

Published by :



Md. **Nahid-Ull-Islam** (<https://orcid.org/0009-0005-5464-2492>)

Md. Nahid-Ull-Islam is a graduate of the Department of Apparel Engineering, Bangladesh University of Textiles, and is an avid enthusiast of video games. He has a research interest in the scope of studying fashion, arts, and culture expressed in video games.

# **CULTURAL HERITAGE IN YAKUZA 0: REPRESENTING JAPAN'S BUBBLE ECONOMY**

MD. NAHID-ULL-ISLAM

## Abstract

The growing implementation of video games to depict cultural heritage goals has sparked an increased interest in research opportunities. This study presents a research opportunity on the portrayal of tangible and intangible cultural elements in Yakuza 0 during bubble economy of the late 1980s. The bubble economy is an important milestone in Japan not only for its impact on economy but also a cultural paradigm due to liquidity of money among its citizen who loosened themselves in over consumption of goods and services. The study relied on a framework that used dimensions of cultural heritage to analyze the tangible and intangible cultural aspects portrayed in the game through extensive gameplay and text analysis. It focused on different elements from Yakuza 0, identifying the cultural heritage represented by those elements, suggesting Yakuza 0 as an effective representative of Japan's bubble economy culture. The world design, landmarks, in-game objects, as well as the story, environment, and side activities replicate the cultural impact of bubble economy in Japan due to liquidity of money and the desire for excessive consumption. The study highlights the effectiveness of Yakuza 0 as a time capsule for the later generation to learn the Japanese cultural heritage during bubble economy.

**Keywords:** *Game, Yakuza 0, Cultural heritage, Bubble economy*

## Introduction

Game-based learning has been increasingly popular in recent millennia supported by educational theories such as experiential learning, active learning, and contextual learning (Ortiz et al., 2015). Games are effective in learning environments due to their incentive and repetitive nature, ability to engage and provide feedback, and safety for experimentation (Garris et al., 2002; Seel, 2011). Game-based learning can also be used to teach about cultural heritage. It is the knowledge that holds significance for contemporary settings due to its impact on identity formation (Ott & Pozzi, 2011). It encompasses both intangible characteristics such as ideals, social structures, and customs, as well as tangible aspects like monuments, historical locations, and mobile artifacts (Mortara et al., 2014). Communicating intangible concepts to students and the broader public might be challenging (Papathanassiou-Zuhrt, 2015). Ancient relics and monuments can be significant only when contextualized in interpretive settings that include missing pieces. Games can enhance cultural heritage awareness through preserving, reproducing, and appreciating cultural content, whether intangible or tangible (Laamarti et al., 2014; Mortara et al., 2014). Due to the interactive nature of video games, it is possible to access the culture portrayed in video games than those of traditional media (Malegiannaki & Daradoumis, 2017).

The current study explores the unique cultural heritage of the game entitled *Yakuza 0* (Ryu Ga Gotoku Studio, 2015). *Yakuza*, or domestically known as *Ryu Ga Gotoku* (Like A Dragon), is a triple A Japanese game created by Ryu Ga Gotoku Studios

and released by SEGA (Kwan, 2016; Oakley & O'Connor, 2015). In 2015, the studio developed *Yakuza 0*, the sixth installment in the franchise and a prequel to the first title (Loh, 2024). The tale follows the origin of Kazuma Kiryu and Goro Majima as they become entangled in a fight between rival Yakuza clans for dominance over a patch of land known as the "Empty Lot" in late 1988, seventeen years before the culmination of the first game (*Story of Yakuza 0*). Beyond their engaging gameplay and captivating plots, a distinguished aspect of the *Yakuza* series is the faithful adaptation of real world landscape into virtual world and *Yakuza 0* is no exception. The world of *Yakuza 0* is not only for aesthetics purpose; it precisely portrays the bubble economy of Japan and manages to capture the late 80s culture of Japan for the players to experience (Cole, 2020; Tsuruta, 1999).

The objective of this study is to investigate the scope of *Yakuza 0* in context of the tangible and intangible concept of culture, how the game associates itself with these concepts and the relevance with real-world. The study begins by reviewing the concept of tangible and intangible culture, and the existing works based on video games as cultural heritage. The study then analyzes how *Yakuza 0* includes the tangible and intangible cultural elements of Japan from the 80s. The research questions are formulated for this study as follows:

RQ1: How does *Yakuza 0* represent tangible and intangible cultural heritage content?

RQ2: How is *Yakuza 0*'s virtual cultural legacy relevant to the cultural legacy of actual world?

## Background Study

### *Cultural Heritage*

Cultural heritage (CH) encompasses all symbolic and creative materials passed down via cultures from past to today (Jokilehto, 2005). It strengthens and enriches cultural identities. CH distinguishes historical areas and preserves human experiences. Upholding and exhibiting CH is a core component of cultural policies. It acts as a coordinated link between society, norms, and values, including ideas, belief systems, and their relative importance. Symbols, technology, and artifacts provide concrete proof of fundamental norms and values. They create a symbiotic interaction between the concrete and intangible. Intangible heritage refers to the greater context of tangible heritage, shaping its meaning (Bouchenaki, 2003). UNESCO categorizes CH under tangible and intangible attributes. Intangible heritage is embodied by people rather than inanimate objects. Beyond this categorization, the subject of the significance and importance of intangible heritage gets extremely complicated. Due to the convention's novelty and intricacy, most articles on the issue focus on definitions. UNESCO defines intangibility as practices, representations, expressions, knowledge, and skills that individuals, communities, and organizations acknowledge as part of their CH (Balela & Mundy, 2015; Ruggles & Silverman, 2009; UNESCO, 2003). Tangible parts include music, dance, art, language, celebrations, poetry, rites, and knowledge/skills (UNESCO, 2003). There is a close connection to culture and heritage. A nation's identity is strongly influenced by its cultural legacy (Barwick, 2012). Historic conservation approaches prioritize preserving "cultural identity". In addition to tangible cultural characteristics,

identifying, analyzing, and conserving intangible qualities within built settings are becoming increasingly important (Karakul Türk, 2011).

