

Staging Shakespeare in Social Games: Towards a Theory of Theatrical Game Design

Jennifer Roberts-Smith, Shawn DeSouza-
Coelho, and Toby Malone, University of Waterloo

Abstract

This essay discusses the theoretical implications of a recent experiment with game-based social media to increase Shakespeare literacy in eleven to fifteen-year-olds. In collaboration with the Stratford Festival, we aimed to make the gameplay of our pilot, *Staging Shakespeare*, and the social space it generated, experientially theatrical in some way. While the pilot itself was not, in our view, successful, the design process helped us articulate a theory of theatricality grounded in the ontological complexity of theatrical things and the ontogenetic conditions of theatrical environments. Our conclusion is that literal simulations of Shakespeare's plays or of Shakespearean theater production may not be the richest way to teach Shakespeare through social games. Instead, we may need a design theory grounded in the adaptation of theatrical principles to electronic media, and perhaps a new aesthetic and even a rhetoric of gameplay only associatively related to Shakespeare.

Introduction

Staging Shakespeare (Romeo and Juliet Edition) is the working title of the pilot for the first of a suite of Shakespeare-based games planned by the Gamifying Shakespeare project, a collaborative education-outreach initiative of the Stratford Festival (the largest theatrical institution in Canada), the University of Waterloo Games Institute, and commercial game development companies based in Ontario, Canada (including, for this game, Industry Corp.). One of the goals of the larger project is to increase Shakespeare literacy in eleven to fifteen-year-olds through game-based social media, as a means of continuing the Festival's historical role as a developer of future audiences for its own and other theaters' productions. In particular, *Staging Shakespeare* aims to communicate a basic understanding of theatricality: that is, that if you speak words or move bodies or objects in different ways on stage, they mean different things. It also showcases the production history and production values of the Festival in the hope of enticing users to translate their online theatrical experiences

into live, in-person experiences, thereby generating revenues for the Festival. The project's core methodology is to try to meet potential new young audiences in the mediated social spaces they already occupy, such as games and mainstream social media platforms, circumventing the usual hierarchical avenues of family outings and school field trips to develop a community of young theater enthusiasts who have their own direct and independent relationships with the Festival. Our first task has been to design and produce the working prototype for a cross-platform mobile app called *Staging Shakespeare (Romeo and Juliet Edition)*, which, for reasons we discuss here, we have not yet released.

Staging Shakespeare invites players to engage in a mediated analogue for a community of theater professionals: playing as "directors," they virtually stage excerpts of scenes from *Romeo and Juliet* (one of the plays that was in production at Stratford in 2013 during the game's initial development phase); playing as "critics," they review one another's virtual productions. (Future "editions" of the app might market the Festival's seasons and expand players' repertoires by replacing text excerpts and production elements related to *Romeo and Juliet* with assets related to whatever is then playing on stage.) In "director" mode, players move avatars around in three-dimensional models of the Festival's four theaters, using digital renderings of costumes and props held in the Festival's archives and assigning to avatars a limited range of physical gestures. In playback, avatars speak with the pre-recorded voices of Festival actors (see figures 1 through 4).

A "budget meter" determines the resources available in each venue (the gown pictured in figure 2d, for example, is expensive to use). A director's progress through the game is measured by "trophies" earned for scenes staged in each venue (visualized as an emerging pseudo-Elizabethan coat of arms) as well as by a level system that advances players from the smallest through the largest of the Festival's theaters (see figures 5 and 6).

In "critic" mode, players view scenes staged by other directors and assign ratings for four pre-defined categories of achievement on a four-star scale. Players interact with one another within fairly tightly circumscribed parameters, since they generate only numerical ratings, and not commentary, on one another's work, a design choice made to reduce the potential for the negative exchanges so common in unmediated online forums. Instead, depending on the rating assigned, the game automatically publishes a two-part, pre-programmed review statement for each category of achievement, each part having its own potential for pedagogical application. (The first part begins "Shakespeare says . . ." and follows with a tongue-in-cheek adaptation of a quotation from Shakespeare; the second part begins "Critics say . . ." and offers an explanatory statement in modern English). The game then averages and publishes the four category ratings along with another two-part summarizing statement; see figure 7.)

Directors' coat of arms screens display their reviews, but the reviews (good or bad) do not affect directors' progress through the game: good reviews lead to bigger budgets in future "productions," but bad reviews do not prevent directors from staging more scenes. Directors can share their reviews on Facebook if they want to advertise their successes, but once on Facebook, reviews operate principally as publicity for the game (and by extension the Festival), since further interactions are limited to Facebook likes and comments. Staged scenes themselves are stored on the Festival's servers, and access to them is available only by downloading the *Staging Shakespeare* app. Although other social media platforms may be engaged in future "editions" of this or other games, Facebook seemed a reasonable starting place, given the age range of the target demographic for this first prototype. In this iteration of *Staging Shakespeare*, there is no direct path from the game back to the live theater, but the development team has considered a juried competition to which virtual directors could submit sets of virtual scenes and virtual critics could submit short original prose reviews of them; winners would receive tickets to *Romeo and Juliet* or whatever play was featured in the game during the season of that particular edition's release.

