the cost per player of simulation games, which typically increased in proportion to the number of players; more players required more moderators and materials. In televised form, perhaps these simulations could reach hundreds—if not thousands—of additional players with little additional cost (Lee, 1968, 475). Because they would fund this project internally, the FPA and WGBH could experiment and figure out the answers to these questions as they went along, with few consequences for failure.

The idea for this televised simulation game came at a time when most government contractors were trying to understand simply *how* to design games for the public—let

alone how to design them with new technologies. (Abt Associates wouldn't begin

designing *Fair City* for another three years, to add some perspective.) In the early years

of his firm, Clark C. Abt had worked chiefly for government agencies such as the CIA,

which, according to one employee, meant developing sophisticated scenarios based on

top-secret government intelligence.[4] And in several cases, the outcomes of these

simulations accurately mirrored those of the real-life conflict.

After weeks of preparation, the game was slated to air on WGVX-TV with the

title "The Most Dangerous Game,"[5] and was to have five weekly broadcast slots between

October and December 1967. In each staging of the game, groups of in-studio players

were chosen to represent the game's major political powers in a simulation of the 1950

Korean Crisis. (The viewers would participate from home, as I describe below.) To

prevent players from repeating the known historic outcomes of this historic event, the

countries were given pseudonyms: Nordo (India), an "economically depressed" and

"newly independent and democratic" country; Transania (USSR), a "vast nation heavily

damaged by the last World War"; New Zenith (USA), the "richest, most heavily

industrialized nation in the word"; Hamil (China), an "immense, poor country with very

large population"; and Inland–Outland (North and South Korea), "occupied almost

continuously by one of the great powers" and divided into "Inland, ruled by Transania,

and Outland, governed by New Zenith" ([Map and country descriptions for The Most

Dangerous Game], 1967[?]†).

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[4] Personal interview conducted at Abt Associates. August 23, 2012.
[5] The game was giving this title because, according to Mastrude, "Conducting the affairs of a nation on today's planet is the most complicated and dangers of the games man has devised" (Mastrude, 1967[?]†).

Producing such a large game required much technical planning by WGBH. Given that there would be thirty on-air participants (five representing each country), filming the show required the use of two television studios and dozens of crewmembers and volunteers. Studio A, the larger of the two, housed the large group discussions for all teams, whereas Studio B provided the audience with an intimate view of private team discussions. The game was played in rounds, beginning with a public statement from each country, then moving into private meetings for strategy and negotiation. Teams could also choose to meet with ambassadors from other countries. After two such rounds, teams selected an action on behalf of their country. These decisions funneled into the game's decision tree, and the results of the teams' collective actions were shared. To encourage viewers to tune into the show week-to-week, it was suggested that "the show might end at an appropriate cliff-hanging point" after the final round of decision-making. (Gerber, 1967, September 14†)

Because *The Most Dangerous Game* is one of imperfect information, the creators wanted to model the in-studio experience for the at-home audience by giving them access to the information known by only one of the teams, in this case Transania. (The home audience operated as remote members of the country's "political elite.") The creators chose Transania (USSR) as the country-of-focus for several reasons, both pragmatic and political. Because of the stalemate that ensued in the real crisis, the roles of India, North Korea and South Korea would be "extremely frustrating" to take on, and would "not make for an interesting and stimulating game" (Mastrude, 1967, July 31†). And on the other, with only the United States, China and the USSR remaining, the FPA wanted to challenge the audience beyond simply "thinking like Americans," while avoiding

"potentially a real public relations problem, if we were to choose communist China as the team to identify with" (Mastrude, 1967, July 31†). Thus, the USSR was the only viable option.

Fearing a context in which the home audience must sympathize with Communist regimes—even if only in the context of the game—the designers instead based the game on Russia's point of view. In a truly neutral game, disconnected from real-life considerations, there would be no fear of such indoctrination. However, games and their rules are inherently political and largely influenced by outside political and ideological factors. In this respect, there is no such thing as a "neutral" representation of the real world in games.

To fulfill WGBH's goal of giving the audience a direct influence on the game's outcome, they designed a system through which participants could "play" Transania by telephone. During the game's deliberation periods, the moderator would ask the Transanian team to come to a consensus regarding their two best courses of action. These choices were relayed to the audience, who were asked to weigh-in on the decision-making process, as demonstrated by the show's script:

> ANNOUNCER: Your ministers now have to decide between [Choice A] and [Choice B]. As a member of the political elite, which approach do you recommend? If your advice is [Choice A], call 491-5600. If you choose [Choice B], call 491-5605. Our phones will be open for the next four minutes ([The Most Dangerous Game Filming Script], 1967†).

Alongside the players in Studio A sat a team of ten phone operators controlling the game's phone bank, recording the votes of the audience. After the call-in period, the results were tabulated and the vote percentages relayed to the Transanian ministers for consideration. In addition to phone-in voting, after the game's weekly "cliffhanger" was

revealed, the home audience was urged to send the show a policy advice letter. The author or authors of the best letter would be invited to the studio the following week to read their letter on the air.

The show eventually premiered on 19 October 1967 with this exciting provocation for the audience:

> Tonight you are invited to play *'The Most Dangerous Game'*—the game of international diplomacy. The thirty people you see in our studio right now run an imaginary world on the brink of nuclear war. What you, and these players, do in the next two hours will lead to peace—or nuclear disaster! ([The Most Dangerous Game Filming Script], 1967†)

The announcer quickly summarized the conflict for the audience: Fighting on the adjacent Inland/Outland peninsula had "escalated into a threat of World War III!" With control over Inland/Outland having been split between Transania and New Zenith, respectively, after the last war, and with both major powers battling by proxy within the peninsula, tension was rising. And, just as the game begins, the announcer revealed that Outland has just launched an offensive into Inland, with New Zenith's troops waiting anxiously along the Inland border. With neighboring powers Hamil and Nordo ready to take sides, reaching an agreement in the International Council was the only hope of averting the impending war. ([The Most Dangerous Game Filming Script], 1967†)

After the first round of diplomatic negotiations, Transania—and the home audience—were given several choices: proposing a peace conference; supporting Hamil economically and militaristically (to gain its favor and support); moving troops to Inland for defense; or moving troops across the border into Outland. ([The Most Dangerous Game Filming Script], 1967†)
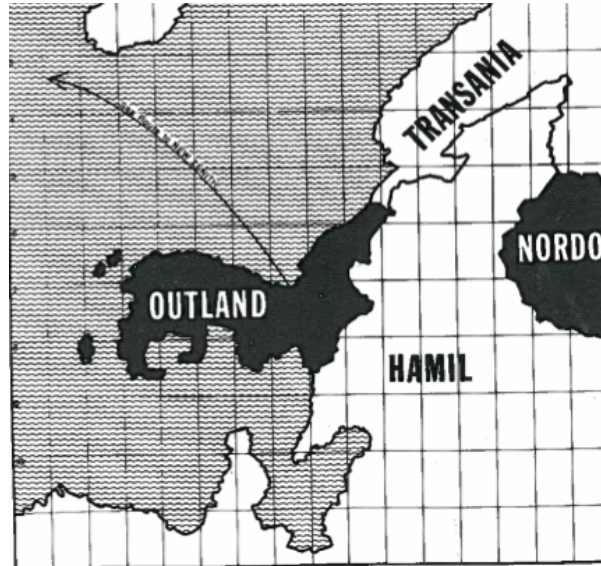
***Figure 2: A map of countries for the initial broadcast of "The Most Dangerous Game."***

Much like in the real Korean Crisis, the simulation became locked in a stalemate, with no team willing to make an offensive move—at first. As the game continued, both the in-studio players and home audience grew impatient, even frustrated, resulting in riskier decisions that seemed to ignore the disastrous real-world effects of all-out war, but that also made for great television. As the series continued into its fifth week, that the participants would steer the game toward war was almost a foregone conclusion. When asked why their team opted for war, one in-studio player answered, simply, "We all seem to have found war a far more entertaining solution" (Lee, 1968, 476). Even after experimenting with some scenario changes—identifying the countries by their real names, taking the nuclear option out of the game—the question for the show's runners remained not if, but *when*, war would erupt in the studio.

Ideally, a player would make a perfectly rational choice when playing a civic game, carefully weighing the rewards and consequences of each decision, and then making the rational choices to optimize her rewards. In serious games especially,

designers hope that players will bring along an additional set of rational equipment: a sense of fairness and ethics in their decision-making. The way players' decisions manifest themselves in real life, however, do not follow such a predictable path. Indeed, in the case of *The Most Dangerous Game*, the play in fact always resulted in a nuclear war, despite the absurdity of such a choice in a real-life context. According to the designers, the tedious militaristic stalemate the players reached in the game often left players bored and restless. In the true Korean Conflict, the stakeholders understood the magnitude of their decisions—but in a game setting, everyone involved couldn't help but laugh. As Rick Lee said to *Newsweek* on the players' decisions to go nuclear: "Everybody was shocked. It was like when everyone is laughing in a movie, and you find yourself laughing, too, even though the picture may be tragic" ("Most Dangerous Game," 1968, 51).

Though the game's intended goal was for players to meet the needs of their respective countries (and presumably make ethical choices with respect to the outcomes of those choices on their citizens), players brought with them numerous goals of their own. These ranged from keeping the game interesting for themselves to entertaining the home audience—they were making a television show, after all. As this demonstrates, real-life players are not as rational as designers would prefer. An effectively designed game, then, would provide players with a kind of "sandbox" for trying out various kinds of decisions, both rational and irrational—much like some of today's popular open-world games. If the serious message of the game only becomes clear if a player plays rationally, chances are the message will be lost. In many cases, players find a certain delight in

bending the rules—or, in some cases, starting a nuclear war—at the expense of selecting the "right" or "just" outcome.

