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A QUALITATIVE CONTENT ANALYSIS OF AFRICAN VIDEO GAMES DEVELOPED BY STUDENTS

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Abstract

It is necessary to move away from non-colonised perspectives in video games. There have been numerous issues with the representation of Africa and the portrayal of Africans in video games. It is necessary to discuss the essential aspects of Africanisation in video games to ensure that the African perspective is represented clearly. By utilising the participatory culture framework, students were grouped together to create video games with African themes. Students developed 17 unique games, all based on African themes. Eight unique characteristics were extracted from the video games. These characteristics include aesthetics, music and dance, mythological creatures, religion, race, play style, landscape, and language. This paper aims to inspire the representation of the rich African heritage in video games of African origin. In this way, we can ensure that the knowledge of indigenous African entities is projected, transmitted, and protected, despite the prevalence of Western approaches worldwide. Therefore, the paper recommends proper representation of African culture in both local and Western games and suggests further research to better understand the African phenomenon.

Keywords: Indigenous, South Africa, Culture, Video Games, Cultural Representations, Participatory culture

Introduction

The African video game industry has rapidly developed into a vibrant segment of the global digital entertainment environment. Over the past few decades, the video game industry has experienced exponential growth, transforming into a global cultural phenomenon that influences entertainment, education, and social interactions (Amoah & Tawia, 2024). In recent times, the African video game sector has experienced remarkable development. According to Yieke (2024), the number of professional game developers in Africa has grown significantly, from an estimated 100 in 2010 to over 3 000 by 2022. The gaming industry in Africa was valued at $2.6 billion in 2021 and is expected to reach $5 billion by 2025 (Yieke, 2024). However, Western viewpoints have frequently dominated the representation of various cultures in this medium.

In recent years, there has been a growing recognition of the necessity to decolonise video games and incorporate a more extensive range of cultural narratives, particularly those pertaining to African culture (Okoli, 2024). During the early 2000s, the African video game industry was more concerned with consumption than with creation. The majority of African gamers depend on imported titles, primarily from North America, Europe, and Asia (Hoffman, 2024). Several factors have contributed to the lack of local game production over the years. These include insufficient technical infrastructure, restricted financing options, and a shortage of specialised education in game design and development (Johnson et al., 2016; Timotheou et al., 2023).

The video games reviewed in this paper contribute to the global gaming market and serve as a significant platform for artistic expression, educational outreach, and economic progress in Africa. As the African gaming sector continues to grow, it creates a fertile ground for research that provides insight into the intricate relationship between technology, culture, and creative expression within the African context. As reported by Yieke (2024), the emergence of African video games has created a unique segment in the global gaming industry, signalling a substantial shift in cultural representation and digital innovation. Tressel (2019) argued that it is crucial to create African-centred media, such as video games, that counter Eurocentric narratives, as this can help build a more inclusive global culture. This aligns with the larger movement of Africanfuturism, which is a cultural aesthetic that blends science fiction, historical fiction, and Afrocentricity to critique current issues and reimagine historical narratives.

The potential of video games to serve as a medium for cultural expression and preservation has been identified. The argument centres around the idea that games can be effective instruments for promoting intercultural learning and understanding. Kirkpatrick (2013) argued that video games, as a form of culture, have the potential to challenge prevailing narratives and present fresh perspectives on diverse global cultures. The wide diversity of customs, languages, and creative manifestations throughout the African continent presents a significant opportunity to highlight its rich cultural heritage to a global audience (Shliakhovchuk & Muñoz García, 2020). African-themed video games offer gamers a unique opportunity to discover, enjoy, and educate themselves about the rich and diverse cultures of Africa. Moreover, it offers a

platform to challenge the long-standing misrepresentations of the African continent in Western media (Cerezzo-Pizarro et al., 2023). Numerous video games with African themes are currently incorporating indigenous languages, architecture, and social issues. This not only enhances African culture but also preserves it.

Research problem

Video games represent a powerful medium for displaying and preserving African culture. African game developers are creating interactive experiences that entertain and educate players about the rich cultural heritage of the continent by incorporating elements such as folklore, historical narratives, traditional art styles, music, and languages into their games (Jegede, 1993). Many African video games draw heavily from local folklore, narratives, and mythology, which are incorporated into their narratives and character designs. African history is further presented through puzzle-solving and exploration to educate the players (Cerezzo-Pizarro et al., 2023).

