Uganda’s Road to Peace
May Run through the River of Forgiveness:
Designing Playable Fictions to Teach Complex Values

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ABSTRACT

While gaming technologies are typically leveraged for entertainment purposes, our experience and aspiration is to use them to encourage engagement with global, politically-sensitive issues. This chapter focuses on our game design concerning the struggle of Uganda, a design that allows players to experience the atrocities and inhumane conditions and, by illuminating such values as peace and justice, helps them more generally to appreciate the moral complexity of a humane intervention. Rather than theoretical constructs to be debated in the abstract, the ethical struggles involved in determining a humane intervention in the game setting are grounded in different Non-Player Characters’ perspectives and operationalized within the underlying game dynamics. Beyond reporting on the designed game, the chapter draws the reader into the struggles of designing such an ethically contentious game.

KEYWORDS

curricula, design, designer, ethics, fiction, game, identity, immersion, interactivity, learning, play, player, role, story, storyline, values, videogame

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INTRODUCTION

One of the most persistent problems of this period is how to reconcile conflicting goals in the aftermath of severe criminality…. The regime responsible for crimes against humanity or genocidal behaviors [remains] as part of a bargain by which its impunity was “purchased” in exchange for its voluntarily relinquishment of power (Falk, 2000, pp. 24–25).

The violence committed by the Lord’s Resistance Army (LRA) for over 20 years on the Acholi people of northern Uganda has resulted in the death and displacement of millions, and left countless others mutilated, raped, or enslaved as child soldiers (Eichstaedt, 2009). Reports suggest that torture continues to be practiced among security organizations, including the arrest and beating of opposition members of Parliament (Central Intelligence Agency, 2008). In 2007, the President of Uganda, Yoweri Museveni, requested support from the International Criminal Court (ICC), which then issued arrest warrants for top LRA leaders. However, a year after the warrants were issued, Museveni offered the LRA amnesty in exchange for an initial ceasefire and eventual comprehensive peace agreement—despite the fact that the warrants were issued at Museveni’s request. This example highlights the tension between seeking peace and attaining justice. Ugandan human rights lawyer Barney Afako argued that seeking justice through the courts will prolong violence, stating: “Justice needs to be justified in terms of lives,” adding that “the [international] criminal justice system is isolated from the moral consequences of its intervention” (“Quotes of the Week,” 2006). Others, however, maintain that peace is dependent on justice, as only through attaining justice can there be reconciliation and rehabilitation (Falk, 2000).

A core question illuminated in this chapter is how these particular dilemmas and the underlying universal struggles that they involve might be translated into game play. More generally, we are interested in how to leverage videogames to engage citizens in challenging situations so that they can appreciate the ethical and moral complexities of social issues while experiencing the problem in a personally-relevant way. This challenge—to structure engagement with issues in ways that both address their complexity and bear relevance beyond the specific context—is what we regard as central to our work as designers of games. To tease out these challenges, we use the complex case of Uganda. Solutions to Uganda’s situation that are prominently advocated by the international community and in human rights statements have emphasized the need for justice to achieve peace, as if this were a universal truth. Such a perspective, that peace is dependent on justice being enforced, is regularly adopted regarding global justice more generally (Falk, 2000). However, as one inquires deeper into the local phenomena, which in this case is the Ugandan story of justice, the accepted disciplinary “truths” become complexified (Hannum, 2006). Indeed, as our design work advanced, we examined more perspectives and even talked with local Ugandans, and such lofty statements became less useful, compelling us to question whether peace in Uganda is necessarily dependent on justice being enforced.

Such grounded engagement with any theoretical claim, shifting from general platitudes to specific instances, is necessary not only for the struggles of Uganda and the tension between peace and justice but for other concerns as well. The hesitation to accept such a ready-made solution as the correlation between justice and peace and, instead, the patience to discern an emergent solution, synthesized from alternative perspectives, represents a sophisticated and adaptable approach to a wide range of important problems. It reveals aspects of Uganda’s struggles not previously appreciated and offers, if not a path to their...
resolution, then at least a step toward that path. And to consider the Ugandan context from this perspective equips one with the experience of engaging complex issues in a manner bearing relevance to all walks of life. Our work is predicated on the belief that contemporary videogames can afford such forms of engagement: they constitute complex, ideological worlds in which players can work individually and in large groups to engage and overcome sophisticated challenges (Barab, Dodge, Ingram-Goble et al., in press; Squire, 2006). Being narratively elaborate yet capacious, thus inviting players’ own elaborations, they allow the player to take on roles that might not be accessible in their everyday life, and in the context of these roles, players make decisions and experience the consequences as they unfold in the designed world of the game (Barab, Gresalfi, Dodge, & Ingram-Goble, 2010).

This chapter focuses on our game, The River of Justice, which centers on the struggles of Uganda by embedding the player in the fictional, virtual world referred to as Bunala. The game was designed to help players to experience the atrocities and inhumane conditions of that country and, by illuminating such values as peace and justice, help them more generally to appreciate the moral complexity of a humane intervention. Game play begins in the briefing room of a company that has been commissioned to advance a recommendation regarding how to proceed with the Bunala situation, specifically the Liberation Resistance Movement or LRM (a fictionalized LRA). The player’s character, a freelance investigator, represented in the three-dimensional world as an avatar, is required to travel to in-game villages where they talk to local Bunalia and determine which response to the LRM is most appropriate: amnesty, justice, or forgiveness (see Figure 1 for an illustration of the virtual world, the dialogue of a game character, and the player game meter). Using their keyboard, the player moves their in-game avatar around a three-dimensional world, unlocking different villagers and talking to different types of people in the fictional world by clicking on them, listening to what they have to say, and choosing responses from a menu of choices. The implicit objective of the game is to raise the Satisfaction level of most Victims (unless they are resentful, desiring Justice), and to lower the Satisfaction level of most Perpetrators (unless they can be redeemed through Forgiveness). The explicit outcome is to recommend a decision to the fictional ICC, with the player’s in-game boss judging the alignment between the recommendation and particular game play interactions and choices.

