In Celebration of Low Process Intensity

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*"It's not that play is either rule or nonrule based but a question of **whose** rules in **which** contexts."*

-- T.L. Taylor (2006, p.157)

"As technologists, then, our concern is not simply to support particular forms of practice, but to support the evolution of practice."

-- Paul Dourish (2004, p.25)

It's Sunday night, and a lively crowd of game enthusiasts has gathered in the middle of IT University of Copenhagen's central atrium. We've just finished the 2011 Nordic Game Jam, an annual weekend-long event where professional and hobbyist game developers form teams and make small prototypes. The crowd has arranged itself into a giant circle, creating a makeshift arena around the play space. Controllers in hand, two players stand facing one another, engaged in a playful duel. They are playing a physical party game that I have just prototyped that weekend, called *Johann Sebastian Joust!*

J.S. Joust is a slow-motion jousting game for two to seven players, played with motion controllers. The central task of the game is to keep your motion controller sufficiently still. The game's soundtrack, J.S. Bach's *Brandenburg Concerto No. 2*, plays an integral role, hence the game's cheeky title. When the music plays in slow-motion, the motion controllers are extremely sensitive to changes in movement. When the music speeds up for brief periods, this threshold is raised accordingly. If a player's controller is ever moved beyond the allowable threshold, that player loses, signaled by a loud explosion sound and vigorous rumble feedback.[1]

The goal of the game is to be the last player remaining. What that entails in practice, however, is not so clear. A game in which players simply have to hold their controller still would quickly become a tiresome endurance match. An alternative way to frame the game is one in which players slowly approach one another and try to *make their opponents lose*. This can be accomplished with a wide variety of tactics, including pushing the opponent, hitting their

[1] Though the original prototype was developed for the Nintendo Wiimote, the more recent version uses the PlayStation Move controller. This newer version of the game utilizes the controller's built-in LED light orb to help signal various pieces of game information. To warn the player that they are close to exceeding the loss threshold, the controller's light orb flickers (like a candle) and rumbles softly. To reinforce the feedback of being eliminated, the player's light orb turns red for about a second, then turns off completely. In these ways, the light orb allows other players and spectators alike to more clearly see the game state.

controller, baiting them into moving too much, etc. This more aggressive, physical approach is the one I had been showcasing earlier in the day, in my public demos throughout the game jam.

Back to our two players dueling in the atrium – Agnieszka and Sidsel. By this point in the evening, the game has been running nonstop for over an hour. It will continue well into the night. A loose custom has been established such that the losing players offer up their controllers to new challengers, to allow as many people as possible to try the game. In this particular game, Agnieszka and Sidsel are about to produce one of the most memorable highlights of the evening.

As the music slows down, Agnieszka sets her sights on Sidsel and charges (in slow-motion, of course). Suddenly put on the defensive, Sidsel backs up equally slowly, wagging her finger as a warning to her oncoming attacker. Just when it looks like Agnieszka is taking control of the game, Sidsel makes good on her warning and executes a spectacular reversal; while somehow managing to keep her own controller steady, Sidsel kicks up her left leg. Her foot connects with Agnieszka's controller, which goes flying out of her hands. Agnieszka is eliminated, and Sidsel is the winner.[2]

Is such a kick even legal? Are players allowed to use their feet? In the short lifespan of the game, such a move had never been seriously attempted. Because the game system only receives input through the controllers' accelerometers, it's up to the players themselves to decide what kinds of material world actions are "kosher." In this particular case, however, Sidsel's kick requires no legalistic negotiation. The crowd, breaking into a thunderous applause, has already sounded its overwhelming approval.

Outline & Method

I have previously written at length about another physical party game I co-designed, *Brutally Unfair Tactics Totally OK Now* (a.k.a. *B.U.T.T.O.N.*) (Wilson, 2011). In that article, I made the argument that certain kinds of intentionally "broken" or "self-effacing" games can help nurture a distinctly self-motivated and collaborative form of play. Citing examples from mainstream games, indie games, folk games, and pervasive computing, I articulated what my own design approach shares with these precedents, and also what it tries to do differently.

This article is intended as an extension of that work. In this piece, I focus my attention on the game studies and game design literatures. In particular, I challenge certain value statements that continue to proliferate in discussions about what games are and how we should make them. As I will show, numerous scholars and practitioners alike have called attention to the computer-enacted rule systems that underlie most digitally-mediated games. In attempts to identify what distinguishes computer games from other media, these thinkers have frequently claimed, in some variation, that *rules*, above all else, are what constitute the "essence" of games.

Reflecting on *J.S. Joust* and *B.U.T.T.O.N.* as two complimentary case studies, I espouse a design philosophy that challenges that position. Quite deliberately, both games monitor only a fraction of the actions they instruct. As a design strategy, this conspicuous absence of technological systemization can be understood as an attempt to foreground social context. My argument is that it may not always be so productive to conceptualize digitally-mediated games as "computational systems," especially when designing for certain genres and certain contexts. To offer one possible

[2] This memorable moment was captured on video and can be viewed on YouTube at: http://www.youtube.com/watch?v=GnkrGZTtPbU

alternative, I elaborate on the idea of game as *alibi* – as a culturally-recognized excuse to "act out" and play the fool. For the development of physical party games like *J.S. Joust* and *B.U.T.T.O.N.*, where the gameplay experience is so conspicuously dependent on context and player attitude, the credo of *deputizing* the players to enact the game themselves provides a useful articulation of what the designer's work actually entails.

First, I summarize Chris Crawford's notion of "process intensity" and other theoretical work that can be grouped together under the label of the "proceduralist" position. I argue that this position advances a number of value judgments about how we should think about and design digitally-mediated games. Second, I present case studies of *J.S. Joust* and *B.U.T.T.O.N.*, as well as the design thinking that motivated them. Third, I use these two examples to illustrate a possible alternative set of design values. I also explain why my own design approach may not be so easily reconcilable with the proceduralist position. Finally, I situate my design approach in relation to Grant Kester's (2004) examination of community-based art practices. In particular, I explore what it might mean to reframe game designers as *context* providers (as opposed to just object makers). In looking towards the contemporary art world, I hope to provide an inspiring cross-disciplinary reference point for the design ethos I describe here.

At stake here is not just how we might understand games, but also how we might *create* them. Design values, like the ones I address herein, affect what kinds of games get made as well as how those games are received and judged. These kinds of discourses can exact a significant influence on the attitudes that guide our creative practices.[3] My claim is that systems-centric perspectives on digital games, both popular and academic, unintentionally marginalize a wider diversity of possible alternative approaches to game design. This argument is anchored in the belief that the ways we talk about design, as well as the ways we *don't* talk about design, affect the things we make. As such, in presenting my two case studies, I am less concerned with the games themselves than with the thinking and attitudes that informed the design process. It is partly for this reason that I have chosen to focus on my own creative practice.

The projects presented here were developed before I realized that they would be, or even could be applicable to my academic research. They were developed as projects with the Copenhagen Game Collective or with my studio, Die Gute Fabrik, in a social context that differs radically from that of my job as researcher. As I have argued elsewhere (Wilson, 2011; Wilson, forthcoming), I do not view my design work as a deliberate research "method." Rather, the research component of my work consists of the theoretical reflection presented in this article – a kind of literature-grounded creator's statement, written in a university setting. The two case studies are not intended to be viewed as validation that the games are indeed "successful" in some objective sense. They should instead be understood as evocative starting points for a cross-disciplinary discussion about digitally-mediated gameplay and how we might design for it.

