Problematizing Cultural Appropriation

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ABSTRACT

Cultural appropriation in games entails the taking of knowledge, artifacts or expression from a culture and recontextualizing it within game structures. While cultural appropriation is a pervasive practice in games, little attention has been given to the ethical issues that emerge from such practices with regards to how culture is portrayed. This paper problematizes cultural appropriation in the context of a serious game for children inspired by Día de los Muertos, a Mexican festival focused on remembrance of the dead. Taking a research through design approach, we demonstrate that recontextualised cultural elements can retain their basic, original meaning. However, we also find that cultural appropriation is inevitable and its ethical implications can be far reaching. In our context, ethical concerns arose as a result of children's beliefs that death affects prominent others and their destructive ways of coping with death. We argue that revealing emergent ethical concerns is imperative before deciding how and in what way to encourage culturally authentic narratives.

Author Keywords

cultural appropriation; game narrative; research through design; serious games; death; children

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous – Design.

INTRODUCTION

Games can create new and unfamiliar experiences that extend players' knowledge and challenge their beliefs. While this is considered to be a strength of games, it also introduces challenges. In the case of games that convey new *cultural* knowledge and representations, game designers must be cognizant that their choices offer a lens through which a particular culture may be viewed in the future, influencing the public's attitudes and behaviors toward the culture being portrayed [8].

Cultural appropriation is "the taking – from a culture that is

not one's own – of intellectual property, cultural expressions or artefacts, history and ways of knowledge" [21]. Cultural appropriation occurs when game designers decontextualize cultural history, expressions or artifacts that belong to a culture that is not their own, in turn recontextualizing them into game structures. Even though culturally-sensitive game designers might seek to formalize cultural elements within game structures such that cultural authenticity is retained, control over the experiential nature of a game narrative is rarely possible [4]. Both formal and experiential aspects of narrative foster the construction of cultural knowledge that may be offensive to the original culture. Therefore, we argue that in taking social responsibility seriously, designers must strive to understand how games encourage cultural interpretations toward capturing and responding to emergent ethical concerns.

The aim of this paper is to problematize cultural appropriation in the context of a serious game whose goal is to teach literacy skills to children with dyslexia. Our game world is inspired by Día de los Muertos, a Mexican festival with origins traceable to the Aztec period, that is focused on celebrating and remembering the dead. This game design context introduced two particular challenges in relation to retaining cultural authenticity: first, the nature of our game prioritized learning literacy aspects, over the cultural richness of the narrative; second, our players were children whose cognition on death is already shaped by their development and local culture. In acknowledging how the particularities of our context might shape cultural interpretations, we adopted a research through design approach to understand how cultural appropriation and cultural authenticity co-exist and are experienced by children. This research does not aim to reduce cultural appropriation in all its complexity to a set of definitive game design recommendations. Rather, it attempts to foster a better understanding of cultural appropriation and the considerations it raises in the context of game design and in light of design methods involving cultural outsiders.

The contributions of our research are the following: First, we show that recontextualised cultural elements can be interpreted in culturally authentic terms if they convey core values through symbolic rituals and interactions. This helps to inform design strategies that may promote cultural authenticity in the context of games. Second, we show that cultural appropriation is hard to avoid, especially when the cultural rituals refer to concepts of universal concern, as was the case with our game. Our findings highlighted the

importance of understanding cultural appropriation as the interpretive product of children's development and local culture. Third, we find that striving for cultural authenticity introduces new design concerns, ranging from the ethical to the methodological. Even though our research was initially motivated by ethical responsibilities towards cultures represented with a view to limit cultural appropriation, children's appropriation of the festival raised different ethical issues and designer responsibilities toward them. Importantly, some of their interpretations required us to rethink the consequences and complications of both cultural authenticity and appropriation.

BACKGROUND

Culture in Games

Work on culture within the games research community has most often concerned cultural representations. For the last decade, researchers have pointed out the lack of cultural diversity present, and the over-representation of white, male characters. For example, Williams et al. write that "the world of game characters is highly unrepresentative of the actual population and even of game players" [25]. Furthermore, when culturally diverse characters are present in games, often they present negative or problematic cultural stereotypes. For example, in considering representations of black males, after studying 149 games, Burgess et al. found that all black male characters were either athletic, violent, or both [2]. With respect to representations of Native American cultures, Lameman points out that male characters are frequently portrayed as vengeful warriors or mystics, and otherwise as generic warrior types, while female characters are excessively sexualized and tend to play minor roles [13, 14].

