Influences of Game Design and Context on Learners' Trying on Moral Identities

Spencer P. Greenhalgh

University of Kentucky

Author note

Spencer P. Greenhalgh, School of Information Science, University of Kentucky

Correspondence concerning this article should be addressed to Spencer Greenhalgh, 350 Lucille Little Library Bldg., Lexington, KY, 40506. 859.218.2294

E-mail: spencer.greenhalgh@uky.edu

Abstract

Games can invite players to try on moral identities, but players ultimately choose how to respond to this invitation. In this study, I explore how the design of a game and the context it is played in affect whether players tried on a moral identity when completing in-game actions. I interviewed seven students who had played an ethics game and asked what influenced their perception of the game's ethical significance. After coding interview transcripts using an established framework of design and contextual features related to serious games, I found that environmental constraints, formal constraints, goals, and the game context all influenced whether students tried on moral identities during the game, suggesting a complicated relationship between player identity, game design, and game context.

Keywords: analog games, ethics games, game-based learning, identity, moral education

Influences of Game Design and Context on Learners' Trying on Moral Identities

The development of a moral identity is an important outcome of education, and games and virtual worlds can serve as important resources for developing moral identity. Early in the 20th century, Dewey (1916) incorporated moral education into his philosophy of education for democracy, and Roseth (2016) has argued that few today would oppose the idea that "moral character formation is a foundational goal for parents and schools" (p. 213). Indeed, ethics education has been incorporated into a range of educational contexts based on a number of professional, educational, developmental, and democratic rationales (see Schrier, 2015).

Yet, even someone who accepts the importance of moral identity development in education might be forgiven for expressing skepticism about games' contribution to this outcome. In addition to ongoing skepticism about games as educational resources, games have a particularly complicated history with issues of morality and ethics. Despite players' protests that "it's just a game," many parents, public figures, and others have expressed concern with what is seen as morally-objectionable material in both analog and digital games. For example, in the 1980s, role-playing games such as *Dungeons and Dragons* were accused of connections with violence, drug use, and Satanism (Waldron, 2005). The next decade saw an increase in concern about the depiction of violence in video games (Depauw & Bilterys, 2011), and questions about whether participants in mass shootings were inspired by video games have persisted throughout the 2000s and 2010s (Depauw & Bilterys, 2011; Jansz, 2011).

However, developments in research and gaming have challenged this reputation of games. On one hand, empirical research has not come to any firm conclusion about whether playing video games causes violent behavior (Tobias, Fletcher, & Wind, 2014), challenging the argument that games inherently promote immoral practice. On the other hand, games are

increasingly addressing issues of moral or philosophical importance (Poels & Malliet, 2011), including for explicitly educational purposes (e.g., Carnes, 2014; Hunter, 2013; Sadowski, Seager, Selinger, Spierre, & Whyte, 2013; Seager et al., 2010), raising the possibility that games could actually help support moral reflection and behavior. In response to these developments, scholars are increasingly paying attention to the complex and nuanced way that moral values are manifested in games (Bogost, 2007; Flanagan & Nissenbaum, 2014; Sicart, 2009) and gaming communities (Kafai, Fields, & Ellis, 2019; Simkins & Steinkuehler, 2008); they have also begun describing players as moral agents (Sicart, 2009; Poels & Malliet, 2011) who try on moral identities as they play (Konijn, Walma van der Molen, & Hoorn, 2011).

Yet, just as the argument that "it's just a game" was once leveraged to qualm moral concerns, it can now be employed to call into question the effectiveness of developing moral identity through this medium. Players retain ultimate control over whether to respond to moral considerations within a game (Flanagan & Nissenbaum, 2014; Kingsepp, 2011; Schulzke, 2011); that is, even if a game addresses issues of moral importance, it is up to the player whether to ignore or set aside opportunities to try on a moral identity by engaging in moral practice. Indeed, some research suggests that players may actively pursue strategies of moral disengagement when they play in order to be more competitive or maintain feelings of enjoyment (Hartmann, 2011; Hartmann & Vorderer, 2010; Klimmt, Schmid, Nosper, Hartmann & Vorderer, 2006). As a result, educators need to know in what circumstances students are likely to try on a moral identity through games if they are to succeed in using those games to promote moral reflection and learning.

In this paper, I respond to this need by exploring which factors influenced the extent to which students playing one ethics game tried on moral identities while completing in-game

scenarios. To facilitate translation of my findings into practice, I concentrate in particular on factors explicitly identified as important in the design of educational games, including the design of the game itself as well as contextual factors surrounding the implementation of the game. The results of this study will therefore be of value to game designers and teachers by providing insight as to how games can be designed, adapted, and presented in order to promote moral learning and identity development.

Background

In the following sections, I describe how the concept of a social practice is key to understanding the processes being examined in this paper. I begin by relating practices to the concepts of *identity* and *learning* and showing how this relationship can play out in the context of games. Then, I show how these concepts correspond with the literature on morality and moral identity development.

Practices and Identities in the Context of Learning

From a sociocultural perspective, both identity and learning can be seen in terms of social practices. For Gee (1989), a collection of social practices is "a sort of 'identity kit'" (p. 7). That is, members of a particular social community recognize fellow members by their ability to carry out the practices valued within that group. Conversely, someone who employs practices foreign to that group will be recognized as an outsider, even if those practices are otherwise familiar enough that this person is able to achieve their goal. Thus, a person's identity can be seen as a function of the practices she employs, and as she employs new practices, she functionally assumes a new identity.

Learning can therefore be seen as a process of trying on a new identity through the process of acquiring new practices (or acquiring new practices and—in doing so—trying on a

new identity). Lave and Wenger (1991) famously described learning as the acquisition of the knowledge and skills valued by a particular community, which happens through participation in that community and results in growing acceptance by that community. Similarly, Gee (2003; 2007) argued that learning a particular academic discipline (or content area) is less about committing to memory the facts and other content associated with that discipline and more about trying on the identity of someone who carries out the practices valued within that discipline.

Gee (2003; 2007) has argued that games are particularly well-suited to support learning in this way. That is, games offer players a chance to try on a compelling identity in the form of an avatar or character; doing so successfully (i.e., in a way that leads to in-game success) then involves carrying out the practices associated with that identity and, in doing so, learning. Other authors (e.g., Bogost, 2007; Shaffer, 2005) have referenced Gee in their own explanations of how games provide a particular perspective on the world for learners to adopt, analyze, or critique. It should be noted that players may ultimately choose to keep in-game identities distinct from out-of-game identities (Gee, 2003; Kingsepp, 2011; Sicart, 2009); however, this is not inconsistent with a view of games as helpful tools in the context of identity development. Indeed, identity researchers acknowledge identity formation as involving "'trying on' different selves" (Kerpelman & Pittman, 2001, p. 491), and games scholars have drawn from this thinking and echoed this language (Jansz, 2005; Konijn et al., 2011; Ritterfeld, 2009) to describe games as contexts in which players can experiment with different identities. Naturally, the hope of educators employing games is that this experience will go beyond experimentation to include the adoption of desired and valued identities.