CH has a crucial role in nation-building and historical preservation. Hence, preserving CH is important for economic, historical, and cultural processes (Hani et al., 2012). It offers research scopes in products like films, video games, and digital media as creating new cultural artifacts is a significant approach to demonstrate the importance of culture (Barwick, 2012).

### *Cultural Heritage Representation in Video Games*

Representation is the production of meaning via symbols and visuals (Šisler, 2008). In recent years, video games have been effective in conveying our comprehension and impression of specific locations or times through the act of representation. Video games use various representations, such as visuals, movies, stories, sounds, and character designs, which can be accurate or inaccurate when applied to real-world scenarios (Balela & Mundy, 2015).

Due to the scope of using video games as a medium for learning, there have been several studies conducted on how video games represent culture (Rapp et al., 2019). Scholars are interested in the incorporation of CH in commercial video games and its impact on game culture representation (Balela & Mundy, 2015). Popular games that address cultural legacy include *Assassin's Creed* (Ubisoft Montreal, 2007), *Civilization* (MicroProse, 1991), *Age of Empires* (Ensemble Studios, 1997), and *Total War* (Creative Assembly, 2000)

(Cole, 2021; Di Mascio, 2021; Mol et al., 2017; Sukhov, 2021). Numerous studies showed how the faithful adaptation of architecture in the virtual world can preserve the architectural aspect of culture from a particular time period (El Nasr et al., 2008; Karsenti & Parent, 2020; Šisler, 2008). While some games (Assassin's Creed) adapt the architecture of a time period to represent the relevant history, there are also other games (Stray (BlueTwelve Studio, 2022), Deus Ex (Ion Storm, 2000)) which take inspiration from the historical architecture and mirror the elements in their virtual world to represent the culture in a metaphorical manner (Cheng, 2024; Davies, 2018). Many games provide a high level of information about the world and its locales, population, cultures, technologies, flora, and wildlife, which aids in its construction, comprehension, immersion, and experience (Wolf, 2018). Video games' digital worlds, like those in literature and cinema, are full of significance, allowing players to create scenarios and even reflect cultural narratives (Meinel, 2022). Video games have the potential to disrupt traditional ideas of geography by connecting virtual and geographical space, changing the role and meaning of location about societal interactions and cyberspace (Gröber, 2014). With today's technological advancements, video games may create virtual worlds that closely mimic modern reality, giving the impression that the world is a living place instead of just a setting for gaming (Harambam et al., 2011). Furthermore, current games frequently use strategies to recreate recognizable physical space experiences, sometimes even reflecting actual geographical locales and landmarks which enables the players to experience the culture of that particular geography (Uzunogullari et al., 2025). Video games also imitate different parts of reality, such as people, events, and

cultural identities (Balela & Mundy, 2015). Several studies highlight the representation of cultural heritage by faithfully portraying the arts, languages, music, intangible aspects of environments, peoples' behavior, and customs in video games (Balela & Mundy, 2015; Cheng, 2024; Malegiannaki et al., 2020; Ramírez-Moreno, 2019).

### *Representation of Japanese culture in Video Games*

There is a diverse range of Japanese videogames with cultural value, consisting of arcade fighting games, PC-based strategy games, and console JRPGs, and their mechanics and settings may be examined together to comprehend videogames as a dynamic form of artistic expression. Popular games like Final Fantasy (Square, 1987), Metal Gear Solid (Konami Computer Entertainment Japan, 1998), Street Fighter (Capcom, 1987), and Katamari Damacy (Namco, 2004) transmit ideology and critique through narrative, character design, user interface, cabinet art, and accessories. Japanese developers have utilized the medium to express their views on home and nation, nuclear energy, war and historical memory, societal disintegration, and bioethics. These videogames developed by Japanese studios play a crucial role in shaping Japanese cultural identity (Hutchinson, 2019).

For example, Shenmue's (Sega AM2, 1999) designers pioneered the recreation of real-world locations in games, using inspiration from the alleyways of Yokosuka to create remarkably accurate reconstructions of the town as the game's backdrop. P-Studio designers thoroughly replicated the streets of Sangenjaya, naming the location as 'Yongenjaya' in the game Persona 5 (P-Studio, 2016). Persona 5 features

stunningly realistic graphics and colors, even for seemingly mundane virtual objects. Persona 5 allows the players will feel at ease in Sangenjaya, while residents will recognize landmarks such as subway staircases and street crossings in the game (Hutchinson, 2019).

There have been very few studies regarding the Yakuza series (Hutchinson, 2019; Lima, 2022; Menon, 2023). The franchise remains inadequately studied in western, English-based literature. The studies mostly focused on the fictional town of Kamurochō as a faithful adaptation of Kabukichō, while highlighting the presence of Yakuza and their core values, and how the yakuza games portray these issues. Kamurochō is an accurate replica of Tokyo's red-light district, including the entry archway with red neon lights. While the locations appear virtually identical, their names and purposes may alter slightly. Yakuza's Kamurochō provides a spatial-temporal experience that encourages players to form an emotional connection with the space through actions, sentimentality, ludoforming, and longevity (Hutchinson, 2019; Lima, 2022; Menon, 2023). The Yakuza series also depicts the portrayal of Korean immigrant in Japan known as "zainichi" (Japanese name with Korean heritage), highlighted by a study (Hutchinson, 2019).

