Understanding a Socially Awkward Digital Play Journey

Amy Huggard, Anushka De Mel, Jayden Garner, Cagdas ‘Chad’ Toprak, Alan Chatham, Florian ‘Floyd’ Mueller
Exertion Games Lab
RMIT University
Melbourne, Australia
{amy, chet, jayden, chad, alan, floyd}@exertiongameslab.org

ABSTRACT
Socially awkward experiences are often considered as something to be avoided. Interestingly, examples from the traditional games domain suggest that social awkwardness can enable novel and engaging play experiences. We note that there has been little research into exploring social awkwardness when it comes to digital games. In response we present our experiences with Musical Embrace, a digital game that requires close physical proximity and whole body interactions to explore socially awkward play between players. Our observations from users experiencing Musical Embrace at a number of events suggest that social awkwardness experienced by participants often rises and falls as part of the digital play journey. As such, we draw upon the classic five-act performance structure (consisting of exposition, rising action, climax, falling action and denouement) to examine the experiences of players and understand the way in which social awkwardness engages players as the game progresses. With our work we hope to inspire game designers to consider the potential of social awkwardness in digital games.

Keywords
Social awkwardness; digital play; exertion game; uncomfortable interactions

INTRODUCTION
Digital games are often perceived as enabling positive entertainment experiences. In contrast, social awkwardness is often considered a negative experience that can involve stress and lead to suffering due to anxiety (Benford et al. 2012, Clegg 2012). Interestingly, contrary to popular belief, research suggests that uncomfortable interactions, such as socially awkward encounters, could potentially assist aspiring designers to enhance the entertainment experience rather than diminish it (Benford et al., 2012). We note that Benford et al. argues that this potential arises from our fundamental desire for stimulation, arousal and excitement (2012), words that resonate with our experiences of playing digital games.
In response, we propose socially awkward interactions as a key play component in a bid to enhance digital play, possibly offering players new and unusual experiences. In particular, we focus our research on the social awkwardness that can arise from close physical proximity to other players and associated bodily interactions (see Figure 1). We also want to further research on awkwardness specifically relating to social situations, where it has been suggested that feeling awkward is an important part of social behavior (Clegg 2012a). Clegg previously stated that the “moment of awkwardness [is] characterized by a sense of moral or social transgression that magnified and intensified social experience and focused perceptions on social behaviors. Those social behaviors expressed awkwardness through anxious, hesitant, disjointed, or avoidant actions” (Clegg 2012a). We are inspired by Clegg’s work (Clegg 2012), in particular, we are interested in ways how we can facilitate and transform social awkwardness by directly confronting it within a game environment.

We are further encouraged by a history of non-digital games that employ close physical proximity for facilitating social awkwardness: for example, in the game *Twister* (Hasbro 1966), players climb over each other in an effort to put hands and feet on certain parts of the play mat on the floor, creating awkward physical proximity between players. Similarly, in *Spin-the-Bottle*, teenagers challenge each other to socially uncomfortable actions as part of playing the game. In both of these games players deliberately engage in socially awkward situations in order to experience engaging play. Inspired by these analog games, we present our experiences with Musical Embrace, a novel digital game that promotes close physical proximity to facilitate social awkwardness in order to enable an engaging experience for its players.

As part of the game, players must apply strong pressure, collaboratively, to a suspended novel pillow-like controller, using only their torsos in order to move through a virtual play environment. Derived through observing participants in play and the design knowledge gained through creating Musical Embrace, the contribution of this paper is the
articulation how social awkwardness rises and falls as part of an engaging digital play journey.

RELATED WORKS

Figure 2: Bubble Popper.

In the last decade, the mainstream game industry has “taken an interest in the role of physicality in digital games” (Wilson 2011). The release of platforms such as Nintendo’s Wii, Sony’s PlayStation Move and Microsoft’s Kinect has offered opportunities for the facilitation of social awkwardness due to the surfacing of technology that can support close physical proximity. The Wii, in particular, has in studies conducted by Lindley et al. proven to allow for “easy fun” that draws players outside of the immediate virtual game and into the social physical context in which it is played (Lindley et al. 2008). This shift in focus from game to the body signifies a new type of play where players partake in bodily actions such as “reeling, swerving and ducking” (Lindley et al. 2008) that have the potential to engage players in close physical proximity, possibly leading to socially awkward play. Interestingly, the authors note that these bodily actions do not even need to be “registered by the game” (Lindley et al. 2008). This type of play correlates with Simon’s notion of “gestural excess”, wherein players “twist, contort and perform in ways that the game as such neither demands nor necessarily accommodates” (Simon 2009). These findings suggest to us that these emerging game platforms offer opportunities for bodily actions, which could lead to close physical proximity and therefore to social awkwardness. However, we note that with most current games using these platforms, players are encouraged to stay physically apart, often facilitated by sensing technology that is limited when it comes to detecting close physical proximity: for example, the Kinect has trouble identifying bodies when they overlap the capture area or stand too close to each other. This can limit opportunities for players jointly experimenting with social awkwardness. As such, with our project we intend to also explore how to repurpose some of these technologies to engage with, and be engaged by, social awkwardness.