[3] To offer one concrete example, Khaled and Ingram (forthcoming) reflect on the ways in which their serious games research project has been shaped by a focus on procedures and mechanics. They write: "Our choices regarding literature have undeniably been shaped by an awareness that we will need to proceduralise and computationalise these concepts, and work them into game components, mechanics, and scenarios." The authors acknowledge that this approach – of "proceduralizing" the project's core concepts into mechanics – has not only affected the design of the game itself, but also *the very lens* through which they choose to view the entire project.

On Process Intensity and Procedurality

"Process intensity" is a term popularized by game designer Chris Crawford in 1987. It signifies "the degree to which a program emphasizes processes instead of data" (2003, p.89). "Data" here refers to multimedia elements like graphics, sound, and text, whereas "process" refers to the algorithms that operate on and arrange that data. In his advice to aspiring game designers, Crawford advocates "process-intensive programs" over "data-intensive programs." As Crawford sees it, computation comprises the very essence, or "schwerpunkt" of the computer. [4] Indeed, he identifies process intensity as the defining measure of "computeriness."

Citing the computer's ability to enact rules, carry out calculations, and present results, Crawford claims that computers are particularly well-suited for "interactivity" – more so than any other medium. Moreover, he argues that "interactivity" happens to be the very essence of games, "the one element that is more than important, more than necessary, but indeed the entire point and purpose of games" (p.72).[5] This observation leads Crawford to formulate a strong compatibility between games and computation. He claims that processing power "made games so much more compelling" (p.73).

This emphasis on the processual or "procedural" capabilities of computer technology has been a hallmark of digital media theory more broadly. Like Crawford, a number of scholars have tried to articulate the formal properties that distinguish computer games from other media forms. Janet Murray (1997) and Ian Bogost (2007), for instance, both emphasize that the computer's ability to execute procedures (i.e. rules) is a defining, if not *the* defining characteristic of digital media.[6] We might term this perspective the "proceduralist" position (Sicart, forthcoming).

Murray famously identifies four essential properties of digital media, describing it as procedural, participatory, spatial, and encyclopedic. Comparing these four properties against one another, she elaborate that the procedural and participatory are "more fundamental" in that they "provide the basis for what we think of as the defining experience of the digital medium" (p.6). Murray, who is centrally interested in the representational and expressive capabilities of digital media, singles out procedurality in particular. She writes that "The most important element the new medium adds to

[4] Crawford uses the German word *schwerpunkt* for additional emphasis. In his words: "It means 'focal point' or 'concentration of effort point' or 'central point of attack.' It's a beautiful word because it expresses an idea that we just don't have in English: the notion that, in any effort, you have many necessary tasks, but there is no one central task that must take first place in your considerations." (p.71).

[5] Though Crawford acknowledges that "play" might be another way to frame the "essence" of games, he argues that the term "play" is fuzzier than that of "interactivity," and therefore less useful.

[6] I should note that Murray herself has expressed criticisms of overly formalist approaches to game criticism. Responding to "ludologist" scholars like Espen Aarseth at the height of the so-called "ludology vs. narratology" debates of the early '00s, Murray argues: "Because the game essentialists want to privilege formalistic approaches above all others, they are willing to dismiss many salient aspects of the game experience, such as the feeling of immersion, the enactment of violent or sexual events, the performative dimension of game play, and even the personal experience of winning and losing" (2005, p.1-2). Though I certainly agree with Murray on this point, her earlier work, as I argue below, positions some properties of new media (i.e. procedurality) as more "salient" than others. As such, I would argue that Murray and the ludologists, despite their differences, both ultimately privilege computationally-enacted rules. In the passage cited above, Murray does acknowledge the "performative dimension" of gameplay. But in *Hamlet on the Holodeck* (1997), Murray, like the ludologists, echoes essentialist art theory that values art works which "refine and purify the perceived essence of a given medium" (Kester, 2004, p.46).

our repertoire of representational power is its procedural nature, its ability to capture experience as systems of interrelated actions" (p.274). As Murray sees it, aspiring digital media artists, from interactive storytellers to game designers, will ultimately distinguish themselves by harnessing complex algorithmic thinking towards creative ends.

Bogost (2007), following Murray's lead, argues that computer-enacted procedures open up new modes of representation and expression. In particular, he centers his investigation on videogame "rhetoric," i.e. how games might be used to mount claims about and critique cultural and political values. Situating videogames within and against the history of more familiar forms of rhetoric ranging from the spoken to the visual, Bogost argues that videogames offer a fundamentally different type of rhetoric. "Procedural rhetoric," as he terms it, operates via algorithmic processes. As an example, Bogost (2008b) explains how the simulation game *Animal Crossing* models economic life in a way that conveys lessons about long-term debt and consumerism.

Positioning his theoretical framework against work in the serious games literature, Bogost argues that the true "power" of videogames lies not in their narrative, visual, or textual content, but rather in their ability to communicate through procedures. "This ability to execute a series of rules," he writes, "fundamentally separates computers from other media" (2007, p.4). As Bogost describes it, rules are what "construct the meaning of the game" (2008b, p.121). Videogame play, in this view, can be understood as the manipulation of symbolic systems provided by the game.

Speaking as a practicing game designer, my concerns center around what these proceduralist theories *prescribe*, both implicitly and explicitly. As Crawford, Murray, and Bogost frame it, the computational capabilities of digital media carry with them a number of imperatives for how we should design. In particular, all three authors are unambiguously critical of digital media that foreground multimedia content (e.g. images, text) over computational process.

Crawford explicitly advises his readers to "Eschew data-intensive designs; aspire to process-intensity" (p.92). According to Crawford, process intensity – and specifically high process intensity – provides "a useful criterion for evaluating the value of any piece of software" (p.89). Though he recognizes the value of graphics and sound, he positions them in a clear secondary role to "interactivity," which he urges "must be given primacy in our designs" (p.75). Crawford ultimately concludes that "the very notion of low-interactivity games is intrinsically wrong-headed" (p.84). By "low interactivity," he seems to mean low process intensity.

Bogost, building off Crawford's work, identifies procedurality as the "principle value" of the computer (2007). "Higher process intensity," he writes, "suggests that a program has greater potential for meaningful expression" (p.27). If multimedia content like images, sound, and text are "constructed, selected or sequenced" by code, Bogost reasons, then surely "Image is *subordinate* to process" (p.25, emphasis mine). Emphasizing this hierarchical ordering of formal elements, Bogost critiques other scholars of digital rhetoric for sometimes "mistaking subordinate properties of the computer for primary ones" (p.25). As in Crawford's work, the implicit judgment here is not that multimedia content is somehow unimportant, but rather that videogames which emphasize data over process end up wasting their true promise.

In a similar vein, Murray famously criticizes early World Wide Web sites and CD-ROMs as "multimedia scrapbooks." As Murray sees it, digital media should not just remediate earlier forms, but instead should utilize their own "intrinsic properties" (p.67). This leads her to stress the importance of "[identifying] those properties native to *the machine itself*" (p.64, emphasis mine) – properties like the computer's ability to enact procedures. Murray seems to equate this charge with algorithmic complexity. She argues that the computer "was designed to *embody*

complex, contingent behaviors" (p.72, emphasis mine). Here, videogame design is framed in almost cybernetic terms, i.e. as the task of modeling behaviors and systems.