The lack of diversity and stereotypes within games might be less troubling if games truly were enclosed "magic circles", where meaning within a game was separate from meaning outside of it. Various scholars have refuted this notion, however [3, 7]. Indeed, serious games in particular are premised on evidence that games encourage meaning making, foster knowledge and develop transversal skills that are transferable beyond the game [6]. In reflecting on what this means for cultural representations, Leonard argues that games serve as a form of tourism, allowing us to "try on other bodies and experiences" so that players can "indulge in the other" [16]. Nakamura suggests that due to heavy stereotyping, identity tourism in games is currently more about supporting experiences that are "entertaining, nonthreatening, and committed to sustaining racial hierarchies" than it is about being enlightening [17]. Through the process of becoming a game character and interacting with other stereotyped characters, Deskins posits that games can serve as a form of reinforcement of prejudicial, if not racist beliefs [8].

Cultural appropriation, a specific form of cultural representation, has as yet been largely overlooked by the games research community. Cultural identity, culture, and appropriation can all be contextually defined, thus it is sometimes difficult to tell when cultural appropriation is taking place [21]. Often, the "taking" also involves a transformation process, during which the representation, interpretation, meaning, and context of the cultural elements can change. In games, cultural appropriation can be argued as taking place whenever elements of a culture are decontextualised and recontextualised to fit within a game's world, narrative, and mechanics, by designers not from that culture. The *Turok* games, for example, appropriate Native American cultures in the service of entertainment, representing Native American characters as warriors who fight with bows, arrows and tomahawks, and possess connections to spirit worlds and almost alien tracking and sneaking abilities [11].

This transformation process has been viewed as potentially problematic, as it can lead to appropriations that are considered inappropriate and wrong by the members of the "original" culture [27]. For example, in Native American cultures, feather headdresses hold special meaning, and the right to wear them must be earned by the wearer. Yet, Native American-inspired feather headdresses have frequently been appropriated by members of other cultures as fashion accessories and costumes [19]. Often, the culture that has been taken from also constitutes a minority culture. Due to a lack of knowledge, members of the majority culture who experience the recontextualised cultural elements may have little idea of the "original" meanings associated with them. Thus, we should not expect majority culture members to easily identify instances of cultural appropriation. But as Eglash et al. point out in the context of ethnocomputing, cultural appropriation is not always negative, potentially supporting empowerment and two-way cultural shifts in both people and technology [9]. The different perspectives on cultural appropriation highlight the important role of the designer in considering the benefits and ethics of cultural appropriation in games, in order to proceed accordingly.

Strategies for Conveying Cultural Characteristics
In turning our attention to practical design strategies related to how culture is portrayed in games, given the globalized nature of the games industry, many games undergo a process of localization prior to local distribution. "Localisers" end up mediating our knowledge of the world, and "filter the images and narratives that are sold and marketed to global consumers" [5]. This localization can range from modification for clarity — e.g. changing user interface metaphors to ones that are culturally familiar — to modification for cultural appropriateness — e.g. making nude characters clothed. Carlson and Corliss present two strategies that localizers use: *domesticating*, in which they swap details deemed too culturally specific to another culture for culturally familiar ones, and *foreignizing*, in which they seek to retain the cultural and historical provenance of the source text [5].

Both techniques come with disadvantages: domesticating potentially runs the risk of cultural appropriation and sacrificing the character of the original text, while foreignizing potentially runs the risk of culturally alienating players, exoticising and drawing undue attention to details which, in the original text might have been mundane. A third technique commonly used by Japanese game developers might be described as *ambiguifying*. This technique embraces *mukokuseki* or statelessness as a design strategy, in which characters have ambiguous racial and cultural backgrounds (for example, having blue hair), in order to appeal to the broadest market possible [5].

MOTIVATION AND RESEARCH QUESTIONS

In general, cultural representations in games currently leave much to be desired. Especially in the context of serious games, where the intention is for players to reflect on game experiences and for learning transfer to occur, we should approach the representation of different cultures thoughtfully. In light of the global games industry and other forms of transcultural exchange, cultural appropriation in games is an additional phenomenon of which we should be cognizant, facing many of the same difficulties as cultural representations in games, as well as additional ethical issues concerning the recontextualisation of cultural elements for use in games. Domesticating and foreignizing are two approaches that have been used in game localization for addressing cultural elements, but both have their weaknesses. Adopting blanket rules to not represent elements of other cultures is not an ideal solution either. Amongst other reasons, it hugely limits people's exposure to other cultures, and cultural ownership is frequently not a cut-and-dried affair. Clearly, there is a need for designers to consciously reflect on how to represent culture in games respectfully, while taking into account the characteristics of their players to avoid alienation. The present work focuses on and problematizes cultural appropriation in the context of the design of a serious game for literacy featuring a Mexican festival celebrating death. It has a particular focus on children's meaning making processes, and the issues that arise from deeply considering player participation in design.