Considering the lack of advertising for the game, compounded by the station's limited audience, WGBH and the FPA considered *The Most Dangerous Game* an overwhelming success, meeting most of their initial goals. In measuring the audience's phone participation, for example, operators recorded 521 completed phone calls during the first episode, coming from only sixteen minutes during the game when the phone lines were open (Lee, 1968). In a survey of at-home participants, the show's creators were pleased that the game encouraged younger audiences to participate and produced a social context in which citizens could discuss foreign policy. According to their phone survey, 56 percent of players were school age and 64 percent played socially, either with family or a local organization.[6] An evaluation also demonstrated that television could, indeed, successfully reduce the cost per player in a large-scale simulation game. Lee estimated that one additional employee could facilitate an additional 150–200 at-home players per hour (Lee, 1968).

The game was also praised widely in the popular media. Percy Shain (1967), the *Boston Globe*'s television critic, called *The Most Dangerous Game* "the newest favorite parlor pastime" that "provided fascinating insights into human nature" through an interactive approach to television that was the first of its kind (93). A videotape of the game was also showcased in six cities across the USSR by the United States Information Agency as part of a traveling exhibit called "Education Today, USA," showcasing innovative approaches to American education (Bock, 1968, December 6†).

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[6] Shain, Percy. "War Climaxes on 'Dangerous Game' Show," p. 93, *Boston Globe*, 11/19/67.

Despite the success of the pilot, the FPA and WGBH wondered how the game could be improved. In particular, they considered players' predisposition toward war. "As a teaching device, such games can be defended as imposing some of the restraints and frustrations of 'real-world' policy making," Lee noted in a reflection on the game. "As a television program, however, situations with potentially more exciting realistic outcomes would be desirable" (Lee, 1968, 476).

In addition, the home audience felt restricted by the game's simple binary voting system; they weren't able to "express the shades of their opinion" (Lee, 1968, 476). One solution, the creators thought, might be to increase the number of possible choices for the at-home audience. However, even given more possible decisions and outcomes, the audience's creativity was still limited by the use of a decision tree to provide game results. They wondered if future games could feature a foreign-policy expert as the game's "computer," allowing players to take innovative, unexpected actions and see the outcomes generated on-the-fly by the expert. The expense of such an expert might be impractical for a face-to-face simulation game with a small number of players, but when factoring in a large television audience, it made financial sense (Lee, 1968).

Another insight—one that would have a profound impact on the design of future games produced by the FPA and WGBH—was that increasing the number of television stations playing the game could both increase the potential viewership of policy games and provide a larger framework for audience participation. "Each city could be assigned a country to play," Lee described. "It could meet with its allies or address the world, or plan national strategy in secret. If the studio team in one region wanted to address only its own constituents, it could ... broadcast to only its own region by using a flexible

interconnected network system" (Lee, 1968, 476). In expanding *The Most Dangerous Game* from its original local context, the creators wanted to retain the intimate feeling that one was playing alongside friends and neighbors.

The next version of the experiment, called *Cabinets in Crisis*, which aired April–May 1968, was comprised of seventeen interconnected television stations along the East Coast, from Maine to New York to Rhode Island. Though created especially for high schools affiliated with the station's "21-inch Classroom" initiative, this game—a simulation of the Yugoslav Aid Crisis of 1950—enjoyed wider success than its predecessor, with 13,650 students enrolled ("Cabinets in Crisis," 1968†). Building off the feedback from their first game, the FPA and WGBH revised their design to give the television audience more time to reflect critically on the debate. Rather than relying only on the "liveness" of phone-in voting to make the game interactive, *Cabinets in Crisis* was broken into shorter thirty-minute segments, with weeklong breaks occurring between major decisions. This allowed classroom players to have discussions after the broadcast and several days to craft a thoughtful policy advice letter for the on-air team, which could be mailed into the station. For snap decisions, on-air teams would ask the audience simple questions they could answer via phone voting. Each week, after taking all advice into consideration, the on-air teams would make their choices.

Despite these modifications, the viewership felt slighted by the game's power structure, claiming that the studio players were systematically ignoring viewer policy advice. Some student viewers from Boston Latin High School were so convinced of a conspiracy that they showed up uninvited to the WGBH studios. They demanded a list of local schools involved in the game so they could all band together, thus forcing the on-air

team to comply with their policy suggestions. The "rude and unnecessarily combative" students even brought a hidden tape recorder to try and catch WGBH staff lying about the game's rules ("Cabinets in Crisis," 1968, 12†).

The game was popular enough at Boston Latin High School that it became a campaign issue in the race for class president. Though the students were not very successful in their "revolt," the experience, "While uncomfortable for the staff members who had to deal with it, is really quite encouraging. A television series so captured the imagination of a group of students that they felt it somehow to be their own" ("Cabinets in Crisis," 1968, 12–13†). These students' engagement with the game wasn't necessarily that of a "typical" simulation-game player, but that the revolt happened at all lends much credibility to the conclusion that this game successfully expanded to a national scale. *The Most Dangerous Game* and *Cabinets in Crisis* not only captured the attention of viewers while on air, but also encouraged collaboration, independent research and political action—a far cry from the "polite fiction" Mastrude had foretold.

## Coda: "Back to Basics"—The End of an Era

The partnership between WGBH and the FPA would last several years, resulting in the games *The Most Dangerous Game* (1967), *Cabinets in Crisis* (1968), and *Crisis in the Congo* (1969). However, once WGBH began working on projects outside the purview of the FPA— for example, working with high school students to develop *City Game* (1970), a game about local government—the partnership no longer made sense.

Beyond broadening the scope of the games beyond international politics, "Big changes were afoot at WGBH in 1970."[7] The station's general manager would take a job at another station in Washington, D.C., and around the same time, Director Rick Lee would leave for a graduate program at Harvard. Tragically, Bob Larsen would unexpectedly fall ill and pass away. The station would continue its games-based programming a while longer under the new leadership, but the key players were no longer there to keep the games running.

A wider cultural shift would also impact the development of games on a national scale. A wave of alarmist discourse chronicling the decline of literacy swept the United States, spurred by articles such as *Newsweek's* 1975 piece "Why Johnny Can't Write" (Sheils, 1975). Critics complained that educators had, over the past decade, spent so much time trying to reinvent the education system that they had neglected to teach students even the most basic building blocks, such as proper grammar. Thus, the "Back to Basics" movement was born:

> Generally, proponents of the movement tend to reject the sixties: its innovations, open classrooms, audio-visual techniques, tutorial components, pre-writing stimuli, ethnic and dialect concerns, and open-admissions policies that would modify standards and curricula. (Baum, 1976, 32)

Counter to gaming experiments such as *Fair City* and *The Most Dangerous Game* where learners were encouraged to subvert traditional power structures and work alongside professionals as equals, Back to Basics preached, "At all levels, the teacher is to take a dominant role, with 'no nonsense about pupil-directed activities'" (Brodinsky, 1977, 522). Another belief was to simply "ban innovations," particularly "instruction by electronic gadgets" (522). Simply put, the core values of innovation and equal access that

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[7] Rick Lee, personal e-mail, 20 March, 2013.

had fueled the spread of serious games throughout the 1960s were now called into question. While this ideological shift in education was not the only factor in the decline of games in the 1970s, it does help us understand why the technique's popularity may have diminished in favor of more traditional means of instruction.

**Summary**

In this case study, I have presented *The Most Dangerous Game*, an early example of technological innovation in civic game design. After witnessing the benefits of simulation games to help citizens better understand international politics, the Foreign Policy Association wished to expand the reach of civic games beyond a physical meeting room and into the community at large. In bringing simulation games to TV audience, the creators of *The Most Dangerous Game* sought to help turn the television into a participatory medium, allowing viewers not only to learn by watching, but having their decisions factor into the live broadcast. While acknowledging the limitations of the technology used, the developers successfully brought civic gaming into thousands of homes. This case helps demonstrate the sophistication of early civic game developers, showing that the technology used need not be digital to be meaningful or far-reaching.

## Conclusion

In this chapter, I sought to augment our understanding of the history of civic games by examining two early attempts at developing games to improve citizen participation in civic processes. These games help historicize contemporary serious games, broadening our understanding of the phenomenon beyond the digital games of the past decade. These historic examples highlight some early innovations in the design of games, from helping

carve a space for games in citizen participation processes to experimenting with novel forms of networked games by incorporating technologies such as the telephone and television. In designing for regional and national audiences, the designers of these games also provide important lessons on designing games on a large scale, as well as the problems that can arise when designing for large amounts of players.

While today's game designers rarely identify with these game experiments (in part because they are rarely discussed), the lessons learned from early serious games not only still apply to the designers and consumers of serious games, but also ask us to rethink some of our assumptions about games and game history. While this chapter addressed only two such cases of early civic game design, it nonetheless shows the wealth of valuable information that can be uncovered from the past

# Chapter 3: Civic Engagement and Games in a Digital World

## Introduction

Decades after the policy simulation games described in the previous chapter had fallen out of favor, innovations in digital games have sparked a newfound interest into the civic potential of videogames. In fact, as the title of Ian Bogost's recent book *How to Do Things with Videogames* (2011) suggests, people are increasingly turning to digital games to *do* work beyond the confines of the game itself. In today's civic sphere, games are seen not only as a way to influence the thinking of players, but also to give them the tools to take action. In this chapter, I analyze two emerging forms of civic engagement enabled by digital technologies and see how games can fit within these frameworks. In doing so, I argue that digital games do not exist in a world apart from other modes of civic engagement, but instead operate within a larger civic ecosystem. In one instance, I look at a form of engagement that takes place entirely within the digital space of an online game. In a second, I look at how digital games can augment traditional face-to-face civic experiences.

