The Puppet Master Problem: Design for Real-World, Mission Based Gaming
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> When gamers interact with their environments… probing often takes the form of seeking out the limits of the situation, the points at which the illusion of reality breaks down, and you can sense that it's all just a bunch of algorithms behind the curtain.
> —Steven Johnson (2005), *Everything Bad for You Is Good for You*

> Puppet master: An individual working 'behind the curtain' to control the game.
> —Sean Stacey (2002), *The Unfiction Glossary*

In early August 2004, the alternate reality game *I Love Bees* gave its online players, over 600,000 in number, their first real-world mission. On a web page that had previously presented recipes for the fictional heroine's Saffron Honey Ice Cream and Bee-licious Chocolate Chip Cookies, a new set of tantalizing ingredients appeared: 210 unique pairs of Global Positioning System (GPS) coordinates; 210 corresponding time codes spaced four minutes apart and stretching across a 12-hour period in the Pacific Daylight Savings Time zone; and a central timer counting down to a single future date: 08/24/2004.

There were no further instructions provided. The *I Love Bees* (*ILB*) players were given no goal, no rules, no choices, no resources to manage, no buttons to press, no objects to collect—just a series of very specific, physical locations and an impending cascade of actual, real-time moments. Taken together, what were these ingredients supposed to yield?

For two weeks following the initial appearance of the GPS data set on www.ilovebees.com, interpretation of its meaning varied greatly among the *ILB* players. There was no early consensus about what *ILB*'s designers wanted the players to *do* with these coordinates, times and date. An explosion of creative experimentation with the data ensued.[1] Some players plotted the GPS points on a United States map in the hopes of revealing a connect-the-dot message. Others projected the earthbound coordinates onto sky maps to see if they matched any known constellations. A particularly large group collected the names of the cities to which the 210 points mapped and then tried to create massive anagrams and acrostics from them. A smaller group decided to average the two numbers in each pair of coordinates and look for an underlying statistical pattern across the set. Meanwhile, many players began visiting the locations nearest them and taking digital photos, uploading them to the *ILB* community online to see if a visual or functional commonality across the sites would emerge. Others without digital cameras carried out similar scouting activities and filed text-based reports, hoping to help uncover the secret message signified by the coordinates. Among this growing scouting group, numerous competing patterns emerged: The coordinates all pointed to Chinese restaurants, several players suggested—or mailboxes, or videogame stores, or public libraries.

For a short while, the potential for plausible readings of the GPS coordinates seemed both inexhaustible and irresoluble. However, as the 8/24/2005 date loomed closer, and after tens of thousands of speculative posts on dozens of Web forums, a critical mass of players finally converged on a single interpretation: The GPS data set was not a puzzle, or a clue—it was a

command. The designers were instructing players just to show up at the locations at the specified times and *wait for something to happen.*

And so, on August 24, swarms of "beekeepers" (a nickname many of the *ILB* players adopted) showed up at nearly all of the 210 locations, expectantly hovering in groups of a dozen or more. At the coordinates, the players clustered together laden with laptops, cameras, PDAs, cell phones, and anything else they thought to bring just in case, waiting to find out exactly what they were supposed to do. They explained to inquisitive passersby, "We're playing a game."[2] The core mechanic of which appeared to be: Go exactly where you are told to go, and then wait for something to happen. Don't make meaningful decisions. Don't exercise strategy. Don't explore the space. Just go, and wait for further instructions.

This is a game?

Indeed, it is. For many gamers, the August 24 *I Love Bees* mission was their first introduction to a new mode of digital gaming, one that centers on real-world, live action, performance-based missions. I call it the *power play.*

Power plays are a kind of cross between a digital dare and street theater. They are live gaming events, conducted in public places and organized via digital network technologies, in which players are directed via clues to show up at a real-world location. Upon arrival, participants are given a set of instructions for an action to take at that site. These instructions may be discovered in a nearby geocache, received as a text message, delivered via ringing payphones, or downloaded by players using their mobile Web applications.

Once the instructions are in hand, players carry them out immediately, usually documenting their own actions with digital photographs and videos. This first-person media proves that they have successfully completed their missions and captures the moment for online audiences who are waiting to see how the real-world players performed. Frequently, there are also on-site actors— "plants"— to observe the players' performances and to reward them with another mission or a clue to the next location.

Power plays can vary considerably in length, number of participants, and total ground covered. The quintessential example, the power play in its purest form, is a *flash mob*—an intensely focused burst of anonymously-engineered play that involves a single mission lasting precisely 10 minutes.[3] A flash mob brings a dozen, a hundred, or five hundred players to the same location, where they are prompted to perform a shared set of silly and usually crudely geocached instructions—slips of paper hidden in the men's room, for instance, directing them to whirl like dervishes back and forth across a major pedestrian crosswalk. Other, more complex, power plays involve dozens of connected missions unfolding over several hours. These longer games may feature as many as 1000 simultaneous players roaming a single city neighborhood. The paradigmatic example of this kind of power play is the cell phone-based urban superhero adventure the *Go Game*, in which players interact with local residents in collaborative physical challenges and performance art missions. Still other power plays, like *I Love Bees*, ping hundreds of thousands of players distributed around the world with just one or two real-world missions a

week. These real-world missions stem from and fuel an online, serial narrative, and such an extended power play can last as long as three or four months—until the Web-based story ends.

