

Rose-Tinted Videogames: The Influential Nature of Nostalgia in Videogame Development

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Abstract

Nostalgia is a common experience, with videogames providing a strong potential trigger for nostalgic feelings towards the playing of games or memories about games. Nostalgia has positive effects on creativity, inspiration, exploration, social connectedness, and a sense of self-continuity. These elements find a natural home in the creative industries and have led to the creation of a multitude of nostalgic products. This study investigates nostalgia's influential role in videogame development, analysing how nostalgia-driven decisions made by developers are interpreted by players who share a nostalgic object. This paper examines three case study games based on three lenses: Remind, Repeat, and Revive. These categories and cases demonstrate practical development insight into core design decisions and player reception. For developers, these findings could lead to the accurate representation and sensitive implementation of nostalgic objects in games. Players could enhance their enjoyment of games by learning to identify where idealised recollections diverge from the subjective and objective reality of their nostalgic object.

Keywords

Retro; remake; self-continuity; inspiration; creativity; motivation; *Yooka-Laylee*; *World of Warcraft Classic*; *Dungeon Keeper*.

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Introduction

Videogames are a strong trigger of nostalgic feelings for players and developers alike, capable of filling one with melancholy, yet also a strange desire for more. This desire can drive renewed interest in past titles, reflected in a market filled with remasters, rereleases, and retro resemblances where “video game developers have successfully relaunched a plethora of past video game content and technology” (Wulf et al., 2018, pp. 60-61). A common though personal phenomenon, nostalgia can be prompted by a soundtrack, a line of dialogue, a visual cue, or even a deeply personal memory. Anything which evokes thoughts of a nostalgic object—an element from a nostalgic memory—can be considered a trigger. I look to understand nostalgic videogames in more depth by learning how nostalgia shapes the development process, determining moments in a videogame's development that nostalgia has influenced, and how well nostalgia-influenced games represent the nostalgic object that they reference. This knowledge could help developers employ nostalgic objects sensitively, as the focus of emotional attachment and, accurately, as reference material. Developers must acknowledge the differences between the shared and personal aspects of nostalgia. This could lead to games that remain fresh for new players and engaging for returning, nostalgic players. Additionally, by understanding their nostalgic memories and capacity for idealised recollections, players may learn to temper their expectations and use this awareness to enhance their enjoyment of nostalgic games that are unable to live up to their nostalgic object. These games can then be enjoyed for what they are: a new, independent experience that can evoke positive memories.

Literature Review

A formation of the Greek root words *nostos* (return) and *algos* (longing), nostalgia was, for many years, seen as a curable psychological disorder of homesickness (Boym, 2001). Distinct from homesickness—a longing for one's home—nostalgia is a sentimental longing for the past (Wildschut et al., 2006) or, as Boym (2001, p. 10) posits, for “that shrinking space of experience that no longer fits”. The past becomes a figurative home as opposed to a literal home. Nostalgia has been referenced for centuries, as far back as Hippocrates and Homer, despite only being coined as a term in the late 17th Century. Modern studies highlight a mixture of nostalgic effects, with a lean towards more frequent and intense positive emotions versus weaker, less frequent negative emotions (Wildschut et al., 2006). Negative effects present as grief, depression, or an erosion of one's present-day sense of meaning which occurs if the subject fixates on past events as better days compared to their current state (Sedikides et al., 2008). Positive effects include enhanced openness, creativity, optimism, and inspiration (Sedikides and Wildschut, 2016; Tilburg et al., 2015).

Nostalgic recollections are a double-edged sword of emotion, moving between these positive and negative states. Narrative progression from negative to positive creates a “redemption arc” often characterised by “descriptions of disappointments and losses . . . redeemed or mitigated by subsequent successes or triumphs over adversity” (Wildschut et al., 2006, p. 981). Adversely, albeit less frequently, a “contamination sequence” progresses narratively from positive to negative (Wildschut et al., 2006). This may occur when references to the nostalgic object are objectively accurate, but still subjectively insufficient, given the idealised recollections and varying interpretations of personal nostalgia (Madoglou et al., 2017; Wulf et al., 2020). Redemption arcs could provide manoeuvrability within players’ reception of a videogame by engaging their openness to seek redemptive qualities, thus providing an overall positive experience in contrast to their melancholic reminiscence.

Nostalgia presents commonly in two forms: reflective nostalgia—the reminiscence and longing to return home—and restorative nostalgia—active efforts to recreate home. Reflective nostalgia concerns itself with individual and cultural memory, whereas restorative nostalgia focuses on tradition and symbolic fabrication (Boym, 2001). Therefore, to understand nostalgia, one must explore the link between the nostalgic object and these responses. Nostalgic events most frequently include close others (family, friends, social bonds), momentous events, and specific settings, in experiences where “the self was the central character” (Wildschut et al., 2006, p. 979). The recollection of such experiences, and recognition of their parallels in our present, can “bolster a sense of continuity and meaning in one’s life” (Sedikides et al., 2008, p. 306). This self-continuity feeds into other effects of nostalgia, notably its motivational potential to raise optimism, spark inspiration, and boost creativity (Sedikides & Wildschut, 2016). Studies have found nostalgia to stimulate an individual’s openness to experiences, often characterised through reflectiveness and inventiveness, where “this enhanced openness [mediates] nostalgia’s contribution to creativity” (Tilburg et al., 2015, p. 6). Openness is a more effective predictor of creativity than the other “Big Five” personality traits—extroversion, agreeableness, conscientiousness, and neuroticism (Feist, 1998).