### *Culture of Japan during Bubble Economy*

Japan's export economy had significant growth in the course of the 1980s and 1990s, driven by the export of cars, printers, and manufactured goods to complicated economies like the United States. As a result, the Japanese banking

sector saw an excess of cash flow, lending practices were relaxed and stock and real estate prices soared. These causes contributed to a period of economic growth dubbed as 'the bubble economy' (Colombo, 2012; Zhou, 2024). During the bubble economy, Japan's total bank loans rose from 135 trillion to 376 trillion yen, although the nominal GDP growth rate remained around 5%. Even between 1981 and 1985, credit in Japan grew by around 26 trillion yen. From 1986 to 1990, it climbed by 46 trillion yen each year on average. The ratio of total bank loans to GDP is much more puzzling. This condition caused a significant increase in Japanese land values, as well as stock prices. This was a major issue of internal and external imbalance, but the Japanese government believed that financial deregulation may help to address it (Dong, 2024).

Against the backdrop of the boom economy, Japanese youth increasingly established a 'consumerist dominance', allowing them to incorporate art and entertainment aesthetics into their daily lives (Green, 2020). The expanding economy fueled the quick expansion of the entertainment industry to meet the public's cultural needs (Chen, 2023).

The study observed a significant gap in literature about cultural representation in Yakuza games. Almost every game from the Yakuza franchise depicts the contemporary events and customs in Japan. But Yakuza 0, being the prequel of this franchise takes place in the 1988 which serves as a research scope to study the cultural heritage of Japan during bubble economy.

Methodology

Framework to identify cultural heritage of bubble economy in Yakuza 0

This research evaluates Yakuza 0 to explore howCH-based analysis can enhance understanding of cultural representation. To identify cultural heritage, a framework developed by Baela and Mundi was used (Balela & Mundy, 2015). This framework highlights the method of identifying tangible and intangible cultural elements from analyzing video games (Table 1).

Table 1 The tangible and intangible cultural elements of bubble economy identified in Yakuza 0

Tangible cultural elements	Intangible cultural elements
Game map	Main story
Actual and ludoformed landmarks	Character lifestyle
In game items	Side activities

Using this framework, different aspects of Yakuza 0 were divided into the category of tangible and intangible aspects of culture (Figure 1). The study collects data from Yakuza

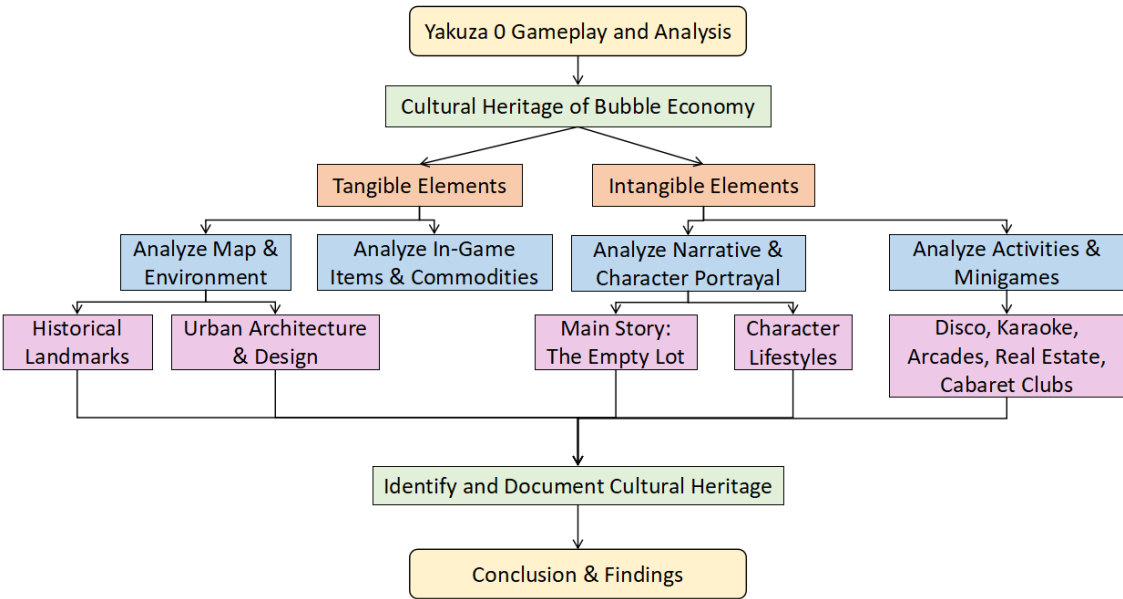


Figure 1 Framework for identifying the cultural heritage represented in Yakuza 0 (Source: The Author)



0 through gameplay and analyzing the texts. While playing Yakuza 0, its main story and sub stories were analyzed in context of real life references. The map of Yakuza 0 was thoroughly explored to identify historical landmarks, to observe the environment, activities, and portrayal of characters. In-game texts like dialogues from games, character description, as well as information from the game's official website were analyzed to identify the cultural heritage during bubble economy.

In accordance with the framework, Yakuza 0's universe or map, as well as its in-game commodities, are examples of tangible culture. The study graphically analyzes how the virtual world and in-game products imply the tangible culture of the bubble economy. The framework represents the game's narrative, which is centered on the narrative of the game, the portrayal of characters' lifestyles, and minigame activities as intangible aspects of culture. The study examines games and narratives, as well as character design and activities, to find intangible cultural aspects.

