



The Impacts of Audience Contexts on Interactive Storytelling: Exploring how Cultural Backgrounds and Personal Preferences Influence the Design and Development of Interactive Narratives

Ren YinZhu

https://orcid.org/0009-0008-6729-9277

## Abstract

This article explores how the context of audiences who interactive with digital storytelling games, including cultural background and personal preferences, influences the design and development of interactive storytelling. Interactive storytelling merges traditional narrative techniques with new media technology, allowing digital readers to shape the ending and meaning of digital stories. Creators of interactive stories must tailor the storyline to specific audience contexts, to enhance audience engagement and immersion. The personal preferences of audiences are crucial to interactive narrative success, as failure to consider diverse needs can lead to less engaging interactions (Domínguez et al., 2016). This research highlights the importance of considering audience context whilst creating interactive narratives, in addressing these issues, can result in a more immersive and engaging experience for audiences. However, designing and developing successful interactive narratives can be challenging, particularly with respect to addressing the cultural background and personal preferences of the audience. Hence, we explore the challenges and opportunities associated with creating interactive narratives that



resonate with diverse audiences. Using a combination of survey and interview methods, i examine how creators can gain a deep understanding of their audience's cultural background and personal preferences to tailor interactive storytelling to specific audience contexts. My findings reveal that failure to consider these factors can result in less engaging interactions and a failure to achieve the desired effect. To address this challenge, we suggest that creators should strive to gain a deep understanding of their audience's cultural background and personal preferences while also maintaining their artistic vision and ensuring technical implementation is appropriate. Tailoring interactive storytelling to specific audience contexts can help creators to create a more immersive and engaging experience, using cultural elements that resonate with their audience and incorporating them into the narrative. This research highlights the importance of considering the cultural background and personal preferences of the audience when designing and developing interactive narratives. By understanding the audience's cultural background and needs, creators can develop a narrative that aligns with their preferences, leading to a more engaging and satisfying experience.

Keywords: Digital Media, Interactive Storytelling, Cultural Background, Personal Reference, Design

### Introduction

Historically, it was Arthurs (Malloy and Aarseth, 1998) who introduced the concept that interactive storytelling should incorporate repeated attempts, and continuous exploration, whilst acknowledging that not all users prefer the risk-taking mode. Arthurs equally described the non-linear narrative of 'cybertext' as a "labyrinth", which enables readers to freely explore, as it provides more possibilities than simply the "ergodic" narrative (Juul, 2015). American digital media scholar Murray identified two modes of "spatial navigation" for interactive texts: the problemsolving-oriented "maze" and the free but entangled "rhizome" (Huaxing, 2011). In combining these two modes, can enhance a user's virtual space navigation experience. Within interactive storytelling systems, they have an open structure, with readers as protagonists who can shape the ending and meaning of the story (Lu et al., 2012). It is Sterne's (1759) experimental text in 'The Life and Opinions of Tristram Shandy, Gentleman', which utilized annotated pages to encourage nonlinear reading; this was ahead of its time. Other scholars such as Strohecker (1986) and Niesz and Holland (1983) have made significant contributions to the field of interactive storytelling, as they have explored the potential of hypertext and



computer-based technologies to create interactive and non-linear narratives. Strohecker, for example, developed the concept of "hypermedia storytelling," which involves using multimedia elements such as sound, video, and graphics to create immersive and engaging stories. Niesz and Holland, on the other hand, focused on the role of the reader in shaping the narrative through their choices and interactions with the text. Their work has paved the way for the development of new forms of interactive storytelling, such as interactive fiction, video games, and virtual reality experiences. These mediums allow readers and users to engage with narratives in new and exciting ways, and to participate in the creation of the story itself.

