Rediscovering West Chinatown: Immersive Game Design Revives Toronto's Chinese Cultural Heritage

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Abstract. This project focuses on recovering marginalized stories from Toronto's West Chinatown. It aims to make these findings accessible through interactive means, promoting inclusivity. By integrating cultural studies, archival research, design, storytelling, and gaming, the objective is to develop an augmented reality (AR) game that introduces participants to forgotten stories of historically marginalized groups. The AR archive connects the historical aspects of Toronto's Chinatown to the present, while gamification enhances engagement and enriches visitor experiences. This game—called Chinatown Time Machine—aims to recuperate the memory of not only erased architectural features but of historical events in Toronto's West Chinatown through AR activities, bringing cultural heritage to life.

Keywords: Toronto's Chinese cultural heritage · critical play · game design · marginalization · augmented reality

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1 Introduction

West Chinatown, established in 1878, is one of Toronto's oldest ethnic neighborhoods, attracting both locals and tourists (Luk, 2005). Unlike its North American counterparts, this vibrant enclave lacks a traditional Chinese gateway called the paifang (Wang & Duan, 2015: 147), which represents a historical omission. The absence of this important architectural symbol prompts contemplation of the cultural and urban developments that led to its disappearance, compelling us to uncover the forgotten narratives it once conveyed. Moreover, it highlights the interplay between urban progress and the preservation of marginalized immigrant stories, characterized by enduring struggles and discrimination. To revive these untold tales and engage present-day citizens and visitors, we must embrace critical and creative approaches.

At the Modern Literature and Culture Research Centre, where this study took place, our focus lies in recovering marginalized narratives of Canadian and American women, with a particular emphasis on overlooked artists. Previous research has shed light on systemic oppression rooted in ethnicity, nationality, gender, and class, shining a critical light on exclusionary social practices. Through archival research, we have unearthed neglected stories that showcase the resilience and innovative adaptation of diverse cultures. Our research adopts (1) a Foucaultian (1977) archaeological approach, providing insights into power dynamics at the intersection of cultural heritage, diaspora, and storytelling; and (2) a critical game design approach, highlighting the transformative potential of games and play in challenging societal norms to drive social change (Flanagan, 2009; Gammel, 2019; see also Loveless, 2019).

Specifically, this project focuses on recovering marginalized stories from Toronto's West Chinatown. It aims to make these findings accessible through interactive means, promoting inclusivity. By integrating cultural studies and heritage with critical game design and storytelling, the project involves developing an augmented reality (AR) game that introduces participants to stories sidelined by dominant culture and history. This game-called Chinatown Time Machine-aims to recuperate the memory of not only erased architectural features but of historical events in Toronto's West Chinatown through AR activities, bringing cultural heritage to life.

2   Archival Methods and Technological Feasibility

Our project on Toronto's Chinatown in 2022 (Kong, 2022) draws on both family archives and the City of Toronto Archives (Chinese History in Toronto, 2022) to cull fragments of information on the Chinese diaspora in the city since the 19th century, including records from the 1878 Toronto City Directory, photographs, and various printed ephemera like newspaper articles and handwritten letters. These resources provide insights into the clustering of laundry businesses, the discriminatory segregation they faced, and the development of Old Chinatown on Elizabeth Street by 1909. However fragmentary, these firsthand narratives provide glimpses of the community's erased history and experiences.

To recuperate these buried histories, the project combines archival studies with critical game design and storytelling to make cultural heritage and history accessible. The game allows players to immerse themselves emotionally in the lives of historical figures from different periods of Toronto Chinatown's history. The game uses a technological framework inspired by the popular AR-based 2016 game, Pokémon Go (Shin, 2017; Khajeheian & Kolli, 2020), including augmented reality and Global Positioning System (GPS) navigation technologies, allowing players to scan real-life environments on location and capture various Pokémon characters. It is also inspired by other location-based games creatively engaging with local history (Ballagas et al., 2007; Luiro et al., 2019).