### *Representation of cultural heritage in Yakuza 0 Tangible elements*

Yakuza 0 takes place in the fictional cities of Kamurochō and Sotenbori, recreated from Kabukichō and Dōtonbori respectively (Loh, 2024). Kamurochō is a hotbed of exquisite eateries, entertainment, nightclubs, and gambling establishments. The city is brimming with discos, phone clubs, luxury stores, and high-quality entertainment venues. Sotenbori is the west's entertainment capital, rivaling Kamurochō. The Sotenbori River divides the city east and west, with one

side featuring the vibrant "Sotenbori Street" and the other end with a more subterranean atmosphere known as the "Shofukucho" (Loh, 2024). Kamurochō and Sotenbori, like Kazuma Kiryu and Goro Majima, are protagonists not only for their environmental and narrative components, but also for their vibrant residents and ludic architecture that connect with players (Domsch, 2019). Kamurochō has iconic ludoformed (Aarseth, 2019) landmarks such as the neon lit Kamurochō gate of Tenkaichi streets (identical to the one found in Kabukichō Ichiban-gai street), adult entertainment established Pink street, Hotel district, champion district, exclusive disco saloon, as well as more grounded landmarks such as discount store Don Quijote, Pronto Café, Mach Bowl, Kamurochō Theatre Square/Kabukichō Toho Cinema, male idol billboards on Hanamichi-dori and Shichifuku streets, and several kombini's, nightclubs, small alleys, and love motels which are situated in almost the same location in both game and real-world. The chain of Don Quijote has the exact same location in Kamurochō and Kabukichō, on an intersection only a block apart to the right side of the entry gates. Similarly, Sotenbori holds several ludoformed landmarks such as Iwao Bridge, Sotenbori Bridge Zuboraya, Kani Douraku, Kushikatsu Daruma which are inspired from their real-life counterpart. Substantial recognition value is crucial for both good portrayal of architectural element of cultural heritage. Thus, the ludoformed recreation of real-life architecture in the virtual world of Yakuza 0 acts as a time capsule for the tangible elements of culture (Lima, 2022; Tuan, 1977). Among these landmarks, a notable landmark featured in Yakuza 0 is the disco bar Maharaja, which was recreated after the famous disco bar of the same name. The establishment of the Maharaja Tokyo discotheque in 1984

Table 2 Authenticity of tangible cultural elements represented in Yakuza 0

In game cultural element	Real world counter part	Cultural authenticity
Game map; Kamurochō and Sotenbori	Kabukichō and Dōtonbori	The authentic and presentation of tangible culture by ludofforming real world locations into virtual space
Architectures; landmarks, stores and buildings	Accurate depiction of landmarks from Kabukichō and Dōtonbori	The authentic and presentation of tangible culture by featuring physical landmarks into virtual space
In-game items	Foods and other items during bubble economy in Japan	The high value of items due to value of money in bubble economy

marked the beginning of the second disco boom, which was associated with the impulsive and lavish lifestyle associated with the 'bubble economy' in the late 1980s. Fancy VIP rooms were packed with aristocratic dandies, dubbed 'bubble gentleman', surrounded by 'Classy girls'. Approximately 71 Maharaja-affiliated establishments opened throughout Japan (Wajima, 2022). This phenomenon is also observed in Yakuza 0 where both Kamurochō and Sotenbori had venues of Maharaja.

The game also represents tangible elements of culture via in-game objects. Food items available in Yakuza 0 like Takoyaki, Ramen, Sushi as well as beers and sakes serves as a representative of the tangible element of Japanese culture due to their role in social and business lives (Loveday & Chiba, 1985). An important detail observed in Yakuza 0 was the high price of in-game items compared to those of other installments from the franchise. This was due to value of money during bubble economy. Japan's Bubble Economy led to wealth and a shift in societal thinking. Taking large

loans from banks, lenders and the strengthening of the Japanese yen resulted in a rapid increase in net assets for ordinary people, leading to excessive consumption(Kamikawa, 2006). An exclusive in-game object from Yakuza 0 is the telephone cards(*System of Yakuza 0*). Similar to telephone booths and telephone clubs, telephone cards are not available anymore due to rapid access to mobile phone. The presences of such objects serve as a capsule of the tangible culture from the bubble economy. Another example of Yakuza 0 representing tangible culture is the portrayal of Yakuza presence in Kamurochō. In Yakuza 0, the Tojo Family's emblem was visible outside their main headquarters. However, in later games dated after 2005, Yakuza were only identified by little pins worn by their ranks. This development highlights the impact of the 1991 Bōtaihō law and later revisions, including the Bōhaijōrei, on the Yakuza's ability to conceal their institutional presence from the public eye (Baradel, 2021). Thus the map and in-game items of Yakuza 0 portray the tangible aspects of Japanese culture during bubble economy (Table 2) (Caselli et al., 2023).

### *Intangible elements*

The narrative of *Yakuza 0* serves as a significant representative of intangible culture during the bubble economy. The main plot revolves around the conflict of Yakuza families for the requisition of an empty lot in Kamurochō (*Story of Yakuza 0*). This incident is directly linked to the practice of purchasing land in the bubble economy. In the 1980s, land prices near Tokyo's business districts skyrocketed. The gradual expansion in nearby residential areas led to higher land prices and increased borrowing for real estate, investments, and stock purchases (Kamikawa, 2006). Massive liquidity in Japanese banking systems created a misleading picture of prosperity and extravagance. The Japanese economy had already been in shortfall, with investors and residents facing significant investment risks and obligations (Urano, 2017). The practice of purchasing real state can be also observed in the minigame of real state royale (Lima, 2022; *System of Yakuza 0*). Additionally, the plot of buying land depicts a paradigm of desiring financial growth rather than honor in *Yakuza* which mirrors the practice of over consumption of material wealth due to economic growth during bubble economy. The increased presence of yakuza members and their activities in Kamurochō also portrays the real life incident of dense yakuza population in Kabukichō during bubble economy (Baradel, 2021; Hill, 2005; Menon, 2023). By completing side-quests, players gain insight into the dynamics between yakuza and citizens in Japanese culture. This experience is parodic, critical, and realistic of Japan's everyday cultural components, including the blue tents of homeless people, the country's relationship with sex, sexuality, and sex work, the country's position as a technological, geek-otaku paradise, and the often invisible

crimes and corruption associated with yakuza among police and politicians, providing a comprehensive view of Japan and its people (Lima, 2022).