Interactive storytelling emerged as a new trend driven by digital media technology, representing the evolution of narrative studies across various mediums (Sanchez-Lopez et al., 2020). New media art and technology have brought about new features that combine art forms and technology, such as integration, interactivity, hypermedia, immersion, and narrative (Parker & Ken, 2002). Ascott in 1997 (Hope & Ryan, 2014) proposed five characteristics of new media art, which emphasize the fluidity of images, surfaces, and identities, and they are: connectivity, immersion, interactivity, transformation, and emergence. These five categories reveal the unique and dynamic nature of new media art, which has emerged as a powerful medium for storytelling and creative expression. Connectivity refers to the ability of new media art to connect people and ideas across vast distances, creating a sense of global community and shared experience. Immersion allows the viewer to become fully absorbed in the artwork, blurring the line between reality and fantasy. Interactivity encourages active engagement with the artwork, inviting the viewer to participate and shape the narrative. Transformation enables the artwork to evolve and adapt over time, reflecting the changing needs and desires of its audience. Finally, emergence emphasizes the organic and unpredictable nature of new media art, which can give rise to unexpected and transformative experiences. These categories are particularly relevant to interactive storytelling, and dynamic narratives rely on transitions and emergences between them. Digital interactive narratives share similarities with traditional forms of storytelling, whilst possessing new media characteristics across various narrative practices (Paul, 2003). Due to this, interactive storytelling is a fascinating and growing field, which has evolved from the fusion of traditional narrative techniques and new media technologies.

What is interesting about interactive storytelling, is that it combines traditional techniques to digital technologies, creating immersive experiences allowing audiences to actively participate choosing the outcome of the story (Aarseth, 2012).



What this achieves, is it creates a more comprehensive engagement and emotional connection with the audience, which can lead to a more impactful experience (Boase, 2013). For instance, researchers have explored how interactive storytelling is a useful tool to be used within education and learning. Numerous studies have revealed that interactive storytelling even can enhance a students' engagement and retention of knowledge (Saritepeci, 2020). However, there are indeed concerns about the ethical implications of interactive storytelling, particularly in terms of user privacy and data protection. As these narratives become more personalized and tailored to individual users, there is a risk that a user's data could be misused or exploited (Rosenbaum et al., 2020).

Interactive storytelling creators must be mindful of these risks, and work to ensure that the audiences' data is protected and used ethically. There is another are that interactive storytelling has proved useful, and this is as a means of promoting social change and activism. Various scholars have explored how interactive storytelling can be used to raise awareness and understanding of social issues, such as poverty, human rights violations, and climate change (Hancox, 2018; Tolly, K. M., 2008). This statement was further supported by Polletta and Chen in their 2017 study, where they argued that interactive storytelling can be used to promote social change and engage audiences in activism. Yet the success of such efforts relies heavily on the cultural and social norms of the audience, and the context in which the narrative is presented (Polletta and Chen, 2017). In other words, it is very meaningful to consider audience context for the design and creation of interactive storytelling.

# Research Hypotheses

Considering the literatures, three hypotheses can be drawn, and I will work through these now

1. An Audiences Cultural Background has Significant Impacts on the Design and Development of Interactive Narratives.

How an audience receives a piece of text is influenced by various factors, including age, gender, social class, cultural background, and personal experiences (Hole et al., 2016). Cultural background is particularly critical in shaping an individual's expectations and preferences for storytelling. In addition to this, different age groups have distinct material and spiritual cultures influenced by their life experiences, resulting in differences in their cultural backgrounds. For instance, younger



audiences tend to engage more with narratives that feature interactive elements, such as branching storylines or interactive games (Sangalang et al., 2013). Whereas older audiences can tend to prefer more straightforward and linear narratives that prioritize coherence and continuity (Shin, 2017). It is important to note, that these opinions are generalizations and are not concrete rules. It seems that age can similarly influence the appropriateness of themes and content for different audiences. This is especially noted when designing interactive narratives for children, where ageappropriate language and themes are crucial for enjoyment and education (Copland and Garton, 2014). It is apparent that personal experiences, such as past trauma or life events, can significantly impact an individual's response to an interactive narrative. Studies have shown that individuals who have experienced trauma may be more sensitive to certain themes or content, such as violence or sexual assault (Kilcommons et al., 2008). Whilst others who have not experienced such events, might be more desensitized to these themes and find them less impactful. What this shows is that the reception and interpretation of a piece of text is not a universal or objective process, but rather a subjective and complex one that is influenced by a wide range of factors. Understanding these factors can help writers and content creators to tailor their messages to specific audiences and create more engaging and meaningful narratives.