The real-world missions of the power play challenge gamers to play in environments they wouldn't normally play, to interact with strangers they wouldn't typically acknowledge, to make spontaneous spectacles of themselves, and to rewrite the social rules of a given space in highly visible ways. In short, the players' public performances are designed to be seen and heard by as many people as possible, to have a significant local impact and widespread online circulation. Not everything about the power play, however, is designed to be witnessed or received. The attention-seeking performances of the players are prompted and guided by an *invisible* creative team, which carefully and purposefully stays out of sight while the players attract the limelight. This off-stage design team is composed of a group of shadowy, often anonymous figures working behind the scenes as the writers, programmers, directors and stage managers of the live gameplay.

They are the first real-time, digital game designers, and they are called the *puppet masters*.

The Rise of the Puppet Master

> If you're the puppet masters, what does that make the players? Your little puppets?
> —anonymous audience member at the Game Developers Conference lecture "I Love Bees: A Case Study" (McGonigal, 2005)

This essay is a response to two sets of problems posed by the sudden popularity of power plays, and by the associated rise of the puppet master in contemporary digital gaming. The first problem set belongs to the gaming theorists and to the ethnographers: Why would any gamer agree to be a public 'puppet' of an anonymous game designer? Where is the *fun* in such a rigid gaming structure? And furthermore, where is the *propriety*? To some critics, such an unbalanced power dynamic seems a bit perverse; to others, it seems downright dangerous. (Imagine here, as many already have, a recklessly negligent, if not outright malevolent, puppet master who asks gamers to "go too far"—a scenario inevitably posed to me after each and every design workshop or lecture I give on the subject of the power play.) The second problem set of this essay belongs to the game designers: How do you structure a game so that you can effectively, and remotely, 'pull the strings' of dozens, hundreds, or thousands of players *without* making them feel like mere puppets? How do you develop the puppet master-player relationship into a collaborative one, and what real-time recourses do you have to actively manage that relationship? Here, I want to offer a series of critical frameworks for understanding both the pleasures of the puppet mastered experience and the real-time design strategies that support those pleasures.

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The first thing to know about the term 'puppet master' is that it was the *players* who originally adopted it to refer to the real-time designers of a power play.[4] Since then, many designers have taken up the name as an acknowledgment of its popularity among players. But the term does not originate with the puppet masters themselves. It comes directly from the players.

This is a tremendously important distinction. The source of the term 'puppet master' reveals its function: It is primarily a way for players to conceptualize and to talk about their relationship to the game designers. It is not a top-down description of the game designers' ambitions or design strategies. Rather, it is a bottom-up expression of how the players choose to perceive, and to communicate to others, the novel power dynamic of the games they are playing.

Puppet masters (PMs) are not, of course, the first or only 'masters' of gaming. For decades, non-digital games have relied on *dungeon* masters (DMs) and *game* masters (GMs) to organize, host and guide players through table top games, such as *Dungeons and Dragons*, and live action role playing (LARP) events, such as *Cthulu Live*.[5] Like PMs, DMs and GMs are actively involved as authority figures in supervising the live unfolding of a multiplayer game. However, players' widespread adoption of 'puppet master' instead of these more traditional terms is an explicit assertion of the inadequacy of existing gaming terminology to describe the qualitatively new experience of participating in a power play.

So what is it that players wanted to say about a puppet mastered experience that they could not say with typical gamer speak? According to the most widely cited definition, a puppet master is "an individual working 'behind the curtain' to control the game" (Stacey, 2002). This definition requires a bit of unpacking—what do players mean by 'behind the curtain'? And in what sense are the PMs in 'control' of the game? Both of these elements, the *framing* and the *mechanics* of player supervision, are essential to understanding why participants in power plays have adopted the term 'puppet master'.

In digital gaming culture, the *Wizard of Oz*-inspired phrase 'behind the curtain' usually refers to the computer programming that generates the players' experience of the game world: the physics engine that creates the laws of time, space and motion in the game universe, for instance, or the artificial intelligence that drives non-player characters' actions and dialogue. Media theorist Stephen Johnson, for instance, comments that when it comes to videogames, "it's all just a bunch of algorithms behind the curtain" (2005, 45). Here, the curtain refers to the interface that keeps the programming invisible to the gamers. When it comes to real-world, mission-based games, however, it's *not* just algorithms behind the curtain—it's a team of live game designers. And what keeps them invisible to the gamers is not a stable interface, but rather an active practice: the PM practice of withholding information from, and refusing direct interaction with, the players during the game.