The objective of the game we are designing is to strengthen the literacy skills of players. Our target audience concerns late primary school aged children (ages 9-11) who live in England with reading difficulties, many of whom find reading to be a demotivating activity. Previous research shows that best practice teaching for dyslexia involves 'explicit phonics teaching', which is often performed through multisensory drill and practice activities [20]. Part of our design challenge therefore became to present versions of these activities within a motivating frame. In particular, we sought to pique enough interest in players such that they would return to the activities repeatedly, with the game featuring no set ending point. We wished to situate the game within a world that was both familiar and unfamiliar, in which the player's role would be a heroic one involving language decoding, and the other characters

would be reliant on the player. Having decided to foreground maintenance of friendships with characters as a means of encouraging replaying of activities, we also needed a world that would feature a multitude of interesting characters.

We eventually chose a world inspired by Dia de los Muertos, or the Day of the Dead (DotD). The core message of DotD, a two-day festival that is observed in Mexico and other central American cultures, is of remembrance and acceptance of death, with death being viewed as a continuation of life [1]. On these days, friends and family gather to celebrate the lives of the departed. The living build shrines for their loved ones. They honor the dead by giving offerings to them such as sugar skulls, marigold flowers, traditional foods and beverages, by praying for them, and by writing and performing humorous poems and songs about them. It is believed that over those days, the souls of the dead awake to visit the living. DotD is associated with a particular aesthetic, characterized by bright colours and cheerful, playful representations of the dead as skeletons. We initially became interested in DotD because of its aesthetics. On further exploration of what the festival signified, particularly, reflecting on the central role of communication in DotD, we decided to draw on it to inform our game world as it could be interpreted as aligning with the pedagogical goals of our game.

A guiding value of our work was to maintain the cultural authenticity of DotD in the game world. However, in designing a culturally faithful account of the festival, we faced challenges. One such challenge arose from the primary purpose of our game, which was to strengthen literacy. The world setting played a secondary role of support in motivating learners to continue playing the game. This meant that as designers we could not privilege a rich cultural exploration of the DotD. Such narrative constraints are inherent to serious games. *Socialdrome*, for example, aimed at developing children's social skills acquired in a fictional island called Cascara. While the island provided the context for numerous learning activities, its role was to motivate the learning goal of the game [23]. Thus, our first research question was: *can cultural authenticity in game design be maintained by presenting children with a narrow perspective of the festival that retains its core message and rituals?*

A second challenge emerged from the fact that neither we, nor our target players, are Mexican, and concerned the meanings, interpretations, and practices surrounding death in the cultural context of childhood in the UK. While cultural appropriation debates have focused on ownership of particular cultural artefacts or knowledge, death affects everyone and is not tied to any specific culture; indeed every culture interprets death in its own ways.

Previous research provides some insight into children's cognitive and cultural understanding of death. Children understand the natural causes of death by middle childhood

[10, 15, 22]. This understanding is in part mediated by the media's persistency in reporting death. Challenging a sociological claim that death has become a private matter, Walter et al. argue that death is at the centre of public life, with the British media 'trespassing' into the family realm on a daily basis [24]. They argue that the media privilege the reporting of the deaths of public members of society, or deaths that have occurred under extraordinary circumstances. Their analysis also demonstrates the media's fascination with the feelings, emotions and grief associated with death, which they call 'emotion invigilation'. As children's understanding of the natural causes of death evolve, supernatural explanations also begin to develop; such explanations go beyond what can be explained by natural laws. In a meta-review of relevant empirical work, Woolley and Ghossainy show that despite the common belief that children display credulity, compared to adults, children are less supernatural in the way they conceive of death [26]. Even though children and adults both agree that biological functions cease upon death, adults tend to propose that cognitive processes continue beyond death. Crucially, culture plays a central role in this belief shift. Testimonials from loved ones, such as parents and teachers, foster children's belief in the supernatural [10] with supernatural explanations of death increasing with children's age [15].