Beyond offering a simulation of the conditions and struggles, which might draw upon arrays of factual data to show and speculate the outcomes of a user’s actions, our goal with the game is to situate the player as a decision-maker immersed in the dramatic setting, enmeshed in its tangle of possibilities and consequences. To illustrate, at one point in the game discussed further below, the player meets a member...
of the rebel army and must decide whether the member’s actions were born of necessity, thus warranting their forgiveness and rehabilitation, or of choice and desire, thus demanding justice to achieve long-term peace—in short, demanding their death. More than a theoretical question, the game forces the player to commit to a decision and, in the subsequent scene, directly witness the consequences of their choice, thus making salient the player’s own beliefs and biases instantiated as irrevocable outcomes.

Given our emphasis on dramatic agency (Murray, 1997) in which the player actions in part determine how the game story unfolds, we refer to our game designs as playable fictions. Playable fictions are interactive stories in which one is positioned as a protagonist who makes game choices that have consequence in the fictional world. The design of any playable fiction involves defining a storyline as well as the game dynamics that make game play challenging and enjoyable. For a playable fiction concerning an actual and politically-sensitive event, the design challenges involve choosing which aspects of the narrative to fictionalize, and doing so in such a way that the design affords an experience that is pedagogically-illuminative yet narratively coherent. Additionally, for the designers to operationalize their own beliefs and biases into a narrative rule set (i.e., decision X causes outcome Y) requires a defensible commitment. That is, because the actual game choices serve to reify the designers’ beliefs, those beliefs must be scrutinized and found to provide a valid platform upon which to base the gameplay. For example, it is one thing to argue that ends justify means, yet quite another to force the player to sacrifice a Ugandan child if she is to save a larger number of people and possibly bring an end to the atrocities.

In this chapter, we discuss *The River of Justice* so that others can consider the process and problems we faced in reifying the Ugandan situation into representative characters, proxy variables, interactive rule sets, unfolding plotlines, and other design decisions. First we discuss our design methodology, including outlining the affordances of fictionalization and of playability. Next, we analyze the game design, providing details that illuminate the design problems, decisions, and solutions. Finally, we explicate the lessons that we learned through the design work and that want to share with others.

**THE EDUCATIONAL AFFORDANCES OF PLAYABLE FICTIONS**

While considered by some as mere amusement, videogames are becoming critically recognized as sophisticated vehicles for participation, including academic and civic engagement (Jenkins, 2008; Lenhart, Kahne, Middaugh, Macgill, Evans, & Vitak, 2008). In many contemporary videogames, players do not simply click buttons without thinking, but instead engage rich narrative storylines and employ complex discursive practices and problem solving strategies as they come to master and appreciate the underlying game dynamics (Barab & Dede, 2007; Gee, 2003; Shaffer, 2007). In fact, scholars have been documenting the discursive richness, depth of collaborative inquiry, complexity of game play, opportunities for consequentiality, rich perception-action cycles, exploration of situated identities, and sophisticated forms of learning and participation that can occur during game play (Barab, Gresalfi, & Arici, 2009; Gee, 2003; Shaffer, 2006; Squire, 2006; Squire & Jan, 2007). Videogames can stimulate rich forms of participation that enlist membership and identity in ways that often occur only in advanced curricular designs, story books, or other media (Murray, 1997).

Central to our work is the conviction that through game play, one can be experientially situated within a space that entwines real with fictional details, and authentic with playful activities, to embed the player
and the subject matter within an engaging and dynamic context (Barab, Gresalfi, Dodge, & Ingram-Goble, 2010). An important component, and one highlighted in this chapter, is their power as playable fictions, that is, a story to be realized or completed through the act of making choices and solving play tasks that co-determine with the designer how the game narrative will unfold for a particular player. In this way, playable fictions can position the learner in a consequential role that personalizes the narrative challenges, affording players an investment in the situation and responsibility for the direction of the narrative. Gee (2003) hypothesized that while playing a videogame the player develops a hybrid identity that is part real player making decisions, and part in-game character executing those decisions and part player-character as the real player reflects on themselves as people who make decisions that cause particular game character and world outcomes. This dynamic, in which the player and the context co-define each other and evolve together through meaningful inquiry, epitomizes Dewey’s (1938) notion of transactivity, or how “every experience enacted and undergone modifies the one who acts and undergoes…for it is a somewhat different person who enters into them” (pp. 35). As Vygotsky (1978) argued, through play one can act a head above oneself, with play providing an effective scaffold for expanding one’s zone of proximal development, that is, for understanding more than one could understand by oneself.

As Gadamer (1976, p. 112) argued, when playing a game, one is “playing out oneself” or, at least, an extension of one possible self. Play invites us into an experience that plays us, affording particular actions and at the same time leaving us as one who has realized these opportunities in a particular way. By being playable, our pedagogical designs contextually bind the learner and content affording a sense of intentionality, legitimacy, agency, consequentiality, accountability, and reflexivity (Barab, Dodge, Ingram-Goble, & Gresalfi, 2010; Barab, Gresalfi, & Arici, 2009). This is in part because the designs position the learner as a first-person protagonist doing epistemological work on the context by allowing the player a sense of dramatic agency in terms of the underlying narrative (Murray, 1997). Such a design involves a curricular context that is less a set of information to be acquired and more a world to be played. Learning in such dynamic environments becomes a way of seeing the world or of being in the world (Thomas & Brown, 2006), one that requires enlisting general concepts and understandings (e.g., justice, amnesty, and forgiveness) as tools for considering, determining, and ultimately transforming particular storylines, and this, in turn, can foster deep understanding of complex and value-rich domains.