Nostalgia is perfectly positioned to shape the creative industries despite becoming a divisive topic. Nostalgia for old media is viewed as evidence of diminishing creativity and originality (Geraghty, 2018, p. 161), but also as “memory [turned] muse” (Tilburg et al., 2015, p. 6). In recent years, Disney revisited a multitude of nostalgic titles (Rowe, 2022) and, in doing so, illustrated the duality of nostalgic interpretation. Multiple studies have stated that Disney films conjure a nostalgic longing for male-dominated and orderly patriarchal realms that lie somewhere between our past and fantasy (Do Rozario, 2004), highlighting the negative connotations of rose-tinted reminiscence. More positively,

Rowe (2022) sees this cycle as a love for media symbolically passing between generations. Do Rozario's and Rowe's positions are two sides of the same coin, both responding to the perpetuation of the past, through tradition or reverie, respectively. These mirror Boym's forms of nostalgia: restorative and reflective. Neither is innately negative or positive but there is capacity for both, with resulting negativity or positivity borne of creative choices and individual subjective reception. Only by studying videogame development case-by-case can we determine the presence and influence of restorative or reflective nostalgia in videogames. Nostalgia's presence in games is apparent as, alongside Disney, Geraghty (2018) names videogame giant Sony as part of a large, growing market for nostalgic entertainment, encompassing toys, games, and other media.

Nostalgia-related games research often focuses on player experience. As developers, even if we share a reflective longing with players and achieve tangible nostalgic restoration, perceptions of the outcome will be rife with division (Boym, 2001). Understanding every player's nostalgic object intricately is futile. However, we can understand it broadly through two measures. The first is players' needs, specifically self-identity and understanding oneself through one's past (Maslow, 1943; Sedikides et al., 2008). The second is motivations — nostalgia as an intrinsic, internal, and emotion-driven process (Ryan, 2007; Schell, 2020; Wulf et al., 2020). Nostalgia affects the two processes that make video games and, by extension, media in general, enjoyable. These are hedonic gratification through short-term pleasure and enjoyment, and eudaimonic gratification through contemplation and long-term self-growth (Oliver & Raney, 2011, p. 985). Associating play with a positive nostalgic experience contributes to enjoyment (hedonic) and the comparative nature of past and present lead to pensive thought (eudaimonic) on self-continuity, a feeling often reinforced by nostalgia (Wulf et al., 2018, p. 64). Self-continuity and a sense of identity is a key need (Maslow, 1943) and gamers can "revisit and maintain their gamer identity" through retro gaming (Wulf et al., 2018, p. 62). For some, acquiring or collecting past consoles and hardware can reinforce one's self-identity as a gamer, despite technology being a secondary trigger for nostalgic reverie (Bowman et al., 2023). Primary triggers focus on content and circumstances, such as characters, story, the player's physical setting, and social interactions (Wulf et al., 2018).

Indie game nostalgia highlights a longing for small budgets, small teams, and big creative strides. For this, Juul (2015) uses the word "simplicity", often applied to videogames retrospectively and nostalgically. Two (initially) low-budget, small-team, indie games viewed nostalgically for their simplicity are *Runescape* (Jagex, 2001) and *Minecraft* (Mojang Studios, 2011). With such intense nostalgic longing from players, developer intervention can shape a game's future. *Old School Runescape* (Jagex, 2013), a nostalgic clone maintained in

tandem with *Runescape*, was released in response to a player vote (Runescape, 2013). Conversely, some *Minecraft* players choose older versions while developers push forward with the ever-changing, live version (Batchelor, 2017; Minecraft Forum, 2022).

Furthermore, counterfactual retro styles such as high-quality renders of low-poly, 3D models evoke feelings of a simpler time without leaving the comfort of present-day technology, indicating “nostalgia for a time that never actually happened” (Juul, 2015). This disparity between nostalgic recollections and their factual counterparts remains largely unexplored in videogames studies and is only briefly hinted at by Boym wherein:

Creative nostalgia reveals the fantasies of the age, and it is in those fantasies and potentialities that the future is born. One is nostalgic not for the past the way it was, but for the past the way it could have been. It is this past perfect that one strives to realize in the future. (Boym, 2001, p. 351)

This study examines the idealised recollections of developers and players through games influenced by restorative nostalgia—a shared longing that is mutually experienced, yet deeply personal.

Methodology

To determine the effects of nostalgia in videogame development, I have chosen three case studies. Each will be used to explore nostalgia’s influence throughout development as a primary motivator; the hindrance or enhancement of creativity due to the restrictions imposed by the nostalgic object; and the clarity of the nostalgic influence in the final experience.