Notably, this privileging of computation is also echoed in popular game design wisdom. Tracy Fullerton (2008), in her game design textbook, admonishes: "If you want to be a game designer, try looking at the world in terms of its underlying systems" (p.8). She advises that students look for design inspiration by examining their interests in terms of objects, behaviors, and relationships.[7] In their own textbook, authors Ernest Adams and Andrew Rollings (2007) initially make an effort to eschew the notion that games can be understood as systems of rules. They explain: "We prefer that you think of a game as an activity because that focuses your attention on the player – the person for whom the game is made – rather than on the rules" (p.12). But in trying to articulate the difference between videogames and their non-digital predecessors, they do indeed embrace design values that frame game design in terms of computational systems. For instance, they write that "The *most* important benefit computers bring to gaming is that the computer relieves the players of the burden of personally implementing the rules" (p.18, emphasis theirs). The implicit argument here is that computer-enacted rules comprise *the* most salient feature of videogames. This judgment ultimately leads Adams and Rollings to discourage certain kinds of designs: "Ambiguous or conflicting rules are a sign of bad game design" (p.11).

Other practicing game designers, too, have echoed the proceduralist stance. Rod Humble (2006), for instance, locates rules at the very "center" of game design practice. Though he admits that games can "benefit from" other elements, Humble argues that rules are ultimately the only thing needed for a game to "succeed as a work of art." Brenda Brathwaite (Brathwaite & Sharp, 2010), writing about her acclaimed boardgame *Train*, emphasizes the same sentiment:

> "The rule set […] of any game, is the single most important thing a designer crafts. The rules of the game are the game. The pieces, the parts, the board? The table, computer or console? The graphics, the viewpoint, the angle of the camera? They are all there for one reason only – to allow us to play out the rules. They embody the game, they help to immerse us, but they are not the game. The rules are" (p. 317).

In this passage, Brathwaite equates games with systems of rules. Moreover, she establishes an unambiguous hierarchy between rules and other formal elements of games.[8] Brathwaite's

[7] Fullerton's description of game design as "hosting a party," however, is far more resonant with the design approach I advance in this article: "The results are not always predictable or what you envisioned. A game, like a party, is an interactive experience that is only fully realized after your guests arrive" (p.3).

[8] For me, the irony here is that Brathwaite's *Train* (which I had the opportunity to try myself at IndieCade 2010) is a perfect demonstration of the *shortcomings* of proceduralist theory. First, as Brathwaite herself describes at length (2010, 2011), her boardgames have an important sculptural dimension to them. *Train*, which is a game about the Holocaust, is constructed on a bed of glass (a Kristallnacht reference). The players even pull the rule sheet out of a Nazi typewriter that Brathwaite herself sourced. For *One Falls for Each of Us*, another one of her boardgames about the Trail of Tears, Brathwaite is meticulously coloring and preparing 50,000 Native American game pieces, one for each victim. Here, she is deliberately playing with sense of scale to help convey the gravity of the tragedy. In both cases, Brathwaite has rejected the idea of producing additional copies of the game. In short, I would argue that games like *Train* and *One Falls for Each of Us* are just as much pieces of sculpture as they are "game systems." To frame rules as the single "most" important element undervalues the role of the very deliberate process behind the game's development, as well as the physicality of the final product. Second, *Train*, not unlike *B.U.T.T.O.N.* and *J.S. Joust*, features an intentionally ambiguous ruleset. Brathwaite's hope is to make players "complicit" in their simulated acts, and to encourage them to improvise alternative strategies and new endings. As such, I

phrasing here provides a useful crystallization of certain values statements that underlie the proceduralist approach to game criticism and design (Sicart, forthcoming).

Placed in its historical context, all this focus on procedures and rules can be read as a response to dominating trends in multimedia design, game development, and game analysis. Arguably, calling attention to rule systems provides a welcome counterbalance to mainstream game development practices that prioritize high-end, high-budget graphics at the expense of innovating on what the player *does* in those games. Moreover, scholarship on computer-enacted game rules challenges (or at least complements) game analyses that fixate on audiovisual content. Espen Aarseth, for example, has famously criticized "visualist" approaches to game analysis. Addressing film theorists in particular, Aarseth writes: "The game gaze is not the same as the cinema gaze, although I fear it will be a long time before film critics studying computer games will understand the difference" (p. 52). Like the authors discussed above, Aarseth turns his attention to rule systems, asserting that the computer game is "the art of simulation" (p. 52).

The problem is that proceduralist theory, at least when framed in normative terms, marginalizes (even if unintentionally) other design possibilities. My contention here is twofold. First, as I will argue throughout this paper, we cannot satisfactorily "rank" the formal aspects of games in relation to one another. From a design standpoint, multimedia elements like image and sound may indeed inform the very heart of a creative game design practice. Second, such a formalist perspective is inherently limited. In particular, framing game design as the art of "system design" makes the critical mistake of focusing too intently on the media object itself. Too often, we give short shrift to the social and cultural contexts in which those games are situated – and not just existing contexts, but also the contexts that players shape and create through their play.

To be clear, I do not mean to advocate for some kind of radical social determinism. Obviously, the things we make and the code that drives them can play an essential role in shaping player experience. Rather, my concern is that *over-privileging* computer-enacted rules marginalizes a diverse ecosystem of possible hybrid approaches that might otherwise flourish in the gaps between conventional videogames and other media forms. There exists a fertile space of game design possibilities beyond formalized systems and computational algorithms – a space where players are rallied to improvise their own gameplay and appropriate games to their own purposes.

In the following sections, I present case studies of two such games – two digitally-mediated, physical party games that I designed or co-designed. Both games were developed under a mindset that differs radically from the proceduralist perspectives cited above. In particular, both games challenge wisdom that claims computational rules to be *the* single most salient aspect of digitally-mediated games. I hope to demonstrate that there exist some promising, very deliberate approaches to designing low process intensity games.

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would argue that the rules themselves are overshadowed by the social interaction and interpersonal exchange that emerges around the game. As Brathwaite herself tells it, most games of *Train* are followed by serious discussion that frequently last an hour or even more. These kinds of discussions, both during and after the game, are an integral part of the game experience. On this point, I find it telling that Brathwaite sees rule lawyering as a "game mechanic." As I see it, this kind of negotiation cannot adequately be reduced to the formalism of "mechanics." Rule negotiation always happens in a particular sociocultural context, between particular players from different backgrounds (see Taylor, 2012). Brathwaite's emphasis on rules and systems therefore undersells what players bring to such an open-ended experience.

Case Study #1: *Brutally Unfair Tactics Totally OK Now (B.U.T.T.O.N.)*

B.U.T.T.O.N. (2011) is a highly physical party game for 2 to 8 players, played with Xbox controllers or keyboard.[9] Previously, I have written about the game in relation to folk games and play theory (Wilson, 2011). In this section, after briefly reintroducing the game, I turn my attention to its textual and audiovisual elements, as well as to the contexts which those elements both shape and are shaped by.

The basic gist of *B.U.T.T.O.N.* is that multiple players race to their controllers through physical space. Each round, players follow a series of instructions that appear on the screen. First, they are instructed to put their controllers down. Second, they are ordered to take a number of steps backwards, away from their controllers. Third, they are given some kind of command or task (e.g. "Lie on the floor" or "Act like a monkey"). Finally, after a short countdown, a randomly chosen win or lose condition is displayed (e.g. "First player whose button is pushed 15 times wins"), tacitly encouraging players to rush towards the controllers. After a certain window of time, the round ends and the results are displayed. Players can then begin another round.

I describe the game as both "broken" and "self-effacing" (Wilson, 2011). I call the game "broken" because it fails to enact the very rules it decrees. The computer does not try to monitor whether you took exactly six steps back, or if you did indeed spin around five times. Moreover, the rules are inherently riddled with ambiguities. How is a "step" measured? Is unplugging another player's controller cheating "too much"? In a very obvious way, it's up to the players to interpret the rules and referee themselves. Viewed in relation to most conventional videogames, *B.U.T.T.O.N.* gives a distinct impression of "incompleteness," as if the system were somehow defaulting on its end of the bargain. We, the players, are forced to pick up the computer's slack.