It was Hall (1976) who introduced the concepts of high context and low context communication styles, which they attributed to cultural differences. It seems that eastern cultures tend to have a high context communication style that relies more on implicit or nonverbal cues, whilst western cultures prefer a more direct and explicit communication style. This reveals that designers and developers need to remain aware of these changes and adapt their approaches accordingly. For instance, a storyline that was once well- received by a particular cultural group may not be as appealing to them in the future due to changing social and cultural dynamics. Therefore, it is essential to continuously monitor and update interactive narratives to ensure that they remain relevant and engaging to their target audience. However, cultural differences are not simply limited to the geographical locations of east and west. For example, Lemay et al. (2021) noted that various cultures prioritize collectivism, with others prioritizing individualism. This can significantly affect how individuals perceive narrative elements like plot, characters, and themes.

Additionally, cultural differences influence the way audiences interact with, and respond to, interactive narratives, such as preferring a non-linear and open-ended narrative, or a more structured clear-cut narrative. Designers and developers need to



be aware of the subtle nuanced differences to ensure that digital interactive narratives are engaging and resonate with the target audience. Having said this, it is important to recognize that cultural backgrounds are not static and do indeed evolve over time. In quite multicultural societies like the United States, cultural identity can be shaped by multiple factors, such as ethnicity, religion, and socioeconomic status (Xu et al., 2022). Due to this, it is crucial to consider the diversity within a particular cultural group when designing and developing interactive narratives.

# 2. An Audiences Personal Preference plays a key role in the Success of Interactive Narratives.

Digital interactive narratives offer personalized and immersive experiences for audiences, yet their success depends on storytelling quality, technology, interactive design, and audience preferences. Personal preferences play a significant role in shaping an audience's emotional investment and engagement in a narrative (Kim, 2001; Zillmann, 1996; Kaspar et al., 2016). Different types of interactive elements can enhance audience satisfaction, yet their effectiveness depends on an audience's individual characteristics (Brannon et al., 2021). Audience immersion is influenced by individual needs for autonomy, competence, and relatedness, which indicates that personalized narrative design could improve its effectiveness on the reader (Paradeda et al., 2020). Nevertheless, it is important to note that personal preferences may change over time and within different contexts. As such, a more personalized approach to interactive narrative design may be necessary to ensure the success of the narrative. This can be achieved through conducting audience research, and gathering data of audience preferences or characteristics, as well as testing and refining the narrative based on this feedback. Besides, factors such as these personal preferences do not always determine the success of interactive storytelling.

Whilst considering the type of platform or technology used for digital interactive storytelling can also impact its final effect. For example, virtual reality (VR) technology offers a unique immersive experience that has the potential to enhance audience engagement and emotional resonance (McRoberts, 2017). However, the use of digital technology can also present barriers for some audiences, such as those with disabilities or older audiences who may struggle to use certain devices (Pradhan et al., 2018). As well as this, the use of mobile devices for interactive storytelling may require different design considerations, such as for those with shorter attention spans and smaller screen sizes (Kim, 2008). In continuance, the success of



interactive narratives is as well influenced by other factors, such as the quality of the storyline and the execution of the interactive elements. Research has unearthed that interactive narratives which effectively blend compelling storytelling with well-designed interactive elements, are more likely to be successful in capturing and maintaining the attention of the audience, as well as fostering a sense of emotional connection and empathy with the characters and their story. (Chuang and Jamiat, 2023). Interactive narratives that strike the right balance between the storyline and interactivity can also promote a sense of agency and immersion, empowering the audience to shape the narrative and feel a sense of ownership over the experience. This can lead to greater engagement and motivation to explore different story paths and outcomes, ultimately resulting in a more satisfying and memorable experience for the audience. Additionally, successful interactive narratives can lead to positive word-of-mouth and increased interest in the story and the platform used to deliver it, potentially leading to greater exposure and future opportunities for the creators.

# 3. Interactive Storytelling can be Tailored to Specific Audience Contexts to Increase Engagement and Immersion.

Through incorporating elements that resonate with an audience's values, interests, and experiences, interactive storytelling has the ability to offer a more personalized and emotionally resonant experience for audiences. Several studies have highlighted the potential of audience-tailored interactive storytelling, such as personalized storytelling in a healthcare settings with tailored stories increasing patient engagement and satisfaction (Gray, 2009). Similarly, in the context of cultural heritage, interactive storytelling has been used to tailor museum experiences for visitor preferences and interests, which results in higher engagement and a sense of ownership over the experience (Vrettakis et al., 2019).