The two games included as case studies represent only a small sample of the growing corpus of digital games for community engagement.[8] As such, the point of this chapter is not to present an exhaustive list of games, nor is it to analyze every possible use of games within civic contexts. Instead, it is meant to give the reader a glimpse at the diversity of game designs and play situations enabled by digital technologies, and how

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[8] More comprehensive lists of civic games can be found at Games for Change (http://www.gamesforchange.org/play) and the MIT Game Lab's Purposeful Games for Social Change directory (http://purposefulgames.info/).

these designs are in conversation with larger discussion about civic engagement in the digital age. In particular, I focus on the ways in which digital games have been designed to transform civic discourse and inspire some form of civic action, and the ways that designers, critics, journalists, and practitioners talk about the civic affordances and limitations of these games. In many cases, the limitations of these games are attributed to poor game design; however, I argue throughout the chapter that these limitations are not specific to games, but are instead indicative of the limitations of online civic action in general.

I begin by looking at viral engagement practices—succinct, sharable civic campaigns that move easily through social networks to raise awareness and encourage simple civic actions. I argue that casual serious games can serve as a viable strategy for framing campaigns around pressing social issues and current events. These games can provide brief narrative and ludic frames not only to persuade the player, but also to provoke him or her to take immediate action after playing by contacting elected officials. Next, I look at digital games designed specifically for integration into traditional face-to-face civic processes such as public meetings on issues of urban development. These games seek to augment and directly influence civic discussions through perspective taking and empathy introduced via digital games. These games are designed to be part of a larger game *experience* that includes face-to-face discussions and critical thinking outside of the game. Within each case study, I contextualize game-based civic practice within wider debates about digital media and civic engagement.

Each of the game-based civic practices described in this chapter is framed around an analysis of design principles, discussion of civic uses and potentials, and ongoing

challenges and criticism. I also draw connections between today's digital work and the analog games discussed in the previous chapter to show that both eras of game design draw from a common belief in the power of games to influence civic life—as well as similar lessons learned and failures.

The cases presented were chosen based on several selection criteria. Both games are generally notable, meaning they have received multiple mentions in major national newspapers, such as the *New York Times*, *Washington Post*, or the *Boston Globe*. A second criterion was the author's own experience of designing games for community engagement for the past five years, as well as his personal interactions with other game designers, community leaders and practitioners working in this space. This criterion is especially salient in the section on games for public meetings. Lastly, each of the games mentioned in this chapter has won a major award or competition for serious game design, demonstrating its value in the wider serious gaming community.

While many other civic frameworks and games are not mentioned in my analysis, my goal is to focus on some of the most widely discussed projects that have proven influential to the public's understanding of civic games. And though none of the projects discussed in this chapter (or even this thesis) have gained enough notoriety to be known by most members of the general public, they are nonetheless games that have, and will continue, to shape the way civic games are designed in the future.

## Viral Engagement and Casual Games: Encouraging Awareness and Action through Online Games

In the spring of 2013, the Supreme Court heard oral arguments on two controversial court cases related to marriage equality in the United States. The first concerned California's Proposition 8, a state constitutional amendment that denied same-sex couples the right to marry. The second, the Defense of Marriage Act, denied all same-sex couples marriage benefits at the federal level. To help raise awareness of these two important cases, the nonprofit Human Rights Campaign launched an initiative to encourage Facebook users to change their profile pictures to a red equals sign as a public display of their support for marriage equality. According to a report released by Facebook, between March 25 and March 27 approximately 2.7 million users participated in the call by changing their profile pictures (Bakshy, 2013). Not only was the initiative noticed by millions of additional Facebook users via supporters' social networks, but the overwhelming success of the campaign also resulted in dozens of stories by major media outlets reporting on the picture-changing phenomenon (c.f. Cavna, 2013; Italie, 2013; Yang, 2013).

As this case suggests, these online campaigns can constitute a powerful tool in the
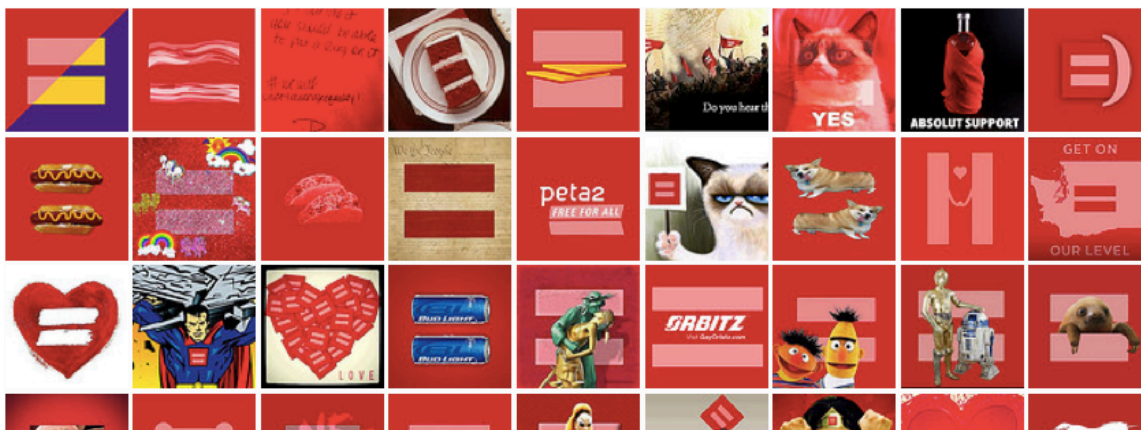


Figure 3. Screenshot of a collage of the Human Rights Campaign's favorite Facebook logo remixes. (via http://www.flickr.com/photos/humanrightscampaign/sets/72157633101425657/)

community organizer's toolkit, providing new channels for engaging citizens in civic actions that are simple, yet impactful in raising awareness. From changing Facebook photos to signing online petitions, small acts of digital activism and political engagement are slowly becoming an everyday part of civic life (Christ, 2011; Karph, 2010; Smith, 2013). Fung and Shkabatur (2012) refer to these types of civic discourse as *viral engagement*: "a political message or campaign that spreads quickly, reaches large audiences and calls for action" (2). The key to the success of these campaigns, they argue, is that they can be shared easily through online networks and appeal to political "amateurs" who may not traditionally engage in political or civic action.

At the center of these viral engagement campaigns is the "ask"—the presentation of an issue and the subsequent call to action from organizers on how audiences can help address it. Fung and Shkabatur (2012) note that asks in these campaigns share three main features:

- First, the [organizer] provides information about the topic that is new or unknown to much of the audience and that is presented as urgent or plainly unjust.

- Second, the [organizer] develops a narrative or "frames" the issue in a way that identifies the injustice at stake and so serves to locate the issue in the world view of the audience and highlight its salience.

- Third, based on this new information set in a narrative of injustice, the [organizer] asks her audience to take action. (6)

These steps were actualized by the Human Rights Campaign by: 1) succinctly summarizing the impacts of this legislation on the lives of same-sex couples;[9] 2) framing

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[9] See, for example, the "Stand for Marriage" website linked to its initial Facebook post about the campaign: http://www.hrc.org/StandForMarriage.

the campaign around the ideals of "fairness" and "equality"; and 3) asking readers to show their support by changing their Facebook profile pictures.

According to Fung and Shkabatur (2012), the potential for these types of asks to "go viral" is dependent upon many factors, most notably their use of a simple, low-cost mechanic for participation (signing an online petition, "liking" on Facebook, sharing a video), their ability to reach previously unengaged or unaware audiences, and their ability to highlight new issues or perspectives related to the topic at hand. In short, the engagement produced by such campaigns is "fast, cheap, and thin" (1). And in most cases, the authors add, mainstream media coverage plays a crucial role in expanding the audience of the campaign and bringing it to the attention of policy makers.

Some forms of digital games are well suited to facilitate this type of viral engagement, offering succinct game experiences on social issues that are easily sharable across social networks. Jesper Juul (2010) describes an emerging class of games called *casual games* that allow players to "have a meaningful play experience within a short time frame" (8). These games appeal to wider audiences than traditional "hardcore" video games by lowering barriers to gameplay, most notably by employing simpler game mechanics and not assuming the player has previous familiarity with digital game conventions. Unlike the more complicated and time-consuming game experiences outlined in Chapter 2 and later in this chapter, casual games are designed to fit within players' everyday lives— able to be played in just minutes, and easy for players to dive back into when they have more time. Moreover, Juul states that these games eschew the heavy, expensive graphics of hardcore games, making them easier and cheaper to produce. Taken together, these aspects of casual games make them particularly useful

within the context of viral engagement, in which the success of the campaign depends on broad appeal and ease of access.

In what follows in this section, I provide a case study on the use of casual serious games to facilitate viral engagement in civic issues. Looking to *Darfur is Dying* (2006), I show how games can fit within the viral engagement framework, raise awareness for a serious issue and encourage further action outside the game. I analyze both the game system and how the game's creators facilitate the "ask" around a civic issue, and how the game is framed and presented in the wider popular and critical discourse.