Furthermore, I call the game "self-effacing" because it goes out of its way to encourage subversive play, goading players to bend, break, and extend the rules. "Unfair tactics" is the name of the game, both figuratively and literally. One in-game message, for example, reminds the players that "it's totally OK to push other players' buttons." To be clear, I do acknowledge that *all* games allow for "house rules" and player appropriation (Consalvo, 2007; Harper, 2010; Jakobsson, 2007). Rule negotiation, as T.L. Taylor (2012) puts it, is a "consistent feature" of digital game culture. The difference here is that *B.U.T.T.O.N.* gleefully smears these considerations in the players' faces, providing an occasion to actively celebrate these oft-neglected facets of console gameplay. In other words, the game is not self-effacing merely because the rules are ambiguous, but rather because it signals an acute *self-awareness* of that ambiguity.

In designing *B.U.T.T.O.N.*, we conceptualized the game as more than just a system of computational rules. Above all, we wanted to convey a particular sense of humor and a particular

[9] We have also experimented with alternative input devices. At the 2011 Independent Games Festival, we replaced the controller with a dance pad. In July 2011, at an exhibition at New York City's Museum of Modern Art (MoMA), the game was installed with oversized buttons the size of small trashcans. Perhaps most radically, for our "Killscreen vs Scandinavia" party in March 2011 we commissioned four cardboard "controller suits," worn by human performers. Into each costume was embedded some form of wireless input device. The result was that players, instead of scrambling to inert plastic controllers, raced to dancing performers. The fun, of course, was that the controller-performers could decide on the fly to run away, to help a particular player, to interfere, etc. For me, these kinds of alternative input devices/installations are exciting because they open up forms of digitally-mediated play that are decidedly theatrical, sculptural, and performative. That said, I also believe that there are certain advantages in taking traditional, familiar technologies and repurposing them in new and unexpected ways. I expand on this thinking below.

mood. For this reason, we should acknowledge the broader multimedia experience that the game delivers. Graphics, sound, and text all play an essential role in setting the right tone.

Both the game's graphics and music are intentionally stupid. The visual aesthetic, by Nils Deneken, relishes in its animated rainbows and neon wireframes, as if targeting the stereotypical stoner. The silly characters dance idiotically on their buttons, and cry giant tears when they fail to win. The music, by Nicklas "Nifflas" Nygren, features a whimsical blend of retro-styled game soundtrack and elevator music. Our hope was to get players dancing along to a series of tunes as catchy as they are obnoxious. One command even instructs players to "Dance like your avatar."

Similarly indispensible is the game's textual content, which instructs the players what to do (and, in some cases, what not to do). In a certain sense, those texts *are* the game. From an algorithmic standpoint, *B.U.T.T.O.N*. amounts to little more than a randomized billboard, taking a rudimentary button-press detector and dressing it up with sequences of timed texts. In short, the amount of computational "game logic" has deliberately been minimized. Moreover, as with the graphics and the music, the texts were written to be cheeky in terms of both content and style. Some texts, rather than introducing new "game mechanics," are geared instead at evoking a particular mood or emotion. This especially true of the "socially abusive" content (Wilson and Sicart, 2010), which aims to make players laugh or feel awkward.[10]

The takeaway here is that *B.U.T.T.O.N*., as a digital media object, relies less on programmed rules and more on the irreverent spirit of its textual and audiovisual content. Or, more accurately, it relies on the appropriations of human players who are emboldened by that spirit. In this way, deliberately broken games like *B.U.T.T.O.N*. compel players to consider context – their competitors and their audience.

Case Study #2: *Johann Sebastian Joust!*

J.S. Joust, as described in the introduction, is not as explicitly "self-effacing" as *B.U.T.T.O.N*. The game does not actively prod its players to cheat. Nevertheless, it does feel markedly "incomplete," especially in comparison to most other accelerometer games. Not only does the system fail to specify what we are and aren't allowed to do in the physical world, it also fails to describe what, exactly, the players are supposed to do or how they should arrange themselves. Though I continue to demo *J.S. Joust* as a highly physical, "make your opponent lose" jousting game, the underlying system is open-ended enough to support a much wider variety of games.

Indeed, the story behind the development of *J.S. Joust* underscores the extent to which our particular framing of the game is a product of player appropriation and social context. Partially inspired by the "Animal Tracker" minigame from *Wii Party* (2010), I had originally conceived of the project as a racing game. The idea was that three players, with motion controller in hand, would race across the room to a fourth controller. With this idea in mind, the changing tempo of the music was designed as a means for baiting the players into moving too fast.

It is a fortunate accident that I had not yet implemented the functionality of that fourth controller when I started playtesting the game. The open-endedness of that my prototype allowed us to

[10] One instruction, for example, reads: "Wealthiest player, take one step forward." Other prompts ask players about their personal hygiene. The Xbox version of the game even comes with a "Naughty Mode" that instructs players to strip off articles of clothing.

improvise a significantly different game from the one I had initially imagined. To determine the right sensitivity of the accelerometers, my colleagues and I repeatedly staged races across the room. Eventually, we set aside the more specific goal of racing in order to experiment with how fast we could move at different acceleration thresholds. The breakthrough moment soon followed when Nils and I happened to find ourselves walking towards one another from opposite sides of the room. Staring at one another, face-to-face, each of us silently hatched the same mischievous plan; as soon as we were in range, we shoved one another in an attempt to make the other lose.[11] In that one instant, it became clear to us that the game we *actually* wanted to make was one that involved an antagonistic duel.[12] In a certain sense, it is debatable whether I even "designed" *J.S. Joust*. As I see it, Nils and I pulled the game out of the social ether, collaboratively.

Even within our own specific framing of the game, *J.S. Joust* encourages a wide variety of house rules. In some rounds, we agree to keep the controller on our heads, or in our pockets. Other rounds, we might decide to play crawling on our knees. In this sense, the game can be viewed as a digitally-mediated playground game. *J.S. Joust* demonstrates a more toy-centric approach to game design in which players are tasked with elaborating their own rules around a playful object – in this case, a simple acceleration-sensitive device that dynamically adjusts to the music.

Much like a playground sport (say, pickup basketball), *J.S. Joust* requires it players to gauge an appropriate intensity of physical play. How hard can I push my opponent? Will they mind if I try to kick them? An anecdote may help to illustrate the deeply contingent nature of the game: earlier this year, we had our friends Erik and Matt try the game. At one point, Matt ended up shoving Erik into a wall, with unexpectedly violent force. The maneuver might have been welcomed by a more physical player, but for Erik it was clearly beyond his comfort zone. This anecdote serves as a reminder that this kind of game requires its players to stay attuned to the subtleties of context.

As in *B.U.T.T.O.N.*, the music in *J.S. Joust* plays an essential role in setting the tone. The choice of J.S. Bach's *Brandenburg Concertos* was quite deliberate. The playful transgression of listening to the music at such comically slow and fast tempos becomes all the more absurd given that Bach's music is so renowned and so "high culture." As such, my claim here is that the music cannot simply be viewed as a formal element "subordinate" to the game rules. Ultimately, *J.S. Joust* is as much a piece of dance choreography as it is a "game."[13] Moving along to silly music in slow-motion becomes a kind of freeform play, deeply enjoyable in it of itself.[14]

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[11] *J.S. Joust* draws influence from a simple game that Nils and I had improvised (along with our friends Bernie and Ida) in Christiania back in 2010. In the game, two players stand on opposite ends of a tightrope or balance beam and slowly charge at one another. The first player to hit the ground – either due to his own imbalance or to a physical confrontation at the center of the rope – is the loser. This kind of "precarious," face-to-face physical confrontation is the very dynamic around which *J.S. Joust* operates.