As perhaps is to be expected in a collaborative digital tool-development project, the process of designing *Staging Shakespeare* has raised strategic, logistical, aesthetic, rhetorical, and ethical questions enough to occupy more papers than we will ever have time to write. They include, for example: will we sell more tickets by showcasing the Festival directly in this medium, or by just trying to make something cool that will make the Festival seem attractive by association? How will we track sales resulting from gameplay? How do we render the Festival's high material production values in low-resolution images suitable for mobile devices? What should we call things? ("Edition"? "Production"? "Actor"? "Avatar"? "User"? "Player"?) How should we group and sequence gameplay activities? (Set and costumes together? Set and light? Avatar selection followed by costume design or vice-versa? Should you have to direct and critique? Direct, then critique?) How should we represent the Festival's policy of "non-traditional" casting? (Should it be optional for teenagers or imposed by programming? Does it require an explicit, dedicated pedagogical frame?) Is it acceptable to get kids to pressure their parents to buy tickets (in the unlikely event that we should be so successful)? These and other questions have generated extended discussion and have significantly influenced the design of our evolving prototype of *Staging Shakespeare*; their cumulative effect has been to return us again and again to the core pedagogical question of why we are doing this in the first place. What is the nature of the social space that we hope this game will create? To design a game is, after all, to design an experience; what are we asking our players — who will be perhaps only eleven years old and probably not older than

fifteen — to *do together* in the particular social medium of our game, and what do those activities argue and teach about our knowledge and values as they relate to theater?

If the focus of our pedagogy in *Staging Shakespeare* is theatricality, its gameplay — and the social space its gameplay generates — need to be in some way experientially theatrical. The concept of theatricality has, of course, been used to describe various aspects of human-computer interaction since very early on, most visibly perhaps by Brenda Laurel's 1991 *Computers as Theatre*. Many complex games continue to use strategies to engage players that we might think of as analogous to aspects of the theater. The role-playing relationship between player and avatar is the most obvious and ubiquitous example in its analogy to acting. Less common but arguably as theatrical is the analogy to an audience's (rather than an actor's) identification with character in games such as *Heavy Rain* (2010) or *Journey* (2012), where players become affectively invested in non-playable characters with which they can only interact through the "hero" characters they control. The live theater has also been represented explicitly in a range of games and interactive simulations, such as *Façade*'s "one-act interactive drama" (Stern and Mateas 2005) and the *Simulated Environment for Theatre* (SET) (Roberts-Smith et al. 2012; 2013).

Perhaps the most extensive and long-lived simulations of theater in social media have occurred in Second Life, which at one time hosted a number of troupes of performing avatars, including the Second Life Shakespeare Company. Virtual adaptations of Shakespeare have been as numerous there as virtual productions. As Katherine Rowe has observed, the "persistent," "extensible," customizable environment of Second Life is particularly conducive to "creative, public engagement with Shakespeare online" (2010, 59). It has been used as a pedagogical tool for theater studies and even as a means of disseminating the findings of major academic theater research projects, such as King's Visualization Lab's *Theatron3* (2009) at King's College London. The project's reconstructions of lost European theaters occupied Second Life real estate and hosted visiting avatars for several years.

Lastly, theater artists have reciprocally adopted, co-opted, and adapted social media and game structures as means of analogizing digital environments and generating augmented realities: *I Love Bees*, Nine Inch Nails' *Year Zero* (2007), and Improv Everywhere's repertoire (2013) are a few examples. Nonetheless, despite the prolific exchange of analogies among digital and theatrical environments, we have not yet encountered any extended attempt to create or critique digital experiences that aim to analogize theatricality from an experiential perspective; that is, we know of no digital environments that intentionally generate what we would describe as theatrical experiences, nor of any criticism that aims to articulate how a digital theatrical experience — in the way we conceive it, as a social experience — might be accomplished.

Our purpose here, then, is in part to reflect on the pilot digital game we have developed (and in particular on its limitations, since we have decided not to release the game in its current iteration), but also to begin addressing what we can only in all frankness describe as the theoretical vacuum at the core of our design process. We begin with an attempt to define our key concepts — virtuality, theatricality, and the social imaginary — in relation to one another and in a way that helps us to apply them across the media of live theater, digital games, and other aesthetic representations of human experience. We then look to existing digital games for models of the kinds of experiences we hope to generate. We conclude with some speculation about potential approaches to designing social games that facilitate theatrical interactions.

Virtuality, Theatricality, and the Social Imaginary

Although we are conscious that the term "real" and its complement "imaginary" belong in particular ways to the trajectory of discourse reaching from Lacan to Žižek,¹ we are nonetheless going to co-opt them here for different purposes. Their more familiar vernacular usages are convenient starting places for our argument. "Real" for the purposes of this discussion is a means of packaging the dimensional, temporal, material experiences of our everyday lives, which we encounter with our physical senses — external, embodied reality, if you will — *along with* the immaterial, conceptual, perceptual, or affective experiences of our intellectual and emotional senses — internal reality, if you will — and setting those two experiences *against* the virtual, which is a representation of one or the other kind of reality or both, whether fantastical or faithful, usually manifest in or on some kind of non-human material object, like a piece of stone or a book or a computer, but sometimes in or on a human object, as in the case of a tattoo or a theatrical performance. In this conception of reality and virtuality, a sculpture might be a virtual world, and so might the printed words in a novel, or the image in a tattoo, or the gestures in a play, just as fully as the code driving *Second Life* is. The virtual is a representation of human experience expressed through some material medium (e.g., paint, canvas, paper, skin, ink, muscle, voice, metal, plastic, electrons). Any version of the virtual generates a fourth kind of experience (after the material real, the immaterial real, and the virtual): an imaginary — call it fiction, perhaps. We touch, we read, we view, we play, knowing that our imaginative occupation of the virtual worlds we are touching, reading, viewing, or playing is intentional and not real, just as we willingly and actively choose to suspend disbelief when we are auditors of a theatrical performance. The imaginary is intentionally generated by an audience in response to the virtual; it is neither materially nor immaterially real. When an audience that is made up of more persons than one respond together intentionally to the shared experience of a particular virtuality, they might be said to generate together a social

imaginary. To the extent that our *Staging Shakespeare* game occupies electronic social media, it does so in the hope that those spaces can accommodate the kind of social imaginary that is peculiar to the theater.