## Case Study: *Darfur is Dying* (2006)

In 2005, game designer Susana Ruiz became interested in developing a serious game on the issue of genocide after hearing from her nephew that, in a classroom lesson on the Holocaust, his class failed to make connections between the atrocities of the past and those currently happening around the world (Fairweather, 2006). What had begun as a game project about the Rwandan genocide was soon reenvisioned as a game about Darfur region of Sudan after the announcement of a $50,000 competition called the Darfur Digital Activist Contest co-sponsored by mtvU and the Reebok Human Rights Foundation (Boyd, 2006). Together with a team of students from the University of Southern California, Ruiz created a simple "narrative-based simulation" game in which the player takes on the role of a displaced Darfurian refugee fighting to stay alive in war-torn Sudan (Darfur is Dying, 2006a, n.p.). The final game prototype, *Darfur is Dying*, debuted in 2006 at the Save Darfur rally on Washington D.C.'s National Mall, and was

also made available online at www.darfurisdying.com (Vargas, 2006). As the game's official description makes clear, the game was designed with viral engagement in mind:

> Darfur is Dying is a viral video game for change that provides a window into the experience of the 2.5 million refugees in the Darfur region of Sudan. Players must keep their refugee camp functioning in the face of possible attack by Janjaweed militias. (Darfur is Dying, 2006a, n.p.)

As a game about an ongoing genocide, *Darfur is Dying* attempts to provide information about a conflict that may be unfamiliar to players, while simultaneously framing this issue through the everyday experiences of Darfurian refugees—two key steps in initiating the subsequent "ask" for players to take action.

As the player begins the game, she is immediately asked to select one of eight refugees to represent her camp. She is then shown the simple arrow-key controls and told, "You are a Darfurian refugee who must forage for water … You risk being attacked and possibly killed by Janjaweed militias when you leave the confines of the camp" (*Darfur is Dying*, 2006, n.p.). Using simple keyboard controls, the player runs in the direction of a nearby well to collect water, while hiding from armed militias scattered throughout the environment. If the player is unsuccessful at dodging the militia, the game describes the tragic consequences, which can include abuse, rape or death. Apart from foraging for water, the player must also help manage a refugee camp by building shelters, growing crops for food, and keeping refugees healthy by visiting the clinic. However, the camp is also prone to militia attacks that contaminate supplies and destroy buildings.
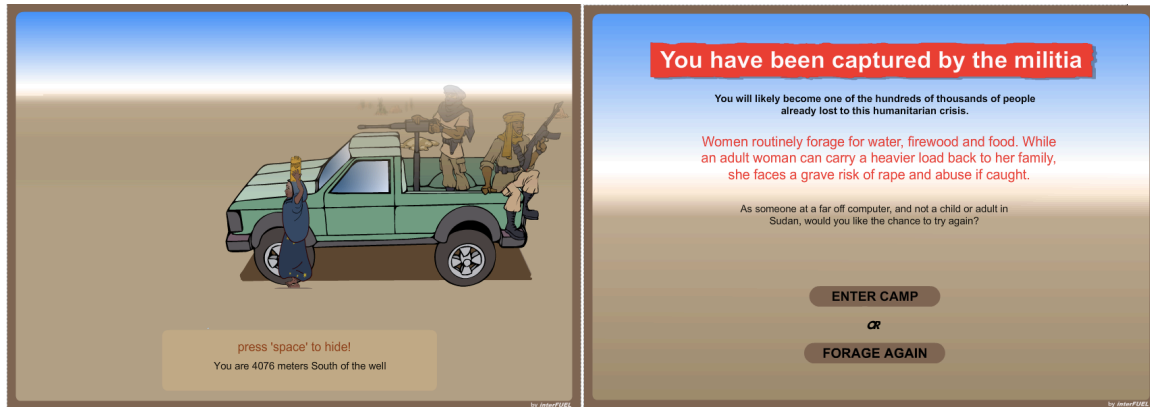
**Figure 4. Screenshots from *Darfur is Dying*. On the left, the player forages for water while being chased by the Janjaweed militia. On the right, the game describes the dire consequences after being caught outside of camp.**

Taken together, the acts of foraging for water and managing the camp constitute an argument on behalf of the game designers about crisis in an attempt to encourage the player take further action. As Ruiz said of the game: "We were always trying to make something that would be accessible to the audience that wouldn't go to see a documentary about Darfur, or wouldn't read a newspaper article" (Boyd, 2006). Unlike traditional persuasive mediums such as newspaper editorials, the argument in *Darfur is Dying* is made not only through the written and visual "texts" available on the game's website, but also through the process of internalizing the arguments embedded within the game's rule-based systems.

Game scholar Ian Bogost (2007) describes the process of appealing to audiences through the rhetorical affordances of videogames as *procedural rhetoric*—the "practice of persuading through processes in general and computational processes in particular" (3). In creating software, he argues, programmers create code "that enforces rules to create some kind of representation," (4) which in turn allows for meaning and expression to be conveyed through the act of delineating a system. Through the creation of rules and mechanics of a serious game, the procedural rhetoric allows the designer to "make claims

about *how things work*"[10] (29) in a way that cannot be as easily conveyed in a linear, text-based form. For example, a newspaper article could describe the importance of water within refugee camps and the risks and dangers involved as refugees leave their camps in search of water sources. However, as a game, *Darfur is Dying* can better represent the nuances of wider system in which water plays an integral role. In deciding which character to send out to fetch water, the player must grapple with many decisions. Should she select an adult character who can carry larger quantities of water, or the child character who can run faster? Should she select a male or a female character? And if the player successfully acquires water, should it be used to grow crops in the camp's garden, or instead used to make bricks to build shelters? As a game representing this system of choices, the procedural rhetoric of *Darfur is Dying* allows players to understand the consequences of each decision in light of the overall health of the refugee camp. According to Ruiz, the game's design was based on discussions with workers from refugee camps as well as genocide experts (Boyd, 2006).

As a viral engagement campaign, the *Darfur is Dying* employs procedural rhetoric not only to help players understand the injustices occurring everyday in Sudan, but also to compel them to take further action outside the game world. Within the game system itself, the creators included a large red "Take Action" button that provides players a list of actions they can perform to contribute to the campaign. Like many other viral engagement campaigns, most of these actions are simple to perform and take little time to complete. For example, players can click a button to send a message to President Obama or their local elected officials. Players can also import their e-mail contact lists and send the game to friends and family. Additionally, performing each of these real-world actions

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[10] Emphasis in original.

ties back into the player's game experience. The more players reach out to politicians and

friends outside the game, the less likely the militia will attack their camp. In connecting

the real-world action of speaking to elected officials with the in-game threat of attack, the

game system shows players that even small actions to increase visibility on the Darfur

region can have an impact.



**Figure 3. Screenshot of the in-game "Take Action" screen. The pressing the "Take Action" button takes players to this interface where they can initiate a variety of real-world actions.**

Players are also provided with a secondary "Take Action" option by clicking a

link in the main navigation of the game's website. Alongside the list of actions, the site

assures players, "No matter how large or small, every action taken to increase awareness

about the severe human rights abuses happening in Sudan is an important step" (Darfur is

Dying, 2008b, n.p.). From this page, players can click to links to, for example, educate

themselves further about the crisis, contact the United States government, or provide a

donation toward the cause.

**Figure 4. Screenshot of the "Take Action" choices from the Darfur is Dying website. The site encourages players to "Act now. End the killing."**

While most attempts at viral engagement ultimately fail to spread (Fung and Shkabatur, 2012), *Darfur is Dying* proved to be a successful viral campaign. By December 2006, eight months after its public release, the game had been played more than 2 million times, with at least 10,000 players electing to send e-mails to their senators about the conflict in Darfur ("When new videogames hit the headlines," 2006) and "tens of thousands" more players accessing other activist tools (Art, 2006, n.p.). The in-game sharing features encouraged players to spread the game through throughout their social networks; however, as Fung and Shkabatur argue, viral campaigns also rely upon the mainstream media to extend their reach, and *Darfur is Dying* was no exception.

As a project sponsored by MTV, *Darfur is Dying* leveraged celebrity endorsements of the game, which helped create media interest. In a press release, mtvU noted that musical groups and artists such as Kanye West, Thrice, Gym Class Heroes and System of a Down would participate in the game's launch ("mtvU to Unveil Student-

Developed Viral Video Game," 2006). A *Washington Post* article about the first public appearance of the game noted that Olympic gold-medal speed skater Joey Cheek was first in line to play (Vargas, 2006). Ruiz has agreed that the celebrity promotions of the game helped the message spread faster (Art, 2006). Apart from celebrities, other media coverage focused on the novelty of games framing civic issues, noting that "activism is going online, in the form of a video game" (Boyd, 2006, n.p.). Journalists reported that *Darfur is Dying* was part of a new generation of games that "immerse people in the real world, full of real-time political crises" (Thompson, 2006, n.p.), assuring readers that "help is at hand for parents worried about the violent computer games their children play" (Fairweather, 2006, n.p.).

Despite the praise for this campaign to engage the public in the Sudanese conflict, the release of *Darfur is Dying* was surrounded an air of skepticism, and, in some cases, disgust. One of the game's earliest reviews, Julian Dibbell (2006) dismissed the campaign as "sick and twisted," and a "dark little perversion of the human imagination" (n.p.), stating that *Darfur is Dying* was simply an attempt by MTV to drive traffic to its website. Others criticized the game of oversimplifying and trivializing a very complex, serious issue. One player at the game's release asked, "In this age when so much information is on the Internet, do we really need a game—a game—to remind people that something so terrible is happening in the Sudan?" and another noted, "I don't think you can get a real experience of being a Darfurian refugee by playing a game on the computer." (Vargas, 2006, n.p.). Game scholars have also raised some flags about the game's effectiveness as a civic tool. Ian Bogost (2007) has noted that while the game "proceduralizes the experience of Darfuri villagers at a particular moment in the crisis,"

(97) it subsequently fails to engage in "a procedural rhetoric about how historical circumstance underwrote the conflict, and why that circumstance makes solutions so difficult" (97). In other words, the scope of the game is too narrow to give players an understanding of the broader political systems driving the conflict.