The research described above thus claims that children already have understandings of death, which are strongly culturally situated. In exploring how to approach cultural appropriation in the game design process, it was important to examine to what extent children contributing to the design would seek to appropriate DotD to make it more familiar to their ways of understanding, despite designers' best efforts to maintain cultural authenticity. Our second research question was: *will the festival mediate children's understanding of death and how?*

To address these questions, we adopted a *research through design* approach undertaken through a participatory, constructivist game design method described below.

METHOD

Participants
We undertook two design workshops with two classes (year five and six) at a single mainstream primary school in south-east London. The school is located in a socially and ethnically diverse area with a higher than average proportion of students whose first language is not English. The children were all within our target age group (ages 9-11). A total of 37 children participated (20 boys and 17 girls), with 22 children within the year five class (aged 9-10) and 15 children within the year six class (aged 10-11). The children were divided into groups of four or five, with a total of five groups in the year five class and four groups in the year six class.

Materials and Procedure
Each workshop lasted for about one hour and was facilitated by three to four researchers. The children's class teacher was also present throughout the session. We based the workshop on a constructivist approach. Through children's development of stories, we explored their cultural beliefs, understanding and experiences of death.

The workshop involved three related phases. The activity structure within each phase, along with adult facilitation when necessary, provided scaffolding for children's development of stories. The activities were designed to encourage the children to actively construct stories in collaboration with their peers and imbue them with their own meanings. Moreover, to ensure that children's stories aligned with game structures, workshop activities required an incremental building up of a game system, as recently proposed by Khaled and Vasalou [12]. For instance, children designed game characters before they went on to design events that took place between these characters. Importantly, we chose to retain the festival's cultural authenticity by highlighting the core values it expressed (indicated in small caps within the text), ensuring in turn that these values were an intrinsic and central part of the activities. To derive the values, prior to the workshop, the authors conducted research on the festival. After each researcher had read numerous secondary sources, namely online articles written about the festival, they convened to discuss their understanding of the festival and to define a first core set of values. These values were later verified in discussion with two cultural insiders who served as informants to our method. Thus, workshop prompts and activities were based on this preliminary research aiming at building a design method that reflected the cultural authenticity of the festival.

Presentation of design context: we explained to the class that we were designing a game based on the DotD festival, and that we welcomed their ideas for game characters and stories. First, we highlighted the purpose of the festival in celebrating the lives of those who have died, exemplifying the UNIVERSALITY of death to all humans and living organisms. We then showed the students a 3-minute animated film of a young girl's experience of the festival[1]. The film had been created by art and design students and had received a Student Academy Award. It started with the girl's visit to her mother's grave on the DotD. As tears flowed down her face, she was drawn by a sudden force into the world of the dead. Even though she was initially afraid, the girl slowly joined the festivities dancing with one skeletal figurine in particular, whom she recognized as her mother. As mother and daughter held each other with love, the girl found herself back at the grave site. The story ended as the girl skipped with joy away from the graveyard. The video encapsulated the festival's core message of

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[1] https://www.youtube.com/watch?v=jCQnUuq-TEE

REMEMBRANCE and ACCEPTANCE. It also served as an introduction to the aesthetic style of the DotD. Next, one researcher told a 5-minute story about a girl and her dead dog using a PowerPoint deck featuring photos of Mexican DotD festivities to support the storytelling process. This story was built upon our research on the festival and was purposefully designed to introduce children to values, customs and traditions for honoring and calling on the dead, including customary foods, marigold flowers, poetry written for the dead and dedicated shrines. These customs expressed the INTIMACY fostered on the day between the dead and the living.

Development of characters: we then asked the children to create their own characters in groups for a story about this festival featuring one living, and one dead character. Each group was provided with paper templates for each character, which they could fill in with details such as their hobbies/interests, job, and relationship to the other character. Example templates based on the story told to the children at the start of the workshop were displayed on an interactive whiteboard as a prompt for groups who were struggling with ideas. Once the children had agreed on their two characters, they were provided with modeling clay as well as a selection of other art materials including paper, beads, and other accessories. Using these materials, they built or drew each of their characters.

Narrative construction: we invited children to create a story about their characters. In supporting the children in developing stories that described relationships and communication between characters, they were asked to consider the following questions: *Why does one of your characters want to contact the other character? How do they contact them? What are they saying? How does the story end?* Through this narrative, children were able to explore all three emotive and cognitive components fostered by the festival: INTIMACY, REMEMBRANCE and ACCEPTANCE. Each group was provided with a blank paper storyboard on which they could document their ideas for their story. Lastly, each group was given a Flip video camera and asked to capture their story on it. This activity required children to integrate all of the ideas they had

developed into a cohesive narrative.