Practices and Identity in the Context of Morality and Ethics

Moral identities are among the many identities that individuals can "try on" while playing a game. Roseth (2016) defines morality as "the distinction between right and wrong and the way we ought to treat one another" (p. 214). Broadly speaking, moral education refers to help learners develop those distinctions, though there is considerable debate and controversy associated with how to specifically define and understand the term (Roseth, 2016). In this paper, I also use "ethics" and "ethical" as near-synonyms for "morality" and "moral." Whereas morality refers to the general concept of right versus wrong (including within interpersonal behavior), ethics refer to specific, socially-defined and situated standards that essentially operationalize these general concepts (Roseth, 2016). This distinction (between a general concept and contextual application) is important, and the choice to use these terms interchangeably is, admittedly, incorrect on a technical level. It should be noted, however, that this study is not concerned with the specific *ethical* standards that individual players adopt so much as with whether they perceive specific scenarios as *ethically-significant* (by whatever standards they adopt) and, therefore, *morally-salient* (as defined by those ethics) in a game. Indeed, like other scholars who have studied moral learning and practice in games (e.g., Schrier, 2015; Simkins & Steinkuehler, 2008), I recognize both that there is no consensus on what constitutes moral behavior and that it is important for students themselves to consider different ethical perspectives in their own moral learning. Thus, although using these terms interchangeably would be problematic for a technical, philosophical exploration of games, it is fitting for a study that does not make distinctions between different ethical systems in determining moral behavior.

Nonetheless, the distinction between a general morality and situated ethics lends important insight into how the previously-described theories of community, identity, and practice play out in the context of a morally-salient game. For example, Wenger and Gee's writing

presupposes the existence of (mostly-)defined communities associated with (largely-)distinct

identities and practices. One could conceivably define a particular *ethical* community in terms of

those who identify with a particular school of ethics and practice ethical decision-making in

keeping with that identity. However, this suggests that several different standards would be

necessary for evaluating a player's trying on one of one of any of several different ethical

identities; this approach thus adds unwelcome complexity and unnecessary distinctions for

research (such as this study) that is not interested in distinguishing between different ethical

approaches to moral questions. Fortunately, scholars already use the terms *moral* community and

moral identity in ways that are compatible with a potential diversity of specific, situated ethical

perspectives. Shoemaker (2007) has used the term *moral community* to refer to all persons who

have "the capacity to understand, apply, and/or respond to moral reasons" (p. 71); this

explanation can also serve to define *moral practice* as any action that applies moral reasoning

(i.e., consideration of right versus wrong or how to treat others). To have a *moral identity* is

generally recognized as to make morality an important part of one's self-conception (e.g., Hardy

& Carlo, 2005, 2011; Narvaez & Lapsley, 2009; Nucci, 2001; Roseth, 2016).

These terms are used in a way that generally correspond with the relationship between

community, identity, and practice advanced by Wenger and Gee—and with the literature on

games and learning that draws from these scholar's ideas. Shoemaker (2007) tied membership in

a moral community to moral responsibility, implying that the appropriate identity within a moral

community is therefore a moral identity. Similarly, appropriate practice within such a community

(and the natural consequence of a strong moral identity) is moral practice. When players of a

game make morality an important part of their controlling a character or avatar within a game,

they will both strive to make morality-driven decisions within the game and engage in "trying on" a moral identity during their play (Konijn et al., 2011).

One further insight derived from the distinction between morality and ethics (and from these definitions of moral community and moral identity) also corresponds with established theory on identity and practice. For Wenger (1998; see also Lave & Wenger, 1991), adopting appropriate identity and practice in a community is not simply an exercise in conformity to a community but also the acquisition of the right to negotiate the meanings which undergird that community. Thus, upon receiving recognition of one's basic membership within a moral community, one receives the right to negotiate the ethical frameworks by which moral identity and practice are defined in more specific terms.

Purpose

The purpose of this paper is therefore to explore how the design of a game and the context it is played in affect whether players try on a moral identity when completing in-game actions. To accomplish this purpose, I will analyze interviews of students about their experience playing one particular ethics game. In analyzing these interviews, I will answer two research questions:

1. Which design and contextual features contribute to players' decisions whether or not to try on an in-game moral identity?

2. How do these features interact to encourage the trying on of an in-game moral identity?

Answering these questions will allow those who design and employ ethics games to better understand which elements of a game's design and context serve to afford perceptions of ethical significance as well as the process by which those elements encourage such perceptions.

Research Context

This research took place as part of my service as a French Language Fellow in a large Midwestern university's Residential College in the Arts and Humanities (RCAH). As a Language Fellow, one of my responsibilities was to design and supervise an Integrated Language Option, a project-based immersion experience in which students study not only language and culture but also world history, art and culture, ethics, and engaged learning—the main pillars of the RCAH curriculum (see Plough, 2014).

The focus and curriculum of each ILO is co-constructed by the students and the supervising Language Fellow at the beginning of the semester; during the semester examined in this study, I worked with the students to design an ILO that focused on issues related to government, society, and culture. During this co-construction phase, we decided that we would explore these issues through game-based learning. Taking inspiration from the game *Tribes* (Brin & Jackson, 1998) and from the *Daedalus Project* course designed and taught at Brigham Young University (Cronin, 2004; Heimburger, 1994; Tripp, 1998), I developed a simple game that I will refer to in this paper as the *desert island game*.

The desert island game is best described as an analog roleplaying game (RPG), which has implications for understanding how it was played and its relationship with other educational games. Although much of the focus on educational games and identity development is on digital games, analog games should also be considered important educational resources, as they share many of the affordances commonly attributed to digital games and virtual worlds (Author, 2016a; Tekinbaş & Zimmerman, 2003) and therefore serve as effective testbeds for exploring issues related to digital game design (see Romero & Schreiber, 2008). Nonetheless, there are important distinctions between analog games and digital games—not least, that for digital games,

"the rules are embedded in the hardware and the software" (Tekinbaş & Zimmerman, 2003, p. 86), whereas players of analog games are themselves are responsible for knowing and enforcing the rules (or, alternatively, free to modify or ignore them). Thus, while a digital game is a tightly-controlled system, there is inherently more flexibility in an analog game, which has important implications for learning (Author, 2016a). This distinction may be even starker when (analog) RPGs are considered. As the name suggests, the principal distinction of an RPG is that the player's chief activity in the game is taking on the role of one or more characters, guiding their decisions in the game world and often defining or improving attributes that influence their success at in-game tasks. While this core focus does not prevent an RPG from being highly structured around specific game mechanics (indeed, the RPG is a popular genre even among digital games), some analog RPGs are more of a "moderately regulated joint telling of stories" (Kociatkiewicz, 2000, pp. 72-73).