There are however potential limitations and challenges in implementing audience-tailored interactive storytelling. For instance, tailoring the experience to specific audience contexts may require significant resources and expertise in audience analysis, data collection, and content adaptation. As well as this, there is a risk of reinforcing stereotypes or creating exclusionary narratives, if audience analysis is not conducted thoroughly or if the tailoring process is not inclusive and diverse (Hancox, 2012). Hence, whilst the potential benefits of audience-tailored interactive storytelling are promising, further research is needed to explore its feasibility, effectiveness, and ethical implications in different contexts.

# Pus

## Methodology

To respond to the topic of the influence of audience contexts on interactive storytelling, I carried out both quantitative and qualitative research to investigate how cultural backgrounds and personal preferences affect the design and development of interactive storytelling. The aim of the research was to gain a deeper understanding of the factors that influence audience engagement and how this knowledge can be used to inform the creation of more effective interactive narratives. By examining the ways in which cultural and individual factors contribute to audience contexts, I hope to provide insights that can guide the development of more engaging and impactful interactive storytelling experiences.

#### Research Sample

In this research, both survey and interview methods were used to gather data. I conducted interviews with 8 designers, comprising an equal number of 4 males and 4 females. Participant ages ranged from 25 to 37 years, and all have professional experience of 3+ years or more.

To collect the questionnaire data, I used interview analysis to inform the design of the questionnaire questions, which was distributed to 30 employees working in design companies.

Among the questionnaire respondents, there were 17 male employees and 13 female employees. The ages of the participants varied from 22 to 41 years of age, with the majority falling within the 25 to 37 age range.

#### Research Findings

I discovered that a portion of digital interactive storytelling creators recognized the essential role of considering their audience's cultural background, to enhance the design and development of narratives. It was found that, to understand how to make changes that align more closely with an audience's cultural background, remains the most challenging aspect for creators. Considering this there are common issues that arose when creators attempted to improve their work, such as inappropriately using cultural elements, or not having a thorough understanding of their audience's background. These factors can result in ineffective improvements to digital interactive storytelling. It is crucial for creators to be aware of these specific manifestations as they strive to improve and enhance their work.



Group Perspective	Number of People	Percentage
Possess a detailed understanding of the impacts of cultural backgrounds - due to factors such as time, race, and other differences, even within the same country.	10	33.33%
Possesses a limited understanding of the impacts of cultural backgrounds - can result in design deviations and misunderstandings.	6	20%
Failure to fully consider the impacts of cultural backgrounds - the diverse needs and preferences of the audience can lead to less engaging interactions.	5	16.67%
A general consideration of the impacts of cultural backgrounds - overly broad cultural backgrounds and insufficient technical implementation can result in a failure to achieve the desired effect.	9	30%
	Total Count: 30	Total: 100%

Table 1. Impacts of culture background on digital interactive storytelling

As displayed in Table 1, multiple respondents found it challenging to gain an indepth understanding of the cultural backgrounds of their audience, such as comprehending the impacts of race, age, and geographical region on a person's thinking. Consequently, 33.33% of participants in the survey reported that gaining a comprehensive insight into their audience's cultural background presents a significant challenge. What has been discovered is that creators of digital interactive storytelling can conduct more detailed surveys to better understand the cultural backgrounds of their audience. There was 30% of respondents who believed that the complex composition of cultural backgrounds makes it challenging to replicate the same emotion that the tangible material world brings. This poses a considerable challenge that current digital technology cannot easily overcome. Furthermore, 20% of participants suggested that creatively exploring different interpretations of cultural backgrounds might still realistically fall short of expectations, such as



through errors or misunderstandings of the audience's cultural background. As well as this, 16.67% of people believe that failure to meet all of the audience's needs may result in less diverse interactive content.