In a power play, participants typically have no confirmation (in some cases, not even a clue) of who the puppet masters are, or what their motivation is, until the game is finished—if ever. Professional power plays such as *I Love Bees* may conclude with a list of credits; grassroots power plays like flash mobs may never reveal the identity of their PMs. Occasionally, as in the *Go Game*, the puppet masters are made known at the start of the game, but they too disappear 'behind the curtain' until the game is finished. This curtain, of course, is metaphorical—a kind of social norm, an agreement that the two sides will keep a functional distance from each other throughout the live play. The designers agree not to interfere with live play as overt authority figures once they have handed over the instructions for the live missions. And for their part, players agree not to try to "out" the secret designers, or to contact the designers directly for any "out-of-game" advice or discussion, that is to say, with *meta* concerns about the gameplay.

This practice is radically different from the continual, open, and face-to-face communications between traditional game masters and their players. GMs and DMs are never 'behind the curtain'. They are clearly identified and known by name to the players, and there is a transparency to their work. Creative and executive decisions generally are made in front of, or in the midst of, the players, with input from the players often solicited before and after decisions are made. In the power play, quite to the contrary, there is a disparity in awareness of, and access to, the other side, like a one-way mirror. The puppet masters watch the players, but the players have no view of behind-the-curtain machinations. The PMs make design decisions in secret and send covertly delivered messages to the players, while the players have no clearly defined in-game recourse to talk directly to the PMs. This power practice of constructing a one-way flow of knowledge and communications is what players refer to when they talk about staying behind the curtain.

The players' definition of a puppet master also hinges on the word *control*. Traditional game masters are said to "organize" and to "referee" their games (West End Games 2003, 3). But puppet masters are granted a much more explicit and pervasive authority: they "control the game." This shift in language, along with the metaphor for direct manipulation implied by the name 'puppet master', is required to capture the ceding of traditional gameplay control players must agree to in order to participate in a power play.

In traditionally mastered games, players are provided with narrative scenarios and options for actions to take. Through direct choice, or random choice (rolling dice, e.g.), or some combination of the two, players determine the "next step" in the game. As explained in West End Games' excellent reference "Introduction to Being a Game Master," the masters interpret these steps and inform players of the outcome: "As the players describe the actions of their characters, you decide whether or not they can do what they describe, or how difficult the action is. You interpret dice rolls according to the rules and then tell the players what happens" (2). In this model, player may not have the final word on what their decisions mean, but they are making choices and taking actions that affect the game's plot and final outcome. Power plays, on the other hand, strip players of the authority to make decisions. Unlike virtually any other game you could think of, 'mastered' or not, in power plays the players' *actions* are entirely pre-determined. Their job is simply to figure out where to be, to get there on time, and then to carry out the site-specific instructions they are given.

In a sense, then, the gameplay of a puppet mastered experience boils down to a high-stakes challenge: Perform—*or else*.[6] Or else what? Or else, be denied the opportunity to play. Be left out. Be left behind. There is simply no *optionality* to the power play—do exactly what you're told, or there's no play for you. This underlying power structure requires a level of overt submission from gamers that is simply unprecedented in game culture. And so the players' definition acknowledges: It is the puppet masters, not the players, who "control the game."

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Why has a mode of gaming like the power play, and the associated puppet master terminology, emerged at this particular moment in American culture? And how can we accurately describe,

and inventively design for, the unusual and complicated power dynamic that underlies a puppet mastered experience? Both of these questions require us to begin with a close look at the more traditional cultural and critical contexts for gaming from which the power play has dramatically diverged.

Traditionally Powerful Players

Historically, games theorists and designers have characterized players as extremely powerful individuals, and powerful in a very particular way. Throughout the foundational texts of game studies, gameplay consistently been defined as an opportunity for participants to assert the power of choice, to make their own decisions, and to act only and always according to their own volition. Because puppet master gaming is such a departure from this model, it is worth taking a moment here to track how key gaming phenomenologies and design manifestos of the 20th and early 21st century have worked, until now, to so convincingly define gameplay as the antithesis of a puppet-mastered experience—that is, as the opportunity for a gamer to exercise free will.

Johan Huizinga first introduces the notion of the player's free will in *Homo Ludens: A Study of the Play-Element in Culture* (1950). Huizinga, a historian, proposes that play is always "freely chosen," never externally imposed or dictated: "First and foremost, then, all play is a voluntary activity" (7). For Huizinga, it is important to note, the decision to play is not a momentary choosing, a kind of gate through which the player passes. Rather, the feeling of autonomy that comes from voluntarily choosing to play permeates the entire play experience; the player *keeps* playing as a matter of continuous and active choice. "Here, then," Huizinga writes, "we have the first main characteristic of play: it is free, is in fact freedom" (8). The state of play is the very state of self-determination; it is an overt act and *sustained* expression of the individual will.

Roger Caillois, in *Man, Play and Games*, recapitulates Huizinga's notion of the powerful, self-directed player: "There is no doubt play must be defined as a free and voluntary activity" (1958, 6). Caillois, a sociologist, shares Huizinga's notion of *persistent* volition through play: "The player devotes himself spontaneously to the game, of his free will and for his pleasure, each time completely free to choose… above all, it is necessary that they be free to leave whenever they please" (6). But Caillois takes Huizinga's thesis a step further by addressing the potential paradox of individual freedom within the regulated, social space of games. He notes that much of play, *game* play specifically, is based on binding rules and fixed conventions, and that players must in fact submit to these constraints. Therefore, their decisions are influenced and restricted by the external authority of the game system. However, rather than focusing on this act of submission, he focuses instead on the freedom to make decisions and take self-motivated action in accordance with those constraints: "The game consists of the need to find or continue at once a response *which is free within the limits set by the rules*" (8). For Caillois, "this latitude of the player," or well-defined *scope* for freedom of action, confirms that autonomy is the phenomenological heart of play (8). Indeed, in the final pages of his classic study, Caillois provides his clearest statement of the power dynamic inherent in play: "Play is a creation of which the player is master" (163). In short, the game player is in charge.