[12] Partially inspired by my work on *B.U.T.T.O.N.*, I had indeed intended that the racing game could devolve into pushing and shoving. However, it wasn't until my impromptu faceoff with Nils that I realized that the game might be more enjoyable if this antagonism was made more explicit, i.e. if players were instructed to move *towards* each other, rather than side-by-side.

[13] The choreographic nature of *J.S. Joust* is especially evident when exactly three people are playing. With defensive strategy in mind, players will typically try to shield the arm that holds the controller. As a result, each player will often move away from one particular opponent next to them, ultimately leading the three players to pace around in a circular pattern that resembles a waltz.

[14] In some sense, moving in slow-motion is doubly fun; it is pleasurable in an immediate, bodily way, and it also plays off our cinematic imagination (i.e. the obligatory slow-mo action sequence). My interest in slow-

In their attempt to identify the supposed "defining" characteristics of videogames, essentialist perspectives risk overlooking the internal "logic" of more traditional media. A piece of music like J.S. Bach's *Brandenburg Concertos* certainly suggests its own kind of "rules," i.e. rhythm, harmony, and even sociocultural associations – rules that are interpreted, negotiated, and internalized by listeners and performers. To be clear, I don't mean to suggest that these properties are somehow equivalent to computer algorithms. Rather, my point is that music can play just as important a role in shaping how players act and perform. The design lesson here is that it isn't always so productive to treat multimedia elements like graphics and sound so hierarchically, least of all as "subordinate" to rules of a more algorithmic stripe. As Paul D. Miller (a.k.a. DJ Spooky) – writing on the relationship between music, media, and his own work – so aptly phrases it: "the soundscape is a palimpsest that encourages play" (p.53).[15]

Multimedia, Spectacle, and the Art of "Deputizing" Players

Games like *B.U.T.T.O.N.* and *J.S. Joust* remind us that computationally-enacted rules are not the only, or even the "most" salient characteristic of digitally mediated games. In this section, I'd like to reflect on several other aspects of computer technology that open up fruitful design opportunities for game developers.

First, consumer technologies like game consoles offer a powerful tool for packaging together and presenting compelling multimedia content like graphics, video, music, and text. This point may seem curiously obvious; indeed, as discussed above, many critics contend that videogames have relied *too heavily* on such content. Nevertheless, games like *B.U.T.T.O.N.* and *J.S. Joust* demonstrate how we might recast Murray's specter of the "multimedia scrapbook" as an opportunity to interface with other traditions like folk games, music, and dance.[16] From a formal

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motion games is no doubt influenced by a folk game, Liste Lanser (translation: "Sneaky Lance"), played by my local gaming community at parties. In Liste Lanser, two players faceoff blindfolded, each with a wooden spoon in hand. The first player to hit the other wins. The twist is that both players must move in slow-motion, enforced by the spectators. Once again, this linkage speaks to the considerable debt my design practice owes to the simple folk games and playground games played amongst my peers.

[15] In regards to my own creative practice, I find Miller's writing deeply inspiring. Miller depicts a radical kind of media synesthesia, framing certain media forms in terms of other ones. He writes: "Dj-ing is writing, writing is Dj-ing. Writing is music, I cannot explain this any other way. […] Obviously, you feel the rhythm inside a great poet's stanzas, but it's there within the great philosophers' paragraphs as well. So many media and cultural techniques of interpretation coexist – reading, watching, listening, surfing, dancing – that this textual/sonic synasthesia demands a great deal from us" (p.57).

[16] Beyond raucous party games like *B.U.T.T.O.N.* and *J.S. Joust*, there exists a wider diversity of approaches to designing low process intensity games. For example, a more multimedia-heavy, screen-based approach can be found in the work of researcher and game designer Dan Pinchbeck. Pinchbeck's experimental *Half Life 2* mod, *Dear Esther* (2008), is in some sense more a virtual world or interactive story than it is a goal-oriented "game." Pinchbeck (2008) writes: "There are no goals or action sequences, just an environment to explore with embedded music and voice-over triggers. Additionally, the game contains no AI, making the player's engagement with the piece rest entirely with the narrative, visual environment and audio" (p.51). Nevertheless, *Dear Esther* employs many familiar tropes of the first-person shooter (FPS) genre. Moreover, Pinchbeck's team released the mod to a fan community of self-described gamers who received it in the terms of gaming culture. Pinchbeck explains: "we wanted to release games that pushed the envelope whilst remaining appealing for gamers" (p.51). For these reasons, I agree with Pinchbeck's insistence on calling *Dear Esther* a "game," despite its hybrid nature.

perspective, the two games amount to little more than glorified button-press or acceleration detectors dressed in timed sequences of textual messages and audiovisual content. That's the whole point. Both games are *proud* of their low process intensity. In these games it is the responsibility of the players, not the computer, to enforce many of the game rules. *B.U.T.T.O.N.* and *J.S. Joust* make a concerted effort to foreground what happens *outside of* the computer, between human beings. For this reason, it is precisely those "characteristic" properties of digital media that both games disavow. The key difference between these two examples and Murray's multimedia scrapbook is that deliberately low process intensity games signal an acute self-awareness of this fact.

In developing both *B.U.T.T.O.N.* and *J.S. Joust*, our aim was not to design a readily consumable game system, but rather to *deputize* the players to interpret, enforce, and even modify the rules we prescribe. In other words, the bulk of our design challenge resided not in engineering systems of rules, but rather in successfully rallying the players to approach the game with sufficient silliness and self-irony. To this end, graphics, music, and text serve as essential tools for setting the right atmosphere and shaping, however partially, the context in which the game is played.

Second, technologies both old and new can be leveraged to create a visible *spectacle*. In the case of the *J.S. Joust*, the colored light orb built into the PlayStation Move controller has played a key role in generating excitement around the new Move-enabled version of the game (see Footnote 2). The curiously entrancing glow of the orbs frequently draws a crowd, especially when the game is demoed in low-light settings. Even the simple act of registering your controller becomes a pleasurable experience: upon pressing the button, the colored light switches on, accompanied by a satisfying, shimmering sound effect. This alluring mix of technology, light, and sound plays off personal and cultural imagination, conjuring up images of *Star Wars* lightsaber duels and other science-fiction touchstones.[17] Players are often eager to toy around with the controller, regardless of the particulars of the game rules.

Admittedly, as the Move controller becomes more commonplace this spectacle will likely wane. Part of the appeal of *J.S. Joust* is its "newness" – the newness of both the technology itself and of the way the game employs that technology. For that reason, it might be tempting to dismiss spectacle as a passing gimmick or fad, a mere "secondary" feature of computer technology that fails to exploit the "essence" of the medium. What such logic misses is that games are as much a *practice* as they are a "medium."[18] Games are *enacted*, within particular contexts and often in the

[17] Bart Simon (2009a) makes a similar point in regards to the Wii version of LucasArts' *Star Wars* game, *Force Unleashed*. Though the Wiimote fails to live up to the promise of high-fidelity embodied swordplay, Simon argues that there is "a certain pleasure that might derive from this failure of control." In the context of the *Star Wars* franchise, the rudimentary, "minimalist gestures" supported by the game invite the player to play-act and perform exaggerated movements. As Simon sees it, "the entire weight of 25 odd years of Star Wars culture demands satisfaction and so one learns to manoeuvre in the wedge that expectation creates." Simon's notion of "gestural excess" (Simon, 2009b; Wilson, 2011) speaks to the strengths of deliberately low process intensity designs. Additionally, his articulation of gameplay as "expression of shared or social imagination" (Simon, 2009a) helps explain the appeal of *J.S. Joust* and the way the game uses the colored lights of the PlayStation Move controllers.