Indeed, the desert island game was itself low on rules but high on stories. To begin the game, I asked the students to imagine a situation ten years in the future in which they had been stranded on a desert island with any partners or children that they expected to have at that time in their lives. I explained that, for the purpose of the game, they had no hope of returning to where they had come from; with no choice but to restart their lives on the island, it was therefore up to them to decide how government, society, and culture should look in this new place. To provide some structure for this scenario, I established a small number of mechanics (inspired by *Tribes*) to govern important ideas like how much food individuals needed to have to survive and how individuals could obtain additional food.

The relatively simple design of the desert island game meant that typical play of the game was also simple. I sat with the ILO students around a table in a reserved room in the RCAH's

media center. Most of the time, players did not take individual turns. Rather, I described situations—including ethical dilemmas—for the students to respond to, and they collectively discussed and then announced their responses. It should be noted that the students themselves sometimes suggested new events for and approaches to the game, in keeping with the importance of negotiation in identity development (Lave & Wenger, 1991; Wenger, 1998) and the collaborative, co-constructive nature of both RPGs and the ILO program. To assist with discussion, I sometimes displayed information or images on a television screen in the room; students also sometimes used a whiteboard in the room to sketch out ideas or keep track of resources like food. As appropriate, given a particular response to a situation, I invited players to take individual turns, where they announced their actions within the game. Some situations were resolved automatically, and other resolutions were dependent on the roll of dice. Throughout the game, I kept track of reference material and recorded player actions and outcomes on my laptop. Because of the nature of the ILO, discussions and gameplay occurred entirely in French.

Method

At the end of the semester in which the desert island game took place, I carried out interviews with the students who played the game. To explore the relationship between design and contextual features and students' adoption of an in-game moral identity, I asked them about what influenced their perceptions of the ethical relevance of their decisions during the game. That is, I considered students to be adopting an in-game moral identity when they believed their in-game decisions to be ethically relevant. In this section, I describe the students who participated in this research as well as the methods I used to collect and analyze the interview data.

Participants

All of the students who participated in the desert island game for the duration of the semester consented to participate in interviews. Five women and two men participated in the desert island game; although they ranged from freshmen to seniors, all were enrolled in the Residential College in the Arts and Humanities for their major. Further demographic data were not collected, as the goal of this study was initial exploration of the phenomenon rather than generalizable application of findings. All participants are referred to by pseudonyms in this paper.

Data Collection

After obtaining consent from the students, I carried out individual interviews, following the semi-structured protocol included in the Appendix. The interviews ranged in duration from about 20 to 60 minutes. I made an audio recording of each interview and also took written notes as I met with each of the students.

Data Analysis

After finishing these interviews, I transcribed them and coded the transcripts to answer my two research questions. To guide my coding, I adapted the *Ouroboros Framework of Serious Game Design* (Heeter, 2013) as a set of *a priori* categories. The Ouroboros Framework is a framework for conceiving of the different features of an educational or other "serious" game and its context that may afford or constrain players' engagement with its educational purpose—in this case, moral learning and identity development. Although the full Ouroboros Framework consists of sixteen distinct design and contextual elements that may afford or constrain serious outcomes (Heeter, 2013), I chose to simplify the framework by concentrating on the four categories these elements fall into:

- **environmental constraints**: elements that make up the world or play space of a game, including its story, characters, and any available resources;

- **formal constraints**: elements that dictate how a game is played, such as interactions between players, the rules of the game, and game mechanics and dynamics;

- **goals**: objectives associated with the game, including in-game obstacles and challenges, goals given to or adopted by players, and win conditions or other end states; and

- **gaming context**: elements describing the environment in which the game is played, including perceived or established connections with "real life" as well as pre-game, during-game, and post-game activities; context is thus understood in broad terms as anything beyond the scope of the design of the game itself.

This simplification helped better account for the relatively simple design of the desert island game. That is, whereas all four of these categories are present in the game's design, the nature of analog RPGs and the simplicity of this one in particular meant that some of the individual elements listed by Heeter (2013) were not easily distinguishable from other elements within the more general category or were even absent from the desert island game.

Having established this coding scheme, I proceeded to analyze the interview transcripts. To respond to my first research question, I read over the transcript of each student's interview. As can be seen in the Appendix, some questions during the interview explicitly asked students about perceptions of ethical significance—these questions were given particular attention during the coding process. However, I was also attentive any passage throughout the interview in which a student mentioned morality (i.e., considerations of right vs. wrong or how to treat others), ethics (i.e., specific standards by which morality is judged), or moral values or qualities (see Roseth, 2016). As each student described factors that influenced their perception of ethical

significance (and therefore trying on of a moral identity), I compared those factors with Heeter's (2013) description of individual elements of the Ouroboros Framework. In cases where the factors that students identified corresponded with one or more of Heeter's descriptions, I coded the appropriate passages with those elements. Throughout the coding process, I did not separate interview data into passages of pre-defined lengths but rather considered students' descriptions of factors influencing their perceptions in their entirety. Thus, the coded "chunks" varied in length but each represented a full description of a student's perception. As previously suggested, I ultimately grouped the coding for each element with each of the other elements in the broad categories provided by Heeter; this process allowed for a single passage interview passage to correspond with more than one of the categories.

Throughout these interviews, students' naturally referred to some of the same in-game events, which hinted at some patterns for how different design and contextual features might interact in order to encourage (or discourage) the trying on of moral identities within specific in-game contexts. Thus, to respond to my second research question, I rearranged the transcripts by the in-game events being referred to and considered the pattern of codes within the students' collective description of each event. This allowed me to see how these categories of the Ouroboros Framework interacted with each other and produced results within very particular circumstances.

Results

Players reported that all four of the Ouroboros Framework categories influenced their decisions whether to try on a moral identity during in-game events. In the following sections, I describe how each of these categories individually contributed to players' relationships with their

moral identities and then explore the way that these categories interacted with each other in the context of specific in-game events.

RQ1: Contribution of Individual Design and Contextual Features.

Participants suggested that all four categories of the *Ouroboros Magic Circle of Game Design* influenced whether or not they tried on a moral identity during the game. The examples below are not meant to represent the entire breadth of design and contextual features included in each category but rather to demonstrate how each category can have an important role in encouraging players to try on moral identities.

