Exploring Approaches to the Generation and Representation of Heritage Artefacts in Video Game Contexts

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Abstract

This paper describes research undertaken to understand the approaches used, attitudes towards, and perspectives of game designers with respect to the representation of culture and items with cultural meaning within video game contexts. The approach taken to better understand the above has involved interviewing eight video game designers from global contexts within the industry, all with experience of generating cultural items for inclusion within video game contexts. These interviews have been formally structured with a focus on exploring views, experiences, beliefs and motivations of the individuals and of their working teams. Analysis has occurred through a methodological process of analytical induction with the coding of particular variables within each interview transcript and the transformation of the complete set of codings into set conceptual statements. These statements are related in the paper to earlier work focused on close readings of particular video games with discussion of how the conversations with video game designers elicit an understanding of why misrepresentation in video game contexts occurs.

Keywords

Representation, Cultural Heritage, Game Design, Design Process
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Through video game narratives and visuals, game players often have the opportunity to explore locations rich in cultural content. Video games such as, the Grand Theft Auto, Prince of Persia and Assassin’s Creed series provide a form of cultural tourism alongside the chain of events accessed through the gameplay. Designers are often placed into circumstances where decisions need to be made with respect to the representation of cultural artefacts in video game contexts. These decisions can provide an opportunity for misrepresentation to occur, particularly where gameplay decisions influence design choice.

This paper describes research undertaken to strengthen our understanding of the approaches used, attitudes towards, and perspectives of game designers with respect to the representation of culture and items with cultural meaning within video game contexts. A qualitative semi-structured formal interview based approach is used, allowing insight into how individuals understand and narrate aspects of video game production. The approach has involved interviewing eight video game designers from global contexts within the industry, all with experience of generating cultural items for inclusion within video game contexts. Strategically, open-ended questions have been used to obtain descriptive information of their practical experiences in integrating cultural content in their games. The information from these interviews is transformed into a series of themes which are compared to previous studies in order to discuss the findings of this research.

Definition of Cultural Heritage and Cultural Representation

This paper focuses on analysis of cultural representation through an exploration of how
cultural artefacts are represented in video game contexts. As part of this exploration it is important to provide definitions of the key terms, cultural heritage and cultural representation. Cultural heritage can be defined as the full range of symbolic and artistic materials, delivered to each culture from the past to the present (Jokilehto, 2005). Cultural heritage plays a significant part in confirming and enriching cultural identities through intangible (e.g. customs, values and beliefs) and tangible elements (e.g. material items, dance, language).

Cultural heritage provides materials through which future generations can understand historical contexts (Barwick, 2010, p.74) and enables others to gain an understanding of national and personal identities. Therefore through designing, depicting, and/or creating representations of items with cultural significance, we are providing a method through which viewers and gamers can locate, find value, and be present in cultural spaces.

‘Representation means using language[s] to say something meaningful about, or to represent the world meaningfully to other people’ (Hall, 1997, p.15). Chandler in Signes (2007) broadens this definition to refer to the construction of aspects of ‘reality’ such as people, places, objects etc. Language and aspects of reality in the context of video games covers the range of practices from physical language representation, through text and images, to fully constructed 3D characters and environments. Galloway (2004) suggested that such representation in video games may contain elements of truth and fiction.

**Representation in Video Games**

Of most interest to the research of the authors of this paper El-Nasr et al. (2008) and Sisler (2008) have explored Muslim representation in video games. Assassins Creed I formed the focus of the analysis of El-Nasr et al. Assassins Creed I set in the Middle East provides
players with a form of cultural tourism of a particular time in historical terms. El-Nasr et al. explore how the designers of the game have realised a range of items with cultural heritage from a presentation of Middle Eastern culture and cultural attitudes, to particular artefacts of cultural significance. This analysis is both informed through a methodology, which focuses on cultural lenses developed through play experiences and an interview with Jade Raymond (Game Producer and Managing Director of Ubisoft). Exploring the game El-Nasr et al. focus on how the Assassins Creed succeeds and fails in representing particular items of cultural relevance. They suggest that games need to appreciate and deliver different cultural perspectives in order to determine the way in which individuals will respond to the game.