Analyzing Japanese games requires consideration of their cultural, political, and social contexts (Hutchinson, 2019). The Yakuza is an organized crime syndicate, often compared to the Italian Mafia, whose activities traditionally prioritize "protection" over criminal activity. They view themselves as a parallel force that provides greater protection to companies and communities in exchange for monetary fees (Baradel & Bortolussi, 2021; Kaplan & Dubro, 2012). The yakuza is not only a crime syndicate in Japan, but also romanticized in literature and cinema, which inspired the games (Fujiki & Phillips, 2020; Kaffen, 2022). In *Yakuza 0*, actors like Hitoshi Ozawa, Riki Takeuchi, and Hideo Nakano played lieutenants of the Dojima family through voice acting and motion capture (*Cast of Yakuza 0*). All three actors were notable for their distinguished roles in old cinemas about Yakuza, so casting them in similar role is an effective approach to represent the Yakuza movie culture.

A distinguished element in *Yakuza 0* that is observed is the festive and vibrant portrayal of lives. The residents of Kamurochō and Sotenbori were seen in flashy outfits, waving bundles of money for taxi in the very beginning of the game, and frequently visited high-end restaurants and nightspots, which indicated the blooming economy during the bubble era. Japan's Bubble Economy created a false sense of wealth and altered Japanese society's ideology. Over-borrowing from lenders and the strengthening of the Japanese yen resulted in a rapid increase in net assets for ordinary people, leading

to excessive consumption on a global scale. Excessive affluence and increased consumption led to extreme desires. During this period, Japanese society promoted materialism and the desire for goods and luxurious lifestyles. Japanese people often sought material satisfaction, leading them to indulge in an erroneous fantasy. Therefore, Japanese citizens invested extensively in the entertainment business. The culture developed reflects the spirit of the times and meets the demands of the public (Amano, 2022; Chen, 2023; Zhou, 2024). This can be observed in Goro Majima's narrative from the game, who at that time was managing entertainment business in Sotenbori and eventually earned the title "Lord of the Night" (*Story of Yakuza 0*). Additionally, the side activities of visiting "Maharaja" where a distinguished dancing style with eurobeat songs depicts the intangible culture of growing disco fever during bubble economy in Japan (El Nasr et al., 2008). In 1987, Maharaja Tokyo's association with the Eurobeat genre grew so prominent that the venue's manager

published Japanese renditions of popular Eurobeat tunes. Maharaja popularized "Para Para" or synchronized dancing, where the lower body dances were simplified to side steps, while movement of torso and arms became more complex (Wajima, 2022). The songs "Koi no Disco Queen", and "Friday Night" featured in the Maharaja disco minigame from Yakuza were also inspired from "Dancing Hero" by Yoko Oginome in 1985 and "Give Me Up" by Michael Fortuanti in 1987 respectively (Wajima, 2022). Another form of entertainment, named breakdancing also became popular among Japanese youth in 1980s which is also portrayed by Majima's breaker fighting style, a core component in the game (Mitchell, 2001; *System of Yakuza 0*). Additionally, other minigames or side activities like singing Karaoke, going to Telephone club, or playing arcade games in Sega Hi-Tech Land Sega depicts the intangible culture of Japan during bubble economy by portraying the social norms of that era. Specially, Hi-Tech Land SEGA had features that were similar to those found in genuine arcades

**Table 3** Authenticity of intangible cultural elements represented in Yakuza 0

In game cultural element	Real world counter part	Cultural authenticity
Empty Lot	Real world practice of land acquisition in Japan during bubble economy	The authentic presentation of intangible culture of bubble economy's impact on monetary value
Characters' lifestyle	Real world practice of luxurious lifestyle in Japan during bubble economy	The authentic presentation of intangible culture of bubble economy's impact on life-style
Side activities	Real world practice of karaoke songs, disco, cabaret club in Japan during bubble economy	The authentic presentation of intangible culture of bubble economy's impact on entertainment

from the 80s. The gaming center allows the players to experience four old Sega games during that era: Space Harrier, Fantasy Zone, Super Hang-On, and Out Run. There is also a leader board to evoke the nostalgia of playing at an arcade during bubble economy (Gröber, 2014). Furthermore, Yakuza 0's karaoke bar is identically designed to resemble karaoke from the 1980s (Harambam et al., 2011; Loh, 2024). Thus the minigames and side activities of Yakuza 0 portray the intangible aspects of Japanese culture during bubble economy (Table 3) (Caselli et al., 2023).

### *Limitation*

The study faced several limitations. The paper did not analyze the characters of Yakuza 0 in methodology. It analyzed in-game objects in a holistic manner instead of analyzing and comparing each item in depth with other games from the franchise. Furthermore, the study does not take into account the characteristics of Yakuza 0 as a cultural object, such as the fact that the game is set in a particular genre, or the fact that it is designed to provide entertainment leading to high sales. Hence there is some tension between these characteristics and accuracy or authenticity. Further study is required to address these limitations.

