Play Value, Gameplay, and Immersion in the Early Videogame Industry

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ABSTRACT

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BODY TEXT

When reflecting on the production of "The Pump Unit" system in 1967—created before the famed "Brown Box" that evolved into the Magnavox Odyssey—Ralph Baer recalled struggles to decrease cost while increasing game quality, explaining "there still was not enough perceived play value to justify the projected cost" (2005, 44). The next iteration of the early TV game prototype required more elaborate games to justify the high cost of technology. The term "play value" is not a simply a colloquial expression of gameplay value, but an industry term appropriated from toy marketers and designers. Early videogame design and development was heavily influenced by the US-based toy companies Coleco, Mattel, and Milton Bradley, and terms such as "play value" and "play patterns" were used to describe and conceptualize the design and development of early consoles such as the Atari VCS, Odyssey, Fairchild Channel-F, and Intellivision.

Stephen Kline defines play value as "the duration and intensity of play" (1993, 185) that a child experiences with a toy and as "the length of time children would play with it in free play" (1995, 175). Toy designers and marketers use play value to express a child's involvement, engagement, and pleasure with a plaything, and how toys create forms of "sustained play" (Pelligrini and Jones 1994). Play value is also conceived as distinct from the more familiar "educational value" of toys—thus differentiating between a toy's immersive entertainment value and its pedagogical value in terms of skill development and learning (Smith 1983). Moreover, the concept of play value is used in the toy industry to study and monetize the affective properties of toys (Stern and Schoenhaus 1990). Thus, attaching play value to duration and intensity of use precariously connects a toy's use-value as an engaging plaything with a toy's exchange-value as a commodity. At least for marketers, high play value and durational engagement with a toy mean that the toy will have lasting profitability and value in the marketplace. Thus, play value intimately connects economics with affect.

While play value has been a key concept within the toy industry for over fifty years and scholars have investigated its relationship to toys (Heljakka 2013, 2022), an examination of its relationship to the early videogame industry and game development

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has been overlooked. Heljakka (2019) has distinguished between "objective play value" and "subjective play value" to analyze how play value can describe both the objective development of interactive toy design and the subjective experience of toy players. However, this framework has not been applied to early digital games when the toy industry exerted strong influence on the nascent videogame industry. Thus, this paper has three overarching goals—broadly conceived as historical, objective, and subjective examinations of play value in relation to early videogames.

First, this paper examines play value historically during the emergence of the early games industry (Newman 2017), arguing that play value operates as a transitional concept used by toy companies and videogame companies in the United States to familiarize a new product category while providing a loose design framework for digital games and electronic toys. Thus, examining play value offers a way to articulate the influence of the toy industry on the emergence of the videogame industry within the United States in the 1970s and early 1980s.

Second, play value offers an alternative way to conceptualize gameplay and game mechanics within the early videogame industry, thus historicizing the study of videogame mechanics beyond decontextualizing formalism (Sicart 2008). During the 1970s and early 1980s, consoles themselves were grasped in the language of toys with additional cartridges adding lasting value to the product. Moreover, individual videogames were articulated in terms of adding play value through additional features. Programmers constantly struggled with strict memory limitations, meaning that increasing engagement was articulated in terms of additional action, movement, and graphics that could be packed into a cartridge. For example, numerous variations of games found on Atari VCS cartridges (Montfort and Bogost 2009) were accomplished through technical means to enhance product engagement. Or, focusing on sports themes allowed programmers to easily add gameplay features until reaching cartridge limits, since sports were known play forms which could be simulated incrementally. While designers and scholars have discussed the classical form of computer and arcade games (Crawford 1984), emphasizing rules and challenge (Ruggill and McAllister 2015) and "perfect video game designs" (Rouse 2005), this paper argues that discourses of play value provide an alternative understanding of videogame design focused on the gradual augmentation of features, actions, motion, and graphics to produce engagement.

Third, this paper analyzes the relationship of play value to the subjective experience of digital games, contributing to scholarship that connects toys and videogames (Giddings 2014). As a concept that focuses on sustained enjoyment, duration of engaged use, and a "child's continued enjoyment" (del Vecchio 2003, 30), play value signals an immersive state that identifies a player's investment with toys and early videogames. While Heljakka (2013) has associated play value and Mihaly Csikszentmihalyi's (1975) theory of flow in relation to toys, the articulation of play value in terms of adding cartridges to consoles and features to videogames aligns with alternative theories of player engagement (Myers 1984, 1992). Such work does not privilege the flow state's balance of increasing skills with increasing challenges but focuses on symbol manipulation and opportunities for action; that is, focusing on play value's association with adding features and "things to do" in early videogames provides an alternative understanding of subjective enjoyment and player immersion beyond the norms of increasing challenge and mastery.

Ultimately, this research contributes an alternative and historically specific analysis of videogame design, development, and play in relation to the synergies produced between the toy industry and the early videogame industry. Moreover, it traces the impact of the concept of play value on the emergence of videogames, thus refining our understanding of a crucial period in videogame history.

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