The African video game industry is gaining recognition for its distinctive features, including cultural authenticity. Many African games incorporate elements of local culture, music, language, myths, and history, providing a fresh perspective in the global gaming landscape (Chege, 2022). African video game designers are now using this medium to tell stories that reflect their personal experiences and cultural heritage. Games such as *Aurion: Legacy of the Kori-Odan* (Kiro'o Games, 2016) from Cameroon and *The Orchard of Lost Souls* (Forna, 2013) from Kenya have narratives that are richly embedded in African folklore and mythology (Yakes, 2015). Storytelling

through video games provides a distinct opportunity for cultural expression and preservation. It educates global audiences about Africa's rich traditions and diverse cultures.

The video game industry in Africa has undergone a significant transformation, evolving from a predominantly consumer-driven sector to a creative powerhouse. It is characterised by its rapid growth, cultural authenticity, and innovative approaches to game production (Cerezzo-Pizarro et al., 2023). However, as the sector grows, it brings both possibilities and difficulties that require in-depth investigation. Africa, as a developing presence in the video game industry, must comprehend the important components required for creating high-quality video games featuring African themes (Yieke, 2024). This is still a challenge for stakeholders.

This paper presents a review of 17 video games with African themes. The goal is to identify and highlight the critical components or factors that give African games their unique identity. It aims to provide insight through these factors, exploring the potential of typical African video games to better showcase African culture. This paper also highlights the intersection of culture and video game design. In other words, the inspiring role that culture plays in the design of African video games.

Review of related literature

Several studies have explored the representation of African cultures in both mainstream and independently developed video games. Brock (2011) analysed the portrayal of African settings in *Resident Evil 5* (Capcom, 2009) and found that

these games often rely on stereotypical depictions of Africa. In contrast, Keefer (2023) emphasised how African game developers have begun to create more nuanced and authentic representations of their cultures. Keefer (2023) used *Assassin's Creed* (Ubisoft, 2007) as a case study to illustrate this trend. Notably, Randle (2024) conducted research using a case study on African-themed video games. The paper demonstrated the ability of riddles and narratives to convey the depth of African cultural heritage.

Extensive research has examined the educational potential of culturally specific African games. It was concluded that African themes, such as narratives and puzzles, can provide insight into an African-centred perspective. In a study on the use of folk resources for creative arts education, Addo and Adu (2022) explored the application of a digital version of the traditional Ghanaian game *Oware* (c. 1700) in primary schools. They noted that this approach enhanced students' mathematical skills and instilled appreciation for their cultural heritage. Similarly, Yeboah et al. (2023) studied the implementation of a game-based learning program in primary schools in Ghana. Their findings suggested that such games increase student engagement and improve learning outcomes in various subjects. Vandewalle (2024) presented a study on how video games can serve as a museum of mythology. They argued that mythological video games share similar characteristics with both ancient and modern mythography and have potential for educational purposes.

These studies not only examined the possibility of incorporating the diverse and rich African cultural heritage into games but also demonstrated how such integration can enhance learning. They aim to establish African-themed games in the global gaming industry and create platforms for the industry to engage with them.

Research questions

This study is driven by the following research questions:

- What are the elements that make up African-themed video games?
- What are the African-related characteristics that can be extracted from the students' developed video games to provide a framework for an African video game?

Theoretical frameworks

Africanfuturism framework

Okorafor (2019) defines Africanfuturism as "a sub-category of science fiction that is directly rooted in African culture, history, mythology and point-of-view as it branches into the Black diaspora and does not privilege or centre the West". This framework differs from Afrofuturism by being specifically grounded in African contexts and de-emphasising Western perspectives (Beyt, 2024). This involves observing player experiences and cultural interpretations through ethnographic research. It is a ludological examination of game mechanics and player interactions, along with a textual analysis of game narratives and visual elements (Hanchey, 2024).

According to Hanchey (2024), the term Africanfuturism was first coined by Okorafor to refer to creative works that revolve around and are predominantly authored by people of African

origin, with views rooted principally in Africa. Africanfuturism provides African-centred perspectives and interpretations that differ from the Western representation and understanding of black elements found in Afrofuturism. Africanfuturism challenges the white, Western-centric perspectives that seek to undermine or eliminate the current contributions of African elements, as well as Afrocentric views and interpretations when constructing the future (Hanchey, 2024).