The research domain has, too, produced digital games that create engagement through exploring bodily interactions between players. These include Wilson’s Brutally Unfair
Tactics Totally Ok Now, or B.U.T.T.O.N. (Wilson 2011) and Toprak et al.’s Bubble Popper (2012). In B.U.T.T.O.N., players are expected to follow a series of instructions that appear on the screen, before making an attempt to reach their game controller buttons before their opponents. In Bubble Popper players are encouraged to partake in bodily interactions that are prevalent in many physical sports so as to pop the most amount of bubbles before time runs out (see Figure 2). Although the objectives differ to a degree in these games, we see in both examples a palpable emphasis on opening up the design space for “ambiguities [that] encourage players to bend, break, and extend the rules”, which Wilson labels a “playful subversiveness” (Wilson 2011) where what takes place in the physical space is open for interpretation and negotiation by players; hence allowing players to take increased control of their own engagement. Although neither game was made with the intention of facilitating social awkwardness or requiring close physical proximity and bodily contact, we observe how an open-for-interpretation space can “set clear precedence for unsupervised physical play” (Wilson 2011) which, we believe, can support our research endeavor.

Another commercial game that appears to employ social awkwardness to facilitate engaging play is the iPad game Fingle (Game Oven 2011). Players are encouraged to touch each other’s hands in suggestive ways in an attempt to position their fingers on certain locations simultaneously on the iPad. This game suggests to us that digital feedback can promote certain bodily actions that appear to facilitate bodily interaction that can lead to social awkwardness. Nevertheless, the play experience appears to remain engaging. In response, our project seeks to create more intense close physical proximity (building on Wilson’s idea of abusive game design (Wilson and Sicart 2010)) that is palpable to spectators outside the frame of the game as well as critically examines the impact of such close physical proximity and associated social awkwardness as part of the overall experience.

Since the existing physical relationship between players may play a role in the facilitation of social awkwardness, we draw inspiration also from more art-oriented, yet playful systems such as that of Hobye and Lowgren’s Mediated Bodysuit (2011). In this experience, participants are seen engaging with and touching one another’s bare skin in a manner that would normally be deemed as being socially awkward, however, in this instance is presented as leading to “performative and behavioural immersion” between participants according to the authors (Hobye et al. 2011). From this system we draw insights on the transformative social play element, which sees social relation temporarily transformed to enable participants “to jointly side step inhibitions and question common norms for social behaviour together” (Hobye et al. 2011). Through this, we are able to further understand how digital systems can alter social dynamics between participants: in this case break barriers and even build relationships between strangers as part of the play experience.

In sum, although interactive systems have supported bodily actions and interactions between players previously, there is little knowledge about how digital games can draw from social awkwardness to create engaging experiences, in particular if social awkwardness is facilitated by close physical proximity.

MUSICAL EMBRACE
In the game of Musical Embrace, two players are introduced to a space where a novel wireless pillow-like controller is suspended from a ceiling and falls at chest height, along
with a screen that is positioned to the side, presenting the virtual environment that players navigate through. The pillow controller was created through using the existing sensors of a Wii Balance board that was encased in padding and disguised so as to add an element of mystery to the game (Huggard 2013). The virtual components of the game have been designed in a low-fidelity style reminiscent of existing games such as Lego blocks and Minecraft to draw on the “familiarity principle” (Zajonc, 2001) (assuming most players will be familiar with this type of low-fidelity style) to ease players into the experience and any emerging social awkwardness.

![Figure 3](image)

**Figure 3**: The diagram explains button presses and controls used in Musical Embrace.

A) When players simultaneously apply pressure onto the top two keys (as is indicated in the illustration), it will navigate their virtual viewpoint forward.

B) When players simultaneously apply pressure onto the bottom two keys (as is indicated in the illustration), it will navigate their virtual viewpoint backward.

C) When the board is tilted back and forth; it will allow players to turn and move left and right.