It is not just the theorists who have identified the exercise of free will as a core and constant aspect of game play. Practitioners frequently make the same argument. Game designer Greg Costikyan echoes Caillois' thesis in his essay "I Have No Words and Must Design", writing:

"The thing that makes a game a game is the need to make decisions" (1994, 2.1). He describes the quintessential gameplay experience in terms of the difference between action and *volition*:

> At some point, you are faced with a choice: You may choose to do A, or to do B. But what makes A better than B? Or is B better than A at some times but not at others? What factors go into the decision? What resources are to be managed? What's the eventual goal? Aha! … Now we're talking about decision making (2.1).

Costikyan is differentiating here between performing an action that produces an effect—say, pushing a button—and choosing and self-directing an action from a range of possibilities to achieve a desired effect—pushing which button, when and for how long. Costikyan's player has a sense of purpose guided by a known goal.

Likewise, game designers Katie Salen and Eric Zimmerman argue in *Rules of Play: Game Design Fundamentals* that "playing a game means making choices" (2004, 33). They too differentiate between "interactivity"—performing an action that generates a response—and individually determining the best action to take, thereby taking *responsibility* for the response generated. "In order to create instances of meaningful play, experience has to incorporate not just explicit interactivity, but also meaningful choice" (61). For Salen and Zimmerman, the unique satisfaction about gameplay emerges from the players' ability to claim direct responsibility for an outcome by controlling the decision making process. Game players have full ownership of the actions they take.

The rise of the puppet master as an authority figure in gaming requires us to reconsider these traditional assessments of the personal power of the player. Is gaming really about experiencing self-determination? And must a playful activity automatically be denied ontological game status if players are not asked to choose an action, but rather merely to perform it? If the player is master, as Caillois suggested, then there is no room for a *puppet master*. Yet we have a proliferation of puppet mastered games that throw all of game studies' assumptions about the power dynamics of gameplay out the window.

The Pervasive Factor
Because power plays have emerged as part of a larger trend toward moving games into real-world spaces, it is tempting to attribute the shift in power dynamics primarily to the shift of digital games from virtual spaces to everyday spaces. However, a quick survey of other reality-based games reveals that this is not the case. In recent years, even as experimental genres and platforms for the physical environments have flourished, the traditional power dynamic theorized by Huizinga and Caillois, and espoused by Costikyan, Salen and Zimmerman, has remained the underpinning of most pervasive game design.

Pervasive gaming is an experimental genre in which at least some of the gameplay transpires in real-world environments with the aid of mobile and ubiquitous computing technologies. (Because it centers around real-world missions, the mode of gaming I have dubbed the power play is a part of this larger genre.) Notably, apart from power plays, the most high-profile projects in this new genre have been designed according to a kind of *reverse* puppet master model. Critics call this the 'command-and-control' model (Tuters 2004).

The power dynamic of a command-and-control game is actually the traditional powerful player model taken to its extreme. Large numbers of gamers online make binding decisions on behalf of a much smaller number of players in the real-world; the real-world players carry out their directions. Consider, for example, the 2003 *Big Urban Game* (*B.U.G.*), in which three teams of a dozen or so street runners raced each other once daily, carrying supersized inflatable game pieces across the city landscape. For every street player, there were hundreds, if not thousands, of online players voting on the path the runners should take. For the vast majority of gamers, the *B.U.G.* experience consisted of analyzing a set of options and selecting one in the hopes of influencing a favorable outcome.

When I first discovered *B.U.G.*, I immediately thought its dynamic ought to be reversed. Wouldn't the online players enjoy running around in the streets, rather than voting at their computers? But of course, this instinct betrays my preference for a puppet mastered experience. The *Big Urban Game* was in fact designed according to traditional theories of where the pleasure in gameplay lies: decision making, not carrying out others' instructions. Fun, the *B.U.G.* project argues, lies in strategic choice and agency, even agency over other people; fun is not in performing pre-determined actions under someone else's authority.

The award-winning *Uncle Roy All Around You* (2004) also makes a claim for traditional player pleasures, working through a similar command-and-control design. *Uncle Roy* deputizes large numbers of online players as temporary commanders, directing a single street-player via text message around town and on various site-specific missions. In a power play, this structure would be flipped; most players would take on the real-world missions, while the game designers watched and tele-directed them. But like *B.U.G.*, *Uncle Roy* theorizes its players according to the classical model of the powerful player. Gameplay is about choices, decision making, self-direction, *not* performing someone else's script. Therefore, the majority of *Uncle Roy* participants are online directors rather than pervasive performers.