### **Conclusion**

The study demonstrates that Yakuza 0 is a significant representative of the tangible and intangible culture of Japan during bubble economy in 1980s; fulfilling the research questions provided by the study. The landmarks, world design are accurately replicated after their real-life counterparts to depict the cultural representation of architecture in Japan

during the bubble economy. The expensive in-game items observed in Yakuza 0 align with the value of money or assets in bubble economy, representing the tangible culture. The narrative of "empty lot" in Yakuza 0 is an accurate depiction of the culture of buying lands in Japan during bubble economy, alongside the vibrant environment, character portrayal, and their activities in minigames explored the intangible attributes of Japanese culture during bubble economy, thus extending UNESCO's distinction of cultural heritage. This finding offers a significant insight in the concept of digital cultural archive which can be achieved by the players' stimulated experience. A major limitation of this study is the lack of including several cultural representations such as the tattoo (irezumi), loyalty, honor, and hierarchy in Yakuza as the study primarily focused on the cultural element of bubble economy in particular. To conclude, the study considers that by immersing the players in the interactive and vibrant world of Yakuza 0, the game serves as a time capsule for portraying the tangible and intangible culture of Japan during bubble economy to the new generation. Further study is required to explore the cultural impacts of other Yakuza games from the franchise. Scholars can utilize the Yakuza games' as a unique field of historical and cultural analysis of Japan due to the opportunity of preserving history and culture in video games.

### **References**

Aarseth, E. (2019). Ludoforming: Changing Actual, Historical or Fictional Topographies into Ludic Topologies. In A. Espen & G. Stephan (Eds.), *Ludotopia* (pp. 127-140). transcript Verlag. <https://doi.org/doi:10.1515/9783839447307-007>

- Amano, I. (2022). *Financial Euphoria, Consumer Culture, and Literature of 1980s Japan: Dreams of the Bubble Economy* (1st ed.). Routledge. <https://doi.org/https://doi.org/10.4324/9781003298250>
- Balela, M. S., & Mundy, D. (2015). Analysing Cultural Heritage and its Representation in Video Games. Proceedings of DiGRA 2015 Conference, Tampere, Finland. <https://doi.org/10.26503/dl.v2015i1.721>
- Baradel, M. (2021). Yakuza Grey: The Shrinking of the Il/legal Nexus and its Repercussions on Japanese Organised Crime. *Global Crime*, 22(1), 74-91. <https://doi.org/10.1080/17440572.2020.1813114>
- Baradel, M., & Bortolussi, J. (2021). Under a setting sun: the spatial displacement of the yakuza and their longing for visibility. *Trends in Organized Crime*, 24(2), 209-226. <https://doi.org/10.1007/s12117-020-09398-4>
- Barwick, J. (2012). *Where have all the games gone? An exploratory study of digital game preservation* Loughborough University. [https://repository.lboro.ac.uk/articles/thesis/Where\\_have\\_all\\_the\\_games\\_gone\\_An\\_exploratory\\_study\\_of\\_digital\\_game\\_preservation/9414638](https://repository.lboro.ac.uk/articles/thesis/Where_have_all_the_games_gone_An_exploratory_study_of_digital_game_preservation/9414638)
- Bouchenaki, M. (2003). *The interdependency of the tangible and intangible cultural heritage* 14th ICOMOS General Assembly and International Symposium: 'Place, memory, meaning: preserving intangible values in monuments and sites', Victoria Falls, Zimbabwe.
- Caselli, S., Bonello Rutter Giappone, K., & Majkowski, T. Z. (2023). Ten years of historical game studies: towards the intersection with memory studies. *Game*, 2023(10), 29-50.
- Cast of Yakuza 0. Sega. <https://games.sega.com/yakuza0/cast.html>
- Chen, M. (2023). The Resurgence of City Pop and The Nostalgia Cycle: Impacts on The Music Industry and Modern Culture. *Highlights in Business, Economics and Management*, 23, 1212-1216. <https://doi.org/10.54097/gmptyr66>
- Cheng, L. (2024). Storytelling Cultural Heritage Through a Video Game: Conflict in the Kowloon Walled City in Hong Kong. In I. Saloul & B. Baillie (Eds.), *The Palgrave Encyclopedia of Cultural Heritage and Conflict* (pp. 1-10). Springer.
- Cole, R. (2020). Vaporwave aesthetics: Internet nostalgia and the utopian impulse. *Asap/Journal*, 5(2), 297-326. <https://doi.org/https://doi.org/10.1353/asa.2020.0008>
- Cole, R. A. (2021). Unboxing age of empires: Paratexts and the experience of historical strategy games. In B. Beil, G. S. Freyermuth, & H. C. Schmidt (Eds.), *Paratextualizing games: Investigations on the paraphernalia and peripheries of play* (pp. 97-130). Berlin: Transcript Verlag. <https://doi.org/https://doi.org/10.14361/9783839454213-005>
- Colombo, J. (2012). *Japan's bubble economy of the 1980s*. <https://www.thebubblebubble.com/japan-bubble/>
- Davies, H. (2018). *Re: presenting Hong Kong in Videogame Spaces* Chinese Digital Games and Research Association (Chinese DiGRA, Shenzhen),
- Di Mascio, D. (2021). Architecture, Narrative and Interaction in the Cityscapes of the Assassin's Creed Series. In J.-H. Lee (Ed.), *A New Perspective of Cultural DNA* (pp. 125-143). Springer Singapore. [https://doi.org/10.1007/978-981-15-7707-9\\_9](https://doi.org/10.1007/978-981-15-7707-9_9)