Videogames can enable players, even if they are novices in a subject area, to recognize its complexity through engaging with it in a personally meaningful way. The player’s regular life largely precludes such engagement for a host of reasons: for instance, the object of inquiry may be abstruse or precious; the procedures may be uncommon, complicated, or objectionable; the outcomes may be offensive or dangerous; and so forth (Frasca, 2000). In contrast, videogames can be structured around an issue to, in essence, constitute an ideological world that establishes a rich context for participation and learning (Squire, 2006), including learning of ethics, and invites the player to adopt hybrid roles in that world neither limited to nor divorced from the player’s natural sense of self (cf. Gee, 2003). Leveraging the power of videogames, we have been designing pedagogical worlds that deliberately foster a sense of agency and explicitly present educational tasks, pedagogical scaffolds, social interactions, and reflective moments to support meaningful learning about significant issues (Barab, Jackson, & Arici, 2004; Barab, Thomas, Dodge, Carteaux, & Tuzun, 2005; Barab, Sadler, Heiselt, Hickey, & Zuiker, 2007).
Such work combines literary techniques, game principles, and academic pedagogy to achieve narrative cohesion, immersive experience, academic utility, and meaningful play. The types of virtual worlds we create are educationally valuable and socially meaningful because they are designed such that the solving the embedded problems require that players enlist conceptual understandings to make effective choices (Barab, Gresalfi, and Arici, 2009; Barab, Zuiker et al, 2007). In our design work, the most important pedagogical utility derives not from the hard affordances of videogame technology such as multisensory immersion or instantaneous interactivity, but from the soft ones like hybrid roles, emergent challenges, and unfolding storylines. These affordances can be conceptually organized in a way that, while not suited to all domains, helps to guide designs for teaching values. As playable fictions, videogames entail two families of affordances conducive to scaffolding experience with values: fictionalization and playability.

Both the technology and the culture of contemporary videogames allow for designs that afford one the opportunity to play through fictions in a way that does not necessarily place game play and storyline in conflict. By fictionalization, we mean the process of turning particular content into a story that, while sometimes featuring veridical elements, involves imaginative or even fantastical ones across the domain of the story, including its setting, characters, and dramatic conflicts. The fiction in a game responds to the player’s directions yet must be designed to retain integrity and cohesion; it accommodates the player’s projection yet bears specificity and nuance; it resonates with the player’s experience yet suggests widespread and enduring wisdom (Calvino, 1999; Gee, 2003; Murray, 1997). Fiction and play each serve to shelter the experience as a space with specifications that structure both the fiction and the game play. Through fictionalization, we are able to design with pedagogical liberty about issues that have political sensitivity, ethical subjectivity, and interpretive contestation while still ensuring intrinsic fidelity and projective capacity.

The context entwines real and fictional elements designed to embed the learner and the curricular content within a complex and credible situation. This embedding occurs, in part, because of the player being positioned with dramatic agency in making choices that influence the direction of the story and that make apparent to the player his or her own biases. However, the field of game design has not established best practices and we have limited powerful exemplars regarding how to illuminate political events and contested histories, foster appreciation of what transpired, and position the player to struggle with the underlying ethical decisions that arise during these moments. In using games to complex ethical struggles without simplistic answers, the game designers must confront both pragmatic confounds and theoretical tensions and accordingly must pose many design decisions as conjectures to be tested through actual game play. Choices regarding how to fictionalize the history or operationalize the values reveal as much about the designer’s biases as about the phenomena being illuminated.

In the next section, we show how our ethical biases became reified as we made choices on what aspects to include in our virtual world, in terms of what tasks the player would be expected to engage, and in deciding what outcomes would result from particular actions. Toward this end, we describe our designed game (see a multimedia presentation at http://ijlm.net/knowninganddoing/10.1162/ijlm.2009.0023; Barab et al., 2009), occasionally inserting meta-reflections to illuminate the struggles we went through in building this game and the power of playable fictions for teaching ethics.


**RIVER OF JUSTICE OVERVIEW**

**Setting the Stage**

The player, after choosing his or her gender’s avatar and other features, begins in the lobby of a company named A Just World, which has been commissioned by the ICC to advance a recommendation regarding how to proceed with the situation in Bunala, a country wrought with civil strife and violence. Here, she takes on the role of a freelance investigator and is briefed on the assignment by Timothy Deckard, an experienced field agent who is also the boss:

> Glad to hear it! Let’s get you through this thing. First, have a look at some documents. There’s some general information about the situation here, as well as some letters from some Bunalan citizens. More importantly, you’ll see how the Bunalan government cried for help but then tried to call it off. That’s a no-no. You’re required to read them, but you and I both know the real information is on the ground.

Examining the company documents, the player learns about the severity of the crimes occurring in Bunala (a fictionalized version of Uganda) and gains additional background that justifies the ICC arresting a number of members of the Liberation Resistance Movement (LRM, a fictionalized version of the LRA). For example, the player reads a newspaper article on the discovery of a mass grave that was attributed to the LRM and another article asserting that the LRM is responsible for killing thousands of citizens and for kidnapping children and raping women, with estimates of 1.4 million internally displaced persons (see Figure 2 for an example of the fictional newspaper they engage). Likewise, the player reads a letter from an ex-LRM member who was forced to kill his family to preserve his own life. Statements from Bunalan citizens, official letters, and other documents all help the player understand the current assignment.

*Figure 2.* Screen shot showing one of the fictional news documents that the player interrogates in the game.

To help the player understand his assignment, Timothy recounts stories from other engagements in which A Just World failed to deliver swift justice, resulting in genocide. Thus, he emphasizes the importance of company policy and impresses upon the player, as a company representative, to consistently advocate justice.

Timothy explains that one’s field reputation reflects how legitimate the player’s philosophy is, based on one’s consistency of advocacy. For example, if in the end of the game the player recommends amnesty but has been consistently advocating and making choices in dialogues with game characters that reflect justice, Timothy comments on the apparent disconnect. The player’s Advocacy is a game score comprised of several values and displayed in a meter in the sidebar beside the virtual space. Timothy also urges the
player to quickly pass the company exam so that the player can enter the field and collect the interviews necessary to justify bringing in the military and securing the arrests. Soon after the player starts the first mission, he and his colleague, Teresa (a non-player character, NPC) are sitting in the back of a truck driving to where they can interview locals, but is attacked by the guerilla army.

They are captured by the LRM, and the player begins to experience first-hand the cruelty and complexity of the situation. This is initially done through a series of dialogue bubbles with cut-scenes, presented as hazy memories, informing the player that he is regaining consciousness. While previous game play usually took place in the virtual window where the player had some agency of what they focused on in the scene, in this moment and a few other occasions, player-driven game play is interrupted with the presentation of cut-scenes, or sequences of still images based on actual photographs germane to the game narrative. Commonly used in videogames, cut-scenes can provide plot or character development or backstory information, and they are used in this way in River of Justice. Here, the cut-scene conveys the physicality of the wreckage and the extent, in terms of both distance and time, of the abduction, all in a manner that might be less manageable and effective if transpiring in the virtual space as part of a playable scene. Further, by divorcing the scene from the space and flow of game play, cut-scenes shift the player from an active to a reflective stance and by thus positioning the player once again as a witness, cut-scenes can reclaim the reality and poignancy of the story content that may be neglected during game play.