While these foundational pervasive games do not challenge traditional power dynamics in gameplay, in their extreme configuration of the classically powerful player, they lay bare the conventional function of games as free will simulators. As a result, their command-and-control structures have generated quite a bit of critical dialogue about the proper balance in gameplay—dialogue that speaks to the potentially troubling aspects of a puppet mastered experience. Marc Tuters reports in his essay "The Locative Utopia" that *Uncle Roy*'s design has concerned many critics and artists who worry that such an extreme powerful player model represents "an unwelcome substitution of military logic over the 'real' world" ([10]). In other words, critics worry that bestowing online players with such great and pleasurable authority over real-world 'foot soldiers' may desensitize them to the increasingly militaristic society around them. The idea that this experience will be so pleasurable that it will serve as a seduction to a more militaristic mindset confirms, of course, the idea that it is the personal experience of power that provides the fun in this kind of gameplay.

Interestingly, even more worrying to Tuters than seduction through in-game empowerment is the opposite scenario: the idea that more and more players could wind up in the player-position of *Uncle Roy*'s select few real-world performers. He imagines a game-fueled dystopia of "docile automatons" roaming the streets, pacified into mindless performance-play by a pervasive game

([12]). From 'docile automatons,' it is not a great leap to *puppets*, of course. And indeed, I would argue this imagined *puppet-making* function is the real concern of *Uncle Roy*'s critics—not that *Uncle Roy* will turn players into power junkies, but rather that it will train them to accept the uneven power dynamic when they are on the *flip* side. In other words, it will naturalize the PM-player dynamic and therefore make players more likely to accept out-of-game puppet masters in their real, everyday lives. This is, of course, the same concern expressed by critics of power plays like flash mobs and the real-world missions of *I Love Bees*.

The reception by media theorists to games like *Uncle Roy* returns us to the original puppet master problem, then: What is the value of the unorthodox dynamic created by power plays, and to whom is it most valuable? I suggest we return here to our consideration of the players. We have examined the players' terminology and definitions; now we will focus on their motivations.

Optional is the New Virtual

> Time to get immersed in Reality.
> --Neal Stephenson (1992), *Snow Crash*

One constant axiom of the game development field is that contemporary gamers want highly immersive, realistic gameplay—the more immersive, the better. For decades now, experimental game designers and industry developers alike have aggressively pursued 3-D graphics, emotional A.I., haptic feedback loops, augmented reality systems and all manner of other immersive technologies to give the gamers what they want. In the great majority of gaming culture, this 'will to reality' has driven digital gaming in a particular direction—that of greater sensory realism. But *looking like*, *sounding like* and *feeling like* the real thing is not the only conceivable set of criteria for a realistic digital aesthetic.[7] The puppet-mastered experience is an experiment in creating immersive experience that is not defined primarily by sensory assets.

The pervasive gaming genre as whole (including power plays) engaged gamers with real-world environments, drawing on the *actuality* and *physicality* of other people, objects and spaces to create an alternative mode of immersive gameplay. Through ubiquitous computing technologies, the players are immersed in *reality itself*, as opposed to being immersed in a digitally-rendered *virtual* reality. This kind of immersion, as we have seen, does not require abandoning the traditional power structure of gameplay. However, power plays are experimentally immersive beyond their use of real-world environments, and the players' submission to the puppet masters' commands is the driving mechanic of this immersion.

I believe that the designers and pervasive gamers who embrace the puppet master model have discovered a new criterion for digital realism—a kind of *psychological* realism that perfectly complements the 'immersed in reality' framework of real-world, mission based gaming. Media critic Thomas de Zengotita's recent theory of *optionality* in a media-saturated culture examines the dueling psychologies of reality and its hypermediated alternative; it is the perfect critical framework for exploring the function of dramatic submission in creating highly immersive pervasive gameplay.

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In his 2005 treatise on *Mediated* culture, Thomas de Zengotita makes a startling ontological claim: Reality is not the opposite of virtuality, but rather the opposite of *optionality*. He observes:

> In a mediated world, the opposite of real isn't phony or illusional or fictional—it's optional. Idiomatically, we recognize this when we say 'The reality is…,' meaning something that has to be dealt with, something that isn't an option. We are most free of mediation, we are most real, when we are at the disposal of accident and necessity. That's when we are not being addressed. That's when we go without the flattery intrinsic to representation (14).

For De Zengotita, the essence of virtual experience is its optionality—in other words, the power to choose from multiple options. There is a sense of "flattery," De Zengotita suggests, inherent in the offer: *You choose*. Choose from multiple channels, choose on or off, choose customization— it's all up to you. This flattery, I want to suggest, is exactly what traditionally designed games offer up to their players: an appeal to their sense of individual authority and autonomy by offering up a range of actions and avatars from which the player can choose. This is why traditionally power-structured games, even if they are reality-based or feature the most advanced VR effects, never approach a deep-seated, psychological realism. They are from start to finish a matter of optionality. If we accept De Zengotita's argument, optional is the new virtual. Therefore in order for a game to truly seem real, it must eliminate the optionality that has so long defined gameplay.