One of the things that distinguishes theater from other prompts to the generation of the imaginary (other virtualities) is that the theater's representations are created not by inscription, but by instrumentalization. The theater does not record representations on objects for future encounters; instead, it makes representations by using objects (including the bodies and voices of performers) for short periods of time in unusual, unexpected, or contextually incongruous ways. Theatrical virtuality is an activity rather than a thing; the theatrical imaginary is not something we can generate individually by interacting with an inscribed object (touching, looking, reading, turning pages, pressing buttons), but something we do communally by performing and/or witnessing (and contextualizing and interpreting) unusual instrumentalization. W. B. Worthen (2010) has recently described the theater's mode of expressiveness as technological: whereas a tool is designed for a specific purpose, a technology can be co-opted in a variety of social contexts for unexpected purposes. His example is a screwdriver, which can be used as a tool to insert or remove screws, but could equally be used technologically as a toothpick or a murder weapon or a stake for supporting tomatoes without losing its intended functionality as a screwdriver (2010, 21-22). We see the screwdriver's unexpected use as multiplying its ontologies, not only by addition but also by juxtaposition: the space between screwdriver and tomato stake might expand, for example, into a third ontology of metaphorical critique of the relationship between Nature and Manufacture. Because it never loses a function once that function has been established, adding functions to it *sequentially* (as the theater often does with its material resources — kill a vampire with it next, then pick tomato skins out of our teeth with it, still bloody and steaming) amounts to adding functions and juxtapositions *simultaneously*; in technological use, a theatrical entity's ontologies multiply exponentially.

In his commentary, Worthen is talking about theatrical text, of course, but his example of the screwdriver invites the extension we make to any material element that is manipulated in a theatrical production (including light, sound, and human bodies as well as inanimate objects), each of which remains really itself and also enables, through unusual manipulations, the simultaneous imaginative perception(s) of some thing(s) else. The technological nature of theatrical things makes them different from other entities that we might normally classify as media of virtuality. Some other media do generate imaginaries through interaction between their material-real functions and their virtual inscriptions. George Herbert's *The Temple* is an old example of a book of this kind: if I flap the opening at which his "Easter Wings" is printed, I see his wing-shaped text "fly." Jonathan

Safran Foer's *Tree of Codes* is a recent example: if I turn its cut-out pages in sequence, I perceive its textual "codes" "branching" through its empty spaces. But while both of these works function simultaneously and generatively as material books and also as sites of inscription of the virtual, access to their inscribed virtuality still depends upon my using them in the ways in which they were intended to be used. If I do not flap the opening in *The Temple* at which Herbert's "Easter Wings" is printed, I will not see his text "fly"; if I do not turn the cut-out pages of Foer's adapted novel, I will not perceive its branching codes. Similarly, if I use them in unintended ways, they will lose their intended functions: if I eat my lunch off them, for example, I won't be able to read them any more; just as if I eat my lunch off my iPad, I will not be able to play *Staging Shakespeare* on it; or at least — assuming it survives my tuna sandwich — not at the same time. If the inscriptions of these works (*The Temple*, *Tree of Codes*, *Staging Shakespeare*) or their sites (books, iPad) are used in unintended ways, their virtualities are obscured, and consequently their ontologies are diminished rather than multiplied. Because their virtualities are inscribed rather than functional, they are not technological: inscriptions cannot be used unconventionally without losing their virtuality. Material sites of inscription of virtuality — tools for housing virtuality — are not by their nature technologies in Worthen's sense; only instrumental, active, functional modes of expressing virtuality — things in simultaneous use as themselves and as something else — are theatrical modes of virtuality. The theater's virtuality juxtaposes multiple disparate but simultaneous functional realities and (consequently) generates multiple simultaneous imaginaries; the experience of the theater is the experience of multiple, simultaneous, emerging perspectives on human experience.

To extend this principle to the social imaginary: because theatrical imaginaries are traditionally experienced by groups of people in shared spaces, visible and audible to one another, for prescribed periods of time, the participants in its social imaginaries become themselves evolving instruments of the imaginaries as they emerge. Individual audience members are as fully themselves and something else as are performers in this context: reacting or responding to the new experience of a play, I am changed, I see others change, the change in them in turn changes my understanding of them and of the play, performers respond to the changes in us as the performance proceeds, and so on. In this process, the distinction between user and instrument breaks down: theatrical virtualities are generated only by participants and not by things; the relationship between creator and receiver is not essentially mediated by materials; indeed (in its most extreme theoretical expression), the distinction between creator and audience in the theater is moot. Brian Massumi's useful term for this emergent social mode of being is "ontogenesis," by extension of "ontology" as a word (2002, 8); he conceives of ontogenesis as an open-ended sociality, "a sociality without borders," "ontogenetically

'prior to' . . . the very distinction between the individual and the collective, as well as any given model of their interaction" (2002, 9). Indeed, Massumi says, "that interaction is precisely what takes form" (2002, 9). In the emergent social imaginary of the theater, there are no objects and no observers, because everyone is an agent of ontogenetic interaction.