To start play, players are required to collaboratively apply pressure to the four sensors situated on the corners of the board, from opposite sides, using only their torsos. Each sensor is mapped to the four directional keys of up/down and left/right on the controller. If players apply pressure to the top sensors, simultaneously their viewpoint will move forward (see Figure 3A). When players apply pressure simultaneously to the bottom sensors their viewpoint will move backward (see Figure 3B). Tilting the entire unit to the left or right will rotate the viewport to the left or right, allowing the players to turn in the virtual space (see Figure 3C). The use of hands is not permitted, however, in order to intensify the pressure, we encourage players to use their arms to embrace the other player. The goal of the game is to move through the virtual environment with speed and accuracy in an effort to collect the most amounts of rewards as possible. Players are guided to these reward locations through the use of audio cues, which increase in volume as the player moves in the right direction. After a minute, the game will come to a close and players will be provided with a collective score of the number of in-game rewards collected.
EXPERIENCING SOCIAL AWKWARDNESS

Figure 4: Two strangers partaking in socially awkward interactions in order to navigate a virtual play environment.

Musical Embrace has been presented at an open house event, a game design industry conference, and three research conferences (see Figure 4,5). Those who participated were part of the game design field or shared related interests. We have observed 130 people engaging with the system, where at least 2 (often 4) of the researchers were present. Using observations from such semi-public settings for analysis has been previously demonstrated to be successful in HCI (Marshal et al. 2011). We also asked players in pairs what their experience was like. We discussed these findings among the group of 4 HCI researchers, and used affinity diagrams to identify key themes.

Based on our observations, we now summarize what a typical experience was like for our participants, highlighting how social awkwardness is not a constant component of the game, but rather rises and falls throughout the players’ digital play journey.
JOURNEY THROUGH SOCIAL AWKWARDNESS

Benford et al. suggest uncomfortable interactions are usually not the overall goal but rather a momentary point on a journey through a digital experience (Benford et al. 2012). The authors refer to Gustav Freytag’s five-act performance structure consisting of 1) exposition, 2) rising action, 3) climax, 4) falling action, and 5) denouement (Freytag 1863) to articulate this journey. Although this structure is primarily used to comment on the dramatic structure of traditional dramas and performances, we too make reference to it since we found our participants experiencing this structure.

Figure 6: Observations of people playing Musical Embrace in a manner similar to Freytag’s five-act performance structure.

A) Exposition  B) Rising Action  C) Climax  D) Falling Action  E) Denouement

Exposition

For our players, the Exposition stage (see Figure 6A) involved the initial framing of what to expect if participating in the game. The unusual setup of the game controller where it was suspended from the ceiling seemed to provoke curiosity and generate mounting anticipation, similar to the experience of people queuing up for rollercoaster rides.
As a result, individuals were seen moving toward it, usually in clusters, to find out more regarding the game: “The game setup made me curious to play”. We found this also to be due to the design of the pillow-like controller, which lured participants towards it and took on the appearance of being something that was approachable. We found that a soft, padded board appeared to invite players to play, and was later dubbed “huggable”, with one participant mentioning: “It wasn’t socially awkward, I love hugs!”

The public setup of the game enabled players to become “witting participants” who learnt how to play and prepare themselves through observing others in play. Furthermore, the public setup appeared to inform players that they will step into a context where the rules of their behavior are bound within a particular performance (Sheridan et al. 2007). However, the game also fell into Reeve et al.’s category of suspenseful interfaces (Reeves et al. 2005) since participants only came to fully experience social awkwardness when it was their turn to apply pressure onto the suspended pillow-like controller. A participant mentioned: “I enjoyed watching others play, it was quite fun seeing the more embarrassed faces”.

**Rising Action**

The second stage (see Figure 6B) corresponded with the player’s decision to participate and involved the introduction of another player, who in most cases was a stranger. Playing partners appeared to be selected by random, however height had often been taken into consideration to optimize the play experience. Nonetheless, there were a number of cases in which players expressed interest in playing with an individual who differed in height from them. Although a number of players chose to play alongside someone that they were familiar with, the players for the most part were unknown to one another.

Awkwardness arose, reflected by the players’ reluctance to follow through with the game as they found themselves next to a stranger unsure of the interactions this stranger would engage in and permit. This sort of hesitancy was far more prevalent in instances where a participant was chosen to play alongside a member of the opposite gender.

We allowed participants to experiment with the game controller (e.g. pressing onto the sensors with their hands or torso) outside of the context of the game. This particular moment was for players an opportunity to freely explore the functionality of the controller and familiarize themselves with the game mechanics. It was also the point that saw players laughing nervously and displaying feelings of uncertainty, as they were often unsure of the interactions expected of them and the interactions that the other individual would permit. This however eventually changed once players grasped the mechanics present within the game, suggested by the way in which players acted upon the pillow and experimented with one another in order to navigate and collect the various rewards in the game. This was when players entered the “Climax” stage.