The mission-based design of power plays is especially well-suited to the challenge of eliminating optionality. De Zengotita characterizes the optionality of a mediated environment as an opportunity, through self-expressive choice, "to be the author of your being and becoming" (78). Most digital games, where actions are self-determined, are the epitome of this self-authored experience. But in mission-based power plays, as a player you are precisely *not* your own author. You are written in advance by the puppet master. You are the scripts that you are given. In this sense, the dictated real-world missions that gamers carry out are the opposite of mediated optionality. There is no self-authorship, only performance. It is highly immersive because the player is asked to go without the flattery of being allowed to author his or her own experience. Yes, you can choose not to complete a mission, but if you make this choice, you are no longer playing. Within the game, there is no free will; there is only the reality of what you *have* to do. Play itself may still be voluntary, as it has so long been theorized, but the core experiential quality has changed.

In a culture where everything is designed for maximum optionality, and reality is defined by having to accept a situation exactly as it is with no special customization, modification or self-authorship, the most immersively realistic game is the one in which a puppet master tells you exactly what to do, when to do it, where, and for how long. For immersive gamers, the escape from constant optionality is the pleasure of the relative powerlessness of a power play.

Behind the Curtain

> We all thought we were going to have a little more control over the situation. But you can't predict how people will act.
> —Mike Monello (2005), Art of the Heist *Live Puppet Master Chat*

I have argued that the puppet mastered experience affords a uniquely immersive experience by denying players the power of individual choice, by wrenching them out of a mediated everyday life of endless optionality. But do the gamers really cede *all* control? Is the power really as one-sided as it seems from the outside, and as the players themselves strategically describe it? Or, instead, is the *outward appearance* and *active make-believe* of ceding all control enough to accomplish the kind of psychologically immersive gameplay the gamers desire?

Perhaps it is time to pull back the curtain and make a few first-person observations about the relationship between players and their puppet masters.

I made my debut as a puppet master on January 19, 2002 as the lead writer and mission designer for an 80-player *Go Game* in the North Beach neighborhood of San Francisco—a year and a half before I started organizing flash mobs and two and a half years before I took my place behind the curtain of *I Love Bees*. That day, on the winter-green lawn of a public city park, I experienced a spontaneous rupture in what I had imagined would be a smooth and uncomplicated PM-player dynamic: We tell the players what to do, and they do it. Since that day, the same little *Go Game* kink has emerged again and again in many different genres and contexts. It is a pattern I now recognize as the highly complex, and consistently collaborative, texture of a puppet-mastered game.

A bit of background: The *Go Game* is an afternoon-long urban adventure in which competing teams receive clues over their cell phones to specific locations around their city. When players arrive at each location, they download a superhero-themed performance mission: assemble undercover disguises using whatever you can find at a nearby thrift store; make a secret agent waiting for you on the #30 bus laugh by any means necessary (not that you have any idea which of the dozens of people on the bus the secret agent is); conduct a séance on the floor of a crowded café to improve the psychic atmosphere; figure out how to get onto a luxury hotel rooftop and attract as much attention as you can; get a whole barful of strangers singing and dancing along with you to any song you want to play on the jukebox.

That day, we were putting up only the second *Go Game* ever—Wink Back, Inc has produced hundreds of games for over 20,000 players across the U.S. since—so as puppet masters, we were still experimenting and making last-minute tweaks to our scripts. Just before the game started, another *Go Game* writer decided to revise the opening text message I had prepared. My text was a bit dry: "Welcome, superheroes! Press GO when you're ready to start the game." We both agreed it would be better to set a more playful mood, so she added a colorful interjection to the welcome message: "Howdy superheroes—hold onto your hats, it's time to drop your pants and dance! Press GO when you're ready to start the game."

I had already forgotten about this minor text change when the teams assembled in Washington Square Park to receive their first set of instructions. I hid in a group of park-goers and watched as the players huddled in small groups, switched on their phones, and downloaded our welcome message. I was waiting for the teams to scatter and hit the streets—once they pressed "GO," the first round of clues would send each team off in a different direction. Instead, something completely unexpected happened. Half a dozen players began unbuckling their belts, unzipping

their jeans, and showing off their underwear while waving their arms in the air. This caught the attention of other players, who quickly realized—*A ha! 'Drop your pants and dance'—this is our first mission!* So they, too, dropped their pants and started dancing. Before long, most of the players were dancing merrily in their underwear. They took photos of each other to 'prove' their success in completing the mission.

Of course, the opening message "drop your pants and dance" wasn't a mission at all. But by the time the park was full of pantless performers, my fellow puppet masters and I were already behind our curtain. There was nothing we could do to intervene. We just watched from a distance, with our mouths hanging open.

The first time I told this story at a lecture, an audience member challenged me: "You puppet masters must really get a kick out of manipulating these players to do whatever you want. That must be such a power trip." But in fact, the exact opposite was true. We didn't get a rush of power when the players misinterpreted our simple welcome message. We actually felt completely out of control. We had worked so carefully to craft just the right text for our mission scripts, and yet from the very first moment of gameplay, our actual, *effective* authority was stripped away. Yes, we could give the players a set of instructions—but clearly we could not predict or dictate how they would read and embody those instructions. We were absolutely not in control of our players' creative instincts.

