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"TEDIOUS BY DESIGN." INSTITUTIONALIZED LABOR OF CONTENT CREATORS IN THE GAME AS A SERVICE MODEL: THE *PATH OF EXILE* CASE STUDY

Abstract: This study investigates the work of content creators in relation to developers and fans, focusing on digital platforms in a case study of the video game *Path of Exile* which functions in the game as a service (GaaS) model. The analysis was based on in-depth, semi-structured interviews with a diverse group of aspiring content creators and on the assessment of data extracted from distribution, streaming, and social digital platforms. The institutionalized labor of content creators, which is subjugated to the live service model curated by the developers, could be characterized by the notions of transactional play, aspirational boredom, and gaming the markets. These three elements stand for the commodification of play time, substituting actual play with broadcasted footage, and actively shaping the in-game economy, respectively. The study acknowledges the rising importance of content creators as contributors to the financial well-being of a game employing the GaaS model, while raising awareness of the cultural, economic, ethical and health issues associated with it.

Keywords: content creators, streaming, labor, live service games, games as a service, digital platforms, *Path of Exile*, market, play, boredom

This study investigates the work of content creators in relation to developers and fans, focusing on YouTube, Twitch, and Reddit in the case study of the digital game *Path of Exile* (2013–, Grinding Gear Games; hereinafter abbreviated *PoE* and GGG respectively). Digital platforms have become a crucial element of the modern media landscape, influencing both the development practices and reception of digital games.[1] Content creators who focus on one title only must negotiate the affordances of the digital platforms they choose to distribute the outcomes of their work. Addi-

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[1]   M.R. Johnson, J. Woodcock, *The Impacts of Live Streaming and Twitch.Tv on the Video Game Industry*, "Media, Culture and Society" 2018, vol. 41 (5), pp. 670–688.

tionally, they have to adjust to perpetual changes in the game to stay up-to-date with the demands of their target audience. I would argue that this dynamic is symptomatic of the modern-day games industry and reflects the systems of global, digital work-flow where content creators construct a digital media circuit which not only supports but sometimes even substitutes the gameplay experience available for non-committed players. This paper looks at labor relations in a small subset of digital platform economies concerned with a particular video game that follows a specific financial model – game as a service. While focused on a seemingly niche case study, the research presented here is aimed at highlighting the broader phenomena permeating gaming-focused entertainment economies: the entanglement of customer service, content creation, streamed/broadcasted live play, and other activities that persistently shape the gameplay as well as the in-game economy not only in *Path of Exile* but also in numerous other titles following some iteration of the game as a service model.

I consider *PoE* content creators to be "digitally enabled cultural producers who create and circulate content on social media platforms."[2] All content creators selected for this study are active on both Twitch and YouTube, and their use of platform-specific affordances (e.g. using camera, donation alerts, and customized chat functions) vary significantly depending on their niche.[3] I propose to interpret the work of *PoE* content creators within the conceptual frame of ludocapitalism, which conceptualizes in-game activities as parts of the larger system of production, trading, and consumption of digital and non-digital commodities.[4]

Despite the growing volume of research at the intersection of game studies and live streaming, relatively little attention has been devoted to the study of communication between content creators, developers, and fans in the context of online platforms. Existing studies focus predominantly on business management assessments,[5] monetization of Twitch content,[6] major developers' communication strategies[7] or

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2   A. Arriagada, F. Ibáñez, *'You Need At Least One Picture Daily, If Not, You're Dead': Content Creators and Platform Evolution in the Social Media Ecology*, "Social Media and Society" 2020, vol. 6 (3), p. 1.

3   M. Sjöblom et al., *The Ingredients of Twitch Streaming: Affordances of Game Streams*, "Computers in Human Behavior" 2018, vol. 92, pp. 20–28, https://doi.org/10.1016/j.chb.2018.10.012 (accessed: 2.12.2022).

4   N. Dyer-Witheford, G. de Peuter, *Games of Empire: Global Capitalism and Video Games*, University of Minnesota Press, Minneapolis 2009, p. 149.