This study employed the Africanfuturism framework to analyse video games with African themes that were developed by students. The games were assessed based on their adherence to African knowledge systems, which involved incorporating Afrocentric philosophical concepts such as *ubuntu* into game mechanics and narratives. The assessment also considered how accurately games represent specific African cultures, rather than relying on homogenised or stereotypical depictions. This helped us determine how language, customs, and social structures are used in the game world. The games were also analysed for their ability to present narratives that challenge colonial and post-colonial paradigms or perspectives, while focusing on Africa and its self-determined future.

Participatory culture framework

The Africanfuturism framework used in this paper is based on the participatory culture framework. Its goal is to encourage participation in the core elements of media literacy that can promote a participatory culture in the digital age (Jenkins et al., 2009). Jenkins and colleagues (2009) define participatory culture as "a culture with relatively low barriers to artistic expression and civic engagement, with strong support to

for creating and sharing one's creation … a culture in which members believe their contributions matter, and feel some degree of social connection with one another" (p. 3). Building on this framework, the Africanfuturism framework adopted in this paper expands the creative aspects and emphasises the importance of members' contributions embedded in participatory culture, focusing on the core elements of media literacy. Indeed, the 11 core elements of media literacy, as Jenkins et al. (2009) explain, include play (experimentation), performance (identity adoption), simulation (constructing dynamic models), appropriation, multi-tasking, distributed cognition (interacting with tools), collective intelligence (groupwork), decision (evaluating judgement), transmedia navigation (utilising sources across modalities), networking (finding and sharing information), and negotiation (understanding and respecting multiple perspectives).

The core elements of media literacy require social skills that can only be honed through networking and collaboration, which are characteristics of the participatory culture framework (Jenkins & Ito, 2015). This was the reason for dividing the students into groups of five for the project and throughout the course. The instructional model of inquiry that was adopted includes digital composition, sharing, discussion, and a process for reflection. Using an inquiry-based approach was considered the best option, as it encourages active community engagement and participation among students in the classroom. By adopting the framework, the students were encouraged to investigate and interrogate issues that were of great interest to them and relevant to their upbringing, leading to a journey of discovery (Alalem, 2023; Edelson et al., 1999; Pedaste et al., 2015; Randle, 2024). The framework's

distinctiveness lies in the idea that the knowledge gained from inquiry is translated into a visually captivating and engaging multimodal video, which is then shared and discussed in the classroom. This approach transforms the classroom into a collaborative and inclusive space for social activism. Furthermore, it engages students with the 11 core elements of media literacy required for active engagement in the technology-driven age.

Inquiry-based models start with a preliminary phase that engages students with their prior knowledge of African narratives in video games. This ensures that their prior knowledge and experiences are utilised to determine and identify the critical issues that matter to them. This is followed by an investigative phase that lasts for one week. The students gather information for their groups, which enables them to understand the problem and provide answers. In the final phase, the students synthesise the acquired information into a cohesive format. The goal of adopting the participatory culture framework is to provide a platform for effectively engaging with Africanfuturism. In the first instance, the collaborative framework embodies the traditional Afrocentric collaborative culture, such as *ubuntu*. Moreover, it involves African-centred perspectives and interpretations created by Africans.

Methods

This study employed a descriptive research design, utilising ethnographic observation techniques to examine African-themed video games developed by students. This paper aimed to identify the defining characteristics of African representation in video games. Students were selected as participants for the study. They were organised into 17 groups, with most groups consisting of five members each. One group had four members, resulting in a total of 84 participants. The groups had diverse gender compositions, with different ratios of male to female students in each team. Table 1 gives more information about the groups as well as the video games they developed.

Each group was tasked with developing an African-themed video game. This process was guided by the participatory culture framework, which emphasised the importance of collaborative learning and cultural expression (Jenkins et al., 2009). The framework encouraged students to investigate issues relevant to their cultural background and upbringing. The game development process followed an inquiry-based approach that involved assessing the students' prior knowledge of African narratives in video games, gathering relevant information for their game concept, and synthesising the acquired information into cohesive game designs.