As the cut-scenes stop, the player experiences being held captive in a roughly-built shack, bare, apart from an interrogation chair and other prisoners (see Figure 3). Teresa, also in the room, informs the player that they have been prisoners for three days. Appearing bruised and with ripped clothes, she hints at the harrowing experiences that she underwent while the player’s character was unconscious, including physical and sexual abuse. She becomes quiet when a teenage boy, Mukasa, enters the detention room.

Figure 3. Screen shot depicting NPCs in a prison cell.

Mukasa is an LRM guard, and he approaches the player’s character, stating, “I have brought you some food, my friend.” The player is given a list of choices that reflect choices of how to respond:

a) Please, please let me go. I just want to go home.
b) Thank you. [Take food.]
c) [Say nothing and refuse food.]
As a non-player character (NPC) programmed by the design team, Mukasa responds in one of three ways, depending on what the player chooses above:

a) This is your home now. You are with the LRM. Your life is their life. You come with me now, we have much work to do. You must pay us back for this delicious food and the warm shelter.

b) You are most welcome! Food is the least of the many benefits of being in the LRM. Please, bring your food and come with me. There is much to do! If you do good, you will get more good stuff.

c) You do not want our hard work to make your food and give you shelter? That is not good, my friend. Come with me. There is work to do. Maybe if you do good, I will not tell the Captain that you were rude. The Captain hates rude people. If you keep that attitude, he might not let you join us.

In this way, the NPCs treat the player’s character in differing ways, depending on the player’s choices. Similarly, in a later scene, the captive player wakes to witness a young boy who has his hands and feet bound by tight rope. Mukasa tells the player, “You meet this boy. His name is Bale. We caught him stealing food from our stores.” The player has two available responses:

a) What are you going to do to him? Just leave him alone!

b) He’s just a child. Let him go or…!

If the player chooses option (b), the Justice value of the Advocacy meter increases. Mukasa’s programmed response follows:

a) Oh, but no. To let him go would not be good for us. In Bunala, if you do not show your strength, people will take from you. No. We cannot let that happen. You will help us teach him a lesson today.

The player could reject Mukasa by replying, (a) “I won’t help you! If you hurt him, I’ll make sure you die when they rescue me!” But, with the goal of self-preservation and with hopes to avoid further bloodshed, the player can instead choose to respond, (b) “I understand. Just don’t hurt me. What do you want me to do?” Upon choosing this response, a meter is then revealed to the player and he or she may notice the Amnesty value of the Advocacy meter increase. Mukasa then responds with the second of the two programmed responses:

b) You will shoot this thief with my own gun. If you do not, we will do it anyway. But we will do more, too. We will shoot two other prisoners. Maybe you will pick them for us. Then we cut off this girl’s hand. You will watch us do this. After that I will offer you my gun again. If you still do not shoot her, then we start over with two more people and the other hand. Or, you can punish her like I say. We maybe even spare another prisoner that you choose who has done us wrong.
Here, again, a cut-scene is used, as the virtual world is replaced with a series of images depicting the player shooting the boy. We chose to use a cut-scene here to prompt a reflective moment, to make the player stop and reflect on the decision not simply in terms of the videogame, but by divorcing the scene from the flow and by using more realistic images the consequences of the in-game decision are given enhanced significance. In an interview with one player, she stated:

The feeling of helpless rage which that scene engendered in me completely changed the way I view my personal values... you might say it transformed my sense of self and the world... I am no longer so smug in my feeling of moral superiority... and I will never forget that in the end my values didn’t protect me from being forced to take an intolerable action.

Such uses of cut-scenes serve to deliver particular content with an authenticity not easily afforded by immersion in the virtual space. While this scene might seem extreme, it is in fact consistent with the horror of the events being fictionalized.

However, and quite germane to this chapter, it is not simply the horror that our game is designed to illuminate. Rather, our goal is to embed the player in the complicated ethical struggles that the rest of the world has undergone in deciding whether to take action on the nation’s behalf. Reflecting on the Uganda situation and on political violence more generally, one might argue that unless justice is served, countries like Uganda will never have peace. In fact, as one reads about the atrocities or witnesses the thousands of dead bodies and vacant eyes of kidnapped children, it is hard not to desire justice. As educators and game designers, it was this message that we initially wished to share, but it was also our commitment to help the reader appreciate the complications of such a simplistic conception in practice. Consider, for example, this interaction between the player and an NPC, Bacia, midway through the game. Bacia is the mother of a Bunalan family; her husband was killed by the LRM, her nephew was kidnapped, and her son is bitter with vengeance. She is angry but also weary of the suffering, and she simply wants to salvage what is left of her family. Bacia says,

You think I want it this way? I am so tired, stranger. Tired of sleeping through the sounds of guns. Tired of wondering where my nephew disappeared to in the middle of the night. Tired of watching my son get so bitter that he wants to kill people. He has not even experienced any of the joys of life yet!

She beseeches the player to recommend amnesty to the ICC so that the soldiers can leave and the villagers can be safe (see Figure 4). The player can then respond with a choice:

a) What about the crimes they’ve committed? Shouldn’t they have to face punishment? What about justice?
b) I understand, Bacia. With the LRM gone, you could be safe…

In this instance, Bacia believes that Justice would prolong her troubles, while Amnesty would help solve them. Therefore, if the player chooses response (a) above, the Justice level of his Advocacy increases, but Bacia’s Satisfaction level decreases. Conversely, if the player chooses (b), his Amnesty level increases, as
does Bacia’s level of Satisfaction. These visibly impact the player’s Advocacy meter, as the levels change based on the bias of her choices. Not displayed, but nonetheless affecting the ensuing game dynamics, are an array of variables reflecting each character’s level of Satisfaction with regard to the value being advocated by the player. They understand this through the language of game characters and, in some places, the actions required of the player. These game mechanics are further elaborated below.

Figure 4. Screen shot depicting Kihini, a village Elder, with another NPC. She is prompting the player to consider forgiveness as an option.