Sisler (2008) in his analysis of the representation of Arab and Muslim characters in video games provides an understanding of how cultural stereotypes are often overused in representing characters. In addition, to cater for particular audience preferences decisions are made over the representation of characters which may not represent ‘authentic’ scenarios. The approach used, exploring through visual analysis, games developed in western countries and games developed in the Middle East offers insight into the impact of different forms of cultural teams. However, across development teams there is a presence of forms of inaccurate representation coming through in the pieces produced.

Balela and Mundy (2015) provide a description of research findings which partner the findings covered in this paper. Focusing on analysis through a close reading (presented as case studies) of Assassins Creed I and Unearthed: The Trail of Ibn Battuta, the paper explores through play, visual, and historic analysis, cultural materials presented within the games. Discussion is provided of six underlying issues (cultural appropriation, hollywoodisation, selectivity,
beautification, game dynamics ruling design decisions, and ideological constraints), which are identified from the exploration. The presence of these issues presents questions regarding how these issues occur in the process of design and implementation, which cannot be easily answered through analysis of the artefact. Similar to El-Nasr et al. the perspective falls on how designers approach the inclusion of cultural artefacts within gaming contexts with the intention that exploring the delivered artefact in conjunction with the process can help to elicit mechanisms to support decision making linked to representation.

Method

Research approaches are plans and procedures for research that span the steps from broad assumptions to detailed methods of data collection, analysis, and interpretation (Creswell, 2014, p.3). The research presented in this paper is designed to provide an exploration of the attitudes of video games designers to the design, development and inclusion of digital artefacts in the games they are involved in constructing. Such research exploring perspectives suggests the need for the use of a qualitative approach, looking to understand the meaning individuals, or groups ascribe to a particular problem (Creswell, 2014, p.4). Whilst there are a number of qualitative methods, which can be used to examine phenomena for the purposes of research the semi-structured oral interview offered the most appropriate method. The difficulty in bringing groups of designers together for focus groups, the opportunity such interview structures offer for more detailed exploration and direct observation of behaviour provided the major reasons for this particular decision.

A purposeful sample is key to good research whether it is qualitative or quantitative. The aim in this context is ‘to develop detailed descriptions of the experience of a small number of
people’, in this case, a small number of eight video game designers drawn from global games development environments who share the experience of constructing games which include cultural artefacts. Unlike El-Nasr et al the methodology used in this paper does not provide a direct relationship between the designers/producers of the games present within the case study research. Such a direct relationship may enable a specific exploration of particular artefacts, however, it tends not to enable generic and/or standard approaches to be explored. In addition, such viewpoints may be limited by perspectives developed in the design and delivery of the particular game in question.

The main aim of the interviews was to explore the processes through which video game designers construct cultural items in their gaming contexts. Twenty open-ended questions were constructed which explored four main avenues of interest. The first avenue simply focused on better understanding the interviewees as individuals within the gaming industry (their culture and gender demographics). The second avenue explored the experience of the designer both in relation to the games developed, their roles and whether their games included cultural artefacts. The third area of focus in the interview explored design and development processes, seeking to understand approaches to scoping, designing and producing cultural artefacts. The final item explores the designer and their perceptions with respect to culture, artefact inclusion and need for accuracy in representation.

The interviews each lasted for between forty minutes to an hour presenting a rich resource from which to derive understanding. All interviews were transcribed enabling close analysis of the response of the designer to be undertaken. Such close analysis was established through the use of an approach focused on better understanding the substantive issues present
within the designer responses. These substantive issues are elicited from the text through the establishment of a coding structure for the material. All transcripts are explored in relation to this coding structure and statements are developed, refined and supported through close engagement with the words and meanings articulated by the designers.

After developing fourteen initial statements, in relation to the principal areas of interest explored through the interviews, further refinement focused around the development of a more holistic understanding of the themes under which the statements were developed occurred. This resulted in the five themes explored in the next section. Finally, relationships are drawn between these core themes and the core issues presented in previous research (Balela and Mundy, 2015), in order to make comparisons between the case study exploration and the interviews.

**Analysis**

The below analysis will take each of the identified themes from the interviews with video game designers, detail the meaning of the theme and explore how these themes present themselves through the textual analysis.

