

Digital Worlds Are Changing Cultures: The Influence of AI in Video Game Storytelling on Culturally Formative Narratives

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ABSTRACT

AI incorporated into games has come a long way in the alteration of the gaming stories and the introduction of cultural and social aspects into games. This article is dedicated to considering the use of AI in video games and its impacts on culture and ethnicity. It provides a short historical background of video games from text-based adventures to the multimedia near-movies. Importance is given to the technologies that make the narratives interactive and dynamic. Thus, this research aims to find out and analyze the various meanings that are depicted in video game narratives with a special focus on social relations and culture. Also, the article provides information on concerns related to the realism and fairness of the AI, such as stereotype reinforcement, post-truth, and privacy. It provides recommendations for game designers and identifies gaps for research to mitigate the harms of AI in video game storytelling.

1. INTRODUCTION

Artificial Intelligence (AI) has made waves in many industries, especially creativity. One area that this technology has greatly impacted on is video game storytelling. Video game narratives have changed so much due to AI's enhancement of dynamism and interactivity. Khan and Sabahat (2024) discuss how linear storytelling is being surpassed by AI chatbots used in video games, making them more interesting for gamers. Such gaming experiences are hyper-personalized and gripping where the AI systems respond to player actions and participate in shaping the story further. The assistant aims to optimize the system and user prompts, leading to an improved version of human-like text while upholding the original content's intended meaning and factual accuracy (Khan & Sabahat, 2024).

As emphasized by Riedl and Bulitko (2012) interactive storytelling utilizes AI to control and adjust narratives in games, providing an engaging experience where players are actively involved in the evolu-

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ing story. This concept is reinforced by AI advancements, enabling more lifelike settings and character movements, and generating unique content through procedural methods, resulting in distinct storytelling encounters with each gameplay session (Filipović, 2023; Wu et al., 2023). Yet, using AI in stories brings problems and moral choices, like in other uses of this tech. Concerns about protecting information and the wrong use of personal information that AI gathers from players are raised (Thorne, 2020). Further, the possibility of AI replacing human authors in narrative development is a current subject of discussion, with implications for the future of storytelling across various media platforms.

Stories of different cultures are key in online media platforms and play, as they help make who people are and the stories shared in these places where they play and interact (Crawford & Gosling, 2009). When mentioned games, the tales are not just part of the games but also mix into how players live each day. They shape the way people talk with each other and their life tales (Crawford & Gosling, 2009). The big role of these cultural stories is even more seen in how people who have lost someone use games as a way to show sadness and remember the one gone, where the deep stories in games become a place where they can honor the dead (Kühn-Botma, 2022).

It's neat how stories in games can make players care and get into it with things like love stories (Tomlinson, 2021). They also touch on big real-world stuff like teaching about society (Dishon & Kafai, 2022) and how families get along (Gałuszka, 2018; Gee et al., 2017). These tales can be key in building tech and culture skills at home, and in getting people to take part in society by playing games together (Dishon & Kafai, 2022). Plus, the stories in games about sports show how media can shape who we are and how we live social stories (Crawford & Gosling, 2009).

This chapter centers on how AI affects storytelling in games and its influence on cultural narratives. It examines how AI technology improves game narratives and analyzes how cultural values and identities are represented in AI-driven games. Furthermore, the chapter examines the ethical consequences of these developments. Additionally, the chapter critically considers the ethical implications of these advancements. This encompasses challenges related to cultural appropriation and oversimplification. Additionally, it will highlight how AI in games can facilitate improved communication and empathy among individuals from diverse backgrounds. The chapter will cover the history of storytelling in video games, look at necessary AI technologies, examine cultural influences, and consider ethical considerations. Ultimately, this chapter will offer insights for game developers and suggest areas for further study to ensure AI's ethical and equitable use of in-game narratives. These topics - technical advancements, cultural implications, and ethical considerations - will be interwoven throughout the chapter to provide a holistic view of AI's transformative position in video game narratives.

2. BACKGROUND

2.1. Evolution of Video Games Storytelling

The development of storytelling in video games has greatly changed since the medium was initially introduced. At first, there were hardly any storylines in video games, but eventually, they became a crucial part of the gaming experience (Poliakova & Lut, 2023), transforming into immersive adventures that reflect advancements in technology and creativity.

In the period from the early 1970s to the 1980s, video games experienced the introduction of narratives for the first time. At first, there existed text-based adventure games, where players interacted with the game

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