Revealing the Mechanics

The game design underlying the player experience requires of designers a deep appreciation of their own ethical biases and social commitments. Such self-understanding informs, and becomes evident in, not simply their writing the storyline and developing selected backstory elements but further in their scripting of the options, determining the consequences, and engineering the game dynamics driving the meters and other outcomes. To explain the game design using loosely the language of mathematics, the ethical values like amnesty and justice become variables in a narrative expression, wherein player choices serve as operations on the variables toward the resulting solution. By developing awareness of and experience with the values as they function in specific contexts, the player develops personal understandings both of the dynamics related to these particular values and, more broadly, of how to work with disparate values in complex ways to integrate seemingly incommensurate perspectives into a systemic and nuanced conception.

Specifically, each choice presented to a player is associated with the value that it implicitly serves to advocate (initially either Amnesty or Justice and later they unlock forgiveness). The level of each value is persistently displayed to the player in a meter that he may consult to gauge his reputation acquired through his fieldwork thus far, though the association between his choices and the variable levels is never explicated. Two fundamental roles in the conflict (Perpetrator and Victim) are each differentiated into various stances toward the dilemma (Perpetrators: for Evil, or by Necessity; Victims: Resentful, Tired, or Forgiving), defining five character types for the NPCs. Each NPC is associated with a particular character type (their “bias”) and individuated with a unique name, narrative function, and baseline Satisfaction level, which is not displayed but which figures into the game dynamics. However, each character type (and thus all NPCs with that bias) responds uniquely to the possible value statements advocated by any player choice. The player enacts his choice by selecting one of the multiple choice response options, and in response to that choice, the Satisfaction level of each character is adjusted either up or down,
depending on the valence of the choice in relation to their bias (see Table 1). As an example of these causal relationships between player choices and Satisfaction levels, a Resentful Victim ($V_R$), intent on vengeance, is satisfied by a choice advocating Justice, but a Tired Victim ($V_T$), weary of the struggle, is dissatisfied.

Table 1. Data Operations on NPC Satisfaction as a Function of Player Advocacy

<table>
<thead>
<tr>
<th>Advocacy</th>
<th>Perpetrator</th>
<th>Victim</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Evil ($P_E$)</td>
<td>Necessity ($P_N$)</td>
</tr>
<tr>
<td>Justice</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Amnesty</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Forgiveness</td>
<td>–</td>
<td>+</td>
</tr>
</tbody>
</table>

Table 1 describes player Advocacy choices along the rows and NPC Satisfaction levels along the columns, with the intersecting cells indicating the effect of a particular Advocacy represented in a choice. Again, some decisions increase and some decrease the Satisfaction levels, depending on the bias of the NPC type. Though this operation chiefly corresponds to their role in the conflict (i.e., Perpetrator or Victim), for some NPCs, the response to an advocacy runs counter to the general rule. For example, a Resentful Victim ($V_R$) is satisfied only if the player adopts their particular agenda for justice. To illustrate these mechanics in terms of game play dynamics, consider Ochen ($V_R$), a young Ugandan boy whom the player meets when rescued by Ochen’s family. Ochen is bitter and resentful of the LRM, due largely to the murder of his father. The player has just met the boy’s mother, who expressed her desire for amnesty for the LRM in order to clear them out quickly. Ochen, on the other hand, tries to recruit the player to fight the LRM, to which the player refuses. Ochen retorts,

Do you believe that I like to kill? That I am good at soldiering? Maybe I like this life? You are foolish if you think so. I like to run around and act silly. I like to play games with my friends. But do you know why I cannot? Because my friends are dead or captured. I have no choice. Now that you are here…you have no choice, too.

Ochen believes that soldiers of the LRM should be killed, but the player can choose to respond with one of the following:

a) Won’t that just piss them off? They’ll just send more soldiers...
b) I agree that they should be punished…but what about trials?

If the player selects choice (a), then the level for Amnesty increases in the player’s Advocacy meter, and Ochen’s Satisfaction level decreases. Alternately, if the player chooses (b), then the player’s Justice level increases, Ochen’s Satisfaction level rises slightly, but that of his mother drops slightly.
In this way, player choices serve to advocate ethical values, and both the momentary and cumulative Advocacy for each value is dynamically reflected in the responses made by each NPC according to their bias toward the player choices. These choices bear differential effects on each of the main NPCs—the six victims, three perpetrators, and three stakeholders (see Table 2)—and they are also sometimes referred to by NPCs, who may respond to the ethics inherent in a choice. In one instance, if the player advocates justice, an NPC who had lost her husband to the LRM expresses frustration with the choice, stating that the player does not understand the extent of torment that the people have experienced and what a blessing even amnesty would be for the country. As a broader example, the player can choose to either escape or cooperate with the LRM soldiers, thus changing the sequence and details of the subsequent acts of the unfolding drama. Finally, in the most sweeping example, one’s closing recommendation for the ICC transforms the experience of the ending such that some players might return jobless to Bunala, where they implement forgiveness, while other players espousing the company line enjoy the comforts of their new position. In this way, based on both individual and cumulative choices, the player directs the unfolding dialogue and, in other cases, broader storyline.