In Washington Square Park that day, as the players danced in their underwear, I turned to another puppet master and said, "It's their game now." He nodded, and that's when I realized: No matter what it looked like to outsiders, we were *not* pulling these players' strings. Yes, the players were following our commands, but their *interpretation* of the commands left them fully in charge of their own experience. The scripts had been delivered; the actors were putting on the show. In that moment I realized that the players in a puppet mastered game are not performing objects; they are performing *subjects*. And that performing subjectivity is never ceded, even in submission to a puppet master's orders.

The willful subjectivity of a performer is in its own way a kind of self-determination, a co-authorship with the writers. De Zengotita acknowledges this when he discusses the flash mob phenomenon as a kind of middle ground between reality and optionality. In the middle of

> so many flash mobs… you were *being* the phenomenon as you were seeing it represented, in real time, unfolding before you. You could see the impact of your role on the national stage in essentially the same way you can see the impact of your button-pressing in a videogame. You were the agent, you were the star (152).

As De Zengotita points out, performing in the public eye gives players an expressive visibility and an *audience* that provides the same quality of feedback a digital game offers. The audience reaction becomes the new metric, equally capable of giving players a sense of responsibility for a given outcome.

Interpretive control is not yet part of what we understand to be *meaningful play* in digital games, but perhaps it should be. Crafting a representation, designing a physical manifestation of a digitally distributed text, as De Zengotita suggests, is its own kind of agency, one that game

designers can build into the power model of their games. Performance allows for play in an otherwise rigid gaming structure.

Recognizing that the players co-author their gameplay experience through interpretive control solves the problem of the so-called perversity of power plays. But it poses a new problem for designers. How do you manage the risk of players going off-script? Do gamers ever push bask against the puppet masters, and if so, through what channels? How can you prepare for this, and recognize the push back when it happens? What processes does each side have for "negotiating" the live action scripts in these games? These questions represent the future of puppet master design research.

So I want to return, finally, to a preliminary experiment in this research area—the original *I Love Bees* scenario, in which thousands of players showed up at GPS coordinates with no idea of what they would be asked to do. I was the puppet master in charge of collecting, scheduling and disseminating the GPS coordinates to players, and one of four puppet masters designing the live missions that players were asked to accomplish at those coordinates. I was also in charge of tracking player forums, blogs and chat rooms to try to get as complete a picture as possible of how players were interpreting our scripts—the dates, times and coordinates.

When players showed up on August 24 laden with every form of digital communications technology and personal media devices you could imagine, they were interpreting the vagueness of the GPS coordinates in a very particular way: *Be prepared for anything*. This interpretation was revealed to us, the puppet masters through the photos, blog posts and live discussions the players shared online. The *ILB* PMs, myself included, were amazed at what, exactly, the players were prepared to do. They had compiled databases of each others' cell phone numbers in case they needed to relay information to or from the field. They had stationed significant numbers of players online in case real-time research was necessary to complete the mission. They brought large numbers of friends and family with them in case a group performance was necessary.

What they were in fact asked to do once they arrived on site, as it turned out, did not require any of those improvised supplies, allies, or information systems. At each coordinate, at the appropriate time, a payphone rang. If players located and answered the ringing payphone, they were asked a question—the same question at every phone—about the game's heroine. If they answered correctly (we gauged their response with voice recognition technology), they heard 30 sections of a radio drama. Their mission? To intercept as many pieces of the drama as possible and to report back to other players what they had heard. We played 30 different bits of drama that day; all were successfully intercepted in at least one location, and players met back up online to put the narrative pieces together. They fulfilled their mission perfectly.

But like the *Go Game* players whose interpretation-expectations exceeded the designers' intentions, the players had actually read the scripts—GPS coordinates, dates and times—as asking *more* of them than we the puppet masters had intended. They had performed for us their greater capability, even though they hadn't been directed to use it—yet. By putting it on visible display for the puppet masters, it was like they were asking us to ask more of them. They were directing us to direct them better.

August 24 was just the first of twelve weeks' worth of GPS missions. There were biweekly updates to the coordinates page; ultimately over 40,000 phone calls were made to over 1000 payphones around the world. And this iterative structure allowed the *ILB* puppet masters to rewrite game missions in real-time to better suit the interpretations the players were spinning off of our "scripts"—the series of GPS coordinates, dates and times. Over the next three months, we created missions that allowed the players to do the very things they had already demonstrated to us the desire and capability to do. Each mission still involved answering a ringing payphone and intercepting a piece of radio drama. But because they came prepared with cameras and documented their payphone missions, even though we hadn't instructed to them, we also started asking them to do things that were worth photographing: show up in costume, stage dramatic scenes of rescue, decorate the payphone booths. Because many players came with Web-access phones and PDAs, we distributed clues and instructions for these photo missions on Web pages and in chat rooms. Because they came to the payphones in teams, we began instructing them to bring even larger groups of friends and family to pose by the payphones, and to submit photographic evidence of the performing crowds. When they started coming to the phones with musical instruments, we directed them to improvise songs and to jam over the payphones with musicians across the country; we broadcast recordings of these calls over the Web. When they interpreted clusters of GPS coordinates in one city as a local challenge against other cities' clusters of GPS coordinates, we scheduled simultaneous runs of phones in one city versus another city to make what they incorrectly perceived as an intentional competition into an actual structural element of the game. Each week, we analyzed what the players had shown us through their interpretations of the previous mission, and we wrote new scripts to give them exactly the stage direction they were implicitly requesting.