[18] This broader view on game as practice or cultural space has been elaborated extensively in the literature on massively multiplayer online games (MMOGs) (e.g. Pearce, 2009; Steinkuehler, 2004; Taylor, 2006). As Taylor argues in her work on the MMOG *Everquest*, "Play is situational and reliant not simply on abstract rules but also on social networks, attitudes, or events in one's non/game life, technological abilities or limits, structural affordances or limits, local cultures and personal understandings of leisure" (p.156).

service of playfulness.[19] A game like *J.S. Joust* operates on the belief that spectacle, technological or otherwise, can be both beautiful and energizing. Especially in regards to party and street games, public spectacle comprises the heart and soul of what those activities *are*.

Third, dovetailing off the previous point, games and digital technology both bring with them a host of expectations and sociocultural associations that designers can appropriate or subvert. *B.U.T.T.O.N.*, for instance, makes a spectacle out of repurposing the old and familiar. Quite intentionally, the messy scramble to the controllers feels decidedly out-of-place; wrestling your opponents just isn't what you typically *do* when playing a console or PC game.[20] Likewise, *J.S. Joust* makes a spectacle whenever it is showed in an outdoor public place because PlayStation Move games aren't typically played in the street, or on the beach. This subversion of cultural and social norms can indeed become its own source of pleasure. There's a certain thrill in using conventional gaming devices in ridiculous, "unsanctioned" ways. The lesson here is that it can be productive to look beyond the formal properties of technology itself, towards the interplay *between* that technology and its surrounding contexts. The shortcoming of highly formalistic definitions of "game" – particularly definitions that try to isolate properties of the "thing itself" – is precisely that they overlook these deeply contingent but potent creative opportunities.

Paul Dourish (2001) makes a similar point in his critique of various HCI theories which "attempt to decontextualize events from the circumstances in which they occur in order to uncover their abstract essentials" (p.235). Drawing from phenomenology and ethnomethodology, Dourish argues that formal content and context cannot be viewed so independently of one another. Taken to heart, this lesson can usefully inform the way we go about designing games. In the case of *B.U.T.T.O.N.*, our key creative breakthrough – to get players racing to the controllers – was not won by merely grappling with "mechanics" or rules, but also by considering how game systems both shape and are shaped by a broader gaming culture.

Thinking Beyond "Systems"

One might object that my reading of the proceduralist position is unfairly narrow. For instance, couldn't we simply broaden the notion of "systems" to encompass *social* processes? After all, in both *B.U.T.T.O.N.* and *J.S. Joust*, the players do negotiate *rules*. It seems plausible that theorists like Crawford would indeed welcome the two games (and other games like them) as highly "interactive" in the sense that they demand active and sustained participation.

Still, I would claim that the proceduralist position, at least as typically framed, cannot so easily be reconciled with the design ethos outlined in my case studies. The tension between the two

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This wisdom applies equally well to small-scale, co-located games. Indeed, deliberately low-process intensive games actively call attention to these contingencies.

[19] As Henning Eichberg (2010) argues, a game can be productively conceptualized as a *situation* – one "whose totality can never be caught in all its dimensions" and which "constitutes and epistemological contrast to structures and processes, which can be objectified" (p.192).

[20] In this sense, *B.U.T.T.O.N.* could be viewed in terms of the Situationist *détournement* (Debord and Wolman, 1956). On an ideological level, we hoped to confront technological optimism with an attitude more ambivalent and absurd. Rather than try to "enrich" the material world with new technology, the game takes existing technology and tries to *disenchant* it. See my previous work (Wilson, 2011) for a longer discussion about the game in relation to the pervasive and ubiquitous computing literatures.

perspectives runs deeper than mere questions of scope, (i.e. how broadly we define "process"). To be clear, the point is not that the proceduralists outright dismiss everything other than systems of rules. The thinkers cited above, too, would likely agree that games and gaming encompass much more. Rather, my contention is that their particular theoretical framing is haunted by a number of subtle but problematic value judgments and blind spots.

First and foremost, systems-centric theories tend to conflate computer games with software, and interactivity with computation. Crawford, for instance, specifies that the task of the game designer is "to *automate* interactivity, to replace one of the participants in the conversation with a machine" (p.77, emphasis mine).[21] Adams and Rollings make a similar point, explaining that it is the *computer* that enforces the rules of videogames: "In most video games, the computer sets the boundary of the magic circle because player actions are meaningful in the game only if the machine can detect them with its input devices" (p.18). It's not so surprising, then, that design thinkers like Crawford, Adams and Rollings, and Humble dismiss the notion of radically open-ended computer games. Their skepticism is that the science of artificial intelligence is simply not advanced enough to improvise new rules or author custom-tailored content for us. Adams and Rollings, for example, write: "No computer can create absolutely unconstrained play; software can offer the player only the actions that the designer chooses to implement, and the program will always be limited by the amount of memory available" (p.138). Note that in this view, the task of "creating" gameplay is largely framed as a technical challenge – one delegated to the machine.

Bogost, likewise, shortchanges the "procedural" capabilities of human beings. He writes: "Because procedurality is intrinsic and fundamental to computers, and because computers are much more flexible as an inscription medium than human agents, they are particular suited to procedural expression" (2007, p.10). Human beings, as Bogost sees it, are less reliable: "It is difficult to coerce even a small group of people to execute a particular process again and again, without rest and without incentive" (p.10). Bogost's particular framing here betrays a subtle but problematic assumption. In evoking the metaphor of "inscription" and the image of executing a "particular" process "again and again," Bogost depicts videogame rulesets as necessarily coherent and *stable*. This assumption is perhaps most apparent in his claim that "the gestures, experiences, and interactions a game's rules allow (and disallow) make up the game's significance" (2008b, p.121). Here, as in Crawford's and Adams and Rollings' work, it is the *rules themselves* that "allow" interaction. Authority is ceded to the machine. Bogost (2006) emphasizes our ability to interpret, reflect on, and respond to game systems, but he fails to adequately account for how authored rules – even computational ones – are inevitably repurposed and destabilized by human actors who fuse them together with their own personal, social, and cultural practices.[22]

[21] On this point, I second Stewart Woods' (2007) contention that single-player and multi-player games cannot satisfactorily be viewed as variants of the same form. As Woods puts it, "A multiplayer game is not a simulation to be tinkered with, but a simulative experience that is upheld by player consent" (p.22).

[22] In his defense, Bogost does turn his attention to player performance in some of his more recent work. In an essay (2009) on gesture and Brenda Brathwaite's *Train*, Bogost applauds how the ambiguity of the game rules opens up for player improvisation. Making a similar point about *Dance Dance Revolution*, he writes: "its life as a venue for public performance was born from the spaces the game didn't measure between steps, spaces players felt compelled to fill with improvised maneuvers of their own." Though I certainly agree, this point cannot so easily be reconciled with the formalism of his earlier work (2006, 2007), for reasons outlined above. This tension shows itself in Bogost's essay on performative play (2008a), in which he writes: "Performative gameplay describes *mechanics* that change the state of the world through play actions themselves" (emphasis mine). My contention here is that the term "mechanics" places too much focus on the formal system. Especially in a game like *Dance Dance Revolution*, the relationship between computational system and player performance is loose at best. Meaningful gameplay gestures, as Bart

A critical shortcoming of these perspectives is that they forget that human beings, too, are good at "interactivity." When we focus so intently on computation, we risk overlooking alternative views on interaction design. Games like *B.U.T.T.O.N.* and *J.S. Joust* foreground how we might conceptualize the computer not as a singular authority tasked with orchestrating interactivity on our behalf, but rather as a *material* – one that can be shaped by both designers and players.[23] The problem with systems-centric theories is that they so frequently neglect (even if they do so unintentionally) these alternative design possibilities, almost as if they didn't even exist.