Table 2. Backstory Details for NPCs

<table>
<thead>
<tr>
<th>Name</th>
<th>Gender</th>
<th>Role</th>
<th>Bias</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Victims</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bacia</td>
<td>F</td>
<td>Mother of Amebe Family</td>
<td>V, T</td>
</tr>
<tr>
<td>Miremba</td>
<td>F</td>
<td>Eldest Sister of Amebe Family</td>
<td>V, F</td>
</tr>
<tr>
<td>Acanit</td>
<td>F</td>
<td>Middle Sister of Amebe Family</td>
<td>V, T</td>
</tr>
<tr>
<td>Ochen</td>
<td>M</td>
<td>Youngest Brother of Amebe Family</td>
<td>V, R</td>
</tr>
<tr>
<td>Akello</td>
<td>M</td>
<td>Villager nearby Family</td>
<td>V, T</td>
</tr>
<tr>
<td>Jendyose</td>
<td>F</td>
<td>Villager nearby Family</td>
<td>V, R</td>
</tr>
<tr>
<td>Kaikara</td>
<td>F</td>
<td>Mother of slain boy, Bale</td>
<td>All three possible</td>
</tr>
<tr>
<td><strong>Perpetrators</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mukasa</td>
<td>M</td>
<td>LRM Recruiter</td>
<td>P, E</td>
</tr>
<tr>
<td>Dembe</td>
<td>F</td>
<td>LRM Soldier; Sister of Sahnde</td>
<td>P, E</td>
</tr>
<tr>
<td><strong>Stakeholders</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timothy</td>
<td>M</td>
<td>Senior Worker</td>
<td>Justice</td>
</tr>
<tr>
<td>Sahnde</td>
<td>F</td>
<td>Government Soldier; Brother of Dembe</td>
<td>Amnesty</td>
</tr>
<tr>
<td>Kihini</td>
<td>F</td>
<td>Council Elder of Village</td>
<td>Forgiveness</td>
</tr>
<tr>
<td><strong>Others</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theresa</td>
<td>F</td>
<td>Colleague at A Just World</td>
<td>–</td>
</tr>
<tr>
<td>Bale</td>
<td>M</td>
<td>Tortured boy accused of theft</td>
<td>–</td>
</tr>
<tr>
<td>Sandra</td>
<td>F</td>
<td>Ambassador</td>
<td>–</td>
</tr>
</tbody>
</table>
Forgiveness is not initially represented along with Amnesty and Justice in the Advocacy options; rather, it becomes available as an option after the player has engaged with certain characters, chiefly Kihini, the Council Elder of the village (see Figure 5). Further, because of the record that his choices will have left, unless the player practices a particular value, he will not, in the end, be able to convincingly advocate that value as a solution. The game design accommodates any of the three final recommendations, but the importance of forgiveness is reflected in all of the endgame feedback, such as this response to the player in a final letter from Kihini:

Our people have suffered at the hands of the LRM for many years. I believe it would take over 100 years of restitution to begin repaying us for what they took.... In the end, the oppressed develop into oppressors, new prejudices form, and the cycle of violence will rear its ugly head and devour us again.... I hope that you will personally choose to free yourself from your oppressors and seek forgiveness.

This statement, combined with the other forms of endgame feedback (discussed below), suggests recommendations for how the player might improve his score if he replays the game, and it also articulates important lessons about broader ethical struggles and the role of the game values in relation to those struggles.

Figure 5. Screen shot depicting interaction with Bacia, an NPC who is advocating amnesty.

Note that, as for the player, forgiveness was not among the initial choices considered by the design team; rather, it emerged through a grounding experience during the design phases. As we worked to implement the conception that peace requires justice, the first author was given the opportunity to visit Uganda and South Africa, where meetings with individuals there began to complexify the choices being made available in the game. More than idiosyncratic encounters, our team member travelled through South Africa, experienced Gibbon Island, the holding place for Nelson Mandela, and spent time at a local orphanage in Uganda. These experiences revealed that our previous studies had resulted in an inadequate set of response options for the player. As South Africans and Ugandans shared their stories, we learned
that for many of them, acts of forgiveness are much more important than are notions of justice. They explained that, unlike justice or amnesty, only forgiveness gave them, as victims, power. By granting themselves the ability to determine how they viewed their plight and to forgive their transgressors, they could control some portion of the situation. The other solutions did not allow them that control. As a result, we began to wonder if the international conception that peace demands justice is a theoretical sentiment that problematically belies real-world experience, and we questioned whether the international community should enforce its perspective on those who must live out the consequences.

It was a turning point in our work, as we endeavored to explicate a satisfactory offering of in-game options, when we realized the power of this game narrative and why some consider videogames as becoming a dominant storytelling medium in the 21st Century (Herz, 1997). Thinking through the Ugandan dilemma as game designers, we were forced to consider the actions a player might take, the potential consequences of those actions, and the sufficiency of those consequences as compared to the real world. This involved, in our work, examining our own biases and determining how best to fictionalize the narrative in terms of the setting and backstory, the character types, and the unfolding plotline, as well how best to operationalize our moral and ethical biases into a playable game grammar. In practice, these all emerge dialectically, and this account while attempting to illuminate that trajectory, opportunistically relates events and delimits histories in a manner that privileges our goal of providing the reader an illuminative account of our work without them necessarily playing the game itself.

**Bringing Closure**

Central to the purpose of *River of Justice* is its bearing on real-world issues and on players’ engagement with these issues, both particular to the tragedy of Uganda and more broadly on players’ ethical stances in their daily lives. To scaffold this engagement, the connection between players’ game participation and their daily lives is established at the beginning and made increasingly explicit during the game. To illustrate, in the introductory briefing, players complete a personality profile in which they reveal certain attitudes and beliefs, some of which later impact the course of the narrative. For instance, if one expresses support of corporal punishment, then their in-game colleague Teresa is later killed, instead of being merely beaten and abandoned, and the guard responsible states that his decision was in response to the profile, discovered when the player was taken prisoner. Likewise, in the ending, the player receives a letter from Teresa’s fiancé lamenting her murder. Such customization of gameplay serves to prompt players to reconsider the attitudes and beliefs that they harbored before playing the game.

The game also prompts reflection on the alignment between one’s beliefs and actions, evident especially in the ending. After the lengthy ordeal in the field, the player submits a final recommendation regarding how the company should direct the ICC. Notably, if the player’s decision is inconsistent with their record of advocacy throughout the game as favoring Amnesty, Justice, or Forgiveness, then Timothy, the company boss, balks at the discrepancy. Further, depending on the player’s recommendation and its alignment with not only the company policy of advocating justice but also the player’s Advocacy scores, Timothy announces the player’s new status at the company as promotion, demotion, or dismissal, thus consolidating the span of game play into an opportunity for reflection. Then, as a final occasion of grounding for the player the challenges of realizing ethical bias in their own game decisions, the player is bedridden after falling ill. The player is visited by Mukasa, the young guard who had previously held her
hostage and forced her to shoot a young boy; Mukasa had fled the LRM and is trying to leave Bunala. Confronted by the situation at hand, the player must make a decision: (a) to seek justice on Mukasa by notifying the nearby guard of his past actions, (b) to express forgiveness toward his former captor, or (c) to show amnesty by not alerting the guard but not forgiving the boy either. Just as the player had advanced a recommendation affecting the fate of Bunala, she now must decide the fate of this boy—and, like the boy, accept the decision as one she must bear henceforth.