Ruiz claims that critics are missing the mark regarding the game's goals and its value in a wider civic context. She has said that *Darfur is Dying* was never meant to represent the complexities of civil war and genocide, but instead to spark further interest in players. "It is a simplification of it? Of course it's a vast simplification," she said. "But there's an audience that can approach this and think about Darfur that would never pick up a newspaper article on it" (Thompson, 2006, n.p.). The team's main design goal was to for players to have "walked away knowing something about Darfur they did not know before playing the game" and in particular to inspire players to "chose to participate in one of the [game's] woven 'activist tools'" (Art, 2006, n.p.)

Indeed, much of criticism launched against *Darfur is Dying* as a civic engagement campaign seems to be misattributed to the limitations of the game's design, rather than the limitations of viral engagement as a civic framework. Fung and Shkabatur (2012) argue that critics often see the low-cost engagement offered through viral campaigns as having a low impact on civic life, especially when compared to more traditional forms of civic engagement. Similar criticism was launched against the Human Rights Campaign's profile picture campaign, with critics noting that the campaign was successful in getting people to update their Facebook photo, but it was not likely to sway the Supreme Court's decision (Briton, 2013). On this point, Fung and Shkabatur ask, "Why does a citizen—or a critic—have to choose between online engagement and traditional social protest or

other political activity?" (16). They argue that online activism does not displace other forms of activism and civic action, but may instead serve as a civic "gateway drug" and encourage further civic behavior (16). This mirrors Ruiz's claims that *Darfur is Dying* is simply "an entryway to the crisis" rather than a solution (McKeough, 2006).



**Figure 5. An image macro parodying the Human Rights Campaign's Facebook profile photo campaign.**

Two academic studies involving *Darfur is Dying* provide evidence for this claim, and even suggest that games may be better suited in engaging further civic action than traditional forms such as written texts. In a study by Peng, Lee and Heeter (2010), undergraduate students were assigned to either play *Darfur is Dying* or read a news story detailing the genocide in Darfur. The students who played the game reported being more likely to donate money to raise awareness, sign a petition, discuss the crisis with friends and family, and forward information on Darfur to others. In a separate online study by Neys and Jansz (2010), participants were given the choice to play one of several serious

games, including *Darfur is Dying*. Three-quarters of players reported becoming more knowledgeable on the serious game's subject matter, and a quarter of players reported wanting to seek further information. Both sets of authors make note that their work on serious games is exploratory, and Peng, Lee and Heeter (2010) specifically caution that the novelty of serious games may have contributed to their participants' interest, and that as games become a more common form of political engagement, this interest may fade.

This final point is extremely important when considering the use of games such as *Darfur is Dying* in a broader civic context. While the combination of games and civics itself is not new, as evidenced by the historic examples of serious games, the use of digital games in particular is remains a novel concept. To this end, it is still unknown to what extent a serious game project's success is associated with the public's unfamiliarity with this mode of engagement. Nonetheless, the case of *Darfur is Dying* shows the potential for casual serious games to make an impact as facilitators of civic action.

**Summary**

In this section, I have presented casual serious games as a framework for engaging players in a viral engagement process. Using *Darfur is Dying* as a case study, I showed how the game's designers successfully initiated their civic "ask" to encourage players to take real-life civic action. In creating a game about a social issue unknown to many of its players, the game's developers were able to produce a procedural rhetoric to frame the ongoing crisis and ask players to take on the role of a Darfurian refugee. Once players began to better understand the dangers facing millions of refugees, the game directed them toward simple civic actions they could perform to make a real-world impact. The game's viral success was bolstered by celebrity endorsements as well as mainstream

media coverage. While *Darfur is Dying* was the subject of criticism about the use of

simple games (and simple civic actions) to address a complex social issue, I argued that

the shortcomings of the game were less suggestive of a poorly executed game and more

indicative of the "fast, cheap, and thin" nature of viral engagement as a whole (Fung and

Shkabatur, 2012, 1).

While in this section I highlighted how civic action can be facilitated entirely

within an online environment, in the next section I look at the practice of redesigning

traditional face-to-face civic participation through the use of digital games, particularly

within the domain of urban planning.

## Augmented Deliberation: Digital Games for Face-to-Face Civic Engagement

The use of public meetings[11] in local decision-making processes is a longstanding civic

tradition within the United States. As discussed in Chapter 2, these meetings are not only

seen as beneficial in providing residents direct access to elected and appointed officials,

but are in many cases required by law. Despite the continued use of public meetings as a

form of civic engagement, they remain a widely criticized form of participation. Adams

(2004) notes that the most common criticisms of these meetings are that participants'

input is rarely considered by decision-makers; that these meetings do not facilitate

dialogue amongst participants; and that the meetings attract an unrepresentative sample

of stakeholders. These criticisms have been supported by research on meeting attendees.

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[11] At the local level meetings are held by many groups, such as city councils, school boards, and planning commissions. Meetings are also initiated by Federal agencies, such as the Department of Housing and Urban Development and the Environmental Protection Agency, among many others. By definition, these meetings are open to any member of the public.

For example, a study by McComas (2003) found that participants overwhelmingly thought their contributions had no impact on the decision-making process.[12]

Similarly, public officials continue to question the public's involvement in decision-making processes. In a nationwide survey of municipal officials, more than two-thirds of respondents reported using public meetings as a regular form of citizen participation (Barnes and Mann, 2011); however, only half of the officials agreed that "residents have the necessary skills and knowledge to do public engagement work effectively" (61).

Much like how criticisms of citizen engagement in the 1960s and 70s led to the civic innovations discussed in the previous chapter, so too have today's debates encouraged public officials to pursue new frameworks through which citizens can contribute to decisions in their communities. Specifically, decision-makers are looking to digital media and the Internet to help redesign outdated civic frameworks and establish ways for citizens to participate online. These Internet-based governmental practices are commonly referred to "e-government" and "e-participation" (Macintosh, 2004).

Early attempts at providing e-government focused on providing always-on access to city-specific information and data through governmental websites. These sites were seen as a way for citizens to participate at a distance, removing constraints such as geography and time, since information could be accessed at a citizen's leisure through his or her computer (Conroy and Evans-Cowley, 2006). However, this practice was seen as an insufficient and uncreative approach to connecting with the public. To quote one critic, "Yes, yes, my daughter can build a Web site, too, but digital government is more

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[12] For example, fewer than 10 percent of participants agreed that "citizens' comments will make a difference in the ... decision" (McComas, 2003, 100).

than that … it's not about technologies, it's about transforming government service

delivery through the use of technology" (Pardo, 2000, n.p.).

A 2006 analysis of 590 city government websites revealed that while more than

half the sites offered citizens informational tools, only a third of the sites offered any

interaction tools through which citizens could connect with officials and other residents

(Conroy and Evans-Cowley, 2006).[13] Many cities have made more recent efforts to

include more interactive tools for citizen participation, such as online geographic

information systems (GIS)[14] that help citizens visualize and understand geospatial

information about their communities (Gordon, Schirra and Hollander, 2011). Still, many

see room for improvement.

In the domain of urban planning in particular—which will be the focus of this

section—scholars have updated Arnstein's (1969) *Ladder of Citizen Participation* (see

Chapter 2) to encompass the new affordances of e-participation. In this new ladder

proposed by Hudson-Smith et al. (2002), one-way communication through online service

delivery is placed at the lowest rung of the ladder. According to this model, the most

participatory and most communicative form of e-participation would take place in an

online virtual world. Within these worlds, they argue, features such as real-time chat

systems and 3D fly-throughs enable meaningful interaction with spatial data and allow

"individuals with a minimal skill base to experience the city" (14)—and even create their

own urban designs. Indeed, much of the recent scholarship in urban planning and

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[13] Informational tools included access to information such as zoning ordinances, urban plans, and meeting minutes. Interaction tools included features such as e-mail addresses, online applications, and discussion groups.

[14] GIS refers to a broad set of computer-based tools that allow users to visualize, manipulate and analyze geocoded data and information. For an overview of GIS, see Maguire (1991), and for a history of GIS technology and public participation, see Gordon, Schirra and Hollander (2011).

community engagement has focused on citizen engagement through multi-user virtual environments (MUVEs) such as Second Life (c.f. Evans-Cowley and Hollander, 2010; Hollander, 2011; Gordon and Koo, 2008; Mallan et al., 2010; Panagopoulos, 2012).



**Figure 7. Hudson-Smith et al.'s (2002) "Augmented Ladder of e-Participation."**

Some planners have attempted to use virtual worlds as an online alternative to public meetings in facilitating citizen participation in a planning process. For example, the Kelly's Corner project in Acton, MA sought to help residents visualize physical planning strategies by building them as 3D models in Second Life (Evans-Cowley and Hollander, 2010). Residents could log into the system and explore the neighborhood as a virtual avatar, getting a sense for how the scenarios would look at a human scale. They could then leave feedback and commentary in the environment for planners, as well as discuss the plans with other residents also logged into the system. However, despite the organizers' attempts to reduce barriers of access—by installing the Second Life software at local libraries, for example—only 75 residents in a population of 20,000 used the system, mainly due to technical issues (Evans-Cowley and Hollander, 2010). Though the

residents who used the online tool reported having experiences that were both "meaningful and provocative" (404), Kelly's Corner helps demonstrate the pitfalls of online-only public engagement. In this case, the online environment provided residents with a means to participate from a distance, but also introduced new kinds of technical issues that can occur when expert guidance is unavailable.