**Designers are influenced by a need to concentrate on the aesthetic and how the aesthetic influences gameplay above any need to remain culturally accurate. However, where culture is key it can have an important influence.**

The aesthetic appearance of a game can play a significant role in its success, particularly on the major games platforms (Solarski, 2013). Cultural artefacts are a component element of this aesthetic design, sometimes a major element of the aesthetic, providing key architectural structures, adding contextual materials to the environment (e.g. paintings, typographic pieces, statues etc.) and contributing to character design. In line with the concentration on the aesthetic,
designers as part of the process of development may make decisions, which concentrate on the beautification of cultural items. This beautification may result in significant deviation away from cultural accuracy.

With respect to the interviews, comments such as ‘cultural facts have been positioned second rank or not taken into consideration in relation to the game design importance’ and ‘the culture side in the games is not in our pipeline at this early stage of our company as it needs a higher level of software and further investment’ provide evidence that cultural accuracy is a recognised facet that can be delivered within video game contexts but is either not part of the production timeline as a result of cost factors, or is positioned behind other aspects of the game (e.g. the general aesthetic). From our interview set, it is clear that designers often see items of culture as not important to depict accurately in video games.

The majority of design focus falls on the need to entertain and excite players. Therefore, the attention of designers is concentrated around developing the enjoyability of the game with little attention paid to cultural aspects. This scenario is confirmed by interviewees through comments such as: ‘we brainstorm the subject matter and start the planning phase of the game without paying attention to cultural aspects’; ‘The primary aim is to have a game as a winner and not the culture’.

The above said, when designers are specifically focused on delivering games representing a time period, particular location, and/or specific cultural context then there can be an emphasis on developing an understanding of cultural content. If this link between game design and cultural accuracy can be firmly established within a design production process between game design and cultural accuracy then there is potential to limit misrepresentation. For example comments such
as the following demonstrate engagement with cultural representation as part of the process: ‘the game was based on studying many cultural facts of the different places’; ‘the aim of using cultural items is to share and publicize the Egyptian Culture globally, simply by using accurately the historical monuments of Egypt’; ‘we had to take the culture into consideration and were made to be seen in our visual design, characters, background, places graphics art and history and many more’.

Finally, the comment ‘the cultural issues in the game has been put under the lens of study’ demonstrates engagement in games directly with trying to use the game as a mechanism through which players can interact with cultural issues.

**When developing games, which include cultural items, design teams make use of a range of different resources, ranging from personal knowledge, through secondary sources, to primary experience. The meshing together of these various sources directly impact on the finished product.**

Selecting even a single item representing cultural heritage in the design of a game requires the exploration of a range of different resources. During the interviews with video game designers, they highlighted three main resources used to select or create cultural artefacts: personal knowledge, primary experience, and secondary sources.

Personal knowledge includes non-material knowledge such as the cultural background, belief system and level of knowledge about the particular cultural context acquired over a period of time. Designers using primary knowledge often depend primarily on their knowledge, ‘I do not need any knowledge sources, I use my personal experience by knowing and living in Cairo’, ‘We make our own scenarios, and we make our own world, nothing from the history’, ‘I praise
myself of having great knowledge of the different cultures and religious backgrounds in my country’. ‘It was easy and simple to take into consideration all cultural aspects without going through many books because we have been educated at school’. Furthermore, such designers depicting visions of their own cultures often do not use secondary sources such as books or images, to understand the cultural heritage in terms of forms or locations, ‘I didn't need any research into the cultural background, and my cultural level is outstanding as I am a Native’.

Secondary sources include the use of physical materials depicting the environment, location or culture in focus, such as the use of: books, movies, video games, stories, maps, images, etc. During the interviews, the majority of game designers were noted and categorised as using mainly such secondary sources e.g. ‘It made the design of the environment easy by taking photos of famous monuments and places’, ‘We watched scientific documentaries’, ‘We have used the web, documentaries, old medieval encyclopaedias, paintings, and novels’. Where designers do use such secondary sources to build the elements of cultural heritage, this is often achieved through a focus on the delivery of more detail or to simulate reality, for example, ‘We studied the documentary deeply to decide on the graphics and the design of the main characters’.