Environmental constraints. One way that players commented on the importance of environmental constraints in the desert island game was by commenting on their absence. For example, throughout the semester, Patrick was involved in writing a constitution for the new island government, a project he saw as "an actual manifestation of values" (i.e., not "just a game"). When interviewed, he expressed his wish that the desert island game had allowed him to put that constitution to the test. In other words, he felt that "we should have, like, thrown in, like, 'tidal wave destroys half the village.' What do we do now? How do we follow our [constitution]?" Shaping the story of the game to create these kinds of challenges would have given the players important opportunities to test the ethical standards that they had set up for themselves in the constitution, thereby giving them more chances to try on a moral identity.

Another student, Fisher, also commented on how the lack of particular premise or story elements affected the amount of moral reflection afforded by the game. When asked if there were any issues she would have liked to see addressed in the game, Fisher noted the in-game absence of issues of pressing moral importance on college campuses, such as "sexual assault, sexual harassment, [and] cultural insensitivity." For Fisher, changing the premise of the game to allow

for more discussion of "real life things that happen to us as young adults" would have allowed for additional opportunities to try on a moral identity.

Formal constraints. Players of the desert island game also commented on how certain ways that the game was played influenced their trying on of a moral identity. In particular, several students associated *player-player interactions* with their ethical reasoning in the game. For example, Grace felt all decisions in the game had a level of moral significance to them but that the significance was most apparent to her when there was a lot of discussion (and even conflict) between the players (perhaps because of differing ethical standards). Whitney had a slightly different perspective, attributing higher levels of discussion to higher levels of disagreement between the players as to the correct ethical decision for a particular situation. Similarly, Leigh saw discussion as evidence that different perspectives were coming into play and felt that listening to discussions was an important part of her making moral decisions (and thereby trying on a moral identity) within the context of the game. In addition to corresponding with Heeter's framework, these reports also demonstrate the way in which players were not only trying on moral identities but negotiating between themselves what a proper moral identity looks like (see Lave & Wenger, 1991; Wenger, 1998).

Goals. Although goals influenced player perceptions in a number of ways, Leigh provided in her interview an account of how setting her own goals led her to try on a particular kind of moral identity, with specific ethical standards. Many players used their own opinions and experience to guide their arguments in the game, but Leigh mentioned in her interview that she took advantage of the desert island game to try on a new identity, new ethical stances, and, in short, "try something different." So, although Leigh was personally open to having her own children in the future, her imagined future self in the desert island game was childless, which

allowed her to consider what stances someone in that position might take and to take those

stances in discussions about the distribution of resources in the desert island game. In short,

Leigh's trying on of a moral identity in the game was influenced by her explicit decision to try a

different kind of identity and experiment with its moral implications.

      Gaming context. The importance of the gaming context on these players' moral practice

can be demonstrated by Patrick, Leigh, and Whitney's comments about the particular culture of

the RCAH, the college that all of the players were enrolled in. As previously stated, discussions

and conflict between the players was important in determining whether they saw a particular

decision as ethically relevant. However, these three students saw these discussions and conflict

as being mediated by the fact that everyone came from the same college. Patrick and Whitney

felt that the shared culture and background may have led students to not confront each other as

often as students from different colleges may have; in a slightly different vein, Leigh felt that the

desert island game could have been more effective if we had made more of an effort to discuss

and challenge some of the issues that RCAH students frequently discuss in their own classes and

their free time. However, like other examples of categories presented in this section, the culture

of the RCAH is not the only—or even necessarily the most important—way that the gaming

context affected players' experiences.

RQ2: Interaction of Game Features

      Although all four categories of the Ouroboros Framework appeared to have contributed

to players' trying on of moral identities in the desert island game, further analysis suggests that

each category of game features is necessary but not sufficient to create these perceptions. Rather,

as I will demonstrate in this section, players' responses in their interviews appear to indicate that

in-game events may only have been perceived as ethically significant when all four of the

categories were present and built upon each other in a specific order. That is, perceptions of ethical significance appear to have been dependent on some kind of *environmental constraint* that, through its connection with a *formal constraint*, creates some kind of *goal* scenario for players. However, it is only when players perceive the *gaming context* as supporting a moral thought experiment rather than as "just a game" that they will try on a moral identity. Figure 1 provides a visual analogy of this relationship—that is, that it is when these categories build on each other in a particular fashion that the design and context of the game can adequately support player perception of ethical relevance and the trying on of moral identities.

For the remainder of this section, I will draw from four events in the desert island game to demonstrate how these game elements appear to have built on each other in this sequence to create perceptions of ethical significance. In the first three events, players did not try on a moral identity, and I will tie this decision to the absence of one or more of the Ouroboros Framework categories. The fourth event was perceived to be ethically significant, which I will argue is the result of the presence of all four categories.

Deciding on a location. One of the early activities in the desert island game was for the players to decide on what part of the island they would settle in. Inspired by *Tribes*, one of the games that the desert island game was based on, I gave the players a choice between settling in a forest, on the plains, in a swamp, or in the hills. This choice was related to the *environmental constraints* category of the Ouroboros Framework, in that the representation of the game world was different in each area. In *Tribes*, this choice also corresponds with certain *formal constraints*—the different biomes are associated with different levels of vegetable and animal life, and each area can be overhunted, creating *goals* for players by challenging them to decide when to move from one area to another. However, these elements of *Tribes* were not adopted as

part of the desert island game; as a result, this decision was not tied to any *formal constraints* for these players, who responded by feeling no need to engage with a moral identity.

Thus, while I have previously described how environmental constraints can influence players' perceptions of ethical significance, environmental constraints on their own do not necessarily guarantee such perceptions. For example, because she was not faced with challenges of questions of food management and overhunting, Carrie saw the choice of where to live on the island as "common sense" and "a no-brainer." That is, rather than be a question of how to balance the food needs of the community with the ecosystem in each biome, the choice was just a matter of finding the location that sounded the most attractive at first—a choice that would be influenced by identity but did not specifically require a moral identity to make. Patrick agreed, suggesting that the activity was no more complicated than "yeah, like, this is probably a bad idea to settle in a swamp."

Choosing careers. Another early activity in the game was for each player to choose a career for every adult on the island. Careers represented another *environmental constraint* in the desert island game, in that it changed how characters were conceived of and represented. Again inspired by *Tribes*, I gave students a choice between hunters, gatherers, and crafters; however, I also allowed for the possibility of players creating other careers for their characters in the game. After a class discussion, players decided to also include careers such as an architect, a schoolteacher, and an island chef. It is noteworthy that these decisions taken by the players demonstrate their negotiation of what moral identities look like; that is, by electing to introduce new professions to an ethically-relevant game, the players implicitly argued that their own preferences—and other professional contexts—were compatible with moral practice and, thus, identity. Unlike deciding on a location, this choice was associated with *formal constraints*. For

example, only hunters and gatherers could participate in in-game actions like looking for food on the island, while other professions concentrated on tasks like building shelters. However, because of the freeform nature and slow pace of the desert island game, none of the ethical dilemmas we discussed while playing actually hinged on the presence or performance of any particular profession. In other words, for most players, their choice of career had little impact on their goals within the game.