In either the *Go Game* or *I Love Bees*, were the players willfully misinterpreting their mission scripts? No, I do not think so. The pushing back was more organic, more instinctive. It was a matter of exuberance and desire, rather than conscious strategy or disruption. In the *Go Game*, players dropped their pants to dance because they wanted to; it seemed like a reasonable interpretation of the game's dramatic text because it was already in the realm of possibilities imagined by the players to be fun and appropriate for that particular time and context. Likewise, the *ILB* players were communicating what they thought would be fun to do at payphones by optimistically interpreting each set of GPS coordinates as asking more of them than the previous set.

Behind the curtain in power plays, it's not just algorithms—so the game design is responsive. The puppet masters are able to create new mission scripts without giving players overt decision-making authoring, by following players' interpretations and writing the parts the gamers' interpretations demonstrate the desire and the capacity to play. These co-authored commands preserve the immersive power dynamic because they are still received as non-negotiable imperatives; however, they also allow players to sense their own performative agency.

Conclusion
The gamer's exercise of free will has long been assumed to be a core and constant experiential aspect of gaming. But the rise of the puppet master in pervasive gaming suggests that in the new ubiquitous computing landscape, many gamers want to experience precisely the opposite phenomenon. They are learning the immersive pleasures of becoming *actors* in a gaming

environment, of transforming themselves into physical vehicles for someone else's digital vision. As game-actors, they become masters of interpretative embodiment; they accept as their mission the real-world incarnation of a digital design, much as stage actors in traditional theater have long served as the actual embodiment of virtual texts. For players, the pleasures and challenges of real-world gaming missions are the pleasures and challenges of dramatic performance. And for puppet masters, writing real-world mission scripts is very much the same process as writing dramatic texts; redesigning them in real-time is very much the process of directing live actors on stage. The success of the puppet master challenges our assumptions about the kinds of action and interaction that qualify as gameplay, reveal dramatic interpretation to be a viable game mechanic, and demonstrate the value of a dramaturgical perspective for pervasive game design.

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[1] An excellent archive of more than 3000 posts containing speculation about the GPS coordinates can be found on the *I Love Bees* "Puzzle Solving" message board at http://forums.unfiction.com/forums/viewforum.php?f=81.

[2] A collection of first-person accounts of August 24 meetups at the GPS coordinates is located on the *I Love Bees* "Axon Coordination" message board at http://forums.unfiction.com/forums/viewtopic.php?t=5909 .

[3] The *Cheese Bikini* blog contains an outstanding collection of links and posts documenting the unfolding of the flash mob phenomenon in the summer of 2003. Its author, Sean Savage, coined the term "flash mob" and has compiled his writing about them at http://www.cheesebikini.com/archives/cat_flash_mobs.html.

[4] The term "puppet master" was first applied to game designers in April 2001 by players of *The Beast* (Microsoft, 2001), the first alternate reality game, a story-driven genre of massively multiplayer gaming that sometimes, but not always, includes real-world missions. The first official citation for the term "puppet master" in this context can be found on an early comment in the Cloudmakers discussion forum, organized by players of *The Beast:* http://movies.groups.yahoo.com/group/cloudmakers/message/882.

[5] The term game master has even deeper historic roots, in fact. It was first applied to the overseers of multiplayer *play-by-mail* games, such as the 1960s play-by-mail version of the WWII strategy game *Diplomacy*.

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[6] Much of my thinking about power plays and digital gaming in general is influenced by Jon McKenzie's 2001 *Perform or Else*, in which he analyzes turn-of-the-21st century digital network culture as a series of performative challenges.

[7] For instance, the alternate reality gaming (ARG) genre, out of which the term puppet master first emerged and in which it currently is most frequently applied, is an excellent example of a new immersive aesthetic based on a realistic *doing*, rather than a realistic *feeling*. As I have argued previously about alternate reality games, for example in the 2003 essay "This Is Not a Game: Immersive Aesthetics and Collective Play," in contrast to immersive artworks that try to create realistic sensory experiences and meaningful interactivity in an artificial setting (the history of this tradition is explored most thoroughly in Oliver Grau's 2003 *Virtual Art: From Illusion to Immersion*)*,* the immersive aesthetic proposed by ARGs use *natural settings* as the immersive framework, employing everyday network technologies as virtual reality devices. They eschew the kind of special technology we normally associate with virtual or augmented reality, such as wired gloves, headsets or goggles, and interactive programs or simulators. In this sense, it is reasonable to argue that nothing about ARG play is simulated. The computer-driven alternate reality that they create is make-believe, but every aspect of the player's experience is, phenomenologically speaking, real.