Gordon and Manosevitch (2011) argue that the desire to move important civic discussions out of the meeting hall and into online-only virtual environments may negatively impact the quality of public deliberation: "Social web media, while designed to be social, are not necessarily designed to be deliberative. Deliberation requires a give and take, a mutual exchange, a social construction of knowledge that is possible, but quite difficult to achieve in a digital context" (76). They instead propose a model called augmented deliberation, which describes "a process whereby a group deliberates in a face-to-face setting while they are simultaneously immersed in a virtual environment" (80). They argue that such an arrangement would better suit public participation in urban planning processes, as it would help bridge the gap between face-to-face and online-only participation. The authors outline three design principles, noting that augmented deliberation is a group communication process that:

- balances the affordances of digital technologies with the established qualities of face-to-face group discussion;
- emphasizes the power of experience; and
- promotes sustainability and reproducibility through digital tracking. (80–81)

They suggest that beyond virtual worlds such as Second Life, other types of digital technologies, or even digital games, could facilitate this process.

In the case study below, I analyze the use of a digital role-playing game to augment deliberation in a community-planning meeting. The locally networked game *Participatory Chinatown* (2010) sought to provide participants with a shared narrative experience about their neighborhood's diverse needs and priorities that could serve as the basis for meaningful face-to-face conversations about the planning needs of the community. I show how the game incorporates all three design principles of augmented deliberation and addresses many of the above criticisms of public meetings. In addition, I highlight several challenges in the use of digital games for public meetings and analyze the public discourse surrounding the game's release.

## Case Study: *Participatory Chinatown* (2010)

In 2009, the MacArthur Foundation announced the results of its second annual Digital Media & Learning Competition. Among the grant winners was a collaborative project between three Boston-based organizations—the Asian Community Development Corporation, the Metropolitan Area Planning Council, and Emerson College.[15] The team was awarded $170,000 to produce *Participatory Chinatown* (2010), a project in which "physical deliberation, virtual interaction, and web-input are integrated into an engagement process that encourages residents of all ages and abilities to participate" (Asian Community Development Corporation, 2009, n.p.). Specifically, the project was

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[15] The author of this thesis served as a research assistant on the Emerson College team.

developed to integrate digital media into the decennial master planning process[16] of

Boston's Chinatown, a 42-acre neighborhood located in the heart of Downtown Boston.

Many previous projects designed in Second Life had incorporated elements of

narrative and role-play into the planning process (Gordon and Koo, 2008; Foth et al.,

2009), but the creators of *Participatory Chinatown* wished to formalize these playful

elements by creating a digital role-playing game, around which a face-to-face urban

planning meeting would be designed. As a neighborhood in transition, Chinatown has

dealt with a variety of planning issues, from providing affordable housing for its

socioeconomically and ethnically diverse residents to dealing with the effects of the

rapidly gentrifying Theater and Financial districts surrounding it. Given these concerns,

collecting as much input from a diverse set of residents was critical.

The game's design goals shared a striking similarity to the historic planning

games discussed in the previous chapter, in that the designers wished to enhance the lay

public's planning knowledge through gaming. Much like with *Fair City*, the creators of

*Participatory Chinatown* sought to address the disparities between the knowledge of

expert planners and the lay public. As one of *Participatory Chinatown*'s planners noted,

"Planners, architects and developers have made their careers out of studying data [and]

land use patterns … However, we ask the average citizen to digest the same complex

information in the space of a two-hour evening meeting and make a decision" (St. Clair,

2009, n.p.). The team hoped that combining the photorealism of a 3D virtual environment

with narrative and role-play would lead to a more robust discussion of planning needs

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[16] A master plan is a long-term planning document that clearly defines and organizes a community's development goals and visions for the future. A master planning process is typically initiated every five or ten years.

focused less on individuals' personal concerns and more on the needs of the community's diverse stakeholders (Gordon and Schirra, 2011; Nuss, 2010).

Unlike the historical games, *Participatory Chinatown* diverges with respect to the amount of community involvement in its design. In particular, community members were not only consulted as play-testers throughout the game design process (as with *Fair City*), but would also contribute directly to the game's development. This was accomplished by recruiting high school students from a local youth organization to help produce the game's 3D environment, design the game's narrative, and facilitate the meeting at the game's release. Each of these development areas proved critical in creating an engaging experience for residents, and the involvement of stakeholders in the design process gave the community a greater sense of ownership of the game.

In addition, the team hoped that working with local students would encourage wider participation by younger stakeholders, who are traditionally underrepresented in planning decisions (Metropolitan Area Planning Council, 2011). Within the cultural context of Chinatown, some younger residents may feel uncomfortable expressing their opinions in the presence of their elders. Leaders from the Asian Community Development Corporation saw the game as a way to help break down generational barriers:

> Our hope is that the game itself will allow [youths] to fully express what they would like to see for the future of their neighborhood. A common teaching in Asian households is the virtue of respecting one's elders … Community meetings in Boston's Chinatown often have a large representation of elderly Chinese … And, especially for second-generation Asian-American youth, the thought of speaking up or speaking out to a large group of elderly people is very intimidating. (Lim, 2010, n.p.)

In this sense, use of a digital game was seen as a method to disrupt the traditional power structures of public meetings. While some participants are comfortable speaking out to a group, others could instead make their contributions digitally within the game world.

*Participatory Chinatown* takes place within a 3D representation of the real-life Chinatown neighborhood, with the ultimate goal of creating an environment that residents would both identify with and recognize. The youth collaborators worked with the planning team to help create a photorealistic model by walking through Chinatown and photographing the façades of each of its buildings. These photos were layered onto a 3D model in Google SketchUp[17], which served as the backdrop for the game's narrative (Brown, 2009). Community organizers noted that the process of photographing and documenting each of the buildings within their community actually helped the youth discover small details about the physical environment they had not noticed before (Lim, 2010).



**Figure 5. Youth photos placed onto a model of a Chinatown city block in Google SketchUp.**

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[17] SketchUp is a free 3D modeling tool from Google. See http://www.sketchup.com.

The game itself is a locally networked role-playing game in which players take on the role of one of fifteen virtual Chinatown residents. Each character is on one of three quest lines: finding a place to live, finding work, or finding a place for to socialize within the neighborhood. However, each character possesses certain limitations. For example, Mei Sohoo, a senior citizen from the nearby city of Quincy, is looking to find a new apartment, but she must find something affordable on her limited monthly income. And Joe Wong, a father of four, is looking for a better job to support his large family, but he us limited in his choices since he is not a fluent English speaker.[18] Each of the character biographies was based on interviews the youth collaborators conducted with community members about their lives in Chinatown.



Figure 6. A youth collaborator leads a discussion about the game's character development based on interviews with community members. Photo via http://blog.participatorychinatown.org/?p=292.

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[18] To view the completely text of all fifteen character biographies, see http://participatorychinatown.org/characters.

The game unfolds as the characters walk through the virtual neighborhood together, locating various "opportunity cards" that correspond to real-life live/work/play opportunities in the neighborhood. Just like in the real world, these resources are limited; players can choose to share opportunities with others in the game, but can also decide to keep particularly desirable opportunities secret from other players (such as a coveted apartment that just came on the market). Some characters with deep community ties have expansive social networks of non-player characters (NPCs) within the game, making learning about new opportunities simple, while others new to the neighborhood have to search harder. Others have access to English-speaking real estate agents that are only accessible to players fluent in English. Collecting as many opportunities possible is critical to success in the game, because players must eventually select the three best opportunities that address their character's needs. Competition from other players—as well as outside factors such as income level or wait-lists for subsidized housing options—factors into whether or not a character receives her first choice of opportunities, or any opportunities at all.

This system of trade-offs comprises the procedural rhetoric of *Participatory Chinatown* used to highlight the scarcity of resources within the community and diverse needs of its residents. In many cases, the game's rules highlighted the lack of opportunities for many of the game's virtual residents. For example, a recent influx of luxury apartments in Chinatown has made many new housing options unaffordable for low-income residents, and has created a more competitive market for less-expensive alternatives. Of course, all characters within the game do not feel these constraints. While an affluent character can readily select the residence of his or her choosing, characters
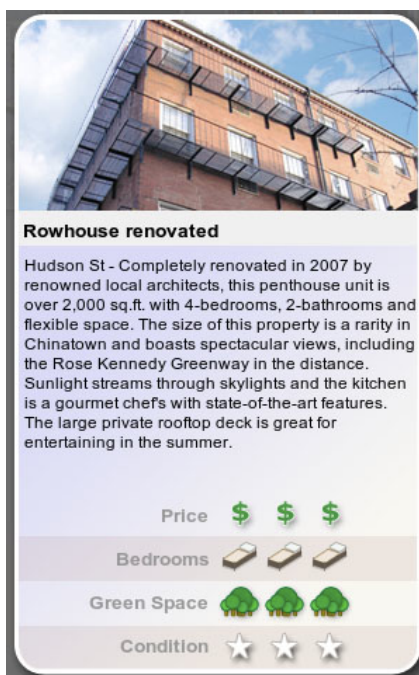
**Figure 7 Screenshot of a housing opportunity card found within *Participatory Chinatown***

with economic constraints are left with few options. These inequalities were designed

into the game specifically to spark face-to-face conversations about how to address

inequalities in community resources.

Looking at the game mechanics alone, one can easily draw connections between

*Participatory Chinatown* and the historic simulation games previously discussed. Most

notably, these games center on the process of community decision-making within an

unbalanced system of power. In *Fair City*, the game focused on the ways in which

governmental bodies make trade-offs in decision-making processes, sometimes at the

expense of the needs of everyday citizens. *Participatory Chinatown* focuses on the power

structures of the built environment, highlighting that the decision to build a particular

type of housing, for example, comes with a set of values that speak to the type of

residents the community wishes to include. This latter argument could, of course, be

made without the use of digital technologies. One could imagine a paper-based version of

*Participatory Chinatown* that could convey a similar argument. However, digital and

non-digital games present their procedural rhetoric in different ways. While in paper-based games, the structure of the persuasive system is largely defined through an explicit presentation of the rules through a written text or verbal instructions, digital games allow the user to come to understand the assumptions of the system through playful trial and error (Bogost, 2007).