Theatrical Simulation: Gameplay, Game Worlds, and Social Gaming

If the experience of the theater is the experience of intentionally generating multiple simultaneous social imaginaries in response to the technological actions of human agents, you cannot do it on a mobile device. So in what way can an app for a mobile device communicate theatricality? Can we inscribe (since that is what a mobile device can do) even the illusion of a theatrical experience in a game at all? At various stages in the development of *Staging Shakespeare*, we considered and rejected existing models of game-apps, however successful, on the grounds that they more often created the antithesis of a theatrical experience for their users than a theatrical one. The models included games of chance (we experimented with a slot-machine allotment of set and costume pieces that resulted in wonderfully productive incongruities of time, place, and style); games requiring repetitive, expert manipulation of a limited set of controls (in a nod to our then-current, for academics, addictions to *Temple Run* (2011), we tried an applause meter that counted the number of roses vs. tomatoes that a user could "toss" at the stage in a limited time, changing the angle of a slingshot to hit different character avatars); games requiring or teaching a specific, measurable knowledge set (we discussed a pre-programmed "rating" system that would allow the game to assess automatically the quality of a player's simulated production). Entertaining as they were, and (as our commercial development partner, Industry Corp., advised us) as likely to increase the appeal of the game for eleven to fourteen-year-olds, each of these models taught players to learn and operate a narrow set of functions within a closed system. As their expertise developed, players developed a clearer picture of the singularity and limitations of that system's organization. The games were tools (in Worthen's terms) rather than technologies; the ontologies of their gameworlds were circumscribed rather than generative; and the distinctions among creators, audiences, and tools were reinforced rather than broken down. With that last point in mind, we have also seriously reconsidered the forms of "social" interaction that our prototype design encourages: these are principally modes of advertising (self-promotion of players sharing their reviews and the indirect advertising that sharing provides to the Festival); anonymous, reductive forms of valuation (Facebook "likes" and numerical ratings out of four); and competition (an inevitable outcome of review-sharing, even if our proposed formal, adjudicated competition were never run). In short: objects, observers, and ontologies abound in this design, but agents

and ontogeneses are conspicuously absent. On the other hand, we did find some more promising avenues for experimentation in the design of larger-scale, more complex games than mobile apps typically offer. (As a consequence, one of the persistent remaining questions for us is whether we should be working in mobile media at all.) These fall loosely into three categories of what we might call simulation that seem potentially able to communicate illusions of theatricality. The categories are simulation in gameplay, simulation in game worlds, and social gaming.

By simulation in gameplay, what we mean is that the activities available to a player are parallel to the activities available to a theater-creator; in other words, things in the game-world can be used for purposes that were not necessarily foreseen by the game's creators. The term used in game studies for this kind of gameplay is "emergence," since it emerges from the interactions of players with a fairly simple set of rules; emergent gameplay is an exploration of a game-world that is proportionally more open-ended and complex than are the rules that guide it (see Juul 2005). Chess is the classic example of an emergent game; among digital games, *Starcraft* (1998) multiplayer is a real time strategy example; *Call of Duty: Modern Warfare 3* (2011) multiplayer is a first-person shooter example. *Staging Shakespeare* adopts an emergent design strategy to the extent that it permits players to select among and combine a variety of production elements in ways that allow them to express personal interpretations of scenes from Shakespeare's plays. Set pieces and props can be moved around on stage, avatars can be costumed, while blocking, lighting, and sound cues can be changed, text can be cut, and everything "rehearsed" can be played back in sequential "performance"; there is no knowing in advance what choices any individual player will make or what meaning will be generated by them. There are, however, significant limitations to the inventory of options available to players. One consequence of making voice recordings of texts available, for example, is that although players can cut the texts being staged, they cannot change them (we cannot provide new voice recordings by Stratford Festival actors of every new version of a text drafted by players). Another consequence is that vocal execution of the text can be manipulated only in the very limited sense that players can choose from four different voices for their avatars (male/female, older/younger); the four deliveries themselves are fixed. Because the world of our game is limited by the number of choices available to players, it is not experientially theatrical; nor is the world of even the most complex, large-scale, multiplayer strategy game; because it operates in closed systems, emergent gameplay is not theatrical. But to the extent that players do not exhaust the options available to them in a gameworld, emergent gameplay creates the illusion of an open system; the more complex the gameworld, the better the illusion. Theatrical experiences exist in open systems, even if only a very limited number of their infinite possibilities are actually used;

emergent gameplay exists in closed systems, but creates the illusion of an open system by making available a very large number of possibilities.