Using an adapted critical evaluation approach (Meline, 2006), each game meets specific inclusion criteria which identify explicit nostalgic intent or influence. Each criterion has exceptions and due to the subjective, personal nature of nostalgia, exclusion according to these criteria does not confirm the absence of nostalgic influences or intent. The criteria are as follows:

1. The game must be an existing intellectual property (IP), or *heavily* influenced by one, to the point that direct comparison between minutiae is possible;
2. The game cannot be a direct sequel, regardless of the time between instalments;
3. The IP in question (or influencing IP) should not contain periodic releases, ideally within the last decade. The only exception is a remaster, such as *Call of Duty: Modern Warfare Remastered* (Raven Software, 2016).

References are necessary in game development, informing elements such as mechanics, art style, and narrative. Games using a primary

reference with nostalgic intent are dubbed “spiritual successors”. Without developers stating this explicitly, the extent of nostalgia’s influence throughout development is practically undefinable and easily dismissed as being pure reference or present for non-nostalgic purposes. Therefore, spiritual successors have been included and non-spiritual successors omitted, despite satisfying Point 1.

Point 2 circumvents arguments that a game is not nostalgic—merely a natural continuation—or that its audience are simply fans, not nostalgic players. Only extensive study to determine a player’s relationship with a nostalgic object could differentiate between nostalgic players and fans. To maintain focus on explicit intent, the two are distinguished based on primary gameplay interests. Fans are interested in discovering new experiences, creating memories, and IP continuity. Conversely, nostalgic players are interested in engaging with existing experiences, reliving memories (reflective nostalgia), and self-continuity. One can certainly be both but “nostalgia and progress are like Jekyll and Hyde: alter egos” and one eventually wins out (Boym, 2001, p. xvi). To stretch the analogy of Odysseus (Madoglou et al., 2017, p. 61), fans seek new voyages, whereas nostalgic players seek to return home.

Point 3 ties into this. Periodic releases for IPs such as *Sonic* (Sonic Team, 1991), are arguably direct sequels, canonical developments, or if the game deviates from the original genre, a release purely for fans of the IP.

Echoing Rowe’s (2022), this article will dissect each game through a different lens of nostalgia adapted for the videogame medium: Remind, Repeat, and Revive, which is also interpretable as past, present, and future. Remind triggers nostalgic memories through design heavily influenced by its nostalgic object, for example, art style, narrative, or a prevalent mechanic. Repeat is much more direct, using the same IP to recreate the nostalgic object as closely as possible. Many games available on digital-only recreations of retro gaming consoles display this quality, especially high-definition remasters (Nintendo, 2022). Revive, unlike the others, is less delicate with its nostalgic object. This brings the nostalgic object forwards into the future with the potential to be a successful reboot or an unfortunate coup de grâce. I will explore a mixture of public discourse—reviews, developer material, and secondary interviews—to establish player reception and deconstruct development processes, drawing comparisons between each case study and its nostalgic object. Using the theoretical framework above, I then analyse key development decisions to determine the extent of nostalgia’s influence on the chosen case studies.

Case Studies

Remind – *Yooka-Laylee*

Of the three nostalgic lenses, *Yooka-Laylee* (Playtonic Games, 2017) was developed to Remind. It uses nostalgia reflectively, to conjure memories of a nostalgic object—*Banjo-Kazooie* (Rare, 1998)—while improving upon its flaws. Changes are inevitable, as “*Re-flection* suggests new flexibility, not the reestablishment of stasis” (Boym, 2001, p. 49). The conceptualisation of *Yooka-Laylee* (see Figure 1) was directly inspired by *Banjo-Kazooie* (see Figure 2). With an awareness of new or better possibilities available to the development team, their urge to restore the experiences of playing in *Banjo Kazooie*’s world took form. This behaviour indicates the flow of nostalgic inspiration: trigger, idea, response (Stephan et al., 2015, p. 1396).



Figure 1. *Yooka-Laylee* cover art (*Yooka-Laylee*, 2017).



Figure 2: *Banjo-Kazooie* cover art (*Banjo-Kazooie*, 1998).

Pitched explicitly as a spiritual successor, *Yooka-Laylee*'s Kickstarter campaign reached £2 million, far surpassing its £175,000 goal, and making demand for the revival of 3D platformers clear (Playtonic Games, 2021). The game released two years later to mixed reviews. Marshello (2017) analyses the game critically as an independent reviewer and nostalgic player of *Banjo-Kazooie*. Marshello's opinion as a player, whilst not wholly representative, helps to highlight the subjective interpretation of a shared nostalgic object. Based on a factual side-by-side comparison between *Yooka-Laylee* and *Banjo-Kazooie*, he offers insight into how players may view the objective differences between the games. Marshello believes the developers, Playtonic, should revisit their classics to determine which elements first captured players' hearts. Given that Playtonic did exactly that, we can see Boym's (2001) proposal of shared longing but a differing opinion on how to return to the nostalgic object at work here. Playtonic used *Banjo-Kazooie* as research for *Yooka-Laylee*'s development to find things they wanted to improve, resulting in many changes to the *Banjo-Kazooie* formula. These are discussed at length in the developer interview analysed hereafter.

