

Half Stress, Half Party: Play and Labor at Mattel in the Early Videogame Industry

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ABSTRACT

Keywords

Playbour, work and play, Intellivision, Mattel, Mattel Electronics, toy industry, early videogame industry, game design, toy design, game history

BODY TEXT

Scholars of the contemporary period have analyzed the imbrication of play and labor in the videogames industry. Such research has examined the relationship between play and labor in game design and development (O'Donnell 2014; Chia 2021; Sotamaa 2021), within individual game studios (Bulut 2020), within hobbyist and amateur traditions of game production (Saarikoski and Suominen 2009; Švelch 2018; Nooney 2023) and conceptually, as ideological uses of play to exploit workers (Dyer-Witheford et al. 2005). Among other topics, scholars have discussed the gamification of labor in the games industry (Rey 2014), the blurring of work and play in particular games (Johnson 2019) and streaming (Taylor 2018), and the “playbour” of game modifications (Kücklich 2005; Walsdorff 2022).

This body of scholarship has not been extensively historicized. Relatively little has been written about play and labor in the early videogames industry (Kline 1993; Kline et al. 2003; O'Donnell 2012; Wade 2016; Fleury 2023; Boellstorff and Soderman 2024). How was work seen as playful within the context of the early videogame industry and the adjacent toy industry? How was creativity managed, commodified and even exploited? What nascent forms of playbour were discernible during this era? How was the relationship between work and play different for professional game designers

Proceedings of DiGRA 2025

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versus hobbyists and amateurs? How did programmers view their work in game design? What aspects of early videogame labor make this era of play and work similar to, or different from, the contemporary period?

To strengthen this area of research, we explore the management of play and labor from 1976–1984 within two distinct divisions of Mattel. During this formative period Mattel was not just the dominant toy company, but a key innovator in electronic games and videogames. The first division we examine, Mattel Toys, was known for Barbie and Hot Wheels, but also had a pioneering history in electronic toys. The second division, Mattel Electronics, became independent from Mattel Toys in the wake of handheld electronic games and the Intellivision videogame system, the success of which led the division to briefly enjoy greater revenue than Mattel Toys itself.

Within Mattel Toys, play and labor become linked in Preliminary Design. This department emerged from Mattel's work in developing new products, a crucial process within an industry where fads were common and most toys were on the market for three years or less. By the mid-1970s Preliminary Design was central to how Mattel Toys managed creativity, a process studied by scholars at the time (Herman 1982). This process began with marketing research, which provided broad guidelines to engineers and toy designers within Preliminary Design. These staff would brainstorm and prototype toy ideas, which would eventually be presented to outside groups ranging from marketers and product engineers to the highest executive levels of Mattel. Through this process the ideas were evaluated and—if accepted into product development—potentially manufactured, advertised, and sold.

Managing this creative process depended on constraints and freedom, a ludic mode of production where workers were given “free movement within a more rigid structure,” a succinct definition of the play experience (Salen and Zimmerman 2004). For example, there was a physical and organizational localization of creativity. Preliminary Design was called “the funny farm,” with a ludic environment characterized by pranks and creative chaos. Isolated on its own floor and requiring special badges for entry, its separation from the rest of Mattel created real and symbolic protection from contamination (Caillois 1961). The playful generation of toy ideas was to be shielded from corporate oversight. The “funny farm” localized a process of harvesting the imagination. There were structures to mold and evaluate creativity, including the documentation of new ideas, prototyping, meetings between the “suits” (marketers) and the “freaks” (toy designers), and channeling toy ideas through institutionalized categories based on gender and researched play patterns. There was a simultaneous bounding and unbounding of creativity: toy designers were to imagine products without restriction or practicality, but within a framework of marketing directives and cost feasibility. This ludic mode of production installed a sense of creative ownership, where toy designers felt control over their ideas and development. Moreover, this localization of creativity forged new temporalities of playtime, where labor was unmoored from traditional work hours.

As Mattel Electronics transitioned from brand name to full-fledged division, it developed its own analogue to Preliminary Design. Known as Applications Software, programmers in this department developed new videogames for Intellivision, as well as software for the Aquarius computer and videogames for other systems including the Atari VCS. Applications Software's organizational structures and labor practices drew inspiration from Preliminary Design. For example, play was protected by

managers who developed a “company within a company” to separate many phases of game design from marketing considerations. Creativity was localized and an atmosphere of playful freedom abounded in an open office environment, though the stress of programming labor introduced new constraints and opportunities. Indeed, one crucial difference between toy and videogame production centered on programming labor. In Applications Software programmers did not develop videogame prototypes to turn over to a different group of product engineers; they designed and coded videogames from beginning to end. One result of this dynamic was that institutionalized play and creativity evolved to manage the stress of labor precarity as the videogame industry destabilized.