One might object that the thinkers cited above only aims to describe "traditional" computer games. Arguably, physical games like *B.U.T.T.O.N.* and *J.S. Joust* should not be treated as computer games, but rather as *games that simply happen to use computers*. Though I do find this distinction evocative, I also worry that it reifies a normative conservatism. First, such a defense underestimates the extent to which even the most traditional computer games are subject to rule ambiguities and disputes (Consalvo, 2007; Harper, 2010; Jakobsson, 2007; Taylor, 2012). Second, this logic frames alternative design approaches as curious exceptions, rather than as possible opportunities. As *B.U.T.T.O.N.* demonstrates, it's possible to make these kinds of context-foregrounding games with even the most conventional of technologies.

As Dourish reminds us, "[abstract] rules and formal categories are valid and relevant only to the degree that people enact them, point to them, adopt them and demonstrate them to each other. The shared reality of a rule is a *consequence*, not a *cause*, of the fact that people choose to follow it" (2004, p.23, emphasis his). With that point in mind, we need not accept Adams and Rollings' claim that ambiguous or conflicting rules are a mark of "bad" design. Quite the opposite, we might embrace deliberate ambiguity as one possible strategy for championing, as Dourish phrases it, "the process by which context is continually manifest, defined, negotiated, and shared" (p.26). In regards to the design process, the idea here is that we might shift our attention away from computational rules themselves and towards those interstitial points where gameplay slides into other forms of expression and where coded rules meet communities of practice.[24]

Leveraging Contexts, Providing Alibis

Bogost, writing on how games can be used to persuade and mount claims, states that "Videogames themselves cannot produce events; they are, after all, representations" (2007, p.332). Perhaps videogames themselves cannot "produce" events, but they can certainly *catalyze* them. In a certain sense, that's exactly what games like *B.U.T.T.O.N.* and *J.S. Joust* are – event-catalyzing apparatuses. For this reason, theory-practitioner Gonzalo Frasca (2004) is equally off-

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Simon (2009a, 2009b) argues, often happen *in spite of* the game system. From a designer standpoint it isn't always so productive to think about open-ended physical gameplay in terms of formal mechanics.

[23] Anna Vallgårda (2009) argues that the computer, like any material, is "a physical substance that shows specific properties of its kind that can be proportioned in desired quantities, and that can be manipulated into a form" (p.42). However, Vallgårda points out that computation itself is not perceivable by human senses. For this reason, the computer must always be alloyed or "composited" with other materials, such as the plastics of keyboards or the liquid crystals of screens. When human players enter the discussion, computation (and by extension, rule systems) cannot adequately be treated in isolation of sensory elements.

[24] This phrasing is borrowed from an earlier essay on the relationship between gameplay and music (Wilson, 2008).

the-mark when he writes: "Neither art nor games can change reality, but I do believe they can encourage people to question it and to envision possible changes" (p.93). Yes, games can push us to reflect and to contemplate. But they can also do much more. They can inspire performance, color social interaction, and give additional texture to interpersonal relationships. In short, "representation" is not the only lens through which we might view games. We can also conceptualize them as *festive occasions*.

At issue here is a tension between two different views on the craft of digital game design: one which focuses on games as *objects* (i.e. with formal properties), and one which sees games – even digitally-mediated ones – in terms of *performance* and interpersonal exchange.[25] Obviously, there isn't one right choice. Nor are these two views necessary incompatible with one another. Nonetheless, as I argue above, the game design literature has privileged the former while largely neglecting the latter. Drawing inspiration from performance art, community art, and other contemporary art practices, I'd like to suggest that we game designers might alternatively understand ourselves as *context providers*, rather than as object makers.

Contemporary art theorist Grant Kester (2004) offers one compelling answer as to what such an approach might entail. In his work on "dialogical aesthetics," Kester examines a particular type of participatory art practice that aims to mobilize community and nurture dialogical interaction. This movement toward direct interaction, Kester writes, "decisively shifts the locus of aesthetic meaning from the moment of creative plentitude in the solitary act of making (or the viewer's reconstruction of this act) to a social and discursive realm of shared experience, dialogue, and physical movement" (p.54).[26] Kester's argument is that art doesn't just have to anchor discourse in a "fixed representational order" (p.87). It can also "enact community here and now through the process of physical and dialogical interaction" (p.58). In this view, art is not necessarily a material thing, but also, potentially, the very facilitation of intersubjective engagement and social interaction.[27]

One of Kester's central examples is Austrian arts collective WochenKlausur's *Intervention to Aid Drug-Addicted Women*. The piece consisted of a series of "boat colloquies" on Lake Zurich, organized by WochenKlausur in 1994. Each meeting, staged on a cruise boat, featured a diverse gathering of constituents from the city of Zurich, including politicians, journalists, activists, and sex workers. The topic of the meetings was drug addiction in the city, and specifically female

[25] For other work that emphasizes the role of performance in computer games, see Henry Lowood's (2010) work on "beautiful play" and the notion of player as artist.

[26] In terms of contemporary art, another relevant precedent here would be Nicolas Bourriaud's (2002) work on "relational aesthetics." Personally, I find Kester's framework to be more productively evocative, and will therefore choose to focus on his work in this article. For two sharp critiques of Bourriaud's theory, see Claire Bishop's (2004) "Antagonism and Relational Aesthetics" and Hal Foster's (2004) "Chat Rooms."

[27] The idea that we might locate art in performance or social interaction itself rather than in an object informs a much wider range of contemporary art practices than the narrower range of approaches that Kester describes in his book. For me, one especially relevant example here is the work of Serbian performance artist Marina Abramović. Identifying the human body as a key strategy for provoking minimally mediated aesthetic experiences, Abramović and Ulay (her partner of the time) write in their 1980 "Art Vital" manifesto: "Immaterially transmitted energy causes energy as a dialogue, from us to the sensibility and mind of eye witness who becomes an accomplice. We chose the body as the only material which can make such an energy dialogue possible" (Westcott, 2010, p.148). For more on Abramović's work as it relates to game design, see my work on "dialogical game design" (Wilson, forthcoming).

addicts who had been driven to prostitution and even homelessness. As WochenKlausur (n.d.) tells it, many of the women "have almost no legal rights and are at the mercy of pimps, customers, dealers and the police." As a direct outcome of the boat talks, the various participants were able to agree on the creation of a boardinghouse that would provide a safe haven for the addicts and give them access to various services. According to Kester, the boardinghouse still functions today.

Kester argues that framing the talks within the sphere of the art world played a key role in facilitating a concrete outcome: "in the ritualistic context of an art event, with their statements insulated from direct media scrutiny, [the participants] were able to communicate outside the rhetorical demands of their official status" (p.2). The insight here is that our society allows special "latitude" to activities labeled as "art." As WochenKlausur's Wolfgang Zinggl observes:

> "The context of art offers advantages when action involves circumventing social and bureaucratic hierarchies and quickly mobilizing people in positions of political, administrative or media responsibility to accomplish concrete measures. An invitation from an art institution provides WochenKlausur with an infrastructural framework and cultural capital, while the exhibition space serves as a studio from which the intervention is conducted" (as quoted in Kester, 2004, p.101).