The second promising form of simulation — simulation in gameworlds — occurs in games whose virtualities simulate multiple levels of reality; these games arguably parallel the experiences of theater audiences. *Assassin's Creed II* (2009) for example, analogizes the co-presence of the material reality of the theater and the fictional reality of the play-world by offering levels of virtual reality, at a temporal and geographical distance from one another, that can be perceived simultaneously inside the game-world. Its players encounter its principal playing arena of Renaissance Italy by means of a fictional machine called the Animus, which taps into the protagonist Desmond Miles's "genetic memory" to allow users to play as Desmond, controlling the actions of the Renaissance ancestors who appear in his genetic past. Desmond's continued present existence is perceptible to the user and to the character of Desmond during gameplay, but not to the characters of Desmond's ancestors. In the much humbler game world of *Staging Shakespeare*, we have attempted to contrast, among simulations of the "reality" of the theater, the "virtuality" of an individual performance and the "imaginary" of the audience's experience. Our "real" objects are explicit representations of the externally-real Stratford Festival: its repertoire, its venues, its archives, and its acting company. Spaces are navigable; objects and avatars are three-dimensional, articulated, and movable; staged text is manifested as sound rather than type. (A key design victory, we thought, was the decision *not* to put un-costumed avatars in tights; they are, instead, in yoga pants and sweats, the way real Festival actors tend to be, backstage before they are costumed.) Players manipulate the simulated "real" to create the simulated "virtual," and in "critic" mode, responses to the simulated "imaginary" are expressed. Both our Stratford Festival and *Assassin's Creed II*'s Animus/Italy incorporate into their virtual worlds differing perspectives on human experience (director/critic; Desmond/his ancestors); but both game worlds remain, nonetheless, hermetically virtual worlds that do not interact with actual reality. In this sense, they may be meta-virtual, offering complex virtualities that invite the contemplation of multiple perspectives; but they cannot be theatrical, juxtaposing contrasting virtualities to create the experience of multiple perspectives. Theatrical experiences multiply ontologies; meta-virtualities create the illusion of multiple ontologies by offering multiple in-world perspectives.

The third promising form of simulation — simulation in social gaming — occurs in games that incentivize collaborative social interactions as means of advancing through the games themselves. The most straightforward strategy is simple content-sharing, as in *Angry Birds: Epic* (2014), which allows players to use friends' stores to power up; or *Geometry Dash* (Topala 2013), which facilitates the movement of gameplay assets (such as avatars' costumes) among players

by unlocking them with Facebook "likes." More sophisticated social content sharing permits the development and sharing of levels of gameplay for others to play (in, for example, *Little Big Planet 3* (2011) or *ModNation Racers* (2012), a design strategy that extends the principles of emergent gameplay to the configuration of the game-world. In that sense, it perhaps provides an analogue for an open-ended system that is social in the theatrical sense of emphasizing the agency of participants (in this case, level designers), although that agency remains individual and depends upon a creator-audience dichotomy. In even more sophisticated social designs, player collaborations are an essential condition for advancement through a game (*Spaceteam* [Smith 2012] is an example), and even of the development of the game itself. In a well-documented example, Valve Corporation's *Team Fortress 2* (2007) extends the collaborative principle to crowd-sourced modifications of the game solicited and delivered by means of Steam, the distribution and social media network developed by Valve to serve its community of players (see Moore 2011); more recently, the Playstation Network has served the same function for *Journey* (2012). While this design strategy does not endow players with the unlimited agency required for ontogenetic interactions in Massumi's terms (since Valve and Sony ultimately retain control of the selection and distribution of modifications to their games), it does characterize players as making meaningful individual and collaborative (if only because curated) contributions to the virtuality of a game; in that sense, the imaginaries generated by the games could be said to be analogous to the collaboratively-generated social imaginaries of the theater. Theatrical interactions are ontogenetic; incentivized social collaborations create the illusion of ontogenesis by curating combinations of individual ontological contributions.

Although the *Staging Shakespeare* design team sees a variety of potential applications of social content-sharing to our existing prototype, the potential affordances of required collaboration and even required collaborative game design seem more germane at this stage to the pedagogical goals of our project. The examples of, *Team Fortress 2* (2007) and *Journey* (2012), in particular, have also extended our working concept of a "social network." That concept now seems to us, on the one hand, less tied to existing public platforms and more available for shaping and definition according to the needs of our project and our constituency of players — and, on the other hand, even if tied to existing platforms, less desirably dependent upon our control. In practical terms, we are now seeking to enable (rather than limit) the agency of our young players in social media spaces. At a minimum, this means that preventing them from commenting on one other's scenes is not acceptable; more ambitiously, we are pursuing a new staging game that requires local (social, but independent of mainstream social media platforms) collaboration among a group of players to stage a production; we are working towards collaborative Twitter performances, improvised by young

people on the basis of their reading of Shakespeare, and un-edited by teachers or Festival staff, in advance of their attendance at Festival productions. A third idea in circulation is a Shakespeare game design camp, during which young people might design and exchange their own theatrical games.

Simulating Ontological Multiplication: Interplay

Although we like to think of our immediate plans for new games and game-related pedagogical activities as elegant recoveries from the design failures of *Staging Shakespeare*, we are also conscious that the most useful outcome of our process so far may be the question of whether literal references to Shakespeare or analogies to the theater need necessarily remain core principles of our designs. There are examples of games entirely unrelated to the theater that arguably simulate the ontological multiplication at the core of theatrical experience better than self-consciously "theatrical" games can. Since this is the most recent and least well-developed part of our design process, it is not yet clear to us how these approaches to game design might be employed in the design of social experiences that characterize players as agents. Nonetheless, we offer the observations that follow here as a gesture in the direction of a new design philosophy that will inform the project's future work.