- Domsch, S. (2019). Space and Narrative in Computer Games. In A. Espen & G. Stephan (Eds.), *Ludotopia* (pp. 103-124). transcript Verlag. <https://doi.org/doi:10.1515/9783839447307-006>
- Dong, R. (2024). Japan's Lost Thirty Years: From Post-War Miracle to Bursting Bubble. *Communications in Humanities Research*, 40, 61-67. <https://doi.org/https://doi.org/10.54254/2753-7064/40/20242240>
- El Nasr, M. S., Al-Saati, M., Niedenthal, S., & Milam, D. (2008). Assassin's creed: a multi-cultural read. *Loading...* 2(3), 1-32.
- Fujiki, H., & Phillips, A. (2020). *The Japanese Cinema Book*. Bloomsbury Academic.
- Garris, R., Ahlers, R., & Driskell, J. E. (2002). Games, Motivation, and Learning: A Research and Practice Model. 33(4), 441-467. <https://doi.org/10.1177/1046878102238607>
- Green, L. (2020). Soundtracking a New 'Japaneseness'-Musical Aesthetic and Aspiration in Japan's Economic Bubble. In *Japan beyond Its Borders: Transnational Approaches to Film and Media* (pp. 159-174). Seibunsha.
- Gröber, J. (2014). From adventure to education: Exploring meanings of scenario and dimension in video games. In *Engaging with Videogames: Play, Theory and Practice* (pp. 17-26). Inter-Disciplinary Press.
- Hani, U., Azzadina, I., Sianipar, C. P. M., Setyagung, E. H., & Ishii, T. (2012). Preserving Cultural Heritage through Creative Industry: A Lesson from Saung Angklung Udjo. *Procedia Economics and Finance*, 4, 193-200. [https://doi.org/https://doi.org/10.1016/S2212-5671\(12\)00334-6](https://doi.org/https://doi.org/10.1016/S2212-5671(12)00334-6)
- Harambam, J., Aupers, S., & Houtman, D. (2011). Game over? Negotiating modern capitalism in virtual game worlds. *European Journal of Cultural Studies*, 14(3), 299-319. <https://doi.org/https://doi.org/10.1177/1367549410393232>
- Hill, P. (2005). Kabuki-chō Gangsters: Ethnic Succession in Japanese Organised Crime? *British Academy Review*, 8, 9-12.
- Hutchinson, R. (2019). *Japanese culture through videogames* (1st Edition ed.). Routledge. <https://doi.org/https://doi.org/10.4324/9780429025006>
- Jokilehto, J. (2005). *Definition of cultural heritage: References to documents in history*. ICCROM Working Group 'Heritage and Society'. [http://www.ycarhe.eu/uploads/media/rural-heritage/Cultural-Heritage-definitions\\_ICOMOS2005.pdf](http://www.ycarhe.eu/uploads/media/rural-heritage/Cultural-Heritage-definitions_ICOMOS2005.pdf)
- Kaffen, P. (2022). Image Romanticism and Yakuza Cinema. *Journal of Japanese and Korean Cinema*, 14(1), 68-86. <https://doi.org/10.1080/17564905.2022.2054084>
- Kamikawa, R. (2006). The Bubble Economy and the Bank of Japan. *Osaka University law review*, 53(105), 105-136.
- Kaplan, D. E., & Dubro, A. (2012). *Yakuza: Japan's Criminal Underworld*. University of California Press.
- Karakul Türk, Ö. (2011). An integrated approach to conservation based on the interrelations of tangible and intangible cultural properties. *METU Journal of the Faculty of Architecture*, 28(2), 105-125. <https://doi.org/http://doi.org/10.4305/metu.jfa.2011.2.5>

- Karsenti, T., & Parent, S. (2020). Teaching history with the video game Assassin's Creed: effective teaching practices and reported learning. *Review of Science, Mathematics and ICT Education*, 14(1), 27-45. <https://doi.org/https://doi.org/10.26220/rev.3278>
- Kwan, A. (2016). *Authored Agency: Exploring the Language and Grammar of Video Games* University of Guelph. Guelph, Ontario, Canada.
- Laamarti, F., Eid, M., & El Saddik, A. (2014). An overview of serious games. *International Journal of Computer Games Technology*, 2014(1), 358152. <https://doi.org/https://doi.org/10.1155/2014/358152>
- Lima, L. A. B. (2022). Kamurochō, Kazuma and I: Experiencing a Ludoformed District in the Yakuza Series. *Replaying Japan*, 4, 9-21.
- Loh, A. (2024). We Write in Other People's Blood: Troubling the Body Politics and Disability Representation of Yakuza 0. *Acta Ludologica*, 7(1), 38-49. <https://doi.org/http://doi.org/10.34135/actaludologica.2024-7-1.38-49>
- Loveday, L., & Chiba, S. (1985). Partaking with the divine and symbolizing the societal: The semiotics of Japanese food and drink. *Semiotica*, 56(1-2), 115-132. <https://doi.org/doi:10.1515/semi.1985.56.1-2.115>
- Malegiannaki, I., & Daradoumis, T. (2017). Analyzing the educational design, use and effect of spatial games for cultural heritage: A literature review. *Computers & Education*, 108, 1-10. <https://doi.org/https://doi.org/10.1016/j.compedu.2017.01.007>
- Malegiannaki, I. A., Daradoumis, T., & Retalis, S. (2020). Teaching cultural heritage through a narrative-based game. *Journal on Computing Cultural Heritage*, 13(4), 1-28. <https://doi.org/https://doi.org/10.1145/3414833>
- Meinel, D. (2022). *Video Games and Spatiality in American Studies* (Vol. 5). Walter de Gruyter GmbH & Co KG.
- Menon, L. (2023). Unreal City: Expressions of Tokyo in Video Games. In *Globalization and Sense-Making Practices* (pp. 243-256). Routledge.
- Mitchell, T. (2001). *Global Noise: Rap and Hip Hop Outside the USA*. Wesleyan University Press.
- Mol, A. A. A., Politopoulos, A., & Ariese-Vandemeulebroucke, C. E. (2017). "From the Stone Age to the Information Age": History and Heritage in Sid Meier's Civilization VI. *Advances in Archaeological Practice*, 5(2), 214-219. <https://doi.org/10.1017/aap.2017.9>
- Mortara, M., Catalano, C. E., Bellotti, F., Fiucci, G., Houry-Panchetti, M., & Petridis, P. (2014). Learning cultural heritage by serious games. *Journal of Cultural Heritage*, 15(3), 318-325. <https://doi.org/https://doi.org/10.1016/j.culher.2013.04.004>
- Oakley, K., & O'Connor, J. (2015). *The Routledge companion to the cultural industries* (Vol. 10). Routledge.
- Ortiz, S. A., Bowers, C. A., & Cannon-Bowers, J. A. (2015). Video Game Self-efficacy and its Effect on Training Performance. *International Journal of Serious Games*, 2(3). <https://doi.org/10.17083/ijsg.v2i3.89>