The resulting community meetings designed with *Participatory Chinatown* were conducted as hybrid gameplay/discussion sessions that immediately launched into a broader conversation between players and decision-makers about their recommendations for the master plan.[19] The idea behind this structure was to remove any delay between the gameplay/discussion session and the subsequent real-world process the game was meant to influence (Gordon and Schirra, 2011).



**Figure 8 Screenshot of the Participatory Chinatown game user interface.**

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[19] For a more detailed description of the meeting structure, see Gordon and Schirra (2011).

*Participatory Chinatown* debuted in May 2010 to a large crowd of Chinatown stakeholders. At each of two meetings, about 45 participants were placed around one of five large tables, each with fifteen locally networked laptops and each running an individual instance of the game. Ten youth volunteers served as "interpreters" during the meeting, assisting participants with limited English language or computer skills.[20] During gameplay, players were encouraged to collaborate and talk to others around them in the room, and many adjacent players "met up" within the game to trade opportunity cards. (While the game allowed players to leave location-specific comments within the environment, it offered no "chat" function, forcing players to communicate verbally.) After playing through the game and collecting opportunities, players then selected the best



**Figure 9. The physical arrangement of the room for the Participatory Chinatown meeting.**

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[20] Participatory Chinatown was available to play in either English or Chinese.

options available for their characters and learned what opportunities, if any, their

character received.

Moderators at each table then facilitated a discussion amongst players about their

experiences playing the game. To heighten a sense of connection between players and

their characters, players wore nametags with their character's name printed on it, and

were asked to speak in "I" statements about the experience of, for example, struggling to

find employment as a non-English speaker. After this discussion session, players were

asked to remove the nametags and enter a separate section of the game system to that

allowed them to input their priorities for the Chinatown master plan and view and

comment on proposed development plans.[21] The meeting then opened up to a large group

discussion about the residents' priorities for the neighborhood and how the proposed

scenarios met or did not meet their needs.

In all, *Participatory Chinatown* was able to achieve many of the game designers'

stated goals. Most notably, the game attracted mostly younger participants, most of

whom had little or no experience with urban planning processes (Gordon and Schirra,

2011). A *Boston Globe* editorial argued that the game-based approach seemed to

overcome some of the issues of diversity at public meetings:

> Not everyone participates equally in such meetings. Developers, dogged activists,
> and retirees are always well-represented. People who work late are not. Computer
> games attract a different audience. At the unveiling event, many game players
> were in their 20s; some were only 14. ("Chinatown, the video game," 2010, n.p.)

In addition, the youth volunteers at the meeting noted that the taking a leadership role in

the game development and facilitation was a meaningful leadership experience. In a later

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[21] Participants could "walk through" proposed designs using the game system, but all of the game
elements were removed at this part of the meeting.

reflection about her life in Chinatown, one of the youth collaborators recalled the

experience of helping an older community member with the game:

> I still remember one woman who was really interested in the game but could not understand the English directions to play. I was glad that I could offer my help to her, so she was able to enjoy playing the game and leave her opinions about Chinatown in the game. Through these experiences, I was able to use both my cultural and language skills in real life to give back to the community. (Li, 2011, n.p.)

In this sense, the game was able to meet the goals of fostering intergenerational

communication about issues of urban planning. It also demonstrates that designing a

game for civic engagement alongside the community may be more meaningful in

encouraging participation than simply staging a play-through of a completed game with

no community input.

As part of a community meeting process, *Participatory Chinatown* serves as an

example of how a digital role-playing game can also meet the design ideals of augmented

deliberation. First, the game process balanced the use of digital technologies and face-to-

face discussions through several methods. The *Participatory Chinatown* game served as a

means for the community organizers to make a procedural argument about the current

planning resources in Chinatown, as well as use the game's graphics capabilities to help

participants visualize urban plans in a realistic environment and at a human scale. The

digital affordances of the technology were paired with face-to-face discussion sessions in

which the laptops were put aside so participants could share their experiences with others.

Next, the game focused on the experience of the planning meeting by using games and

role-play to transform a style of meeting that is traditionally been facilitated through a

PowerPoint presentation (Nuss, 2010) into a more participatory environment in which

each player could direct his or her own experience. Community organizers also noted a

stark difference in the demeanor of participants compared to previous meetings, with one

noting, "I never heard anyone cheer at a community planning meeting before" (Galef,

2010, n.p.). Lastly, because the game was played in a digital environment, all of the

community data captured by the game could be logged and synthesized. In addition, the

comments from the community left within the game were posted to a website where

others could later read them and add comments of their own, allowing for an ongoing

conversation even after the meeting had completed.

Despite the game's success in meeting the design ideals of augmented

deliberation, the game's highlights some challenges. Most notably, the game meeting was

designed intentionally so that the game's procedural rhetoric would directly influence

conversations between residents and planners following gameplay. As one of the

designers noted, the team had hoped that the struggles of *Participatory Chinatown*'s

characters would become a topic of conversation: "If someone said, 'We need more

Starbucks on the corner' or something, other people in the room might respond, 'Well,

how would your character, Hong Yee, feel about that?" (Galef, 2010, n.p.).

The game ultimately failed to produce this type of discussion. This was surprising

to the game's facilitators, who noted that many players identified personally with the

struggles of the *Participatory Chinatown* characters. As one player recalled, "The game

for me was all the characters. I feel like I have a personal relationship with all of them

because I've lived here for so long" (Gordon and Schirra, 2011, 183). Despite building

connections between characters and players, the game did not produce an immediate

impact on wider community discussions. When facilitators prompted participants to

reflect on their suggestions for the master plan in terms of their characters' needs, some

of them casually glossed over the question, while others outright rejected it. One participant said, "I understand what you're trying to do, but…" (Gordon and Schirra, 2011, 184).

This result makes visible the complexities of civic decision-making, which are influenced by a constellation of internal and external factors. During the gameplay session, players could clearly articulate changes to the community that would benefit their characters—but outside the game, players had to weigh the importance of the these new perspectives in light of their desires for the community. The organizers admitted that their goals were "far too ambitious" given the brevity of the gameplay, noting that the game having the desired impact "would require an immediate translation of an emotional experience into a rational conclusion" within the community meeting (Gordon and Schirra, 2001, 184). They conclude that the game instead makes a greater impact in reframing and broadening the types of discussions that happen within a meeting.

Beyond rhetorical concerns, *Participatory Chinatown* highlights several barriers that may prevent the wide use of digital games in public meetings. As the *Boston Globe* summarized, "The Chinatown game didn't come cheap" ("Chinatown, the video game," 2010, n.p.). Counter to the rapid, inexpensive design process of games such as *Darfur is Dying*, creating this kind of immersive 3D game system requires an immense amount of resources, both in game design and community organization. Even with a $170,000 grant, the game's design team had to rely on the help of many community volunteers and the staffs of three local organizations. Such coordination in many communities would not be possible. In addition, the game's heavy reliance on technology use could alienate older participants. As one meeting observer noted, "Generational gaps were quickly apparent

as the younger players most easily navigated the exercise while older players struggled with the game interface" (Goodspeed, 2010, n.p.) Each of these concerns must be addressed before this type of game could be put into wider use; however, many observers were pleased with the potential that could be offered by future game designs.

**Summary**

In this section, I have presented the use of a digital role-playing game in the context of a local community meeting. The game *Participatory Chinatown* builds upon the ideals of augmented deliberation by providing local residents with a more participatory meeting experience than the traditional PowerPoint presentation. By designing the game in collaboration with local residents, the designers were able to better connect the game's narrative to real community concerns and help the community feel ownership over the game. *Participatory Chinatown* challenges the notion of online-only participation by providing a space in which players pair their digital game experience with face-to-face discussions with co-located players. This gameplay is then used as a catalyst to spark wider discussions about the needs of the community. As a digital system, *Participatory Chinatown* can also save the community's data so it can be used later in the design of urban plans. This project demonstrated that while games can serve as a useful tool for helping players think about urban problems in new ways, that the lessons learned from online games are not always powerful enough to change a player's future decisions. Finally, the game highlights issues dealing with technology use and the high cost of 3D games that may prevent their wider use as a civic framework.

## Conclusion

The design of digital games for civic participation remains an experimental exercise for social activists and community organization. In the cases of *Darfur is Dying* and *Participatory Chinatown*, the designers noted that the games were works-in-progress that require future research study before their full impact on civic life can be understood (Boyd, 2006; Gordon and Schirra, 2011). In each case, however, the designers were able to show the benefits of their particular games on the wider civic sphere. In this chapter, I have shown how game-based practices can fit within the wider civic design practices of viral engagement and augmented deliberation, demonstrating their potential for wider use as frameworks for broadening civic engagement. In particular, each of these frameworks draws upon the particular affordances of digital technologies. What is still needed in this domain, however, is wider evidence supporting the medium-specific effectiveness of games in civic engagement. "Providing such evidence through rigorous and generalizable research … is the holy grail of any scholarly agenda on game-based civic learning" (Raphael et al., 2010, 204).

Even given additional research into the effectiveness of games in fostering civic engagement and action, we must continue to look at these efforts with a critical eye. Games themselves may be effective vehicles to promote the ideals of civic action and social change, but cannot create change in and among themselves. Game designer Tad Hirsch argues that many forms civic engagement are not about outcomes, but process, and that the goals of civic games should be to facilitate "ongoing and sustained participation in civic life" (Hirsch, 2010, 342). The two games in this chapter show the range of tactics that can be used to promote participation—from short bursts of civic

activity encouraged by a serious casual game, to a deeper engagement in local affairs through face-to-face planning game.