Playtonic wanted to include players' most loved elements from *Banjo-Kazooie*, offering familiarity but with a new twist. Small decisions, such as giving the anthropomorphic main characters clothes or having the villain speak in rhyme, as in *Banjo-Kazooie*, were debated. Including them out of expectation or obligation, rather than for function or benefit, would detract from the characters and give the impression that Playtonic were only trading in nostalgia. Instead, their absence is acknowledged

narratively. Playtonic also found various problems and areas for potential improvement in *Banjo-Kazooie* that they wanted to address, stating “there’s a history of these games surprising the players and the team wants to innovate” (GameXplain, 2015). Notable areas of focus were progression linearity and ability acquisition pacing.

By design, the “expanding world” feature makes revisiting worlds necessary to experience everything the game has to offer. Players spend Pagies—collectibles needed to progress the game—to unlock worlds and expand them, revealing more Pagies and new areas, some of which require additional abilities to access. The intention was to grant players the freedom to play the game differently and enhance replayability. Playtonic implemented this mechanic despite their awareness that “some traditionalists” would want to visit a level once and “milk it for everything it’s got” (GameXplain, 2015). Marshello (2017) makes an extensive comparison between the opening levels of *Yooka-Laylee*—Shipwreck Creek—and *Banjo-Kazooie*—Spiral Mountain. He describes his all-important first impression of Shipwreck Creek as bland, empty, and “much clunkier than its nineteen-year-old predecessor”. Initially, the player is presented with a path forward, a chest they cannot open, and a ramp they cannot climb. Where the original would teach the necessary ability alongside a new obstacle or interactable, *Yooka-Laylee* neglects to do so, forcing the player to move on and come back later (Marshello, 2017). This forced linearity negatively impacts player autonomy, an important motivational player need (Ryan, 2007), especially if it contravenes the experience of the nostalgic object. According to studies, nostalgic players may be more open to exploring an area fully versus non-nostalgic players due to nostalgia’s effect on approach motivation (Sedikides & Wildschut, 2016; Stephan et al., 2015). The emotion-driven rewards of nostalgic motivation are intrinsic and, therefore, harder to replicate and maintain through in-game rewards. Nostalgic players unable to satisfy their intrinsic motivation through exploration could experience motivational decline (Ryan, 2007; Wulf et al., 2020). Comparatively, extrinsically motivated players could experience motivation renewal from the next external reward—points, items, or achievements (Schell, 2020).

In older platformers like *Banjo-Kazooie*, players often learned new abilities in later levels and could only use them for a short time before finishing the game. To avoid this, Playtonic changed the distribution of abilities across levels. Spiral Mountain contains seven abilities and six health upgrades, with *Banjo-Kazooie*’s tutorialisation regularly interrupting play to teach simple mechanics. This introduces players gradually to new abilities and controls through necessity. To facilitate uninterrupted play, *Yooka-Laylee* gives players multiple abilities from the outset. Shipwreck Creek contains only one new ability. Consequently, players lose the opportunity to engage in the satisfying, reward-based learning experience of discovering their starting abilities

(Toh & Kirschner, 2020). For example, unlike *Shipwreck Creek*, *Spiral Mountain* presents a test to challenge players on two of their newly learned abilities. The test can be skipped, but at the cost of losing out on the enticing reward. In the next area, *Shipwreck Creek*'s free-roam style of learning is undermined. Dialogue boxes constantly interrupt to explain existing mechanics from the starting area, including jumping which, by this point is likely second nature (Marshello, 2017). This leads to frustration for players as they have already discovered an ability (the reward) but are having to retroactively earn it through dialogue interaction and tutorialised actions (the commitment). Poor timing between reward and commitment can make players lose interest (Wang & Sun, 2011). Additionally, *Yooka-Laylee* uses only one button for combat, sacrificing variety for streamlined controls (Marshello, 2017). With only one new ability, linear exploration, and simplified combat, players are not rewarded frequently, or with any variety, which could further demotivate them (Phillips et al., 2018).

Comparisons show that *Yooka-Laylee* frequently and accurately references *Banjo-Kazooie* as a nostalgic object, reminding players of their positive associations with the 3D platforming genre (Sliva, 2017). Frustrations primarily stem from Playtonic's divergence from *Banjo-Kazooie*. When juxtaposed with an idealised recollection, deviations in *Yooka-Laylee*'s design appear to some nostalgic players as failures where *Banjo-Kazooie* succeeds (Marshello, 2017). These changes fail subjectively (for some players) to satisfy the redemption arc of their nostalgia (Wildschut et al., 2006). In contrast, Playtonic, as players themselves, made alterations which still aligned with a positive (redemptive) outcome to their nostalgic longing. This illustrates a divide between developer and player interpretations of how to restoratively handle a nostalgic object (Boym, 2001). *Yooka-Laylee* successfully reminds players of *Banjo-Kazooie*, evoking a nostalgic longing, but acknowledges that it is not *Banjo-Kazooie*—rather, it is a successor. It seeks to move nostalgic players from one IP to another, branching off their nostalgia and leaving *Banjo-Kazooie* firmly in the past.

