

# Temporality of Play: Time in Digital Playgrounds

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## INTRODUCTION

Understanding how video games function as digital playgrounds emphasises the value of critically inspecting players and how their experiences intersect with both material and immaterial concepts. While players interact with the digital arenas of video games to learn and play in a spatial context, a less considered element is the exposure to temporal concepts in game spaces. This article will provide an experimental typology to articulate how play intimately relates to temporal experiences through design, behaviour, and positioning in player lives. Alvarez Igarzábal identifies that video games are temporal artifacts that change with time (2019), yet they can also be seen to consume, motivate, and represent temporal values to and from the player. Three frames relating to the play of video games and temporal concepts will be introduced and extended upon; Game Time, Play Time, and Affected Time. While Game Time and Play Time have been used previously to describe temporal distinctions in video games, this article will broaden the historical definitions for a holistic typology.

First, 'Game Time' will be introduced with existing literature to define how the structure and systems of video games are of temporal significance. Jesper Juul's (2004) seminal work introduced the model of Game Time to include the introductory states and chronological experiences available to the player through game design that could be disrupted through save states and various user-accessible settings. This disruption extends into other features of design such as loading screens, menus, and traversal through game spaces. Game Time has been furthered by scholars such as Hanson (2008, 156) to reflect interdisciplinary considerations such as immediacy and recursive storytelling that exposes players to different states of a narrative timeline. This access to differing temporal points in play is further detailed in Jayemanne's work through chronotypology (2020, 817). Chronotypology introduces narratives and events in-game worlds as temporal frames that can connect both future and past experiences of the player, which are relative to that player. While McKissack and May (2019, 546) see the act of speedrunning to rupture and repurpose the narrative time of the player. Narrative and sequence are only one factor of Game Time as literature

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on time-related mechanics (slowmo, rewind, pause etc.) can serve to address how temporal mechanics act as tools with which players can learn time-centric concepts (Stamenković and Jačević 2015).

To contrast the internal structures of temporal design, 'Play Time' focuses on player experience and behaviour and places emphasis on more than the time spent in-game (Juul 2004). Play Time is a multi-faceted and interdisciplinary frame that can be applied as a symptom of problematic play (Chen et al., 2022, Li et al., 2022), a factor influenced by gender (Hamlen 2010), and as a tool for gatekeeping and prestige development among communities (Kort-Bulter 2021). By relating Play Time to game development, the available duration of play or rather the extended and/or continuous play within game worlds is connected to nuanced effects on user behaviour. Simply, the static length of a video game (from either a narrative or a completion scale) has been observed to impact the perceived value of video games and the motivations for player engagement (Saaidin and Kasiran 2021). This temporal length of play can be further interpreted by temporal notions of frequency, intervals, and rhythm – inspired by Pantzer's (2010, 11) digital application of Toffler's seminal work, *Future Shock* (1970) – to which Wei, Bizzocchi and Calvert (2010, 15) explored how the frequency of actions and repeated structures of play over time are significant to players. The availability for repeat play sessions such as competitive matches (*Overwatch*, *League of Legends*, *Battlefield*, etc.) or cultural practices like speedrunning, content creation, and modding also introduce replayability and mastery into conceptualising Play Time (Hanson 2008, 110).

'Affected Time' is the final, conceptual frame to illustrate how the relationship of time *to* play and *when* play is conducted is relative to players and impacted by external structures. By asserting that time is a resource, video game play can be disruptive and unbalanced in temporal accessibility due to elements in game development and environment. Discretionary time, as discussed by Goodwin et al. (2008) articulates the value of time outside of necessary tasks (work, personal care, unpaid labour etc.) and the scarcity of such to be consequential to individuals. Thus, how players position video games within daily, weekly, or entire life cycles can create new temporal patterns. Patterns that position play as a source of leisure time (Chess 2018) or insert play within work, travel, or other activities with their own temporal restraints (Billieux, Linden, Achab, et al. 2013). In this, the metaphor of video games as digital playgrounds is revisited to assert that access is not limited to spatial contexts but also temporal factors. The use of in-game schedules such as daily tasks or weekly lockouts (seen in games such as *Destiny 2* and *World of Warcraft*) reflects how game development can create temporal pressures to contest daily routines (Freire and Santos 2021). Through Affected Time we can inspect temporal patterns in line with Dyer-Witherford and De Peuter's *Games of Empire* (2009), relating access and agency to socioeconomic disparities, ubiquitous sources of play, and other unique factors such as the time of year (Palomba 2019).

To solidify the scope of this proposal, a meta-analysis of existing industry and scholarly literature on systems that can evolve the topics of Game and Play time will be conducted – with the scope to extend beyond three frames. This will be used to inform a survey across player demographics to critically engage with how temporal dimensions of play are valued and approached, thus developing evidence for the significance of Affected Time in quantitative data. Based on those results, the intent is to develop a critical framework to evaluate the temporal value of video games through play. While ambitious to rescope existing dimensions of temporality in video

games, by revisiting and extending known concepts we can explore and better understand emerging topics such as idle games, player boosts for accelerated leveling, and the disruption of perceived time as explored through flow theory (Nuyens et al. 2020). Disruptive practices also emerge such as automated scripts, recovery services, and the application of temporal dark patterns in design (Zagal, Björk, and Lewis 2013). While non-exhaustive and conceptual in nature, this typology articulates the value of a holistic understanding of temporality in play and the relationship of such to the material and immaterial experiences of players.

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