1 1	Number of	Percentage	
	People		
	7	23.3%	
Failure to consider the audience's preferences - may			
lead to a decrease in interactive participation.			
	13	43.3%	
Broad personal preferences and insufficient technical			
implementation - can result in difficulty achieving the			
expected outcome.			
	10	33.3%	
Balancing personal preferences with artistic expression			
- can be challenging.			
	Total Count: 30	Total: 100%	

Table 2: Impact of Personal Preferences on Interactive Content Engagement

On the topic of personal preferences to the audience, I continued to ask relevant questions to the respondents, and they shared their experiences and the problems that they encountered. Based on my research which utilized survey and interview methods, personal preferences of the audience were located as critical to the success of digital interactive narratives. Survey respondents reported that failure to consider the diverse needs and preferences of the audience, can lead to less engaging interactions, with 23.3% of participants highlighting this issue.

To address this challenge, creator of interactive narrative games must strive to gain a deep understanding of their audience's personal preferences. However, this also presented a significant challenge, as personal preferences vary widely amongst individuals. Various respondents expressed that it was challenging to design interactive narratives that appeal to a broad audience. There were 43.3% of participants reporting that overly broad personal preferences, and insufficient technical implementation, can result in a failure to achieve the desired effect. Moreover, some creators found it challenging to strike a balance between meeting the personal preferences of their audience and maintaining their artistic vision for the interactive narrative. This resulted in creative outcomes that fell short of expectations for some audience members, with 33.3% of respondents indicating that

P

inadequate consideration of personal preferences could lead to design deviations and even misunderstandings.

#### Conclusion

In conclusion, an audience's personal preference plays a key role in the success of digital interactive narratives. Interactive storytelling games creators must strive to gain a deep understanding of their audience's personal preferences, while also maintaining their artistic vision and ensuring technical implementation is appropriate. It seems that failure to consider these factors, results in less engaging interactions and a failure to achieve the desired effect. Based on research findings, it is crucial for creators to consider the cultural background of their audience when designing and developing digital interactive narratives. Consequently, it is not enough to simply have a general understanding of cultural differences, as creators need to tailor their storytelling to specific audience contexts to enhance engagement and immersion. Through tailoring interactive storytelling to specific audience contexts, [interactive narrative games creators can develop a more immersive and engaging experience for their users. This approach helps to create a more meaningful and relatable story for the audience, which can increase their emotional attachment to the narrative, such as incorporating cultural elements that resonate with an audience. In tailoring interactive storytelling to specific audience contexts, additionally assists digital creators to avoid cultural misinterpretations and errors that may negatively impact the story's reception. Understanding an audience's cultural background and needs, leads to the development of a narrative that aligns with the true user's preferences, which enables for a more engaging and satisfying experience.

This research therefore highlights the significance of understanding and incorporating personal preferences and cultural backgrounds in the development of digital interactive narratives. It points to the need for creators to tailor their storytelling to specific audience contexts, enhancing engagement and immersion. Furthermore, it calls for ongoing research to explore innovative approaches and strategies for creating more meaningful and relatable interactive experiences.

Looking ahead, the future of digital interactive storytelling holds exciting possibilities. Advancements in technology and research can pave the way for even more immersive and personalized narratives. By continuing to prioritize audience preferences and cultural sensitivity, creators can unlock new levels of user engagement and satisfaction. This calls for collaborative efforts between storytellers,



game developers, researchers, and audiences themselves to shape the future of interactive narratives.

The journey towards creating exceptional digital interactive narratives is an ongoing process of understanding, adaptation, and innovation. By embracing the insights gained from this research and driving forward with a user-centered approach, we can unlock the full potential of interactive storytelling, offering captivating experiences that resonate deeply with audiences around the world.

#### References

Lemay, E., Kruglanski, A. W., Molinario, E., Agostini, M., Belanger, J., Gutzkow, B., Kreienkamp, J., vanDellen, M. R., team, P., & Leander, P. (2021). The role of values in coping with health and economic threats of COVID-19. Center for Open Science. Available at: http://dx.doi.org/10.31234/osf.io/6j38h

Donnelly, C. (2021). Claiming chaos narrative, emerging from silence. Disability & Society, 1–15.

Available at: https://doi.org/10.1080/09687599.2021.1983420

Swanson, T. J., & Landau, M. J. (2019). Terror management motivation fuels structure-seeking.