In civic processes surrounding issues of policy and planning, there is rarely a defined "win" state. Debates may shift and opinions may fall out of favor, but the core issues will always press forward, unsolved. These digital games may not have the ability to produce true consensus among all stakeholders in an issue, but instead may simply provide a memorable experience from which all participants can speak. This effort alone may provide a much-needed alternative to the polarizing political divisions that discourage political and civic participation for so many citizens.

# Conclusion

Civic engagement is slowly changing in the wake of new technologies. In this thesis, I have presented an analysis of how government agencies, non-profits and social activists have begun to work with game designers to create new channels for citizens to participate in civic life. These projects show great promise in creating new forms of online, game-based participation—as well as transforming established forms of citizen participation such as public meetings. They also present many challenges that will need to be addressed before they can be put into wider use. I have drawn inspiration throughout the text from Games for Change Co-President Asi Burak's (2011) call for us to stop "dreaming about what's possible" (n.p.) in the realm of games for social change, and instead take stock of what games have already contributed. Only when we have done this, Burak argues, can advocates move beyond the realm of "using hyperbole [to gain] wider public interest" (n.p.) and focus on becoming a recognized field of design and research. The goal of this thesis was to deepen the study of civic games by providing grater context for how these games are presented, shared and put to use. Below I summarize some of my key takeaways from this work.

## Reconnecting with the Past

While the use of digital technologies in civic processes is a relatively new phenomenon, the use of games in civic processes is not. In Chapter 2, I provided historical context for this argument by describing a movement in the 1960s and 1970s to design games for improving citizen participation in urban planning and public policy. Similar to today,

decision-makers voiced dissatisfaction with the quality of participation and saw games as a powerful tool for improving the process. Non-digital games such as *Fair City* allowed citizens to take on new roles and perspectives, in turn helping them internalize and navigate complex decision-making processes. These games also provided a playful, low-stakes atmosphere wherein existing power structures were diminished and citizens and decision-makers could work side-by-side toward better policymaking. Most of all, they were officially sanctioned exercises in many decision-making processes—showing that games were not seen as separate from the "real" work of citizen engagement.

However, *Fair City* also provided us with examples of the challenges within this domain. Though the federal government readily requested the help of game designers and provided funding for the Model Cities games, these games ultimately suffered from a lack of public awareness about the benefits of gaming in civic processes. The largest challenge for *Fair City*'s creators was not designing the game or deploying it in community meetings. Instead, they had trouble simply getting people into the room to begin with. Games were seen as a novel tool for citizen engagement, but also as one that required a lot of extra work and coordination to use successfully. Even today, games remain a novelty in the civic sphere, and advocates must continue to "sell" others on their benefits. This is beginning to change, however, in light of the work of serious game evangelists who are working to bring about serious games' benefits into wider public discussions.

Other historic games such as *The Most Dangerous Game* challenge notions that technological innovations in civic games were only a product of computation and the Internet. In designing citizen participation around an early networked gaming experience,

game designers and producers looked to the most widely available networked technologies available at the time: the television and the telephone. Though rudimentary compared to today's robust online networks, bringing together these two networks allowed—for the first time, according to the producers—citizens to play serious games at a distance. No longer passive observers of a game unfolding on television, viewers could take an active role, both by phoning in their opinions and suggestions and writing more detailed letters that were featured on the show the following week. The project was also successfully scaled from a small local experiment to a wide-scale regional experience that connected seventeen cities though the television network.

In these two historic cases alone, we can see the deep connections, both in theory and process, between today's digital games and non-digital games developed decades ago. Future discussions of games in civics should be more inclusive of the longer history of serious gaming—one that includes both digital and non-digital projects.

## Bridging Games and Civic Frameworks

As exemplified the case studies presented in this thesis, games can provide players with new channels through which they can learn more about pressing civic issues, and in some cases take action beyond the game itself. Games alone cannot make a civic impact, but when connected to existing civic and social frameworks, they can become an influential tool for advocacy and social change. In *Darfur is Dying* for example, the game's creators aligned their cause with the practice of viral engagement, giving players a simple method for learning about a social issue, sharing the game with others, and taking quick, real-world actions such as sending an online message to their local elected officials. This

structure allowed the game to easily travel across players' social networks and reach

millions of players—many of whom had never before heard about the crisis in Darfur.

Similarly, *Participatory Chinatown* was not created to replace traditional public

meetings, but instead the creators sought to reframe the discussions that happen within

them. Combining the use of digital technologies with face-to-face discussions allowed

community leaders to draw upon the affordances of games in presenting a meaningful

narrative, and then use this shared gaming experience as the basis for further

conversations about the community's needs. Earlier games such as *Fair City* and *The*

*Most Dangerous Game* served a similar role, in that they were both interested in

improving the quality of future participation in civic contexts. In *Fair City* in particular,

residents and decision-makers played the game together as part of an official planning

process, with observers noting that decision-makers learned just as much—if not more—

than the residents through gameplay.

One focus of analysis throughout this thesis has been the process of how game

ideas are conceived and later designed. In the majority of the cases, games are created by

content-area experts and then brought into a community. This can lead to challenges if

the game process is unable to gain the support of the intended community or its leaders.

*Participatory Chinatown* demonstrates that a collaborative design process with

community members, from early stages of design to the game's launch, can in itself serve

as a meaningful civic activity that gets residents to research and think critically about

their communities. Within the Chinatown community, the game also helped local youth

overcome cultural barriers to participation and gave them leadership roles in a process

typically afforded to older members of the community. These findings show that within a

civic gaming process, the benefits are only contained within the act of gameplay itself, but also in the social practices surrounding the gameplay.

## Limitations

Within this thesis, I sought to provide a focused analysis of four games designed with the goal of fostering civic engagement and promoting future civic action. In addition, I tried to situate the use of these games in light of the wider cultural and political debates surrounding them. While this approach allows us to compare two historic contexts for civic gaming, it also has its limitations.

By only looking at a handful of games, I was able to provide a deeper analysis of their mechanics and better characterize the discussions surrounding them. However, this meant I was only able to look at a small number of the many games that engage with civic issues. Civic games are not limited to any particular genre, social issue or context, and so this thesis is not a definitive statement on the use of games in civics, but instead represents a small piece of a much larger puzzle. Likewise, the social, political and cultural underpinnings of civic action are complex and far-reaching, and my analysis is only an attempt to summarize the discussions that frame them.

Particular to my history chapter, my analysis of historic games was limited by my access to source materials. In the case of *Fair City*, neither Abt Associates nor the Department of Housing and Urban Development (the game's developer and the game's funder, respectively) were able to provide additional archival materials relating to the game's development. An on-site visit to speak with Abt Associates staff provided some additional anecdotal information about game design in the late 1960s, but no additional

written materials. My analysis of this game, therefore, is subject to the biases of the Abt

team that were written into the official report, which was my key reference. Similarly,

WGBH Boston did not archive materials relating to *The Most Dangerous Game* or any of

the related serious games. My analysis of this game was largely constructed through a

close reading of reports, memos, and letters about the game obtained from the *Foreign*

*Policy Association*'s archives at the Wisconsin Historical Society. Due to travel

limitations, I was not able to obtain the full corpus of archival materials for my analysis.

## Future Work

As noted by my limitations, further research into the use of games for civic engagement

is needed. In particular, a broader, systematic study of games used in civic engagement

processes would help us better understand the breadth of this phenomenon, the myriad

types of games used to engage with the public, the techniques used, and the civic

frameworks through which these games operate. One notable problem in this area is that

games are developed by practitioners in many different fields of interest, from urban

planning to game studies to community activism—each of which has its own distinct

methods for disseminating information. This lack of communication between disciplines

means that many of the mistakes noted by one design team are simply repeated by

another. More core research into this phenomenon as a whole—outside of disciplinary

boundaries—would help bring this work together and help designers avoid the pitfalls of

their peers.

Along these lines, further research into games and civic engagement must not

focus solely on the use of digital games. As my case studies demonstrate, non-digital

serious game projects have much in common with todays' digital games, and could prove to be an invaluable resource for designers of future civic games. However, much of the material relating to these games is buried in archives or stashed away in company filing cabinets. Future work should focus on uncovering and making available these historic cases so that decades of knowledge into the design of civic games is not lost.

Finally, while a growing body of literature has focused on the design of new civic games, very few pieces of research have focused on the players of these games. Little is known about why players choose—or do not choose—to play civic games, what they get out of playing them, and how these games impact players' civic and political decisions in the long or short term. Finding answers to these questions may address the dearth of empirical data supporting the effectiveness of games in fostering civic engagement and political action.

## A Provocation

As I have shown within this thesis, digital games constitute just one of many emerging frameworks through which political and civic actors have begun to engage with wider publics; however, in many cases we seem to place games into a category of their own, fetishizing this particular form of engagement over others.

But why?

As we revel in the novelty of creating "games to do civics," do we forget to hold these projects to the same standards we hold many other forms of participation? Civic game projects have proven themselves successful in attracting the attention of the mainstream media, which for many organizations constitutes a measure of success. But

creating awareness about a game and its cause is only one half of the story. After the press coverage has ended, how have these games impacted their political and civic causes? How are these civic impacts evaluated and reported—if at all? Game may provide connections to civic tools and networks, but do they really produce change?

While game designers from decades ago openly criticized their design process and outcomes, today, as many organizations compete for funding and resources, more emphasis is placed on touting the success of game projects than approaching this work with a critical—or even skeptical—eye. In the future, we must not be afraid to these difficult questions.

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