Although *environmental constraints* were here joined with *formal constraints*, the absence of goals seems to have influenced students' decision not to try on moral identities during this event. For example, Leigh seemed to recognize this when she identified the choice of careers as an ethically insignificant decision: "when we had to talk about, like, what jobs we wanted, that really was just preference, it wasn't, like, 'what is right job, what's wrong job?'" Even though different jobs had different ways of moving the game forward (i.e., through formal constraints), Leigh still saw it as an ethically inconsequential decision because they had no impact on the players' goals. She acknowledged, however, that it may have seen more significant under other circumstances: "I guess, too, we could go into 'why do we need [certain] jobs [on the island] and not [others]?'. In other words, if the students' career choices had been put in conflict with their goals as players, Leigh and her classmates might have discussed the moral value of each possible career. However, as things stood, Leigh felt that "careers were pretty straightforward."

Practicing French. Although players did not elect to try on moral identities in the absence of *formal constraints* and *goals*, neither did their presence guarantee that players chose to try on these identities. This was perhaps most clear when Patrick described his own experience with the careers activity. As previously described, this activity involved both *environmental* and *formal constraints* but—for most players—lacked *goals* because there was no challenge related

to players' careers. In contrast, Patrick suggested that he had his own *player goal* during this particular activity: to play devil's advocate and create more discussion and debate. This personal goal made up for the lack of any goal defined by the game; however, the *gaming context* Patrick connected with was in this case unconducive to his perceiving this activity as morally relevant.

Although the players understood that one of the purposes of the game was to consider questions of morality and ethics, they were also attentive to the fact that the underlying purpose of the ILO was to improve their French through an immersion activity. Indeed, when it came to the careers activity, Patrick identified as being most attentive to this element of the game context: Whereas discussion and debate (Patrick's stated goal) sometimes had an important influence on students' decisions to try on a moral identity, Patrick was more interested in its linguistic benefits. In his interview, he explained that

> … for me it was less about, like, what we actually came to a decision on, because
> again, it's a simulation. Like, who cares what we all decide, but, like, we don't
> want to just sit here and agree all the time. We want to try to talk through it and
> get the [language] practice that we're here for ….

In other words, faced with the absence of an appropriate *gaming context*, even the presence of *environmental constraints*, *formal constraints*, and *goals* are not enough to make a decision in a game ethically relevant. Players' identities as French students was an important part of the broader overall activity, and Patrick was therefore not wrong to focus on this element of the gaming context. However, his comments suggest that when he did so, he disconnected from the parts of his identity that emphasized moral reflection.

Distribution of food. Early in the ILO, I provided players with a certain amount of food resources to begin the game with; one of their first discussions was therefore focused on how to

divide food among themselves after arriving on the island. Although most of the players felt that each inhabitant of the island should receive an equal amount of food from a communal store, Leigh passionately argued that, having chosen a career as a hunter who would ultimately provide a great deal of the food, she should have right to more of their initial supply to not only represent her contributions to the community but also compensate her for the danger involved in her work (as compared to careers such as island chef or schoolteacher). Players discussed this proposal as well as other solutions to the dilemma, including an alternative arrangement whereby hunters would typically contribute to a communal store of food to be equally distributed but would also have the option to spend additional time hunting in order to build up a separate, personal supply of food. When interviewed about particularly memorable moments in the game, all students with the exception of Patrick described the distribution of the food as an event that came to mind even several weeks after it had happened.

The memorability of this event may be related to the strong moral reactions that players expressed to it. Partway through her interview, Carrie mentioned "making sure that nobody's starving or without food" as a general moral concern of hers during the game, likely influencing her views of this particular event. Indeed, when discussing the distribution of food later in the interview, she described feeling torn between wanting to respect the danger that Leigh was facing and her desire to establish an island society built on equality. Similarly, Whitney reported that she felt conflicted between what she saw as the equality afforded by a communal food supply and the opportunities for personal advancement and achievement that it limited, and felt that in its discussion, the group never managed to find a truly right answer, instead remaining in an ethical gray area. In addition to these internal conflicts, Grace suggested that this event made it clear that different players had "different versions of what is morally right" and implied that it

was difficult to "figure out how to reconcile that." Stewart took a more pointed approach, explaining that he "felt like [Leigh's approach] was unjust" and that it conflicted with the basic values he had been raised with.

This event, which invited players to so strongly connect with moral identity and practice, was associated with all four of the categories in the Ouroboros Framework. The dispute began with food, one of the *environmental constraints* represented in the world (and one that, as previously described, some students saw as inherently morally salient); however, this *environmental constraint* only caused the dispute because it was associated with a very important *formal constraint*: The rules stated that any character in the game that did not have enough food would die of starvation. The combination of these constraints was enough to create conflicting *goals*: Leigh's objective was to secure recognition for her hard work and security in case of an accident while hunting, whereas the rest of the players were committed to a goal of equity and collective survival. Finally, the *game context* (i.e., the ILO's explicit invitation to consider questions of right and wrong) encouraged players to perceive in this specific in-game event a relation to real life; throughout this activity, the players engaged with this context enough that they tended to see life or death not just in terms of the game but also real-life questions of food ethics.

Discussion

These results suggest that multiple elements of a game's design and context contribute to whether players choose to try on moral identities while playing. When asked why they saw certain activities in the desert island game as being of actual moral importance, players referenced all four of the major categories of the Ouroboros Framework of Serious Game Design: *environmental constraints*, *formal constraints*, *goals*, and *game context*. Furthermore,

my analysis of specific events within the game suggests that all four elements may need to be present—and build on each other—in order to promote perceptions of ethical relevance and the subsequent adoption of moral identities.

This suggests that games are complex educational technologies for ethics educators, who must consider multiple features of a game to best understand how it affords or constrains moral reflection. While this conclusion corresponds with scholarly thinking about games, it may challenge educators', students', or others' beliefs about how games communicate ethical relevance. This challenge does not yet emerge at the level of the environmental constraint. Rather, the educational or moral affordances of a game are widely held to be determined in part by its *theme* (Gee, 2007; Koster, 2010; Van Eck, 2006), which represents what a game *is about* and has an obvious effect on perceptions of ethical significance. Indeed, it is because of the themes (and, therefore, environmental constraints) of games like *Dungeons and Dragons* or first-person shooters that parents and public figures have expressed concern about them on a moral level; conversely, it was presumably because Carrie recognized food as a morally-salient subject in the real world that this environmental constraint in the desert island game became so important to her.