Our interviews with players indicate that this particular scene was quite challenging for some, inviting them to reflect on and question their own ethical biases. As one player recounted her experience, “I started believing in forgiveness” after earlier scenes, but

... that sense of forgiveness was shaken to its core when I was handed a gun and given that impossible choice. How can you forgive someone who has forced you to take an action that you find intolerable?

Another player stated,

Just having a decision like that that feels so embodied... it feels so real... it makes it more than an academic question in ways that talking about it just doesn’t do. Because he’s not a real boy—I’m stunned that it mattered so much.

It is our conviction that the reason it mattered so much is because, in part, of the player’s history with the narrative and the fact that she has dramatic agency on how the story unfolds. For, in a game, the decision has not been determined. Instead, in a game, it is our choices that move the narrative forward. In this instance, the player likely struggles with resentment she has towards the fictional character who previously forced the player to kill a helpless boy or accept responsibility for additional deaths. At some level, choosing not to forgive the guard is a personal accusation that one’s own crimes in the game were also not justified, but forgiveness brings an additional set of ethical conflicts in that it could be construed as vindicating the guard of his responsibility, potentially establishing an ethical dilemma for the player.

Completing the game play story, the player once recovered at the hospital either returns to the office or, if fired from the company job, returns to Bunala, where, reunited with Kihini as support, they help advocate and disseminate the power of forgiveness. In either case, the player undergoes a final debriefing that facilitates a closing reflection on the issues addressed by the game. Now neither actively in role-play nor withdrawn from the narrative, the player reviews a series of artifacts or representations describing the outcomes for various characters and for the country of Bunala as a whole (see Table 3 for a listing of the artifacts). These forms of feedback serve not only to illuminate for players the broader consequences of their choices but also to motivate them to replay the game, perhaps with different choices in the hopes of different outcomes. The first is a reminder of the player’s changed status at the company, and the second is the letter pertaining to Teresa, who had been either harmed or murdered. Another is a letter from Kihini, with insight about the implications of the player’s recommendation as it affects the people of Bunala. The last is a newspaper clipping that speculates and outlines the broader impact of the player’s recommendation.
Table 3. Relationship between Player Recommendation and Endgame Representations

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Job Status</th>
<th>Village Elder</th>
<th>Endgame Representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justice</td>
<td>Promotion</td>
<td>Accusatory</td>
<td>Long Term</td>
</tr>
<tr>
<td>Amnesty</td>
<td>Demotion</td>
<td>Advisory</td>
<td>Short Term</td>
</tr>
<tr>
<td>Forgiveness</td>
<td>Dismissal</td>
<td>Grateful</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Once the game is complete, the player may access the game Codex, a review of the player’s game choices and outcomes (see Figure 6). First, it includes summary scores of the Advocacy choices that the player made as they relate to the three ethical biases, showing how many times the player chose each of the values, Justice, Amnesty, and Forgiveness. It also presents a report of the player’s final recommendation as well as its implications in terms of the game artifacts already encountered but presented again in the context of review. The benefit of the Codex for teaching values is that it demonstrates the relationships among values, decisions, and consequences, thus explicating the agenda embedded in the game design and scaffolding reflection on the multiplicity of perspectives and the need to consider value-based solutions within a systemic context. Its benefit for the field of game design is that it invites conversation with players about how, through their game play, they take up our designs to become lived-through stories. Such an understanding will help to establish best practices in designing games that serve to narrate problematic issues and foster appreciation of the underlying values.

Figure 6. Screen shot depicting the Codex review of in-game statistics.

LESSONS LEARNED AND IMPLICATIONS

Although there have long existed technologies for engaging learners in understanding ethical struggles, we regard videogames as especially efficacious in that they can foster a state of engagement that involves projection into the role of a character who, enmeshed in a partly fictional problem context, must develop and apply particular understandings to make sense of and, ultimately, transform the context (Barab, Gresalfi, & Ingram-Goble, 2009). While typically gaming technologies are leveraged for entertainment purposes, our experience and aspiration is to use them to afford engagement with complex and sensitive issues transpiring around the world. Significantly, designers of such games must attend not simply to the database of facts and probabilities of outcomes, but also to the implications of players’ decisions and to the in-game and user-created narratives that give meaning to such decisions. To curtail the creation of pedagogically imperialistic games, that is, ones presuming the legitimacy of a hegemonic perspective, socially responsible game designers must remain cognizant of important questions: How do we represent...
the various perspectives on an issue, especially issues as complex and volatile as those discussed above, and do this in the context of a game design? How do we decide which choices to make available to the player and determine which consequences should be linked to particular player actions? How do we advance an agenda and do so in a way that doesn’t simply promote the biases of the designers or of one political perspective at the exclusion of others?

The following is a list of lessons that other designers may derive from the experience that we have recounted above. In particular, we briefly reflect on issues of cultural sensitivity, empirical legitimacy, pedagogical lesson, player reflection, and identity transformation. Each of these are expanded on below, grounded in our experience but discussed in relation to concerns of others as they reflect on their own work and that of others.

• Cultural Sensitivity

This work can be considered an example of what Barab, Dodge et al. (2005) described as critical design work, referring to design work that calls in to question and even prompts users to critique commonly held beliefs or practices. Similarly, Thomas, Mitchell, and Joseph (2002, p. 44) wrote that designers need to bear an “ethical commitment to creating culturally sensitive products.” Indeed, through advancing such a design, we have developed a richer appreciation of why critical curriculum scholars are so impassioned against claims of “truth.” In critical work, one begins to question whether idealized notions are useful or, instead, problematic in that they communicate an extraneous, locally immaterial, and potentially hegemonic perspective on the world (Apple, 1976; Freire, 1970/2000; Giroux, 1991). When designing a game, one must not only develop a particular story about the core ideas, but also position players such that they experience outcomes associated with particular choices. This can be challenging in practice because, in choosing which outcomes to associate with given actions, the designer must necessarily privilege particular perspectives over others. In the case of designing an educational game about Uganda, the “win” condition is that which achieves enduring peace, but should this condition be dependent on retributive justice? Or should the game tell a more locally contextualized story, even if such a claim may violate what is more generally argued, namely that justice is prerequisite for peace? We chose to allow for all three choices as possibly bringing about a satisfying closure to the game, but with forgiveness producing the optimal outcome in terms of citizen satisfaction although the player is fired as a result.