Repeat – *World of Warcraft Classic*

Representing the Repeat lens, *World of Warcraft Classic* (Blizzard Entertainment, 2019), abbreviated as *WoW Classic*, is explicitly intended to provide an experience as accurate as possible to the nostalgic object that it references: *World of Warcraft* (Blizzard Entertainment, 2004), abbreviated *WoW*. Note that accurate recreation is less crucial for both the Remind and Revive lenses. Settling somewhere between the Re-release and Remake categories used in cinema, *WoW Classic* is "made to play on the deep knowledge of and love for the originals . . . [capturing] every aspect of the original in almost painstaking fidelity" (Rowe, 2022, p. 103). In 2013, J. Allen Brack, Senior VP of Blizzard Entertainment, was asked by a fan at Blizzcon, Blizzard's yearly gaming convention, whether they had considered operating separate servers for the previous

expansions. Brack's infamous response was "No. And . . . you don't want to do that, either. You think you do, but you don't" (KareemNatic, 2017; Messner, 2017). The statement became controversial, with players feeling ignored by Blizzard. However, Brack later clarified:

The sentiment of what I was trying to express, very poorly back in that day, was that there is a thing called rose-colored glasses . . . a memory of this place, the time, and the stage of life that you were in that contribute [sic] to that nostalgia people feel [towards classic WoW]. (Messner, 2017)

Brack's understanding of nostalgia and the many elements that a nostalgic object contains (Wildschut et al., 2006), set the tone for nostalgia's influence on *WoW Classic*.

With a plethora of changes made across *WoW*'s (then) six expansions, players who remember the first instalment had become disillusioned with the game; nostalgic longing for the past had become dissatisfaction with the present (Geraghty, 2018). Blizzard was initially dismissive, as current *WoW* no longer functioned the same way as its predecessor, meaning a return of the original would see Blizzard running two massive multiplayer online (MMO) games simultaneously (Messner, 2017). Realising that demand was high, with private servers supplying original *WoW* to active player bases reaching six figures—most notably, "Nostalrius Begins" at 150,000 (Robinson & Bowman, 2021)—Blizzard finally found a workaround. Demands for *WoW Classic* came from everywhere—current players, former players, even staff—and realising its importance to players, the development team was staffed with people who specifically wanted to bring back classic *WoW* "in the best, most authentic way" (Messner, 2017). Much like Disney (Rowe, 2022), Blizzard saw its creation as a piece of history, media worth preserving for people to return to and enjoy time and time again (Messner, 2017). Videogames, especially original versions, are strong nostalgic triggers, allowing players to return to the same virtual space they previously explored. Both visual and—for custom hardware such as dance mats, twin sticks, and handhelds (Custodio, 2020, p.9)—haptic stimuli reinforce the accuracy and potency of past/present experience comparisons (Wulf et al., 2018).

To provide the best player experience, *WoW Classic* began with patch 1.12 (Robinson & Bowman, 2021), the earliest version the developers would allow. "*Classic WoW* has all kinds of bugs . . . exploits and hacks that everyone knows about" (Messner, 2017), many of which themselves became objects of player nostalgia, but were removed in later patches and expansions of the game. In *WoW Classic*, non-exploitable, appearance-based bugs were preserved to satisfy players' nostalgic demands without compromising playability (Newman, 2019; Robinson & Bowman, 2021). Original graphics and gameplay systems were placed atop the modern architecture, eliminating many of original

WoW's technical limitations, such as lagging in highly populated zones and cities (Newman, 2019). All the gameplay updates were gone, even those that saved time with nuisance tasks and allowed players to adventure more (Messner, 2017). For example, the Dungeon Finder matchmaking system eliminated players' need to use public text channels to organise groups. Blizzard's motivation for the rollback was to best reflect the original game's state, satisfying player demand (Robinson & Bowman, 2021). Amongst this demand was a notable desire for now removed or lessened challenging elements that gave players long-term goals requiring days or weeks of commitment (Caliastanfor, 2022; TheWanderingGM, 2022). The difficulty was, for many, what made the game so rewarding to play; even small milestones had a huge sense of achievement (Newman, 2019; Robinson & Bowman, 2021).

Geraghty (2018) discusses social media archives as a means of preserving and accessing nostalgic media, disputing the unattainable, memory-dependent nature of nostalgia. Whilst archived nostalgic objects no longer depend on recollection for preservation or interaction, Geraghty neglects the intangible elements of nostalgia: emotion, spontaneity, and novelty. For Blizzard, the intangible social dynamics were as important as the tangible "digital play spaces of yore" (Robinson & Bowman, 2021, p. 425). *WoW Classic* "relies on social connections, and all but forces you to find and nurture them" (Newman, 2019). However, there was no guarantee that the social element would return alongside the game. Luckily, players collaborated extensively, revelling in the social atmosphere that they remembered and even forming polite queues to kill enemies, due to high server populations and slow respawn times (see Figure 3; Hernandez, 2019; Newman, 2019). With social connectedness forming such a strong element of personal nostalgia, and MMOs being naturally social spaces, there is a clear connection between *WoW Classic* players' nostalgia, and their sense of place within the game (Robinson & Bowman, 2021).