This study employed a qualitative content analysis approach to data analysis, incorporating methods from information studies and game studies (Taylor & Liew, 2024). Qualitative content analysis affirms the researchers' subjective interpretation of data (Carr, 2019). This content analysis adopted Krippendorff's (2018) phases of analysis: unitising, sampling, recording/coding, reducing data, inferring context, and narrating. While unitising refers to the choice of a unit of analysis, in this study, the unit of analysis was video games created by students. This included elements such as in-game visual designs, gameplay mechanics, storylines, player interactions, music, sound effects, and voice acting.

Collecting this data involved capturing data from the stages before game design, during the design process, and after the games were designed. Playing the games allowed the researchers to immerse themselves in the game settings and contextualised the use of depictions in the game narratives (Taylor & Liew, 2024).

The researchers approached each game from an Africanfuturism perspective and documenting its gameplay mechanics, storylines, and player interactions. Screenshots and in-game visuals were collected and examined to identify cultural representations. The cultural significance of music, sound effects, and voice acting was analysed as well. The collected data was analysed to identify common themes and unique features that

Table 1 Groupings for video game development through the participatory culture framework

Group	No. of members	No. of males	No. of females	African game created
1	5	0	5	African Adventure Puzzle Game
2	5	5	0	Zulu War Game
3	5	3	2	Loadshedding Game
4	5	3	2	Puzzle Game in Home Affairs
5	5	3	2	Dogfighting Game
6	5	3	2	Ancient Egypt Game
7	5	2	3	Ghosts of Golden Cities
8	5	2	3	Hermit the Crab Game
9	5	3	2	Mythological Creatures (Tokoloshe)
10	5	4	1	Camera Game
11	5	3	2	African Odyssey
12	5	1	4	The South African Mines Game
13	5	4	1	Local Sangoma Healing People
14	5	3	2	Telkom Building Game
15	5	3	2	Escape from Ponte Town
16	5	3	2	Mythological Chronicles
17	4	2	2	Lefa the Farmer

characterised the games as distinctly African. The research process involved comprehensive visual documentation. The 17 video games created by the student groups were coded and categorised to identify the key themes across them (Carr, 2019). The various student projects were compared to identify common themes and unique approaches in representing African culture through different games.

Our analysis of the data revealed eight African characteristics categorised into the following themes: aesthetics, music and dance, mythological creatures, religion, race, play style, landscape, and language. These themes are discussed in more detail below.