In Handbook of Terror Management Theory (pp. 133–156). Elsevier. Available at: http://dx.doi.org/10.1016/b978-0-12-811844-3.00005-6

Xu, Y., Wen, F., Zuo, B., & Rhodes, M. (2022). Social essentialism in the United States and China: How social and cognitive factors predict within- and cross-cultural variation in essentialist

thinking. Memory & 200 Cognition, 51(3), 681–694. https://doi.org/10.3758/s13421-022-01306-1

Brannon, L., Gold, L., Magee, J., & Walton, G. (2021). The potential of interactivity and gamification within immersive journalism & interactive documentary (i-docs) to explore climate change literacy and inoculate against misinformation. Journalism Practice, 16(2–3), 334–364. https://doi.org/10.1080/17512786.2021.1991439

Paradeda, R. B., Martinho, C., & Paiva, A. (2020, November 10). Persuasion strategies using a social robot in an interactive storytelling scenario. Proceedings of



the 8th International Conference on Human-Agent Interaction. http://dx.doi.org/10.1145/3406499.3415084

Chuang, C., & Jamiat, N. (2023). A systematic review on the effectiveness of children's interactive reading applications for promoting their emergent literacy in the multimedia

context. Contemporary Educational Technology, 15(2), ep412. https://doi.org/10.30935/cedtech/12941

Gray, J. B. (2009). The power of storytelling: Using narrative in the healthcare context. Journal of Communication in Healthcare, 2(3), 258–273. https://doi.org/10.1179/cih.2009.2.3.258

Hancox, D. (2012). The Process of Remembering with the Forgotten Australians: Digital storytelling and marginalized groups. Human Technology An Interdisciplinary Journal On Humans In ICT Environments, 8(1), 65–76. https://doi.org/10.17011/ht/urn.201205141653

Sterne, L. (1759-1767). The Life and Opinions of Tristram Shandy, Gentleman. Retrieved from https://www.gutenberg.org/files/1079/1079-h/1079-h.html

Aarseth, E. (2012, May 29). A narrative theory of games. Proceedings of the International Conference on the Foundations of Digital Games. http://dx.doi.org/10.1145/2282338.2282365

Boase,C. (2013). Digital Storytelling for Reflection and Engagement: a study of the uses and potential of digital storytelling. https://gjamissen.files.wordpress.com/2013/05/boase\_assessment.pdf

Malloy, J., & Aarseth, E. J. (1998). Cybertext, perspectives on ergodic literature. Leonardo Music Journal, 8, 77. https://doi.org/10.2307/1513408

Podara, A., Giomelakis, D., Nicolaou, C., Matsiola, M., & Kotsakis, R. (2021). Digital storytelling in cultural heritage: Audience engagement in the interactive documentary new life. Sustainability, 13(3), 1193. https://doi.org/10.3390/su13031193



Hole, K. L., Jelača, D., Kaplan, E. A., & Petro, P. (2016). The Routledge Companion to Cinema & Gender. Routledge.

Oliver, M. B., & Bartsch, A. (2010). Appreciation as audience response: Exploring entertainment gratifications beyond hedonism. Human Communication Research, 36(1), 53–81. https://doi.org/10.1111/j.1468-2958.2009.01368.x

Kaspar, K., Zimmermann, D., & Wilbers, A.-K. (2016). Thrilling news revisited: The role of suspense for the enjoyment of news stories. Frontiers in Psychology, 7. https://doi.org/10.3389/fpsyg.2016.01913

Zillmann, D. (1996). The psychology of suspense in dramatic exposition. In P. Vorderer, H. J. Wulff, & M. Friedrichsen (Eds.), Suspense: Conceptualizations, theoretical analyses, and empirical explorations (pp. 199–231). Lawrence Erlbaum Associates, Inc.

Sangalang, A., Quintero Johnson, J. M., & Ciancio, K. E. (2013). Exploring audience involvement with an interactive narrative: Implications for incorporating transmedia storytelling into entertainment- education campaigns. Critical Arts, 27(1), 127–146. https://doi.org/10.1080/02560046.2013.766977

Copland, F., & Garton, S. (2014). Key themes and future directions in teaching English to young learners: Introduction to the Special Issue. ELT Journal, 68(3), 223–230. https://doi.org/10.1093/elt/ccu030

Kilcommons, A. M., Morrison, A. P., Knight, A., & Lobban, F. (2008). Psychotic experiences in people who have been sexually assaulted. Social Psychiatry and Psychiatric Epidemiology, 43(8), 602–611. https://doi.org/10.1007/s00127-007-0303-z

Sanchez-Lopez, I., Perez-Rodriguez, A., & Fandos-Igado, M. (2020). The explosion of digital storytelling.