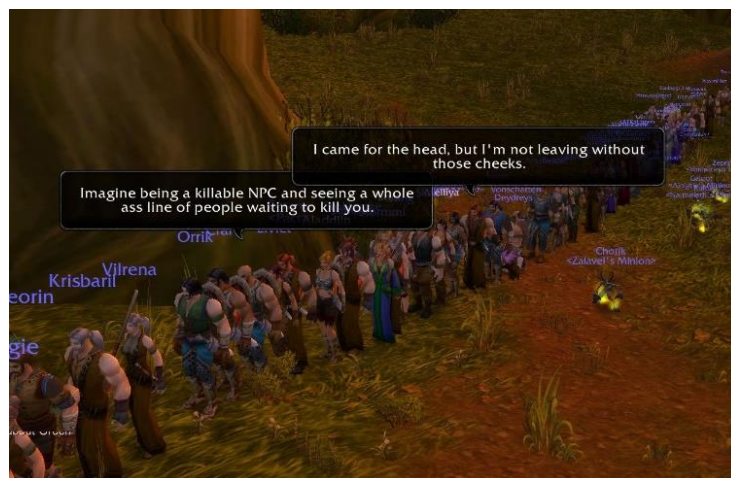


Figure 3. Players queueing to kill a quest NPC in *WoW Classic* (Artemsaetg, 2019).

WoW Classic's reception was so strong that a 1300-strong community project—"The Fresh Crusade"—banded together to 'restart' *WoW Classic* on a low-population server, playing together with new characters to relive the experience once again (Yin-Poole, 2021). In response, Blizzard released fresh *WoW Classic* servers in 2021 (Royce, 2021) and 2022 (Olivetti, 2022). Through Blizzard hearing players and reacting sensitively to their nostalgia—such as the phased introduction of raid content in early *WoW Classic* (Tips Out, 2019)—players were given space to relive their youth, as many do with retro games (Geraghty, 2018).

WoW Classic highlights the individuality of reflective nostalgia and the challenges it creates for developers. Much like *Yooka-Laylee*, there is restorative division, but primarily between players. Deciding what to include and exclude was necessary before development began and the list of changes over the years is extensive (Doomoracle, 2019). Developing *WoW Classic* to match a fixed point in *WoW*'s history gave Blizzard a defined nostalgic object to work from and set player expectations in advance, effectively circumventing the challenge of objective accuracy. For subjective accuracy, Blizzard recreated the original game as accurately as possible but could only facilitate the recreation of players' intangible nostalgic elements: emotional state, social connectedness, and novelty (Robinson & Bowman, 2021; Wildschut et al., 2006). Only players can find the personal elements of their nostalgia, illustrated by *WoW Classic*'s historic social interactions (Newman, 2019; Robinson & Bowman, 2021).

Where *Yooka-Laylee* branches off players' nostalgia, *WoW Classic* makes them revel in it by bringing their nostalgic object into the present. However, focusing entirely on a nostalgic object restricted Blizzard's opportunities to use the safety net of nostalgia's redemption arc (Wildschut et al., 2006). The only possible redemption arc here is the return of a game players had thought was gone, making *WoW Classic* more vulnerable to reflective nostalgia's idealised recollections (Madoglou et al., 2017; Wulf et al., 2020). The Repeat approach is restrictive but also gives players the most nostalgic content with which to satisfy the intangible elements of their nostalgia.

Revive – *Dungeon Keeper*

Dungeon Keeper (Mythic Entertainment, 2014), also called *Dungeon Keeper Mobile*, is a mobile adaptation of *Dungeon Keeper* (Bullfrog Productions, 1997). Through comparison, I will explore how directly building upon a nostalgic object, in this case an IP, affects development decisions and player reception. *Dungeon Keeper Mobile* is not a direct sequel, thus satisfying the case study selection criteria, unlike *Dungeon Keeper 2* (Bullfrog Productions, 1999), an acknowledged sequel. Of the three nostalgic lenses, *Dungeon Keeper Mobile*'s purpose is to Revive: to forge the IP's future using nostalgia for *Dungeon Keeper* as the foundation. Given nostalgic players' primary need (Maslow, 1943) for

self-continuity (Wulf et al., 2018), an explicitly nostalgic comeback would naturally lead to high expectations from players with idealised recollections (Madoglou et al., 2017; Wulf et al., 2020). Jeff Skalski, senior producer of *Dungeon Keeper Mobile*, acknowledges that “any time you re-make anything that is much beloved and has a great sense of nostalgia for people, people are going to be very protective of it” (Makuch, 2014). The servers were shut down in early 2023 (Mikimuster3, 2022), leaving *Dungeon Keeper* (Bullfrog Productions, 1997) and *Dungeon Keeper 2* (Bullfrog Productions, 1999) as the only available titles in the series.