Our analysis is based on archival research of corporate documents and a wealth of interviews with toy designers, game programmers, market researchers, managers, and executives. Through this evidence we pursue multiple contributions. First, we draw attention to the vital importance of understanding the historical imbrication of work and play in the toy industry. The history of playbour—a term emerging in the context of videogame labor and scholarship—has roots in the toy industry, where managing creativity and commodifying fun, play, and enjoyment were crucial business directives. Second, we provide an analysis of work and play within two early “studios” of creative production—Preliminary Design and Application Software. Third, we identify specific institutional connections between the early videogame industry and the toy industry to understand similarities and differences between play and labor in toy production versus videogame design. Fourth, we offer a prehistory of contemporary forms of playbour to historicize and contextualize the present.

REFERENCES

- Boellstorff T. and Soderman, B. 2024. *Intellivision: How a Videogame System Battled Atari and Almost Bankrupted Barbie®*. Cambridge, Massachusetts: MIT Press.
- Bulut, E. 2020. *A Precarious Game: The Illusion of Dream Jobs in the Video Game Industry*. Ithaca: ILR Press.
- Caillois, R. 1961 [2001]. *Man, Play, and Games*. Translated by Meyer Barash. Champaign-Urbana: University of Illinois Press.
- Chia, A. 2021. “Self-Making and Game Making in the Future of Work” in *Game Production Studies*, edited by O. Sotamaa and J. Švelch, 47-65. Amsterdam: Amsterdam University Press.
- Dyer-Witheford, N. and de Peuter, G. 2005. “A Playful Multitude? Mobilising and Counter-Mobilising Immaterial Game Labour.” *Fiberculture Journal*. 5.
- Fleury, J. 2023. From *Superman* to *Swordquest*: Atari and Early Video Game Labor Exploitation.” *The American Journal of Economics and Sociology*. 83 (5).
- Herman, J. L. 1982. “Research and Development in the Toy Industry.” *Performance Improvement*. 21 (4): 36–38.
- Johnson, M. R. 2019. “Playful Work and Laborious Play in Super Mario Maker.” *Digital Culture and Society*. 5 (2).

- Kline, S., Dyer-Witheford, N., and Greig de Peuter. 2003. *Digital Play: The Interaction of Technology, Culture, and Marketing*. Montreal: McGill-Queen's University Press.
- Kline, S. 1993. *Out of the Garden: Toys, TV and Children's Culture in the Age of Marketing*. London: Verso.
- Kücklich, J. 2005. "Precarious Playbour: Modders and the Digital Games Industry." *Fibreculture Journal*. 5.
- Nooney, L. 2023. *The Apple II Age: How the Computer Became Personal*. Cambridge, MA: MIT Press.
- O'Donnell, C. 2012. "This is Not a Software Industry." In *The Video Game Industry: Formation, Present State, and Future*, edited by P. Zackariasson and T. L. Wilson, 17-33. London, UK: Routledge.
- O'Donnell, C. 2014. *Developer's Dilemma: The Secret World of Videogame Creators*. Cambridge, MA: MIT Press.
- Rey, P. J. 2014. "Gamification and Post-Fordist Capitalism." In *The Gameful World: Approaches, Issues, Applications*, edited by S. P. Walz and S. Deterding, 277-296. Cambridge, MA: MIT Press.
- Saarikoski, P. and Suominen, J. 2009. "Computer Hobbyists and the Gaming Industry in Finland." In *IEEE Annals of the History of Computing*. 31 (3): 20-33.
- Sotamaa, O. 2021. "Game Developers Playing Games: Instrumental Play, Game Talk, and Preserving the Joy of Play," in *Game Production Studies*, edited by O. Sotamaa and J. Švelch, 103-122. Amsterdam: Amsterdam University Press.
- Švelch, J. 2018. *Gaming the Iron Curtain: How Teenagers and Amateurs in Communist Czechoslovakia Claimed the Medium of Computer Games*. Cambridge, MA: MIT Press.
- Taylor, T. L. 2018. *Watch Me Play: Twitch and the Rise of Game Live Streaming*. Princeton: Princeton University Press.
- Wade, A. 2016. *Playback: A Genealogy of 1980s British Videogames*. New York, NY: Bloomsbury.
- Walsdorff, F. 2022. "Video Game Modding and Money. From Precarious Playbor to Reimbursed Labor of Love." *Spiel/Formen*. 2: 163-188.