5   R. McDaniel, A. Daer, *Developer Discourse: Exploring Technical Communication Practices within Video Game Development*, "Technical Communication Quarterly" 2016, vol. 3 (25), pp. 155–166, https://doi.org/10.1080/10572252.2016.1180430 (accessed: 2.12.2022).

6   J.N. Giertz et al., *Content versus Community Focus in Live Streaming Services: How to Drive Engagement in Synchronous Social Media*, "Journal of Service Management" 2022, vol. 1 (33), pp. 33–58, https://doi.org/10.1108/JOSM-12-2020-0439 (accessed: 2.12.2022).

7   S. Tomkinson, B. van den Ende, *'Thank You for Your Compliance': Overwatch as a Disciplinary System*, "Games and Culture" 2022, vol. 17 (2), pp. 198–218, https://doi.org/10.1177/15554120211026257 (accessed: 2.12.2022).

personalized media economies.[8] This paper wishes to address this research gap by investigating a case study of a title which consistently comes on top in the rankings of popularity and player retention in its genre.[9]

The focus of this inquiry would be to address the following research question: what is the role of content creators in maintaining the life cycle of a game in the live service / game as a service model? My primary goal lies in highlighting the shift in shaping and advertising a particular gaming experience by the developers and content creators. This shift is characterized by moving away from the transparent and up-to--date communication of designed changes in gameplay and instead aiming towards obfuscating information concerning successful gameplay strategies and incentivizing content creators to focus on the so-called "aspirational content" which requires massive time investment from players. An important context for this research would be the assessment of the nature of labor provided by the content creators as well as of strategies shaping their gameplay and digital media presence.

This study identifies three main aspects of the institutionalized labor of content creators: transactional play, aspirational boredom, and gaming the markets. Transactional play is a way of commodifying play time by introducing and promoting time-efficient strategies for advancing in the game and obtaining in-game digital goods. It directly supports the third component of institutionalized labor, which is curating the state of the in-game economy, be it through the promotion of certain character builds requiring specific items or preparing guides that instruct other players on how and when to engage with a given piece of content. Aspirational boredom involves the introduction of alternative methods of game consumption. Watching a streamer achieve a particularly elusive in-game goal may not only motivate someone to continue playing, but also to follow the otherwise dull and boring gameplay strategies propagated by the content creator.

The structure of this paper reads as follows. Firstly, I introduce *PoE* as a game as a service and provide a cursory overview of the dynamics behind the content related to this game circulated on digital platforms such as Twitch, YouTube, and Reddit. Secondly, I discuss the methodology and core findings of the study, focusing on interviews with content creators and an in-depth analysis of the communication between different parties involved in the production, dissemination and consumption of the game. Then, I proceed to tie up the previously discussed findings with the data

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[8] N.B. Guarriello, *Never Give Up, Never Surrender: Game Live Streaming, Neoliberal Work, and Personalized Media Economies*, "New Media and Society" 2019, vol. 8 (21), pp. 1750–1769, https://doi.org/10.1177/1461444819831653 (accessed: 2.12.2022).

[9] O. Blake, *Path of Exile Did Not Lose Many Players; The Latest Expansion of the Game Caused the Number of Players to Drop by 93%*, "Mediarun Search" 2021, July, https://www.mediarunsearch.co.uk/path-of-exile-did-not-lose-many-players-the-latest-expansion-of-the-game-caused-the-number-of-players-to-drop-by-93/ (accessed: 2.12.2022); Ch.J. Capel, *Path of Exile Has Hit Its Highest Player Count in Nearly 10 Years*, "PCGamesN" 2022, February, https://www.pcgamesn.com/path-of-exile/player-count-record (accessed: 2.12.2022).

obtained through the analysis of the developers' as well as fans' voices as shared on digital platforms.