A shared limitation to theatrical simulation in both gameplay and game worlds is the limitation imposed by digital inscription upon the means of interaction between real player and virtual game. Because digital devices can only respond in the ways they have been programmed to respond to commands issued through their controllers, their virtualities remain hermetic and artificial. The theater multiplies the ontologies of the real by means of functional virtualities; digital media multiply the virtual by means of inscription but do not interact with the real. To our minds, the most effective kind of illusion of theatrical experience would be the illusion of an ontological shift in the real, generated by an interaction between game and player(s). Since the only real element in a digital game with an ontology that can be shifted is its player (the device is a tool; the game is an inscription; only the player has flexibility and, perhaps ironically, agency, since the player can accept the limitations of tool and inscription in order to play), the theatrical illusion in gameplay must be manifest in a shift in the player's sense of herself (or themselves). *Staging Shakespeare* emphatically does not accomplish this (nor do the games we cite above as enabling social agency in their players). For all our well-intentioned pedagogy, it would be entirely fair to say that no player is likely to emerge from our gameplay thinking "something just happened to me." Some games, however, do generate that experience, we think by means of an interplay between gameplay and game world.

At this point, we want to distinguish games that create the illusion of ontological multiplication from games that encourage players to adopt multiple roles, identities, or perspectives. Unlike in the theater, where the roles of actor and audience are (except in very unusual cases) clearly delineated, games frequently offer players multiple options for engagement as audience, actor, and even character. The act of physically engaging with the game's controller makes the player a player in the game world; his agency in the manipulation of an avatar makes the avatar his character and makes him an actor in the theatrical sense; and her witness of the world and its narrative make her the game's audience as well. When, for example, in *Heavy Rain* (2010), a player takes on the role of the game's protagonist Ethan Mars and, in a truly horrific scene, is asked to cut his own finger off, he is placed in the disturbing position of being at once the player-as-agent of that cutting (the player-as-player, as holding a controller), the player-as-cutter (the player-as-actor, playing Ethan), and the player-as-witness to the cutting (audience to Ethan-as-Ethan, as a character existing within a temporal-spatiality apart from that of the player). Complex as the simultaneous occupation of these roles may be — and arguably more complex than any individual is able to experience in the theater — multiple role-playing is not in itself theatrical. Even *Staging Shakespeare* offers multiple role-playing in the opportunity for players to play as directors and as critics (albeit sequentially); but since the roles in *Staging Shakespeare* and other games are predetermined and fixed by the games' inscriptions, they remain hermetic to the games' virtualities. Role multiplication, on the other hand — especially if it is unpredictable, especially if it generates a new imaginary, and especially if it is socially prompted among collaborative game-players — might create the illusion of theatricality.

Two games stand out as examples of the kind of gameplay experience that we might describe as creating an illusion of ontological multiplication; neither of the illusions is socially prompted, but both suggest to us that it would be worth pursuing the application of their design principles as elements of social theatrical games. The first example is *The Last of Us* (2013), an action-adventure game developed by Naughty Dog, which follows protagonists Joel and Ellie as they travel together across the United States of America in search of a cure for the infection that has wiped out most of civilization. Over the course of the game, there are numerous moments in which the player-as-Joel encounters an environmental puzzle common in third-person cooperative (distinct, in our terms, from collaborative) adventure games, namely, a platform too high to pass alone. Whenever Joel reaches such a platform, a trigger pops up on the screen and, when the player presses the designated button, Joel braces against the wall with his hands on his knee, vaulting Ellie up to the platform. Ellie then either struggles to pull Joel up or finds some alternative method of helping him (a ladder, for example). Late in the game, shortly after a particularly climactic sequence in which Ellie brutally murders a man who is attempting to strangle her to death, the player-as-Joel

reaches a platform too high and presses the on-screen trigger, but nothing happens. Joel braces against the wall, hands on his knee, expecting Ellie to come, but she doesn't. Instead, Joel stands upright as the camera rotates toward Ellie, sitting on a bench, clearly distraught. Joel then calls out to her, reminding her tenderly, "Ellie. The ladder, c'mon." The difference between this iteration of the environmental puzzle and the set of conventional iterations that have preceded it represents an attempt on Naughty Dog's part to alter the position of the virtuality of the game world in relation to the material reality of the player's manipulation of the game's controller. It is an unexpected change for the player (albeit a pre-programmed change) in the functionality of the game device, and the disruption it creates in gameplay parallels a disruption in the narrative of the game, drawing attention to an important turning point in the relationship between its protagonists. The user's role as player — her relationship to the game — shifts in that moment in two ways: she is both a more intimate participant in the game world (perceiving an increased intimacy between its protagonists) and also a less powerful agent in the world (since the relationship has advanced as a result of her inability to effect its usual development, growing in spite of her rather than because of her for the first time). She has become not just player, but voyeur. This shift in positionality cannot be described as active on the player's part; but we can imagine a version of this design principle that might be dependent upon players rather than pre-programmed functionalities: if, for example, Ellie were "played" by another player, and if players could affect the affordances that the game offered to other players, players might multiply one another's roles in the game world.

The second, more complex example achieves its illusion of ontological multiplication by means of a similar unexpected functionality in the game's controller. *Brothers: A Tale of Two Sons* (2013), developed by Starbreeze Studios, follows two brothers as they venture out into the world to find a cure for their father's mysterious sickness. During the game, the player controls both brothers simultaneously using half the controller for each brother. The player-as-brothers solves puzzles to progress through the game, including the same platform puzzle as appears in *The Last of Us* (in this case, the younger brother is vaulted by the older brother). Unlike in *The Last of Us*, however, in this game's climactic battle (between the brothers and a woman-as-generically-predictable-siren), one of its protagonists, the older brother, dies. At this point, the player expects the half of the game's controller that has been used to manipulate the older brother to lose its functionality, but it does not. On the contrary, in a gesture opposite from the shift made in *The Last of Us* (continued functionality rather than disrupted functionality), the controller remains active to the point that, when the player-as-younger-brother once more encounters the persistent platform puzzle, the player must use the older brother's half of the controller in order to pass it. In combination, these shifts in the game play and the game world of *Brothers: A Tale of Two Sons* —