In the Chinatown Time Machine game, players utilize their camera-equipped mobile devices to scan location-based markers and gather crucial clues for advancing in the game. This augmented reality and GPS-based adaptation allows players to interact with real-life environments on-site, providing an immersive experience of historical narratives. Visitors can participate using their personal mobile devices or by renting equipment, and they have the option to share their experiences on social media platforms.

3   The Game Design

Chinatown Time Machine is an AR game set in Toronto's West Chinatown. The player wakes up after passing out and discovers they are living in someone else's life due to a mistake with the Time Machine. To return to their normal life, they must uncover the identity of the person whose life they are inhabiting by scanning the surroundings with their mobile camera in Chinatown. The objective of the game design is to digitally preserve and promote the history of Toronto's West Chinatown; explore the impact of discrimination on visible minority groups and foster unity among different immigrant communities; and provide an immersive experience.

3.1   Minimum Value Product (MVP)

The MVP of Chinatown Time Machine features the life story of Jean B. Lumb (1919-2002), a Chinese Canadian activist and restaurateur and the first Chinese Canadian woman to be inducted into the Order of Canada. A conceptual video illustrating the gameplay can be viewed here: Chinatown Time Machine Con ceptual Video. The game will be continuously updated with additional characters, puzzles, content, and seasonal activities.

3.2   Characters

In the game, Qilin 麒麟(Fig.1), a non-player character (NPC), controls the Chinatown Time Machine and provides players with instructions. The fortune teller 算命先生, another NPC, predicts the future and gives puzzle hints. Players can raise 12 Zodiac animal pets, each with unique traits, by completing tasks. These pets are non-fungible tokens (NFTs) owned by players and can be captured using the AR camera for sharing on social media. Player roles encompass historical Chinese figures like Chinese politician Sun Yat-sen, or individuals associated with pivotal events in Toronto's Chinatown.

Fig. 1. Bronzer Qilin at Huron Street Public Square, Yifan Kong, July 28, 2022

3.3   Setting

The game is primarily set in Huron Square Chinatown, a lantern-themed public square (Fig.2) situated on Huron Street, north of Dundas Street West. The square's design is credited to Jyhling Lee (Chinatown BIA, 2017).

Fig. 2. Huron Street Public Square, Yifan Kong, March 29, 2022

Players log into the game with an unknown identity and gather puzzle pieces and clues to uncover it. Huron Square is the main hub for instructions and verification. By scanning installations like the bronze Qilin, Zodiac lanterns, and seat platforms, players experience different game scenes. For example, scanning the 洪门大厦(Hongmen Building) near Roadside Hot Pot provides information about Chinese Freemasons and their contributions to Chinese immigrants in Canada. Educational videos cover topics like Today in History and the History of Toronto Chinatown. The gate lantern offers hidden hints through Chinese fortune sticks, with three free sticks every eight hours.

4   Discussion and Conclusion

By immersing players in historical contexts, scenes, and characters, the game amplifies the impact of storytelling and fosters empathy by involving the audience in uncovering stories. Instead of simply presenting stories to be read, the game encourages players to step into the shoes of historical figures, fostering empathy and promoting cultural understanding among individuals from diverse backgrounds. The project endeavors to empower participants as narrators, highlighting the life events of historical figures in Toronto's West Chinatown and revealing the stories behind the evolution of the built environment through the

perspectives of the residents. While landscapes and inhabitants may change over time, the significance of past events is revealed as shaping our present reality.

Chinatown Time Machine serves as a model for cultural heritage games, with the potential for adaptation to other Chinatowns worldwide by adjusting location and character aspects. Functioning as a virtual museum, the game leverages gamification and technology to enhance accessibility to cultural heritage. Moreover, this project raises vital research inquiries concerning the role of augmented reality archives in navigating conflicts between heritage conservation and the erasure caused by urban development. By challenging cultural erasure and amplifying marginalized historical perspectives, Chinatown Time Machine exemplifies the capacity of games to convey compelling narratives. Ultimately, this project reshapes our understanding of history and cultural heritage, fostering inclusivity.

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