- Ott, M., & Pozzi, F. (2011). Towards a new era for Cultural Heritage Education: Discussing the role of ICT. *Computers in Human Behavior*, 27(4), 1365-1371. <https://doi.org/https://doi.org/10.1016/j.chb.2010.07.031>
- Papathanassiou-Zuhrt, D. (2015). Cognitive Load Management of Cultural Heritage Information: An Application Multi-Mix for Recreational Learners. *Procedia - Social and Behavioral Sciences*, 188, 57-73. <https://doi.org/https://doi.org/10.1016/j.sbspro.2015.03.339>
- Ramírez-Moreno, C. (2019). Hyperculturality, Globalization and Cultural Representation in Japanese Survival Horror. *Re-playing Japan*, 1, 52-63.
- Rapp, A., Hopfgartner, F., Hamari, J., Linehan, C., & Cena, F. (2019). Strengthening gamification studies: Current trends and future opportunities of gamification research. *International Journal of Human-Computer Studies*, 127, 1-6. <https://doi.org/https://doi.org/10.1016/j.ijhcs.2018.11.007>
- Ruggles, D. F., & Silverman, H. (2009). From Tangible to Intangible Heritage. In H. Silverman & D. F. Ruggles (Eds.), *Intangible Heritage Embodied* (pp. 1-14). Springer. [https://doi.org/10.1007/978-1-4419-0072-2\\_1](https://doi.org/10.1007/978-1-4419-0072-2_1)
- Seel, N. M. (2011). *Encyclopedia of the Sciences of Learning* (1 ed.). Springer. <https://doi.org/https://doi.org/10.1007/978-1-4419-1428-6>
- Šisler, V. (2008). Digital Arabs: Representation in video games. *European Journal of Cultural Studies*, 11(2), 203-220. <https://doi.org/https://doi.org/10.1177/1367549407088333>
- Story of Yakuza 0*. Sega. <https://games.sega.com/yakuza0/story.html>
- Sukhov, A. (2021). Gamification of the middle ages: Educational dimension of user modifications of "Total war: Medieval II". Proceedings of the European Conference on Games Based Learning, Brighton, UK,
- System of Yakuza 0*. Sega. <https://games.sega.com/yakuza0/system.html#>
- Tsuruta, H. (1999). The Bubble Economy and Financial Crisis in Japan. *International Journal of Political Economy*, 29(1), 26-48. <https://doi.org/10.1080/08911916.1999.11643984>
- Tuan, Y.-F. (1977). *Space and place: The perspective of experience*. University of Minnesota Press.
- UNESCO. (2003). *Text of the Convention for the Safeguarding of the Intangible Cultural Heritage*. UNESCO. <https://ich.unesco.org/en/convention>
- Urano, M. (2017). Community Movement and Social Change during the 1980s Bubble Economy and its Aftermath. *The Annals of Japan Association for Urban Sociology*, 2017(35), 45-63. <https://doi.org/https://doi.org/10.5637/jpasurban.2017.45>
- Uzunogullari, S., Johnson, J., & Pappas, N. (2025). From Controllers to Immersion: Exploring the Sense of Place in Video Games. *International Journal of Tourism Research*, 27(2), e70019. <https://doi.org/https://doi.org/10.1002/jtr.70019>
- Wajima, Y. (2022). Japanese Disco as Pseudo-International Music. In F. Pitrolo & M. Zubak (Eds.), *Global Dance Cultures in the 1970s and 1980s: Disco Heterotopias* (pp. 101-126). Springer International Publishing. [https://doi.org/10.1007/978-3-030-91995-5\\_5](https://doi.org/10.1007/978-3-030-91995-5_5)

Wolf, M. J. (2018). *The Routledge companion to imaginary worlds*. Routledge.

Zhou, Y. (2024). The Impact of Economic Development and Change on Popular Culture: A Case Study of Japan's Bubble Economy. *Journal of Education, Humanities and Social Sciences*, 42, 289-293. <https://doi.org/10.54097/q03x7k15>

## Ludography

Age of Empires (1997). Ensemble Studios

Assassin's Creed (2007). Ubisoft Montreal

Civilization (1991). MicroProse

Deus Ex (2000). Ion Storm

Final Fantasy (1987). Square

Katamari Damacy (2004). Namco

Metal Gear Solid (1998). Konami Computer Entertainment Japan

Persona 5 (2016). P-Studio

Shenmue (1999). Sega AM2

Stray (2022). BlueTwelve Studio

Street Fighter (1987). Capcom

Total War (2000). Creative Assembly

Yakuza 0 (2015). Ryu Ga Gotoku Studio