• Empirical Legitimacy

This design challenge requires intimacy with the situation, the underlying struggles experienced by people who have actually lived the story and it demands recognition of one’s own biases. As anthropologists and historians have argued, cultures and histories are human constructions, but their constructed nature should not suggest unconstrained liberty for the designer. Rather, due to both what these works represent and what they will engender, the designer bears a responsibility to ground the work in empirical storylines and locally-felt experiences (Geertz, 1978; Marcus, 1981). It is our experience—and a fundamental argument of this chapter—that it is in the particulars that meanings are engaged and transformation occurs. For us, the Uganda story remains a compelling one, albeit tragic, but not our own story. Though we could have translated a textbook-style articulation of a resolution strategy into a game design (i.e., necessarily advocating justice over amnesty), and though this resolution would still represent
an experiential articulation, through more deeply engaging with those whose experiences brought the story to life, we began to understand the limitations of such a simplistic resolution. Through fictionalization, we are able to design with pedagogical liberty about issues that have political sensitivity, ethical subjectivity, and interpretive contestation while still ensuring intrinsic fidelity and projective capacity. The context entwines real and fictional elements designed to embed the learner and the curricular content within a complex and credible situation, establishing what Riffarterre (1990) and Walton (1990, p. 21) referred to as “fictional truths.” Clearly, the explicit details and even the unfolding trajectories of our game are fictional, but it's based in very real events and is designed to foster a real experiential state within the player. In fact, it is this freedom to fictionalize that, we believe, makes playable fictions so pedagogically powerful

• Pedagogical Lesson

A core question raised by this project is how best to illuminate particular situations as well as the universal struggles that they manifest. In response to this question, the challenge becomes how to scaffold players in a balanced sense of engagement, neither remaining as mere witnesses, nor interacting with such simplistic rules that the ethical struggle feels trite, nor performing within such a complex game system that the lessons become obscure. In this case, the Ugandan struggles reflect universal tensions and enduring concerns that arise in diverse forms in diverse contexts but still demonstrate underlying aspirations and disappointments. Such honoring of the particular, simultaneous with appreciation of commonality, is a challenge likewise embraced in the field of historical empathy. These practitioners engage in cognitive empathy characterized by informed perspective taking, not projection, sympathy, or personal distress (Foster, 2001; Polman, 2006). They retain their cultural and individual character in order to understand another context, and this paradox bears implications for the present purpose. Specifically, our designs seek to bridge between local happenings and enduring issues in a way that does not disperse their local meanings but, rather, positions them within the conversation and, at the same time, engages them in a universal debate (Geertz, 1976). As designers, we strive to recognize not only the commonality of the issues but the shared responsibility for their consideration and, hopefully, solution: our players are implicated in the history of Uganda and invested in its resolution toward peace. It is in the player’s reflection on the deeper meaning of these struggles that the pedagogical value of these spaces is realized.

• Player Reflection

Intricate game design can not only instantiate such dynamics as these but also foster player reflection about them, and ideally these reflections can involve not only self-reflection in relation to the game space but, more toward our objectives, reflection on the dynamics of the content, that is, the themes and issues of the game. Such reflection, however, is not an affordance directly borne by videogame technology. Media affording precise depiction serve learning that sort of content, such as the visual features of a botanical species, just as media affording fluid motion serve learning content like the principles of physics. Pictures, films, and even videogames may be suited to these ends. For learning less concrete, objective, or instrumental content like values, media affording narrative, interaction, and inquiry are advantageous because such media afford reflection on dynamics of interrelation and mutuality. A player engaged in fictional play is ideally situated to consider multiple perspectives and to integrate them in novel, tentative, productive ways, exhibiting deep learning of values and their meaning. However, if the
game does not provide experiences that afford or even necessitate reflection, then the player might not engage deeply with the underlying messages even if he potential to do so exists.

- Identity Transformation

A game space like this one serving to illuminate such complex values as peace and justice does not merely portray for players the shocking atrocities and inhumane conditions. In our game, the player inhabits the role of a representative of the ICC who enters Bunalan (i.e., Uganda) expecting to implement a plan for rehabilitation—a workable path to peace. As players engage the Bunalan situation, the game context, characters, and dynamics scaffold their progress from initially comparing justice and amnesty to eventually conceiving an alternative solution based on forgiveness. This synthesis emerges through reflection on the game dynamics and, ideally, the player’s own transactive identity, and such reflection fosters deep understanding of the dynamics of values and their function in the player’s own life.

Generalizing from this experience, education might be broadly conceived as a process of transformation (Engeström, 1987). Understanding what conditions lead to true transformation is part of the larger agenda of the work, but minimally we are arguing for embedding learners in situations where they must adapt general concepts to appreciate and transform virtual worlds and, ultimately, reflect on what their critical choices say about themselves. As designers as well as players, not despite but because we retain our identity when engaging with these issues, do we recognize our role in their unfolding and resolution (Clifford & Marcus, 1986).

In closing, it is our belief that through the power of gaming technologies and specifically the affordances of play and fiction, designers are able to invite others to engage in the experience of their own story. Such opportunity and responsibility can be daunting. While we created a game, the play dynamics were about real people and real happenings. We had to continually ask ourselves, are the in-game solutions respectful and empowering or naively problematic? Are we helping players to better understand both Uganda and themselves, or might offering our perspective do them a disservice? Asking such questions is essential to a reflexive design process. In answer, we believe that history is less likely to be repeated if these stories are understood. More importantly, despite the disheartening stories that we tell through this work, we continue to believe in people’s capacity to reflect on their experiences and to develop their own perspectives: perspectives that may or may not align with those we have designed but that nonetheless allow one to better engage and embrace the stories that our designs illuminate. It is for this reason that we are committed to the design of these stories, even as biased and problematic as they are when designed and played. We further view games and the dramatic agency they support as providing a powerful medium for establishing fictional spaces that through player actions in relation to the virtual world can help to foster a more ethically sophisticated society in the real world.

REFERENCES


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