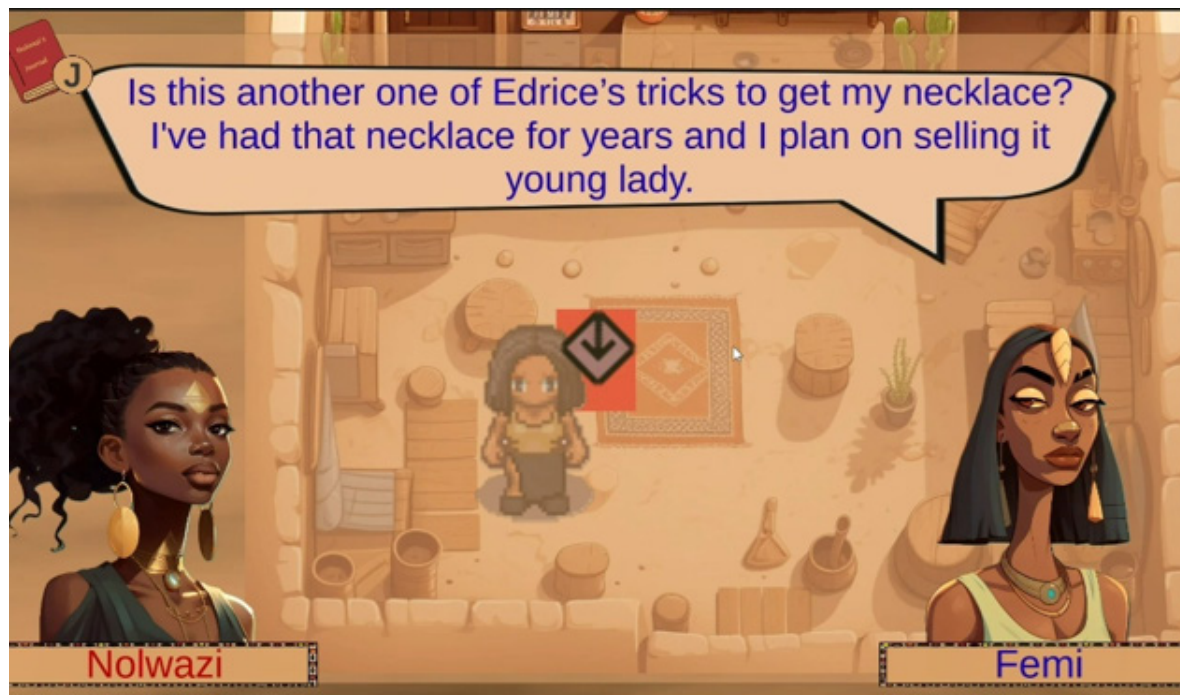## Results and discussions

Fig. 1

Aesthetics, including dressing style, gender, and colour

Several video games developed by the students display aesthetics inspired by African genealogy and characteristics. A good example is African hair. Some of the video games feature characters with braided hair, as shown in Figure 1, while others promote the beauty of dark hair and eyebrows. Several video games use African-shaped and African-themed beads, as beadwork holds significant cultural value in many African societies. It often conveys information about a person's status, age group, or cultural affiliation (Rukariro, 2014).

Figure 1 and Figure 2 depict the rich Afro hairstyles worn by African women. These images were chosen to represent the main character in *African Adventure Puzzle Game* (2023) named Nolwazi, an African warrior. The hairstyles prominently display African aesthetic choices in character design. Nolwazi's hairstyle is particularly noteworthy, as it features a beautiful, full Afro that is distinctly African in appearance. The natural hairstyle not only represents African standards of beauty but also serves as a symbol of cultural pride and identity. Natural hairstyles, including Afros, braids, and dreadlocks, serve as a visible identifier of African origin while also expressing cultural pride. This is consistent with the broader natural hair movement in African communities, which indicates a resurgence of African beauty norms (Bayeck, 2016; Lashley, 2020).

Moreover, Nolwazi's facial features, as displayed in Figure 1, including the shape of her nose and lips, are depicted to represent African physiognomy (Stepanova & Strube, 2012). This was explicitly described by Dart (1938) in a study that

Fig. 2

analysed the facial features of Africans. Nolwazi's dark skin tone is another crucial indicator of her African heritage. These design choices depart from the Eurocentric beauty standards often observed in mainstream video games and instead adopt a more Afrocentric standard to provide a more authentic portrayal of African characters.

In *Lefa* (2023), the characters wear rich African attire rather than Western clothing (see Figure 3). These clothes are primarily from the Basotho culture, which includes unique headgear for both men and women, as well as their distinctive blue costumes that signify social status and origins. This clothing specific to the region showcases a keen attention to detail,

reflecting an understanding of the diverse nature of African fashion.

The fashion items being displayed, including the headgear, could also serve as indicators of social status or cultural affiliation (Utoh-Ezeajugh, 2021). Along with headgear, each character has unique facial features and clothing styles that represent the diversity of African ethnic groups (Dart, 1938).

The students also applied an aesthetic element when naming their video games. They only used African names that are rooted in African culture and traditions and carry significant meaning. The landscape also provides some aesthetic value.

Fig. 3

The green tropical forests, expansive savannas, and desert landscapes featured in the games are familiar to Africans, as they highlight the diverse ecosystems found across the continent.

Overall, these visual elements work together to create a distinctly African aesthetic. By incorporating authentic hairstyles, traditional clothing, diverse landscapes, and culturally specific accessories, the games transcend superficial representations of Africa. Instead, they offer a more nuanced, respectful, and accurate depiction of African cultures and environments. This finding indicates the need for African video game developers to incorporate African aesthetics into video games.

Music and dance

The role of music in video games is crucial. Africa, as a continent, is rich in diverse forms of musical talent and instruments. In many African cultures, music plays a vital role in oral tradition. Games often use music as a storytelling device, with lyrics or musical motifs conveying important plot points or cultural information (Ibekwe, 2013). Some African video games reflect this trend by incorporating music-based mini-games or mechanics that encourage player engagement with the soundtrack (Oikelome, 2019; Onwuekwe, 2009).