**Climax**

The Climax stage (see Figure 6C) occurred when the players began playing, when “anticipation turn[ed] into actual experience” (Benford et al. 2012). Players began to act upon the pillow in order to navigate the virtual space. This particular stage saw player’s interactions transform from being experimental to something that was more focused, since players appeared to be more conscious of the outcomes to each action. Players also noticed the transformation of their interactions “It was only awkward at the beginning”.

(Reeves et al. 2005).
We also observed the collection of each individual reward item as being both an achievement and secondary climax for players.

The existence of the screen (with its depiction of the virtual world) combined with the gameplay style of navigation appeared to comfort players by providing them with an external justification for performing their socially awkward actions. Adopting the Batesonian play frame of “this is play” (Sheridan 2007), it reminded individuals that they are simply playing a game where the rules “are not the rules of the ‘real’ world or of ‘ordinary’ life” (Riezler 1941). This enabled players to experiment freely with the controller and provided players with the excuse to do things that break social norms and push social boundaries, which has been described as means of exploring lesser known concepts and their benefits better (Poremba 2007). The existence of the digital screen also supplied players with a type of what we call “social sanctuary” for when the social awkwardness became too taxing. Players who were uncomfortable with the close physical proximity between them could redirect their attention to the screen in order to temporarily shift the focus from the uncomfortable bodily interaction to one of virtual traversing, where the screen was used as a sanctuary, functioning as a retreat from the social awkwardness.

Falling Action
Here players accepted the unusual interactions as being a tool for navigating the virtual world, and as a result, they began to embrace the intimate nature of the game, and enjoyed having tackled the initial discomfort together (see Figure 6D). Players started to explore new and interesting ways of interacting, such as bending their torsos back or circling the physical game space, whilst embracing their partner, as means of navigating the virtual world. This particular moment saw players enter into a state of playfulness and so the emergence of what Csikszentmihalyi labels as “flow” saw participants “operating at full capacity” and experimenting with the “perceived opportunities for action” (Csikszentmihalyi, 1990) as offered by the game. Moreover, there appeared to be a transformation of social relationships occurring, since the collaborative nature of the game caused “social roles [to] playfully shift and transform” (Salen and Zimmerman 2004); thereby eventually turning strangers into allies. In other situations, the public setup enabled extrovert players to perform to the audience and eventually transform socially awkwardness into a public performance. One player stated: “It’s nice as it stimulates cooperation on a physical level, you get to understand other people more in unusual ways”. However, one person noted: “I’d like to see more happen”.

Denouement
Once the game came to a close (see Figure 6E), players reflected together on what they had just experienced, such as “I was surprised to find pressing my torso onto the board and embracing someone to be fun!” with another participant noting “The game influenced my perspective regarding socially awkward play”. While other players reflected on what influenced them to try something unfamiliar: “The pillow was enough for me to consider it as safe”. This stage also paved the way for feedback, resulting in many suggestions on how the game could make a contribution beyond entertainment. For example, it was suggested that the game could potentially be used as a tool that encourages dancers to stretch prior to rehearsal or performance, or as a tool for encouraging intimacy by utilizing proximity and collaboration to resolve disputes between couples, siblings and close friends. Additionally, it was felt that the game had potential as a team-building tool for businesses to encourage collaboration and a sense of togetherness.
FUTURE WORK
Our insights gained from Musical Embrace have highlighted interesting avenues for future development in the area of social awkwardness in digital games such as: Can playing such a game break social boundaries? Can social connections be fostered through socially awkward games? Do games around social awkwardness have the potential to pave the way for more novel interactions in digital games? Can overcoming one uncomfortable situation in games help people overcome others, with more ease?

Our intentions for the future development of Musical Embrace include delving more broadly into the area of socially awkward games and considering new developments that position players in far more taxing positions and subject them to more uncomfortable experiences. We are also looking into altering the physical-virtual relationships as part of the socially awkward play journey in order to expand our knowledge we gained from having created Musical Embrace.

CONCLUSION
We presented our experiences with Musical Embrace, a digital game that functions as a research vehicle for exploring social awkwardness in digital games. Through our observations from demonstrating Musical Embrace, we suggest that to engage in socially awkward play that designers should consider how moments of awkwardness rise and fall as part of the overall play journey. We articulate this point by drawing on Freytag’s five-act performance structure consisting of exposition, rising action, climax, falling and denouement and by elaborating it in regard to our players’ experiences, as they engaged in socially awkward interactions. With our work we hope to inspire game designers to consider the potential of social awkwardness in digital games.

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