To summarize, our method closely defined some parts of the narrative with a view to promote cultural authenticity, while other parts were left ambiguous and open, such as for example character roles. We intentionally included this underspecificity in order to invite, capture, and understand children's cultural interpretations of DotD values, and their proposals for suitable game design elements.

DATA CAPTURE AND ANALYSIS

Where possible during the workshop, researchers took written notes about events taking place, and took photos. Post-workshop, the notes were compiled into full written accounts of what happened within each group, and the videos recorded by the children were transcribed. The notes and transcripts were transferred to an online qualitative analysis tool and were analyzed according to thematic analysis drawing out key themes in conjunction with the photos, videos, character profiles, drawings, models and storyboards produced during the workshop.

RESULTS

Aesthetics of Death

Children connected the concept of death to characters and physical properties of the world to create playful combinations. Using the aesthetics of the festival as a point of departure, dead characters were often designed as skeletons putting to use the modeling clay we had provided. Children proposed a 'skeleton orchestra'. They envisioned the 'dead playing football with their skulls'. All of them perceived the world of the dead as a place of both decay and mystery, with little light, homes made out of bones, and moldy food. Children were fascinated by the strangeness in the world's decay as they envisioned it.

Aesthetic and creative choices were also prompted by opportunities suggested by the arts materials made available. One team first identified a shiny heart icon in their arts packet before deciding to attach it on their living character's body to express love for her dead dog. Overall, it appeared that children's engagement was sustained through the constructivist approach taken where aesthetic

Figure 1: Clay models of dead and living characters

expression and meaning making was encouraged. Figure 1 displays several clay models that children made.

Actors, Causes and Interpretations of Death

In most of the stories developed, children depicted dead characters to occupy an important status in the world of the dead. For instance, a dead dog acted as protector of dead inhabitants and their animals. Status was also acquired during the transition to the world of the dead. A character who used to be a schoolgirl in life became a doctor upon entering the world of the dead. Another group of children created a story between an uncle, Pedro, and his niece, Pearly. Upon meeting in the world of the dead, an evil leader, Zorgon, arrived and told them that Pearly was not allowed to leave. Pearly defended her uncle and defeated the leader, leaving Pedro as king of the world of the dead.

Figure 2: Pedro, the king of the world of the dead

Children made sense of death through both natural and supernatural explanations. Those who focused on the natural cessation of biological functions tended to sensationalise and dramatize death through gruesome details. One team described the killing of a living character, while enacting it by disassembling the physical props: 'A car came out and hit Johnny. Blood poured and her heart fell out and then her body was split in half. She got buried in her grave piece by piece.' In a similar fashion, another team described a fight erupting between two characters in the world of the dead: 'She takes Pedro's gun, shoots Zorgon in the eye sockets and bones start falling out of them. She then punches Zorgon's skull off and kicks it away'. While natural causes of death emerged in children's stories, many children made reference to supernatural causes that did not adhere to natural laws. Some discussed the continuation of life after death. Drawing on their own religious ideologies, they compared the world of the dead with heaven. Moreover, dead characters were envisioned to continue praying and thinking of their loved ones, suggesting a continuing bond between the dead and the living. One team designed a Facebook application called 'Ghostbook' that was proposed to sustain this communication. Highlighting the importance of the supernatural, another team discussed the role of fate in dying: they talked about a living pirate who had travelled the world and taken many risks only to die at the same spot as his grandfather.
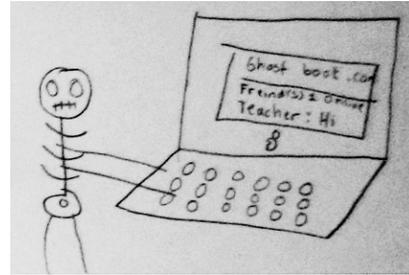

Figure 3: A 'Ghostbook' message sent by a dead to a living character

As Walter et al. caution, children in England are exposed daily to media portrayals of death that privilege and sensationalise both the deaths of public figures as well as extraordinary causes of death [24]. Indeed, the influence of culture was evident in children's construction of stories. Moreover, we note that violence and status in relation to death are frequent tropes in the context of games. Game heroines are comparable to public figures as they almost always occupy an important status in game narratives. Additionally, coping with violence in games is perceived to be a rite of passage by younger children, with in-game violence seen as unrealistic compared to their real world experiences [18]. The perceived lack of realism associated with games could have thus served to foster the violent accounts of death that children provided. Turning our focus to the supernatural, our participants belonged to an age group that has begun to incorporate religious beliefs into their reasoning processes. Even though the exploration of the supernatural was encouraged through the festival and its rituals, children interpreted the supernatural from the lens of their own religious and fatalistic perspectives.