Per

Creator's perspective and creative processes on new narrative forms. Heliyon, 6(9), e04809. https://doi.org/10.1016/j.heliyon.2020.e04809

Lu, A. S., Baranowski, T., Thompson, D., & Buday, R. (2012). Story immersion of videogames for youth health promotion: A review of literature. Games for Health Journal, 1(3), 199–204. https://doi.org/10.1089/g4h.2011.0012

Packer, R., & Jordan, K. (2002). Multimedia: From wagner to virtual reality. W. W. Norton & Company.

Riedl.M.O., & Bulitko.V (2013). Interactive Narrative: An Intelligent Systems Approach,

https://www.researchgate.net/publication/289604607\_Interactive\_Narrative\_An\_Intelligent\_Systems\_Approach

Tredinnick, L. (2007). Post-structuralism, hypertext, and the World Wide Web. Aslib Proceedings, 59(2), 169–186. https://doi.org/10.1108/00012530710736672

Paul, C. (2003). Digital art.The Art Book, 11(1), 45–46. https://doi.org/10.1111/j.1467-8357.2004.00383.x

Strohecker, C. (1986). Electronic Collage: Video Discs and Interactive Narrative. Proceedings of the 1986 ACM Conference on Computer-Supported Cooperative Work, 36-46. https://dl.acm.org/doi/10.1145/637069.637074

Niesz, A. J., & Holland, N. N. (1983). The interactive fiction community. Computers and the Humanities, 17(4), 299-308. https://doi.org/10.1007/BF02856611

Hope, C., & Ryan, J. C. (2014). Digital arts: An introduction to new media. USA: Bloomsbury Publishing. Aarseth, E. J. (1997). Cybertext: Perspectives on ergodic literature. UK: JHU Press.

Saritepeci, M. (2020). Students' and parents' opinions on the use of digital storytelling in science education. Technology, Knowledge and Learning, 26(1), 193–213. https://doi.org/10.1007/s10758-020-09440-y



Hancox, D. (2018). Transmedia for Social Change. In The Routledge Companion to Transmedia Studies

(pp. 332–339). Routledge. http://dx.doi.org/10.4324/9781351054904-37

De Tolly, K. M. (2008). Digital stories as tools for change: a study of the dynamics of technology use in social change and activism. Doctoral Dissertation. South Africa: University of Pretoria.

Maass, A. (1999). Linguistic intergroup bias: Stereotype perpetuation through language. In Advances in Experimental Social Psychology (pp. 79–121). Elsevier. http://dx.doi.org/10.1016/s0065-2601(08)60272-5

McRoberts, J. (2017). Are we there yet? Media content and sense of presence in non-fiction virtual reality. Studies in Documentary Film, 12(2), 101–118. https://doi.org/10.1080/17503280.2017.1344924

Kim, P. H. (2008). Action research approach on mobile learning design for the underserved. Educational Technology Research and Development, 57(3), 415–435. https://doi.org/10.1007/s11423-008-9109-2

Polletta, F., & Chen, P. C. B. (2017). Narrative and social movements. Oxford University Press. http://dx.doi.org/10.1093/oxfordhb/9780195377767.013.18

Podara, A., Giomelakis, D., Nicolaou, C., Matsiola, M., & Kotsakis, R. (2021b). Digital Storytelling in Cultural Heritage: Audience Engagement in the Interactive Documentary New

Life. Sustainability, 13(3), 1193. https://doi.org/10.3390/su13031193

Domínguez, I. X., Cardona-Rivera, R. E., Vance, J. K., & Roberts, D. L. (2016). The mimesis

effect. Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems. http://dx.doi.org/10.1145/2858036.2858141

Juul, J. (2015, January 30). A clash between game and narrative. https://www.jesperjuul.net/thesis/