To rival tower defence mobile games such as *Clash of Clans* (Supercell, 2012), publisher Electronic Arts (EA) resurrected *Dungeon Keeper*’s IP. Following a fifteen-year dormancy, and the cancellation of *Dungeon Keeper 3* and the MMO adaptation *Dungeon Keeper Online* (Dungeon Keeper, 2023), players had little cause to expect another instalment. Consumers show a preference for products with a nostalgic appearance or story (L. Zhou et al., 2013; X. Zhou et al., 2019), so EA’s decision to revive the *Dungeon Keeper* IP, rather than start fresh, was likely a marketing decision to gain immediate interest and kickstart their competition against rivals. Consequently, the developers were beholden to the restrictions of working with an established IP: extensive references, continuity (narratively and mechanically), and expectations from experienced players.

Most features from *Dungeon Keeper* are present in *Dungeon Keeper Mobile*, alongside premium currency, gems (purchased using real currency), and time—an unavoidable core element. This free-to-play model of constant paywalls and time demands, to push premium currency, tarnishes the nostalgic elements of gameplay (Whitehead, 2015). Unbelievably steep progression to higher resource and time costs transforms a renowned experience of fast strategy action into a “dull test of patience” (Johnson, 2014). Even Peter Molyneux, who designed the original *Dungeon Keeper*, was shocked by the time restriction for expanding each single square, acknowledging criticism from nostalgic players craving “an updated version of the game they fondly remembered” (Ward, 2014). Some players believe the older titles are the best way to relive happy memories (Musgrave, 2014).

To understand the mobile adaptation’s shortfalls, one must explore changes to the original’s gameplay loop, particularly strategy, a fundamental part of *Dungeon Keeper*. *Dungeon Keeper Mobile* has smaller maps, less complex systems, and poor balancing, leading to considerably weaker strategy with “one or two optimal ways to build your dungeon” (Musgrave, 2014). This creates an imbalance between nostalgic players’ perceived reward—satisfying, nostalgic strategy—and commitment—time, money, or personal expectations—risking a loss of interest (Wang & Sun, 2011). Monetisation also significantly reduces risk, further reducing the need to strategise. In *Dungeon Keeper*, failure

to withstand an attack meant game over, whereas *Dungeon Keeper Mobile* removes this fail state by deducting resources to instantly repair all the damage (Whitehead, 2015). Not only does this fail to contend with the redemption arc of players' nostalgia (Wildschut et al., 2006), but it directly contravenes their nostalgic object, increasing the likelihood of negative reception.

In the competitive market of free-to-play games, if the default (free) service is not high enough quality, players will move to a competitor (Hamari et al., 2017). Twenty-four-hour delays to clear a single block and extensive resource costs, only avoidable through purchasing premium currency, risk creating an unacceptable level of service quality (see Figure 4). The lack of strategy and risk restricts player competency (Ryan, 2007) and causes motivational loss as nostalgic players' intrinsic motivation is hard won and harder kept (Schell, 2020). Intrinsically motivated players respond negatively to extrinsic rewards, investing less effort (Phillips et al., 2018). Therefore, effective maintenance of intrinsic, nostalgic motivation relies on the perpetuation of nostalgic elements. With one's sense of self and nostalgia so closely linked (Sedikides et al., 2008), slowly dismantling or covering up the glimpses of players' nostalgic objects—their motivation for playing—will harm player retention.



Figure 4. Gem cost and clear time for a single block (*Dungeon Keeper*, 2014).

Casual mobile players are especially sensitive to the commitment/reward balance, with poorly timed rewards harming player retention (Wang & Sun, 2011). Additionally, extensive time frames will negatively affect players' associations between actions and results (Toh & Kirschner, 2020). Nostalgic players are, therefore, unlikely to find satisfaction in free-to-play reward systems of games so closely comparable to their nostalgic object; however, extrinsically motivated non-nostalgic players might. Molyneux describes this as an issue of balance:

I don't think they got it quite right, the balance between keeping it familiar to the fans that were out there but fresh enough and understandable enough for this much bigger mobile audience. (Ward, 2014)

Dungeon Keeper Mobile illustrates the challenges of the Revive lens: idealised player expectations, restrictive source material, and preservation of the original nostalgic experience. A successful *Dungeon Keeper* revival would need to meet or exceed nostalgic players' expectations, making deviation from the source material necessary for narrative progression and mechanic evolution. Unfortunately for EA, the *Dungeon Keeper* IP brought additional scrutiny to an already problematic gameplay experience. Removing risk, simplifying strategy, and integrating a free-to-play model actively removes or alters aspects of the nostalgic object, reducing the likelihood that the game will align with nostalgic players' reflective redemption arcs (Wildschut et al., 2006). This contravention to their nostalgic object elevates *Dungeon Keeper* by comparison. Similarly, poor reception of *Yooka-Laylee* elevates *Banjo-Kazooie* and poor reception of *WoW Classic* highlights the intangible elements of nostalgia from original *WoW* like past social interactions (Newman, 2019; Robinson & Bowman, 2021). The interpretive divide between *Yooka-Laylee*'s players and developers, and further established amongst *WoW Classic*'s players, is also present here (Madoglou et al., 2017). Given the creative freedom available, players are likely to have differing opinions to the developers and amongst themselves on the direction of development. Unlike a new IP or an objective recreation, progression of an IP may diversify players' expectations, obfuscating consensus.