Cultural Rituals as an Entry Point for Exploring the Supernatural

As noted above, the workshops explicitly invited children to consider supernatural elements through the lens of Mexican cultural rituals for communicating with the dead (e.g. marigold flowers). As mentioned earlier, researchers provided an example story for inspiration that described a living child being drawn into the world of the dead as she stood over her mother's grave. Although "novel" ideas did feature in the children's stories, when designing the initial communication act between the living and the dead, most children relied on the cultural rituals we had provided. Communication often began at a three-tier shrine, it was encouraged by marigold flower petals and through placing customary food at graveyards. Similarly children mimicked the example given by researchers as inspiration with most of them describing a sudden force pulling the living character into the world of the dead.

Figure 4: A young girl leaves marigold flowers at the site of her dog's grave

Only two teams provided new ideas for character communication. The first team of children described a dead father who used to be barrister. The father appeared in his son's bedroom with a special mist flowing into his wig. The second team described the importance of mutual gaze between a dead father and his living daughter. The characters acknowledged each other's presence only when simultaneously looking into a body of water. In interpreting these findings, we recognize that the DotD served as a novel and legitimizing cultural lens from which children could explore the supernatural. In light of the cultural unfamiliarity of the concept of directly communicating with the dead, they drew on Mexican cultural rituals and practices to establish their stories. To continue the stories, they then moved to more culturally familiar tropes and practices, shedding light on their own culturally-relevant explanations and meaning making processes.

Emotions and Death

Children's narratives described a series of emotionally charged events whose sequence was directed by the narrative structure we had guided them to follow through the storyboarding activity. Most stories began by expressing the living's state of longing, sadness and nostalgia for the dead. Stories went on to describe the moment where the dead and the living met again. Living characters typically experienced fear and shock when first facing their loved one. After fear subsided, children proposed interactions in which characters expressed their love for each other and shared meaningful moments. Upon the living's exit of the world of the dead, they talked about growing acceptance and peace with death. This composure was often maintained through yearly meetings between characters at the time of the festival. One team for example narrated a story between a father and a daughter who both shared a love for swimming: 'Well Philip died when he went to the Olympic stadium. He had a competition and accidentally drowned. His daughter (Elizabeth) tried to save him, dived in but it was too late and the daughter was very, very sad…

Ok, they communicate by Elizabeth saying a poem to her father and… She goes underground and gets grabbed by a hand, a bone hand, she screams but then her father shows her his swimming move and they are both happy and when they hug each other, the daughter is back saying her poem'. Most notably these emotional narratives aligned with the festival's message of celebrating and accepting death.

Figure 5: A living and a dead sister communicate through a mirror

While the majority of stories started with emotions of sadness, which progressed into acceptance and relief, two teams constructed this emotional journey in different terms. The first focused on the living character's revenge and anger about the death of her friend who had been killed in a road accident: 'Lucy stamped on the car, and crushed it and was very angry with the driver. She ended up putting the driver in the hospital and ended in prison behind bars'. This group of children went on to describe the meeting between the dead and the living character, after which the living made sure that cars could harm no child by casually killing other drivers she encountered. In contrast, the second team emphasized the living character's feelings of guilt and the external pressures imposed on the bereaved in suppressing their emotions. Upon hearing of the death of his father, a young child Lucas thought 'it is not my fault'. After asking 'when is he going to be back?', Lucas was told that his father is never coming back. He was so upset that he began to jump on his bed and broke it. His mother said in disdain: 'why are you jumping on the bed like that? You just broke the bed. That's £150. Learn to be a good boy, a good boy.. now you're going to sleep on a broken bed'. These two groups of children deviated from exploring the festival's message and expressed responses to death that could be viewed as problematic if not further discussed: the first game character expressed revenge, while the second was punished for showing grief in his own way.