continued control functionality without a visible controlled entity, the death of a central character in the game's narrative, the ironic continued necessity of the dead character's agency in order to advance game play — effectively change the real player's positionality in relation to the virtual world of the game. His role of player-as-player is disrupted by the unexpected behavior of the controller; his role of player-as-actor is changed from player-as-acting-two-characters to player-as-acting-one-character (increasing his identification with the single remaining character); and his perspective as player-as-witness to the game world is changed because the rules of the world have shifted from emphasis on the operations of external, material reality (it takes two brothers in cooperation to cross a high platform) to emphasis on, perhaps, internal spirituality (it takes me and the knowledge of how my brother helped me to cross a high platform).

In *Brothers: A Tale of Two Sons*, the contrast between the player's positionality before and after the narrative moment of the death of the older brother is exaggerated by the surprise of the continued functionality of the older brother's side of the controller; and both sides of the contrast (before and after) are also kept simultaneously alive by the continuing functionality of the controller to do things the now absent brother avatar used to do, a continuing reminder of his earlier presence. This is a simultaneous juxtaposition of positionalities rather than ontologies, but it nonetheless generates one of the outcomes of a theatrical juxtaposition, in the sense that in the space between the player's before and after positions, a third positionality opens up, in which the player is invited to make an interpretation. Our experience of playing *Brothers: A Tale of Two Sons* is that before the older brother's death, it was a quest, arguing through narrative that finding things matters; after, it was a relationship, illustrating through affect that people matter. The contrast between those two perspectives on human experience was a commentary upon our ironic misplacement of priorities. In the unexpected interplay between game play and the game world, we as players felt that something had happened to us. Beyond role multiplication, whether pre-programmed or (in our imagined game environments) prompted by other characters, the design of *Brothers: A Tale of Two Sons* also suggests to us that the core element of what we want to call theatrical game design might simply be a system that rewards the subversion of players' expectations by other players. *Brothers: A Tale of Two Sons* creates the illusion of an open system in the meaningful surprise it offers its players; could we design a game that incentivizes meaningful surprise? In a multiplayer game, how might those incentives be collaborative rather than cooperative or competitive?

Coda: Staging Shakespeare in Social Media?

If the existing prototype of *Staging Shakespeare* can make any claim to engaging reality, it does so in its engagement of existing social media platforms, in which, it might be argued, real

players engage one another in a limited way. When we were developing the game, we saw the functions of sharing and reviewing virtual productions of scenes as simulations of the communal exchanges among theater creators and theater audiences, and ways of breaking the hermetic seal of the virtual world we had inscribed. In retrospect, however, reflecting upon the illusions generated by what we have been calling the "interplay" between the systems and the fictions of games — between gameplay and game worlds — we no longer think of existing social media platforms as necessarily the most promising media for generating the illusion of theatrical experience. Interactions on Facebook, Twitter, Tumblr, and Instagram are certainly performative (insofar as they enable public, constructed self-representations) and interactive (because performers can exchange representations, alter one another's representations, even collaboratively author representations); but they are not theatrical because they so narrowly limit the virtual worlds they inscribe. At their richest, social media experiences might be analogous to emergent gameplay; at their least rich, they are as deterministic and ethically questionable (at least from the point of view of theater pedagogy) as the simplest "push-a-button-repeatedly" apps.

In hindsight, we would like to suggest, very tentatively, that an understanding of theatricality that is grounded in Worthen's theory of the technological nature of theatrical things and Massumi's theory of ontogenesis might be a useful way to approach social pedagogical game design, in Shakespeare studies in particular and in theater studies more broadly. Our own experience as game designers and game players leads us to the conclusion — and this will not be at all surprising to Shakespeare scholars — that literal simulations either of Shakespeare's plays or of Shakespearean theater production may not be the richest ways to teach about why Shakespeare matters at all. Instead, we may need a design theory grounded in the adaptation of theatrical principles to electronic media, perhaps a new aesthetic and even a rhetoric of interplay only associatively related to Shakespeare, of the kind we see emerging in games such as *The Last of Us* and *Brothers: A Tale of Two Sons*, in order to offer the next generation of our students an experience rich enough to represent our values. If the theater matters pedagogically, it matters because of the peculiar forms of ontological and ontogenetic richness that theatrical experiences offer (by contrast to their much more often recognized and, in our view, less important affectivity); because theatrical experiences have embedded in their ontologies more than one perspective upon their identities; and because creators and audiences alike are agents of those emergent perspectives. Those things seem more likely to manifest in the frame of a new, aesthetically and theoretically informed approach game design than in our first attempt — however well-intentioned — to wrestle Shakespeare into the limited conceptions of gaming and social media with which we had begun.

Credits and Acknowledgments

Game development:

- *Concept:* Jennifer Roberts-Smith and Andrew Matlock. Design, text, artwork, and programming: for Waterloo: Jennifer Roberts-Smith, Shawn DeSouza-Coelho, Toby Malone, and Neil Randall; for Industry Corp.: Andrew Matlock and Rani Lian; for the Stratford Festival: Anita Gaffney.
- *Avatar voices:* direction: Dean Gabourie; performance: Shauna Black, Ian Lake, Tyrone Savage, Abigail Winter-Culliford, and Jonny Woolley.
- *Research assistance:* Shawn DeSouza-Coelho.