Discussion

Approach

Through the lenses of Remind, Repeat, and Revive, each case study illustrates an approach for developing games that reference nostalgic objects. Direct involvement with the nostalgic object increases across each respective lens, carrying higher risk of idealised player expectations and diversity of interpretation, as in other nostalgic visual media (Rowe, 2022). Remind (*Yooka-Laylee*) leaves the nostalgic object in the past, whole and unchanged, branching off from players' nostalgia. Repeat (*WoW Classic*) recreates the nostalgic object in the present, assuming responsibility for accurate, objective representation, and providing players with a game space (Geraghty, 2018) that facilitates the restoration of personal, nostalgic elements, such as social connectivity (Newman, 2019; Robinson & Bowman, 2021). However, an objectively accurate recreation will highlight any disparity between the nostalgic object and players' idealised recollections. Revive (*Dungeon Keeper Mobile*) uses the nostalgic object as the foundation for a potential future, striving for creative nostalgia's "past perfect" (Boym,

2001). This approach is subject to the highest scrutiny from nostalgic players, as their expectations of the IP's progression may not align with the developers' views (Ward, 2014).

Division

Each case study highlights a divide (Boym, 2001), borne of the disparate reflectivity of shared nostalgic objects (Madoglou, 2017; Wulf et al., 2020). For *Yooka-Laylee* and *Dungeon Keeper Mobile*, the divide is between developers and players, with negativity directed towards deviations from the nostalgic objects (Johnson, 2014; Marshello, 2017; Musgrave, 2014; Sliva 2017; Whitehead, 2015). For *WoW Classic*, the divide is between the players themselves concerning restorative priority. However, Blizzard's decision to isolate a time frame, patch 1.12 (Robinson & Bowman, 2021), set player expectations early. *WoW Classic* also demonstrates a correlation between higher levels of player engagement during development (Messner, 2017) and more accurate restoration of the nostalgic object, bugs included (Robinson & Bowman, 2021). When referencing nostalgic objects, establishing the diversity of players' reflective nostalgia informs objectively accurate, sensitive game development.

Redemption

Individuals are drawn to positive narrative progression during nostalgic recollections (Wildschut et al., 2006). This redemption arc, and increased openness to experience and creativity (Tilburg et al., 2015), offers game developers a safety net when handling nostalgic objects. Nostalgia increases optimism, inspiration, and creativity (Sedikides & Wildschut, 2016; Sedikides et al., 2008), giving players the scope to develop positive associations between nostalgia-driven games and their nostalgic object. However, contamination of the nostalgic object can still result in negative player reception (Wildschut et al., 2006), as seen with *Dungeon Keeper Mobile*. Here, nostalgia-driven development and non-nostalgic development converge, encouraging developers' focus on good practice and existing game design principles such as commitment/reward balance (Phillips et al., 2018; Wang & Sun, 2011), player needs and motivations (Maslow, 1943; Ryan, 2007; Schell, 2020), pacing and player learning (Toh & Kirschner, 2020), and player retention (Hamari et al., 2017).

Conclusion

By analysing three nostalgia-driven, case study games, I have explored the effects of nostalgia on videogame development, the restrictions that nostalgic objects impose on developers, and how players respond to nostalgic references of varying clarity. Nostalgia can inform development direction and enhance valuable skills within a development team as a driving force behind creativity, inspiration, openness, and exploration. These qualities facilitate innovation when faced with the restrictions of nostalgic objects, specifically idealised expectations, source material of

elevated distinction, and the sanctity of nostalgic experience. Similarly, players' responses are at the mercy of their nostalgia. Shaped by a need for self-continuity and the intrinsic motivation of nostalgic reflection, players experience games through the rose-tinted lens of irreplicable, past experiences. Each case study highlights one of three approaches that developers can take when handling nostalgic objects: Remind, Repeat, and Revive. Developers should understand the individuality of reflective nostalgia's idealised recollections and expectations, restorative nostalgia's consequent divisions of opinion between developers and players, and creative nostalgia's diplomatic potential. Creative nostalgia acknowledges a nostalgic object's confinement to the past alongside its idealised recollections' potential, offering a sensitive yet dynamic approach to development and play—the past perfect.

This analysis can inform developers on nostalgia as an experience, its subjectivity (reflective), and implementation in a development environment (restorative). For players, this study can help to identify idealised recollections (reflective) and the limitations of revisiting a nostalgic object (restorative), tempering their resulting expectations. Developers can recreate tangible nostalgic elements—technology, mechanics, narrative—but, as with *WoW Classic*'s queuing phenomena, only players can identify the intangible elements of their nostalgia within the provided game space. Nostalgia-driven games should provide positive experiences independently of their influences, allowing new and nostalgic players alike to enjoy them and eventually become nostalgic objects themselves.

There is a need for further case studies into the nostalgic effects of individual videogame elements on players, and the conscious effects of nostalgia on live development projects as opposed to retrospectives. Additionally, exploring the point at which practical references become nostalgic references would shed light on developers' awareness of their own nostalgia.

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