Specialised and specific sources can also be used to achieve more accurate results, ‘there is one book called, (The Third Crusade 1191: Richard the Lionheart, Saladin and the battle for Jerusalem), that has been especially helpful because it covers the year in which our game takes place’. Other examples of such usage of resources were also provided e.g., ‘Took into consideration the old fashion way: books about Ibn Battuta, Websites (internet).

Primary experience and the use of experts are also indicated as being used as a mechanism to inform design within El Nasr et al, 2008 e.g. ‘The historian helped us with some
harder topics to find information such as original city plans of Jerusalem, Damascus, and Acre that date back to the 3rd crusade’ (El-Nasr et al. 2008). There was limited evidence of this in the interviews with designers which took place as part of this research, however, there was some indication of the use of making use of opportunities to gain first hand experience of locations through ‘traveling to the concerned places’.

The cultural bias of the designer and/or design team, market demands, and stereotyping can have a substantial impact on representation of culture.

It seems clear that there are three key points which may have an impact on cultural representation in video games: culture itself, market needs and stereotypes. Culture has a significant effect on video game designers. It can be used consciously or unconsciously during the design process, ‘Asura based on a Hindu cultural game as a Muslim’, ‘I have great knowledge of the different cultural and religious background’, ‘selected the Evil (as per his culture he believes that the devil is the only character who can be the nearest match to an angry person)’. Furthermore, the designers may provide a bias towards specific characters and locations, the designer uses the detailed facts of their culture as a source to express his design, ‘The game was related to Ibn Batuta, the real story of a religious scholar’.

Market needs can also have a significant effect on video game designers. They often try to make a balance between culture and market demand, ‘We need to achieve equilibrium between business and culture’.

A stereotype has become popular in modern video games and has a great impact in cultural representation. According to Courtney and Whipple ‘a Stereotype is a mental shorthand which helps to convey ideas and images quickly and clearly’ (Courtney, and Whipple, 1983).
Some games portray culture incorrectly. For example, as per a statement made during the interview ‘Japanese culture was not taken into consideration when stereotyping the image of a Ninja, the usage of a Ninja with the usual black uniform and fighting with samurai swords does not reflect the real Ninja. Ninja is a normal person like you and me and doesn’t wear black Kimono, and doesn’t fly like it has been injected into our mind’. Other designers supported the fact of stereotyping by going further into usage of mythology ‘Indian mythology is not used widely in comparison to Greek, Chinese and Japanese mythology’.

**Designers see the game world as different from the real world. Therefore, this drives the designers to a world, which limits cultural representation in video games. This also impacts on development of structures that support cultural tourism.**

During the interview some video game designers suggested that they see culture in video game contexts as completely different from real world. While others see the game world as an extension to the real world. These factors will have an impact on the approach video game designers take to the construction of cultural items in video game contexts.

Looking at the matter from a virtual world perspective the design of video games will neglect or even ignore cultural elements, therefore less attention will be given to the cultural aspect, ‘it is not important and we don’t give too much importance to the accuracy of the cultural artefacts, if we are accurate therefore we are trying to teach history via a game, but in here we are not trying to do so’, ‘We brain storm the subject matter and start the planning phase without paying attention to culture’, ‘We are not taking in consideration the historical and the cultural facts as the subject matter is mythological stories’.

Where others see the game world as an extension of the real world designers confirmed
that cultural aspects are taken in consideration, seen as important and provided with more attention to the subject matter, ‘when I am faced with some different cultural projects I will definitely find it hard as I don’t know how to approach the subject matter to avoid mistakes on the real culture of the main story source’, ‘As the game story is based on factual historical background, thus the game will be developed taking into account the accuracy of the story’, ‘Some are deeply filled with cultural events and heritage some are medium and some are with low cultural input’.