Thanks also to Andrea Gammon, Director of Education, Stratford Festival; Francesca Marini, Former Director, Stratford Festival Archives; Stan Ruecker, Associate Professor, Institute of Design, Illinois Institute of Technology; John Tiggeloven, Director of Production, Stratford Festival; Michael Walton, Lighting Design, Stratford Festival.

This research has been supported by the Social Sciences and Humanities Research Council of Canada, the Stratford Festival, and Mitacs.

Notes

1. For relatively concise explanations of the ways in which Lacan and Žižek employ these terms, we recommend Žižek 2008, 190-94 and Žižek 2007, 145-46.

References

- Angry Birds: Epic*. 2014. Chimera Entertainment. Munich: Rovio Entertainment.
- Assassin's Creed II*. 2009. Ubisoft Montreal. Montreal: Ubisoft Montreal.
- Brothers: A Tale of Two Sons*. 2013. Starbreeze Studios. Stockholm: 505 Games.
- Call of Duty: Modern Warfare 3*. 2011. Infinity Ward and Sledgehammer Games. Woodland Hills: Activision Publishing.
- Foer, Jonathan Safran. 2011. *Tree of Codes*. London: Visual Editions.
- Heavy Rain*. 2010. Quantic Dream. Foster City: Sony Computer Entertainment America.
- I Love Bees*. 2004. 42 Entertainment. Redmond: Microsoft Game Studios. Available online: <http://ilovebees.com> [accessed 22 February 2013].
- Improv Everywhere. 2013. "Improv Everywhere: We Cause Scenes." Improv Everywhere. Available online: <http://improveverywhere.com/> [accessed 22 February 2013].
- Journey*. 2012. Thatgamecompany. Los Angeles: Sony Computer Entertainment.
- Juul, Jesper. 2005. *Half-Real: Video Games between Real Rules and Fictional Worlds*. Cambridge: MIT Press.
- King's Visualization Lab. 2009. *Theatron3*. King's Visualization Lab, King's College London. <http://cms.cch.kcl.ac.uk/theatron/> [accessed 10 February 2012].
- The Last of Us*. 2013. Naughty Dog. Santa Monica: Sony Computer Entertainment.
- Laurel, Brenda. 1991. *Computers as Theatre*. Reading: Addison-Wesley.
- Little Big Planet 3*. 2014. Sumo Digital. Sheffield: Sony Computer Entertainment.
- Massumi, Brian. 2002. *Parables for the Virtual: Movement, Affect, Sensation*. Durham: Duke University Press.
- Media Molecule Blog. 2013. Media Molecule. Available online: <http://www.mediamolecule.com/blog> [accessed 30 March 2016].
- ModNation Racers*. 2010. United Front Games. Vancouver: Sony Computer Entertainment.
- Moore, Christopher. 2011. "Hats of Affect: A Study of Affect, Achievements and Hats in *Team Fortress 2*." *Game Studies* 11.1: 1-14.
- Roberts-Smith, Jennifer, Shawn DeSouza-Coelho, Teresa M. Dobson, Sandra Gabriele, Omar Rodriguez-Arenas, Stan Ruecker, Stéfan Sinclair, Annmarie Akong, Matt Bouchard, Marcelo Hong, Diane Jakacki, David Lam, Alexandra Kovacs, Lesley Northam, and Daniel So. 2013. "Visualizing Theatrical Text: From Watching the Script to the Simulated Environment for Theatre (SET)." *Digital Humanities Quarterly* 7.3.

- Roberts-Smith, Jennifer, Shawn DeSouza-Coelho, Teresa M. Dobson, Sandra Gabriele, Omar Rodriguez-Arenas, Stan Ruecker, and Stéfan Sinclair. 2012. *Simulated Environment for Theatre*. Version 2. Available online: <http://humviz.org/set> [accessed 29 March 2016].
- Rowe, Katherine. 2010. "Crowd-sourcing Shakespeare: Screen Work and Screen Play in Second Life." *Shakespeare Studies* 38: 58-67.
- Second Life*. 2003. San Francisco: Linden Lab.
- "The SL Shakespeare Company." 2007-2008. Available online: <http://slshakespeare.com/> [accessed 14 May 2014].
- Smith, Henry. 2012. *Spaceteam*. Available online: <http://www.sleepingbeastgames.com/spaceteam/> [accessed 2 April 2016].
- Starcraft*. 1998. Blizzard Entertainment. Irvine: Blizzard Entertainment.
- Stern, A., and M. Mateas. 2005. *Façade*. Available online: <http://www.interactivestory.net/> [accessed 11 January 2011].
- Team Fortress 2*. 2007. Valve Corporation. Bellevue: Valve Corporation and Electronic Arts.
- Temple Run*. 2011. Imani Studios. Raleigh: Imani Studios.
- Topala, Robert. 2013. *Geometry Dash*. Sweden: RobTop Games.
- Worthen, William. 2010. *Drama: Between Poetry and Performance*. Malden: Wiley-Blackwell.
- Year Zero*. 2007. 42 Entertainment. Burbank: 42 Entertainment. Available online: <http://yearzero.nin.com/> [accessed 22 February 2013].
- Žižek, Slavoj. 2008. *The Sublime Object of Ideology*. London: Verso.
- Žižek, Slavoj. 2007. *The Indivisible Remainder: On Schelling and Related Matters*. London: Verso.