In summary, our workshops revealed how children interpret death in the cultural context of our game concept. Their characters and stories embodied the tension between strict cultural authenticity in games and involving cultural outsiders as game design participants. We used their

interpretations to reflect on the role of the game as a 'cultural artifact' that encourages certain ways of thinking about death through its narrative and interactive values. We explore their design implications next alongside how they advanced our understanding of cultural appropriation.

DISCUSSION

Co-Existence of Cultural Authenticity and Appropriation

When the children were asked to engage with new perspectives on the supernatural, they drew on cultural knowledge that the researchers had given them. We found that children could not easily conceive how the dead and the living communicate. Lacking their own points of reference, they strongly relied on the cultural rituals and customs of the DotD for proposing how this could happen. Our findings echoed one of the concerns associated with foreignizing as a localization approach, namely, that it led to the exoticizing of particular details [5]. In our case, those details concerned being pulled into the world of the dead, which encapsulates only a small part of the DotD. At the same time, we did not find much evidence that the other significant disadvantage of foreignizing, cultural alienation, was taking place. While children heavily relied on our descriptions of DotD rituals, they simultaneously utilized the rituals as a vantage point for understanding the meaning of the festival. Indeed, the festival's emphasis on remembrance, intimacy and acceptance were understood and enacted by most of the teams. In directing children's construction of stories by providing the purpose and outcomes of the festival, we were able to maintain some cultural authenticity. In drawing this conclusion, however, it is important to recognize that the workshops were run with participants from an ethnically diverse school. Children's pre-existing exposure to cultural diversity might help to explain why they were open to exploring the rituals and narratives of other cultures. Nevertheless, in line with our first research question, our findings are encouraging for games such as our own where narrative exploration is not an end, but serves as a means for motivating another primary objective. We thus argue that game narrative can communicate cultural authenticity as long as it retains components that exemplify its core cultural values.

At the same time, establishing cultural authenticity was not a straightforward process. Despite our efforts to direct them toward culturally authentic stories, children appropriated the festival and imbued it with their own meanings. Leonard writes of games enabling people to "try on other bodies and experiences" and to "indulge in the other" [16]. Conversely, we observed that children sought to make the experiences more familiar. Certain elements and narratives associated with the DotD festival had resonance with them, including relationships between characters, responses to death and causes of death. In those cases, children tended to construct stories in the context of their own cultural, social, and religious background and experiences. To give one example, children engaged in what Walter et al. call

emotion invigilation where they elaborated and dramatized the emotions of the deceased [24]. Therefore, while cultural authenticity was retained and benefited children in understanding death in different terms, children also naturally gravitated towards cultural appropriation. As Calleja argues, game narrative is not only formalized by the designer, but also interpreted, reshaped and experienced by the player [4]. In the special case of cultural representations of death, given the universality of death as a phenomenon, it may be argued that appropriation is not only inevitable but also imperative if children are to make sense of death and bereavement. With respect to our second research question, our findings demonstrated that children's cultural understanding of death played a determining role in shaping their understanding of the festival.

Ethics of Cultural Appropriation

Observing children's cultural appropriation of the festival raised several ethical questions. While children of the age group involved have been shown to understand both natural and supernatural aspects of death, our findings question the extent to which they have accepted death. DotD addresses the universality of death to all human beings and living organisms. In contrast to this view, our participants explicitly avoided describing death as an event that touches all people: those living in the world of the dead were mostly assumed to be people of status. One explanation advanced earlier was that children might be mimicking the way that death is portrayed culturally in the media [24] or in relation to game protagonists. However, it is also likely that they believe death is not of relevance to them, or a distant event, a finding that has been shown in previous empirical research [22]. In maintaining the cultural authenticity of DotD, our game would need to promote a universal view on death, potentially demanding children to confront their own mortality and that of close others, thereby facilitating a change in cognition.

Additionally, DotD foregrounds closure as a means of accepting and coping with death. Some children departed from this perspective on coping to experiment with different ways of thinking and acting. They described counterproductive and detrimental ways of coping with death, including revenge and the suppression of emotions, thus missing the message of emotional acceptance mediated through the festival. Exposing such ways of coping might help children explore when, how and if to regulate emotions during grief [24]. However, neither the workshop, nor our initial game concept, included provisions to encourage reflection on these kinds of interpretations of death. Finally, while participating children had not suffered bereavement, grieving children will undoubtedly understand the game in different terms raising further ethical considerations.

The present work was motivated by an ethical obligation toward the originating culture, in which cultural appropriation in games was viewed as problematic. Our findings broadened this ethical obligation by exploring

design conflicts that can arise as a result of children's cultural appropriation. This highlighted the importance to design for cultural authenticity such that clashes with children's existing beliefs are handled with sensitivity.