**Elements such as the narrative of a video game substantially impact on the selection of cultural objects. In some cases, particular elements require the inclusion of specific cultural items; for example, in any game, which depicts Christianity, the use of a cross will be required. In other cases, games will include a mismatch of cultural resources.**

There are differences between games that include historical events or cultural background, and games with limited cultural aspects. Narratives will oblige the designers to use cultural material, thus to enable them to represent the storylines throughout the game. Some designers through interview acknowledged the difficulties faced during the design phase, to represent culture, ‘Working on games with cultural heritage will be very challenging’. Furthermore, some designers see video games as not providing a good place to bring the world’s reality into it, ‘The culture in the games will not provide the users with the full reality of what the true story will provide, rather a small start, or a very reduced background of the real story’. On the contrary, some designers believe that books and movies or television have greater ability to bring more realistic content, ‘Books and movies will provide much more details about the reality’.
Moreover, lifestyle differences in games teams can bring different expectations, for instance, ‘the expectation of the Americans is different from the European citizen or the Middle East citizens. For example, designing the background stage of the game for a European citizen will be more artistic and less flashy to that of an American citizen’. Another key point, the mixing of culture without taking into consideration the national identity of the place concerned, is another aspect of misrepresentation. For example, placing several elements from different cultures in the same place. Finally, there is a realisation, ‘that games also can be used in different countries even if the cultural side is related to different country’.

**Discussion**

In the previous research related to this paper (Balela and Mundy, 2015), through case study analysis: cultural appropriation; hollywoodisation; selectivity; beautification; game dynamics ruling design decisions; and ideological constraints were identified as key areas coming through from the analysis. Analysing these areas, there are elements of crossover to the themes identified above.

From a cultural appropriation perspective, the final theme which emphasised the potential, for designers, to include mismatches of cultural resources provides support for designers making design decisions which involve the amalgamation of a range of different cultural items from multiple cultural contexts. When this is combined with the limited demonstration of designers paying attention to the realistic construction of cultural environments, it is clear to see how such actions occur within the design process.

The above in many respects directly connects to the selectivity concern raised through the case studies. Effectively the focus here was on designers selecting materials which had the
highest cultural or aesthetic value in a game context. While the above discussion of the interviews does not particularly highlight how such choice decisions occur, where designers are making decisions based on direct experience or secondary sources it is likely they will draw their materials from popular depictions of particular locations or people. In addition, the focus on the aesthetic also provides a means of understanding related to making decisions which help situate the aesthetic, for example, designing games around Egypt require items of high cultural value (e.g. the Pyramids) in order to engage the player in knowing where they are.

Hollywoodisation and beautification in many respects relate directly to each other. Conversations with the designers led to a concentration on the aesthetic. The meaning of beauty in a video game context leads to design decisions which emphasise attractiveness over reality e.g. depiction of what is ‘beautiful’ over what is ‘ugly’. In addition, such concentration on aesthetic beauty can lead through to manipulation of reality, to provide a stronger aesthetic. Therefore, the conversations with the designers have emphasised the focus on aesthetic and gameplay requirements over the need to be accurate in the depiction of video game objects.

The final items raised in the previous research of gameplay choices influencing representation and ideological constraints have been explored through the interviews with game designers. It is clear that ideologies represented through either conscious or sub-conscious design are a factor of designers work. There are limitations in answers given by designers with respect to ‘knowing’ a culture, this ‘knowledge’ will translate through to closed perspectives on particular cultures and places. The emphasis on play and enjoyment over and above all aspects of design stated by designers also leads through to this influencing design decisions made over representation.
Conclusion

Previous research around cultural representation (Majed and Darren, 2015, El-Nasr, et al. 2008) has generally emphasised methodologies, which involve play. Related research to this paper also emphasised play in order to determine key areas of interest to investigate with respect to process investigations with game designers. The research provided in this paper provides a number of insights through the themes articulated into how mis-representation occurs in design within video game contexts.

The overall aim of the case study research and the research presented in this paper (which has focused on better understanding design processes through designer conversations) is to provide structures to better support the design and development process. Matching up the designer responses with the responses from the case study research provides a greater understanding of how issues occur with respect to representation. Whilst some of these are designed in, it is clear in other cases that issues regarding representation, relate to a lack of developed knowledge, or lack of engagement with cultural elements, as cultural elements. Design perspectives which view games as places where there is limited space for reality, provide challenges to supporting designers with understanding the value of closer representation of cultural items. However, designers who do perceive that representing cultural items with some measure of reality in order to support a games narrative or environmental context, would hopefully benefit from design and development mechanisms which understand the aesthetic: game: business: culture balance.
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