In short, the prestige bestowed by established art institutions offers a valuable form of societal legitimacy and opens up unique opportunities to shape people's expectations. In this view, the "art" of WochenKlausur's intervention can be understood as their successful leveraging of the cultural context of the art world to catalyze a series of sociopolitical relationships.[28]

To be clear, the kinds of projects that Kester discusses in his book are both structurally and ideologically very different from the two case studies I describe above. In games like *B.U.T.T.O.N.* and *J.S. Joust*, the formal "object" – i.e. the audiovisual content, and, yes, the computational rules – still plays a very visible role. Furthermore, on a political level, the community-based art practices that Kester champions are targeted at much more specific constituencies. Those projects are "designed" in a far more participatory fashion. Yet despite these differences, Kester's examples encapsulate a number of potent ideas that are relevant not just to the art world, but also to creative practice more generally. Following WochenKlausur, designers might embrace an approach which focuses specifically on leveraging the sociocultural particularities that follows certain media forms and social worlds.

Games, as a societal practice, occupy a privileged space where absurdity, raucousness, and silliness are all culturally sanctioned, at least to some degree. In this sense, games can be conceptualized as a kind of *alibi* – a recognized excuse to act out and perform the ridiculous. Festivity and carnivalism have long been a hallmark of folk games and play culture (Eichberg,

[28] Also key to the success of the piece was an attitude of playful transgression – one that WochenKlausur embraced to outright manipulate officials into agreeing to attend the meetings. As WochenKlausur (n.d.) recounts: "a trick was also used here: first the mayor was invited and told that his colleague, the Socialist party secretary, would also be participating, but only if the mayor had also committed himself. Flattered in this way, the mayor agreed, and half an hour later the same result was achieved with the party secretary. Because the governing Socialist party got involved, the other parties also pledged their participation, and the journalists soon followed."

2010).[29] In regards to physical party games like *B.U.T.T.O.N.* and *J.S. Joust*, it is precisely this *sociocultural function* of games that stands out as the "salient" design opportunity.

B.U.T.T.O.N., not unlike WochenKlausur's boat colloquies, leverages the special latitude given to games in order to coax players into playing the fool. While playing *B.U.T.T.O.N.*, I typically feel empowered to roughhouse my opponents, make strange noises, act like an elephant, and so forth. Moreover, the game not only encourages this behavior – in some sense it *requires* it. Indeed, as discussed above, there is very little "game" beyond these silly directives, unmonitored by the computational system. We're acutely aware that it is we ourselves that choose to enforce these instructions. On an aesthetic level, the game, like the art practices that Kester describes, attempts to foreground how our experience is "conditioned by a given social context or physical situation" (p.54). In short, the game's computationally procedural underpinnings get eclipsed by the lack thereof, as well as by the particular situation in which the game is played.

In a humdrum formalistic sense, *B.U.T.T.O.N.* and *J.S. Joust* are not just "games," but also self-directed theatrical performances that *masquerade* as well-formed games. Interpreted as such, they use the familiar trappings of computer games – win/loss conditions, game controllers, and so forth – as a form of "sugarcoating" intended to make the silly directives more palatable. The game-like structure, viewed as a kind of Trojan horse, is employed in a decidedly instrumental fashion, in the service of providing that alibi for players to carry out those performances.

This point is well-illustrated by the bowing custom that has been adopted by my local play community when playing *J.S. Joust*. Inspired by the baroque style of Bach's music, several players started taking showy, "gentlemanly" bows before each round. Much like typing "gl hf" ("good luck, have fun") before a *StarCraft* match, the bow serves as a conciliatory gesture towards one's opponents. But it is also deeply theatrical, in a way that allows players to revel in the aesthetic of the game. I contend that these bows cannot simply be dismissed as something secondary to the "core" game. For me, it is precisely these improvised customs and performative gestures that comprise the heart and soul of the game experience.

The takeaway here is that games themselves, as formal objects, are frequently outshined by the performance or "meta-game," *especially* in the case of rowdy party games. Though a game might first *appear* to be well-structured and goal-oriented, the messy reality of it can be very different indeed.[30] Positioned at the intersection of game culture and other traditions like dance, theater, and improv, deliberately low process intensity games flaunt their hybrid nature. The hope is that the playfulness of the gaming mindset can be harnessed to actuate new kinds of performance.

[29] As Eichberg defines it, "Festivity is an existential meeting where human beings create a fugitive experience here and now" (p.119). I find this notion of game as "fugitive experience" to be usefully evocative. In the pursuit of festivity, how do we, as designers, nurture this "fugitiveness"? In my earlier work (Wilson, 2011), I coined the term *unachievement* to describe the delicate balance of encouraging subversive play without going so far as to "sanction" that subversion.

[30] The relevant dichotomy here may not be that between "play" and "game," but rather, as Brian Sutton-Smith (1997) articulates it, between "play" and "playfulness." As Sutton-Smith phrases it, play is that which "plays with the frames of the mundane and sticks to its purpose of being a stylized form […] in which the expected routines or rules guide and frame the action in a steady way throughout" (p.148). Playful, by contrast refers to the intension to play *with* the very frame of play. This articulation is useful because it shifts our attention from the *form* that the game takes (i.e. closed-system, open-system) to the *attitudes* of the players. It is exactly this playful mindset that *B.U.T.T.O.N.* and *J.S. Joust* hope to nurture.

Conclusion

Janet Murray has mused that it is "surprising how often we forget that the new digital medium is intrinsically procedural" (p.71). Today, we might counter that it is even more surprising how often we forget that *human beings* too can enact procedures – and not only enact them, but also create, change, and argue about them, all with relative ease. As children's folklorist Linda Hughes (1983) puts it: "Games aren't much 'fun' when rules, rather than relationships, dominate the activity" (p.197). Hughes' wisdom, more than just an observation about games, can also be adopted as a conscious design *ethos*. Deliberately low process intensity designs remind us that we need not cede all or even most of our authority to the machine.

To be clear, I don't mean to imply that low process intensity games are categorically "better." There is nothing "wrong," of course, with focusing on the opportunities that computationally-enacted procedures open up for game designers. The problem is that certain formalist theories, in attempting to identify the "essential" qualities of computer games, perpetuate a certain set of normative design values. Even if we accept that computational rules are central to digitally-mediated gameplay, we need not think about the design process in those terms. How we think about (and *don't* think about) games affects the things we make. As such, it is important to challenge dominant value propositions and offer alternative theoretical frameworks.

In contrast to Fullerton's advice to aspiring game designers to look at the world in terms of systems, my experience designing *B.U.T.T.O.N.* and *J.S. Joust* suggests a different starting point: find an activity that's already fun – say, roughhousing your friends or moving in slow motion – and only then work to iterate a game system into the mix. Sometimes, the more rough-hewn the better. The designer's task, in this approach, becomes one of selling the players on this incompleteness, partly by setting the right mood. Seen this way, game design is reformulated as a *motivational* challenge (i.e. how do I convince players to *convince themselves* to act silly?).

The lesson here is straightforward, but bears repeating: there is something crucial that transpires in those *in between* places, where computational systems run up against other media forms and situated practice. Those designers who make the effort to tackle that betweenness head-on may well discover exciting possibilities for the future of digitally-mediated gameplay – a future that is decidedly performative and readily malleable to our improvisational whims. Like Paul Miller (2004) says: "It's the twenty-first century. Things should be really wild. Anything else is boring" (p.25).

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