Lefa (2023), depicted in Figure 3, features traditional African vocal techniques, including call-and-response patterns, ululations, and choral harmonies. The vocal elements in games often have narrative or emotional significance (Ngcobo, 2022; Ntsihlele, 2003). Complex polyrhythms, a hallmark of

many African musical traditions, are incorporated into game soundtracks. Frishkopf (2021) highlighted that this adds depth to the auditory experience and distinguishes it from Western game music.

Music plays a role in revealing the origins of a group of people. Africans often regard music as an expression of their souls and a reflection of their shared heritage as a people. Incorporating music and dance into video games provides a powerful means of cultural expression and immersion, as they are integral parts of African cultures (Bayeck, 2016).

Mythological creatures

In several African cultures, mythological creatures are not mere fantasies but are deeply intertwined with spiritual beliefs, moral teachings, and cultural practices (Cowen, 2023). To create an intriguing fusion of traditional mythology and modern digital narrative, African-based games should include African mythological creatures (Vandewalle, 2024). African mythology is extremely diverse, differing substantially between locations and ethnic groups (Chauhan et al., 2025).

Mami Wata is a group of creatures commonly found in various West African religions. They are often depicted as powerful serpentine water deities. In games, they may act as guardians of aquatic levels or as major characters in water-based tasks. Drewal et al. (2008) suggested that Anansi, the spider from a West African legend, could be used as a non-player character to challenge players with riddles or missions. Bayeck (2020) cited an example of the Ojuju Calabar myth used in a mobile video game to discourage children from doing

wrong. These myths are deeply rooted in African culture, as they hold significant meaning and contribute to the African way of life. Nevertheless, there is an increasing emphasis on representing these mythological beings respectfully and avoiding caricatures or misrepresentations, which have occasionally occurred in Western media.

Major mythological figures are frequently depicted as boss characters in many stories, and their abilities and weaknesses are often based on traditional narratives. Many games allow players to gain powers or abilities by interacting with or defeating mythological creatures. This mirrors traditional

stories in which heroes gain supernatural abilities. Lesser mythological beings are sometimes used as environmental hazards or challenges, adding a cultural layer to standard gaming obstacles (Vandewalle, 2024).

Figure 4 depicts a fantastical creature, the tokoloshe, in a garden setting from one of the games called *Mythological Creatures* (2023). Although the creature resembles a dragon, which is not commonly associated with African mythology, the surrounding environment indicates an African context. The vibrant greenery and the distinct architectural elements visible in the background suggest a tropical or subtropical

Fig. 4

Musa planted the seeds, which yielded miraculous crops, defying harsh winters.

Fig. 5

goes beyond being a mere design choice; it involves a complex process of cultural translation and digital storytelling. As the gaming industry continues to become more globalised, incorporating these elements thoughtfully and respectfully can enrich game narratives and contribute to a more diverse and inclusive gaming culture (Claybrook, 2023).

Religion

The representation of religion in African-themed video games is a complex and nuanced topic that reflects the continent's diverse spiritual landscape. Africa is home to a wide array of religious beliefs, including traditional African religions, Islam, Christianity, and syncretic faiths that blend elements of multiple traditions (Rüpke, 2021). Many African-themed games

of these religions. If a game is set in North Africa or the Sahel region, it may feature Islamic architecture, characters engaging in *salah* (prayer), or storylines that explore Islamic history and culture. It may also include Christian missionaries, churches, or syncretistic practices that combine Christianity with traditional beliefs (De Wildt, 2023). Students designed games that portrayed the diverse religions present on the African continent, incorporating a twist that highlights the creative space video games provide for developers. This also means creating a new culture by representing these religions in ways that critics might consider stereotypical or trivial. However, from an Africanfuturism perspective informed by participatory culture, students' portrayal of these religions is rooted in African culture and does not centre on Western views of these beliefs. In addition, video games are cultural

artefacts that are influenced by culture while also shaping it. In fact, video games impact culture, as elements in a video game can relate to an existing culture or develop a new culture linked to the game environment (Cerezzo-Pizarro et al., 2023). In their portrayal of religious culture, developers were influenced by both the external culture (i.e., directionality from outside) and the video game environment itself (i.e., directionality from inside to outside). This bidirectionality transforms culture and highlights the potential of video games to shape it. African video games represent elements of African culture, making them accessible to a global audience that may be unfamiliar with these traditions (Campbell et al., 2016). Yet, these games are also cultural elements that mould the culture of the contexts where they were designed.