Although environmental constraints may have obvious moral implications for players, educators, and others, this study joins previous work (e.g., Bogost, 2007) in noting that *formal constraints* and *goals* must not be overlooked. Indeed, given Carrie and her peers' concern about food, their choice of where to live on the island could have made the environmental constraint of different island biomes a morally-salient feature; however, in the absence of any formal constraint tying these biomes to this concern, participants saw no need to try on moral identities when making this decision. Sicart (2009) has gone so far to argue that to understand the ethical

potential of a game, one must examine its formal constraints even before considering

environmental constraints, but Koster (2010) has pushed back on this thinking, noting that the

rules and mechanics of the simple game *Tetris* do not themselves carry any moral meaning but

that these same rules could be applied to a morally-reprehensible "game of mass murder where

you throw victims down a well and they stand on each other to try to climb out" (p. 168). Despite

these disagreements, ethics educators should consider games based whether there are

connections between moral considerations and both a) what the game is *about* (i.e.,

environmental constraints) and b) how the game is *played* (i.e., formal constraints and goals).

Indeed, this advice has long been repeated in more general conversations about games and

education (Author, in press; Mayer & Harris, 2010).

The desert island game also demonstrated the dangers of overlooking the context

surrounding a game As described earlier in this paper, a number of theoretical, anecdotal, and

empirical arguments (e.g., Flanagan & Nissenbaum, 2014; Hartmann, 2011; Schulzke, 2011)

have been advanced to demonstrate that players do not always engage with moral content in

games. Patrick's decision to provoke debate during the careers activity and his perception of this

activity as ethically irrelevant was driven because the ILO context prioritized language learning

in addition to ethical reflection. A more common scenario is likely that a *gaming context* does

not (always) encourage—or outright discourages—perceiving in-game actions as being ethically

relevant. Players who morally disengage from games contextualize them within a *magic circle*

(Kingsepp, 2011; Simkins & Steinkuehler, 2008) that has no relation to real life. The concept of

the magic circle is simply that the normal rules of life and reality do not apply within the context

of a game and that what happens within a game is insulated from any real-world consequences.

Although clearly not always true, this remains a common attitude among many game players,

and ethics educators may therefore be surprised that, without proper contextual support, even a game explicitly designed for ethical reflection is instead played simply to win or have fun.

These contextual elements are critical for whether or not players perceive game content as ethically relevant, but the other game elements addressed in this study should not be overlooked. The *game context* could be considered the most important element of an ethics game in that if a player does not choose to—or is not encouraged to—engage with the opportunities for moral practice within a game, it does not matter how that content is represented in terms of *environmental constraints, formal constraints*, and *goals* (Flanagan & Nissenbaum, 2014; Schulzke, 2011). However, the reverse is also true: No matter how strongly a game's context reinforces perceptions of ethical relevance, that which cannot be acted upon cannot be perceived as ethically significant or insignificant.

This relationship between contextual and design factors suggests that the responsibility for encouraging players to trying on moral identities is shared between those who design a game and those who implement it. Those who design a game must include thematic and mechanical elements that are ethically salient and likely to invite moral action or provoke moral dilemmas; those who implement the game must be aware of those thematic and mechanical elements and create a context that encourages players to take them seriously and engage with them. It is important to note that this responsibility is shared between these two groups rather than neatly divided: Game designers may be able to provide support material that guides ethics educators in creating an appropriate context, and ethics educators may be able to tweak a game to improve its original design and the corresponding learning experiences (Authors, 2016a). In some cases, such as with the desert island game, the person or persons designing a game may also be responsible for its implementation, allowing for greater coordination between these efforts and

responsibilities. However, the findings of this study also highlight that the trying on of a moral identity is ultimately the player's decision, and even contextual factors cannot be said to be deterministic. That is, throughout the desert island game, players adopted different goals, connected with different contextual factors, and ultimately reported different experiences about their trying on of moral identities.

Limitations and Future Research

While my findings lend additional understanding as to when and why players try on moral identities within games, it is important to note associated limitations and shortcomings. These findings are based on a relatively small amount of data from a single study using a particular game in a specific context and may therefore not be generalizable. As previously noted, the desert island game was a simple game with few design elements as compared to many analog and digital games, and my coding was based on a small number of simple categories of design and contextual features. Studying a more complex game and paying more attention to more fine-grained features would likely yield a more nuanced look at how game design and context encourage or discourage the trying on of moral identity. Similarly, the context of this study was within a college that explicitly emphasizes ethics as one of its core values; a different set of players may have responded differently to the affordances and constraints of this (or another) ethics game. Furthermore, the desert island game was not only an ethics education activity but also a language learning activity. Although students did not report that playing the desert island game in French impacted the decisions they made, they did report that it changed their participation in the game (Authors, 2016b), and it may have had a larger impact than the students recognized. Finally, in this study, I limited my focus to whether students try on moral identities while playing the game and did not attempt to determine whether this had lasting

consequences on their more-permanent adoption of these identities, which, naturally, does not always happen (Gee, 2003)

Conclusion

Although "it's just a game" has long been the defense of players trying to defend themselves against criticism for playing games with objectionable material, it is now also a challenge for to ethics educators who hope to use games to invite players to try on moral identities. If players treat a moral thought exercise as "just a game," they are not likely to learn what the game designer and implementer had in mind, and knowing what affects players' readiness to try on a moral identity will help game designers and implementers in their effort to complete their serious goals. In this paper, I examined how different design features of the *desert island game* affected players' perceptions of the ethical relevance of their in-game actions. *Environmental constraints*, *formal constraints*, *goals*, and *gaming contexts* were all found to influence the way the extent to which players saw in-game decisions as ethically relevant; furthermore, my analysis of players' experiences suggests that all four of these elements must be present in order to invite perceptions of ethical relevance. These results show games to be important—if complex—resources for moral education and may be helpful for game designers and ethics educators as they seek to use games to promote moral identity development.

References

One or more references have been removed for the purposes of blind review.

Bogost, I. (2007). *Procedural rhetoric: The expressive power of videogames* [Amazon Kindle version]. Retrieved from http://www.amazon.com

Brin, D., & Jackson, S. (1998). *Tribes* [roleplaying game]. Austin, TX: Steve Jackson Games.

Carnes, M. C. (2014). *Minds on fire: How role-immersion games transform college*. [Amazon Kindle edition]. Retrieved from http://www.amazon.com

Cronin, M. (2004, December 7). BYU students play survivor for credit. *The Salt Lake Tribune*. Retrieved from http://sltrib.com

Depauw, L., & Biltereys, D. (2011). The digital game controversy: Reflections on a long history of media panics. In K. Poels & S. Malliet (Eds.), *Vice city virtue: Moral issues in digital game play* [EPUB version]. Retrieved from http://acco.be

Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education* [Amazon Kindle version]. retrieved from http://www.amazon.com

Flanagan, M., & Nissenbaum, H. (2014). *Values at play in digital games*. Cambridge, MA: The MIT Press.