Design as a Mechanism to Mitigate Cultural Appropriation and Related Ethical Concerns

In the context of games, mukokuseki has been used as a means of appealing to the widest possible audience, as mukokuseki design is ambiguous and cannot be clearly associated with any particular culture [5]. Within our workshop, we observed that ambiguous aspects were interpreted in culturally familiar ways and thus paradoxically invited cultural appropriation. Some designers might argue in favor of unambiguous, closed representations of other cultures that maintain as much cultural authenticity as possible. Nonetheless, as our findings show, the experiential nature of narrative suggests that cultural appropriation will happen. Studies such as our own that take a research through design perspective to understand how cultural events, artifacts or knowledge are interpreted by end users and assimilated into their own cultural knowledge will be vital to determine the ethical issues that might arise, and to design opportunities for further mitigating these concerns within and outside of the game. In the context of our game, our findings have sensitized us to the importance of exploring and acknowledging children's ongoing reflections on death during an educational intervention focused on literacy.

Design Participation For Cultural Authenticity

Acknowledging children's interpretive role in games, in the present work we set out to observe their interpretations of the festival with a view to understand if and how cultural appropriation happens. This research demonstrated the ever-shifting balance between cultural appropriation and authenticity, while also helping us to reflect on how to mitigate emergent ethical issues. Although we engaged our participants in storytelling activities during the workshops, our aim was to generate knowledge about cultural appropriation rather than to share design control with them. Yet, our findings suggest that attempts to co-design in light of cultural appropriation concerns will introduce new methodological challenges, especially with regards to who participates and what participation means. Participatory design in particular foregrounds the needs and perspectives of end users. In understanding users' cultural beliefs, needs and values, designers aim to create appropriate tools and systems. Both pragmatically and ethically, it stands to reason that users should be directly involved in design activities. Games and virtual worlds can feature cultural representations of diverse cultures, human and non-human alike. These cultures may be new to intended players. In the context of our workshop, if we had drawn largely on children's ideas to design the game world and narrative, we would have largely relied on domesticating as an approach for representing culture, as well as cultural appropriation. Therefore, in cases where designers want to share control

with users for applications and systems that represent other cultures, new considerations arise.

Within our workshop, we presented children with cultural rituals and encouraged them to embed them into their stories. Children balanced the use of such cultural resources, and the meaning making encouraged through them, with their own stories about death. Thus, the cultural context of the workshop empowered them to make meaning of a sensitive topic [9]. As discussed earlier, this strategy was used by children to understand the core values of the festival. Future work could develop this approach further through participatory methods that support children to acquire cultural expertise before their input to design. A further approach that balances cultural authenticity with children's experiences would be to involve cultural experts and consultants in working together with children. Such a design team could establish shared understandings of death that accommodate cultural authenticity and at the same time are sensitive to children's development and culture.

CONCLUSION

The present work drew attention to the implications of cultural appropriation arguing that it can influence how the originating culture is perceived, while changing the nature and meaning of important cultural rituals. Our research focused on how cultural appropriation can arise during the design process of a serious game. Targeted at primary school children, the game's narrative was based on the Mexican festival, Día de los Muertos or Day of the Dead, celebrating the lives of those who have died. Taking a research through design approach, we set out to explore how cultural authenticity can be retained through game structures and narrative, while capturing if and how cultural appropriation may happen given children's contextual, cultural understandings of death.

Our findings demonstrated that cultural authenticity can be fostered if designers foreground rituals and relational dynamics that allow users to make sense of the underpinning cultural values. However, we also found that in the case of cultural rituals that implicate universal concerns, cultural appropriation is unavoidable. Most importantly, we showed that cultural appropriation can extend designers' ethical considerations beyond members of the originating culture, to include end users. A key outcome of our research was to gain insight into children's new beliefs, understandings and ways of coping with death. Cultural appropriation became an issue of ethical concern not least due to the subordinate role of our game narrative, highlighting the importance of creating space for exploration and discussion on death within the context of our educational intervention. Our work also served as a springboard for discussing methodological implications for those espousing co-design approaches to game design. Given children's tendency toward cultural appropriation, we emphasize the importance of developing children's cultural knowledge before they assume an active role in

design. Finally, we hope that this work has raised attention to an important design consideration, shedding light into research processes that may support designers to better understand the occurrence and implications of cultural appropriation within their respective domains.

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