Race (black and white)

Games with an African theme provide an excellent opportunity to showcase the immense diversity of African cultures. African video games are increasingly featuring a range of skin tones, from dark to light, to reflect the diversity of African populations and address colourism – both within and outside of African societies (Cicchirillo & Appiah, 2014).

The student games highlight several insights into how race is portrayed and utilised as a component. They feature characters with dark skin tones, reflecting a conscious choice to emphasise African identities. This decision likely stems from the desire to address the historical underrepresentation of dark-skinned characters in video games and assert a strong African identity. Although the skin tones are consistently dark, the characters exhibit visible diversity in their facial features.

This variety in physiognomy reflects the rich ethnic diversity found across the African continent (Blackmon & Terrell, 2007). The characters feature various nose shapes, lip sizes, and eye forms, which avoids portraying a monolithic representation of African facial features.

Figure 6 displays a variety of African hair textures and styles. Some characters have short, tightly curled hair, while others have longer, more loosely curled styles. The diversity in hair representation is significant, as hair has long been a central aspect of African identity and cultural expression (Bayeck et al., 2018; Bennet, 2018).

In addition to their physical characteristics, the characters are portrayed with cultural markers that represent their African heritage. These include traditional face paint, jewellery (such as large earrings), and clothing. These elements are not just aesthetic choices but also important signifiers of cultural identity and affiliation. Notably, *African Adventure Puzzle Game* (2023) does not appear to include characters with lighter skin tones. While this may be a deliberate attempt to emphasise African identity, it also raises questions about the lack of representation of the complete range of skin tones found in Africa, which includes North African populations and individuals of mixed heritage. This may indicate students' understanding of what should be considered African and may also point to how the student-developer's identity informs the design of a game, including decisions regarding the choice of character skin tones. Indeed, research on representation in video games contends that the lack of diversity in the video game industry is one of the factors explaining the distorted and low representation of non-white characters in video games

Fig. 6

(Anderson, 2025). Hence, white characters are the default characters in video games because the majority of developers are white; they choose characters that reflect their racial identities (Srauy, 2019).

Play style

Colonial play styles are not the same as African play styles. The landscape in *African Adventure Puzzle Game* (2023) suggests open-world or exploration-based gameplay. The African setting is not merely a backdrop but an essential component

of the player's experience. It implies that navigation and inter-action with the environment are crucial gameplay elements (Amoah & Tawia, 2024). Several video games featuring fan-tastical creatures in a garden setting suggest that African mythology influences gameplay. This influence can be seen in quest structures, combat mechanics, and puzzle-solving elements that draw from African folklore and legends.

The discussion among farmers in *Lefa* (2023) suggests a kind of dialogue and social interaction that is an important gameplay component, reflecting the communal nature of many African societies. This emphasises cooperative play and decision-making based on community consensus (Amo-ah & Tawia, 2024). Some of the games appear to incorporate traditional African activities into their play style. For example, "local sangomas healing people" likely involves gameplay mechanics based on traditional healing practices. This inte-gration of cultural practices into gameplay mechanics repre-sents a unique approach to creating an authentically African play experience (Bayeck, 2016).

The style of the play promotes exploration and discovery, with the African environment itself playing a significant role in the narrative. The play styles evident in these African-themed video games demonstrate a concerted effort to move beyond colonial narratives and create authentic African gaming ex-periences by integrating cultural elements, diverse genres, traditional activities, and environmental storytelling (Bayeck, 2018; Musya, 2024).

Landscape

The representation of landscapes in video games with an African theme plays a crucial role in creating an immersive and authentic gaming experience. A diversity of landscapes is represented across Figure 7, Figure 8, and Figure 9. This variety reflects the vast geographical diversity of the African continent itself (Salter, 2013). For instance, one video game depicts a tropical environment with dense vegetation and a winding river. This setting likely represents the rainforest re-gions found in parts of Central and West Africa.