Gee, J. P. (1989). Literacy, discourse, and linguistics: Introduction. *The Journal of Education*, *171*, 5-176.

Gee, J. P. (2003). *What video games have to teach us about learning and literacy.* New York, NY: Palgrave Macmillan

Gee, J. P. (2007). *Good video games + good learning: Collected essays on videogames, learning, and literacy*. New York, NY: Peter Lang International Academic Publishers

Hardy, S. A., & Carlo, G. (2005). Identity as a source of moral motivation. *Human Development*, *48*, 232-256. doi:10.1159/000086859

Hardy, S. A., & Carlo, G. (2011). Moral identity: What is it, how does it develop, and is it linked to moral action? *Child Development Perspectives*, *5*, 212-218. doi:10.1111/j.1750-8606.2011.00189.x

Hartmann, T. (2011). Users' experiential and rational processing of virtual violence. In K. Poels & S. Malliet (Eds.), *Vice city virtue: Moral issues in digital game play* [EPUB version]. Retrieved from http://acco.be

Hartmann, T. & Vorderer, P. (2010). It's okay to shoot a character: Moral disengagement in violent video games. *Journal of Communication*, *60*, 94-119. doi:10.1111/j.1460-2466.2009.01459.x

Heimburger, M. Y. (1994). *No university is an island: Implications of the Daedalus Project for BYU and American higher educational philosophy at large* (Unpublished undergraduate honors thesis). Brigham Young University, Provo, UT.

Heeter, C. (2013). *The Ouroboros of Serious Game Design: Game elements which can be used to address serious goals* [Working paper]. doi:10.13140/RG.2.1.4664.4085

Hunter, J. (2013). *World peace and other 4th-grade achievements* [Amazon Kindle edition]. Retrieved from http://www.amazon.com

Jansz, J. (2005). The emotional appeal of violent video games for adolescent males. *Communication Theory*, *15*, 219-241. doi: 10.1111/j.1468-2885.2005.tb00334.x

Jansz, J. (2011). Preface. In K. Poels & S. Malliet (Eds.), *Vice city virtue: Moral issues in digital game play* [EPUB version]. Retrieved from http://acco.be

Kafai, Y. B., Fields, D. A., & Ellis, E. (2019). The ethics of play and participation in a tween

virtual world: Continuity and change in cheating practices and perspectives in the

Whyville community. *Cognitive Development*, *49*, 33-42.

doi:10.1016/j.cogdev.2018.11.004

Kerpelman, J. L., & Pittman, J. F. (2001). The instability of possible selves: Identity processes

within late adolescents' close peer relationships. *Journal of Adolescence*, *24*, 491-512.

doi:10.1006/jado.2001.0385

Kingsepp, E. (2011). Ethics in World War II First Person Shooter games. In K. Poels & S.

Malliet (Eds.), *Vice city virtue: Moral issues in digital game play* [EPUB version].

Retrieved from http://acco.be

Klimmt, C., Schmid, H., Nosper, A., Hartmann, T., & Vorderer, P. (2006). How players manage

moral concerns to make video game violence enjoyable. *Communications*, *31*, 309-328.

doi:10.1515/COMMUN.2006.020

Kociatkiewicz, J. (2000). Dreams of time, time of dreams: Stories of creation from roleplaying

game sessions. *Studies in Cultures, Organizations, and Societies*, *6*, 71-86.

Konijn, E. A., Walma van der Molen, J. H., & Hoorn, J. F. (2011). Babies versus bogeys: In-

game manipulation of empathy in violent video games. In K. Poels & S. Malliet (Eds.),

Vice city virtue: Moral issues in digital game play [EPUB version]. Retrieved from

http://acco.be

Koster, R. (2010). *A theory of fun for game design* [Amazon Kindle version]. Retrieved from

http://www.amazon.com

Lave, J. & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York,

NY: Cambridge University Press.

Mayer, B., & Harris, C. (2010). *Libraries got game: Aligned learning through modern board games* [Amazon Kindle version]. Retrieved from http://www.amazon.com

Narvaez, D., & Lapsley, D. K. (2009). Moral identity, moral functioning, and the development of moral character. In D. M. Bartels, C. W. Bauman, L. J. Skitka, & D. L. Medin (Eds.), *The Psychology of Learning and Motivation* (Vol. 50, pp. 237-274). San Diego, CA: Academic Press.

Nucci, L. P. (2001). *Education in the moral domain*. New York, NY: Cambridge University Press.

Plough, I. (2014). Development of a test of speaking proficiency in multiple languages. *Papers in Language Testing and Assessment*, *3*(2), 27-52. Retrieved from http://www.altaanz.org

Poels, K., & Malliet, S. (2011). Moral issues in digital game play: A multi-disciplinary view. In K. Poels & S. Malliet (Eds.), *Vice city virtue: Moral issues in digital game play* [EPUB version]. Retrieved from http://acco.be

Ritterfeld, U. (2009). Identity formation and emotion regulation in digital gaming. In U. Ritterfeld, M. Cody, & P. Vorderer (Eds.), *Serious games: Mechanisms and effects* (pp. 204-217). New York, NY: Routledge.

Romero, B., & Schreiber, I. (2009). *Challenges for game designers*. Boston, MA: Course Technology

Roseth, C. (2016). Character education, moral education, and moral-character education. In L. Corno & E. M. Anderman, *Handbook of educational psychology* (3rd ed., pp. 213-224). New York, NY: Routledge.

Sadowski, J., Seager, T. P., Selinger, E., Spierre, S. G., & Whyte, K. P. (2013). An experiential

    game-theoretic pedagogy for sustainability ethics. *Science and Engineering Ethics*, *19*,

    1323- 1339. doi:10.1007/s11948-012-9385-4

Schrier, K. (2015). EPIC: A framework for using video games in ethics education. *Journal of

    Moral Education*, *44*, 393-424. doi:10.1080/03057240.2015.1095168

Schulzke, M. (2011). Reflective play and morality: Video games as thought experiments. In K.

    Poels & S. Malliet (Eds.), *Vice city virtue: Moral issues in digital game play* [EPUB

    version]. Retrieved from http://acco.be

Seager, T. P., Selinger, E., Whiddon, D., Schwartz, D., Spierre, S., & Berady, A. (2010).

    *Debunking the fallacy of the individual decision-maker: An experiential pedagogy for

    sustainability ethics.* In Proceedings of the 2010 IEEE International Symposium on

    Sustainable Systems & Technology (ISSST). doi:10.1109/ISSST.2010.5507679

Shaffer, D. W. (2005). Epistemic games. *Innovate: Journal of Online Education*, *1*(6), article 2.