In contrast, *African Adventure Puzzle Game* (2023) presents a different landscape characterised by a more arid environ-ment, featuring sparse vegetation, rocky outcrops, and dis-tant mountains (see Figure 7). This aspect of the video game

Fig. 7

highlights the savanna and semi-arid regions found in various parts of eastern and southern Africa. The inclusion of these landscapes demonstrates an understanding of Africa's ecological diversity and moves away from the stereotypical depictions of the continent as a monolithic environment (Musya, 2024).

Figure 8 illustrates what appears to be an ancient structure or ruins set against a backdrop of mountains and trees. This juxtaposition of human-made structures within natural settings creates a sense of history and cultural depth, highlighting that these landscapes are not just backdrops but rather lived-in spaces with rich histories.

The way atmospheric effects are rendered plays a significant role in creating the mood and realism of digital landscapes. In Figure 7, for example, the use of lighting and colour creates a sense of depth and distance, with the buildings fading into a hazy backdrop. This attention to atmospheric detail enriches the immersive quality of the game environments. It is worth noting that the landscapes depicted in these games differ in style. While some video games, such as Figure 8, aim for a realistic representation, others opt for a more stylised approach. This use of style does not diminish the Africanness of the landscape but rather offers a different artistic interpretation of African environments. The addition of floral patterns to African ecosystems in the videos further enhances

Fig. 8

Fig. 9

the authenticity of these digital landscapes (Bayeck, 2020). Although not featured prominently in the games, elements such as the scattered trees depicted in Figure 7 and the dense vegetation shown in Figure 8 help create recognisable African environments.

Language

The portrayal of language in video games with an African theme is a crucial aspect of achieving cultural authenticity and immersion. This inclusion of indigenous languages in game interfaces and dialogues is a significant step toward achieving authentic cultural representation in video games. Interestingly, some of the games adopt a multilingual approach (Balel & Mundy, 2011; Bayeck et al., 2018).

Figure 10 presents a screenshot from *Mythological Creatures* (2023), which includes a mixture of English and an African language. The figure illustrates character dialogue or narration in an African language, suggesting the use of language as a tool for storytelling and character development. This adds depth and authenticity to the game's narrative. The language

Fig. 10

choices in the game appear to go beyond simple translation. The representation of African languages in these student-developed video games demonstrates a commendable effort to create culturally authentic and immersive gaming experiences (Amoah & Tawia, 2024; Bayeck, 2020). Incorporating indigenous languages into the interfaces, dialogues, and narratives of these games can enhance player engagement and contribute to the preservation and promotion of African linguistic heritage. This goes beyond superficial cultural representation by using language as a vehicle to convey deeper cultural meanings and contexts. It challenges the dominance of Western languages in gaming and opens up new possibilities for expressing African culture in digital media (Bayeck, 2016; Randle et al., 2025).

Conclusion

This study of student-developed African-themed video games has revealed several key components that contribute to authentic cultural representation in digital interactive media. The study has identified eight main elements, namely aesthetics, music and dance, mythological creatures, religion, race, play style, landscape, and language, which display the multifaceted nature of African cultural expression in video games. The study has demonstrated that student game developers are capable of creating rich, culturally authentic, African-themed video games that not only provide entertainment but also serve as tools for cultural expression, education, and preservation. One limitation of video games is the absence

of indigenous languages being spoken, which highlights concerns surrounding technology. It indicates that technology has not yet advanced to a level where familiar languages can be used in video games developed by students, particularly in speech-to-speech interactions.

Ethical Clerance

Ethical clearance was obtained.

Recommendations

The investigation has shown that there is a need to focus on indigenous aspects and explore how local content can be used to teach young South Africans about video game development. This article sheds light on the importance of academic discussions regarding how culture influences the utilisation of technology. It poses questions such as how a video game developer's cultural preferences and beliefs impact video game development, including how their religion or beliefs might shape the creative process. Future research should focus on how Africans can be encouraged to utilise indigenous, familiar, or local content in their video game development, as well as on gaining an understanding of the factors limiting their ability to do so.

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Oluwarotimi Randle: Writing-Original draft, Conceptualization, Methodology; Rebecca Y Bayeck: Validation, Writing - Reviewing and Editing.

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