Shoemaker, D. (2007). Moral address, moral responsibility, and the boundaries of the moral

    community. *Ethics*, 118, 70-108. doi:10.1086/521280

Sicart, M. (2009). *The ethics of computer games* [Amazon Kindle version]. Retrieved from

    http://www.amazon.com

Simkins, D. W., & Steinkuehler, C. (2008). Critical ethical reasoning and role-play. *Games and

    Culture*, *3*, 333-355. doi:10.1177/1555412008317313

Tekinbaş, K. S., & Zimmerman, E. (2004). *Rules of play: Game design fundamentals*.

    Cambridge, MA: MIT Press.

Tobias, S., Fletcher, J. D., & Wind, A. P. (2014). Game-based learning. In J. M. Spector, M. D.

    Merrill, J. Elen, & M. J. Bishop (Eds.), *Handbook of research on educational*

communications and technology (4th ed., pp. 485-503). doi:10.1007/978-1-4614-3185-5_38

Tripp, S. (1998, Spring). On a wing and a prayer. *BYU Magazine*. Retrieved from

magazine.byu.edu

Van Eck, R. (2006). Digital game based learning: It's not just the digital natives who are restless. *Educause Review*, *41*, 16-30. Retrieved from

http://net.educause.edu/ir/library/pdf/erm0620.pdf

Waldron, D. (2005). Role-playing games and the Christian Right: Community formation in response to a moral panic. *Journal of Religion and Popular Culture*, *9*.

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. New York, NY: Cambridge University Press.
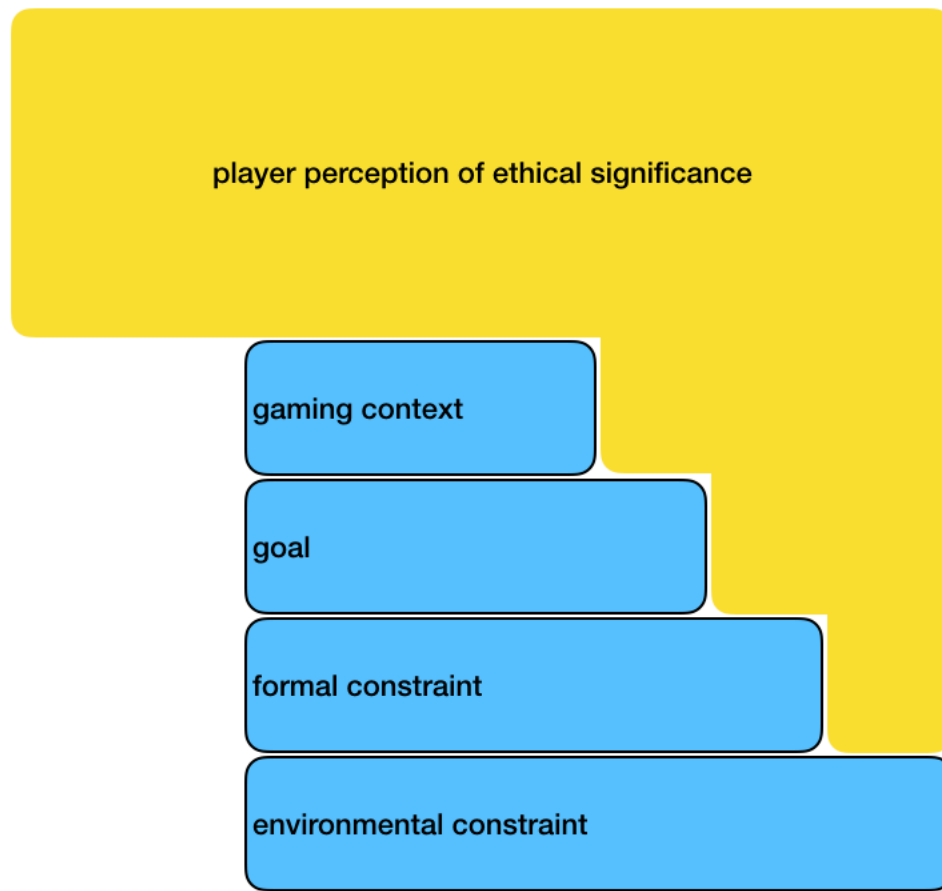
Figures

Figure 1. Visual representation of how Heeter's (2013) four categories of design and contextual

categories interact to support player perception of ethical significance, which leads to trying on a

moral identity in the game.

Appendix

Interview Protocol

In the French ILO this semester, we used a simulation or a hypothetical scenario to think about our topic and to prompt some decision-making. You and your classmates made a number of decisions throughout the game, and I'd like to ask you some questions about those decisions. I have here some copies of the final project that we did together -- you can use that to jog your memory as we talk about the past semester. If it's okay with you, I'll record your answers to these questions.

[Begin recording]

So, as I mentioned, you and your classmates worked together to make several decisions throughout the course of our activity:

1) Which of these decisions would you describe as being particularly memorable?

2) [If there was a positive response to number 1] What was it about these decisions that made them memorable?
   a. [Clarification] What set them apart from other decisions?

3) What factors would you say influenced your decisions during the activity? What sort of things did you keep in mind?
   a. [Clarification] When you were faced with a choice, how did you know which options were better than others?
   b. [Possible follow up] How would you say your classmates influenced your decisions?

4) What sort of decisions would you like to have made but couldn't because of the limitations of the activity?

5) To what extent did you consider your decisions in the simulation to be ethically significant? That is, to what extent did you think of them as matters of right versus wrong or good versus bad?
   a. [Possible follow up] How would you say your classmates influenced whether or not you thought a decision was ethically significant?

6) [If mixed or positive answer to number 4] What is an example of a decision that you considered to be ethically significant?

7) [If positive answer to number 5] Why did you consider that decision to be ethically significant?
   a. [Possible follow up] How would you say your classmates influenced whether or not you thought a decision was ethically significant?

8) [If mixed or negative answer to number 4] What is an example of a decision that you considered to be ethically insignificant?

9) [If positive answer to number 5] Why did you consider that decision to be ethically insignificant?
   a. [Possible follow up] How would you say your classmates influenced whether or not you thought a decision was ethically insignificant?

I asked you earlier about what kinds of factors influenced your decisions during the simulation

10) What additional factors (if any) influenced your thinking when you made a decision that you considered to be ethically significant?

Now, going back to decisions in general:

11) When (if ever) did you feel conflicted about some of the decisions you made during the game?
    a. [Clarification] When did you have trouble making a choice between two or more options?
    b. [Possible follow up] How did your classmates contribute to your feeling conflicted?

12) [If positive answer to number 11] What did you feel torn between?

13) [If positive answer to number 11] When you did feel torn between two or more options, how did you resolve that conflict? What influenced you to ultimately settle on the side that you did?

As you know, we weren't just studying issues of government, society, and culture in this activity; we were also learning more about French language and culture.

14) How would you say that holding the activity in French affected the decisions you made?

15) How might your decisions have been different if we had held the activity in English?