Path of Exile as a Live Service Game

The overarching context of this research, and a key rationale for choosing *PoE* as a case study, is that it is one of the most successful games working with the game as service (shortened GaaS) model. GaaS has been adopted in popular as well as professional digital media discourse to name "a fundamentally new paradigm in the play and production of videogames" and "a shift in the way single videogames are played and monetized over increasingly longer periods of time."[10] Instead of one, finished product, a game operating within the GaaS model would be subject to perpetual updates and even radical shifts in its rules, aesthetics, and virtually any properties that can be altered through the transfer of data packages on the internet. Digital distribution platforms, which in case of *PoE* are directly connected with third-party entities (Steam, Epic Games, Kakao Games, and Playstation Network) "strive to keep all owners of the game continuously updated, both in terms of news about the game as a commodity, and in terms of enforcing that players use the latest version of the game software."[11] Controversies tied to unpredictable changes introduced throughout the life cycles of a number of titles led to critical investigations on GaaS in mobile games, a type of games often experimenting with new iterations of this model.[12] The GaaS model has also been identified as problematic in terms of how "servitization" (i.e. changing a product into a service) impacts the identity of developers and affects both design priorities and the workflow of video game production.[13]

Path of Exile is a real-time action-oriented game focused on killing hordes of enemies. Its interface and gameplay loop, based on developing the player's character through equipment, leveling, and assigning static skill points, shares many similarities with the *Diablo* series and other action-role playing games with roguelike elements.[14] Although *PoE* has a multiplayer option, players may choose to proceed through the game's acts and maps alone. It is important to note that connection to the server is

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[10] J. Jarrett, *The Ongoing Product Lifecycle of a Games as Service Model: A League of Legends Case Study* [in:] *Proceedings of DiGRA 2020*, 2020, http://www.digra.org/wp-content/uploads/digital-library/DiGRA_2020_paper_379.pdf (accessed: 2.12.2022).

[11] J. Švelch, *Resisting the Perpetual Update: Struggles against Protocological Power in Video Games*, "New Media & Society" 2019, vol. 7 (21), pp. 1594–1595.

[12] M.J. Lehtonen, M. Vesa, J.T. Harviainen, *Games-as-a-Disservice: Emergent Value Co-Destruction in Platform Business Models*, "Journal of Business Research" 2022, vol. 141, pp. 564–574, https://doi.org/10.1016/j.jbusres.2021.11.055 (accessed: 2.12.2022).

[13] L.E. Dubois, J. Weststar, *Games-as-a-Service: Conflicted Identities on the New Front-Line of Video Game Development*, "New Media and Society" 2021, vol. 24 (10), pp. 2332–2353, https://doi.org/10.1177/1461444821995815 (accessed: 2.12.2022).

[14] M.B. Garda, *Neo-Rogue and the Essence of Roguelikeness*, "Homo Ludens" 2013, vol. 1 (5), pp. 59–72.

mandatory when playing, which gives GGG an additional level of control over the game. The key characteristics of *PoE* are attuned to achieve its long-term viability as a live service game. The game is distributed in the always-online, free-to-play model with microtransactions and periodical updates to its gameplay formula. As has been noted in business-oriented research from the software-as-service perspective:

> with the GaaS model, [developers] can update a game on the fly – that is, release as many updates as they want, whenever they want – allowing all players to receive them as soon as they connect to the server. With GaaS-based games, players never really finish a game because it keeps evolving.[15]

In-game characters exist exclusively in one of the separate game worlds known as leagues,[16] which effectively function as expansions, with a new league replacing the previous one every three months. In between the leagues, there are periodical delays in development and scheduled "downtime" accounting for maintenance. There are many subtypes of leagues – players can even establish their own private league with rules tweaked to their liking – but the overarching framework of the game is explicitly tied to the changes and alterations introduced by GGG along with the main, three-month long, named league. This research has primarily been conducted throughout three main leagues: *Ultimatum*, *Expedition* and *Scourge*, encompassing the period from April 2021 to February 2022, although some contextual data was also gathered during one of the largest popularity crises the game has faced so far, in the period starting from the launch of the *Sentinel* league (May 2022). *PoE* could be considered an example of a certain subtype of a free-to-play GaaS product, although its financial model differs from high-budget GaaS titles with paid DLCs (downloadable content) and various other ways of monetizing the game as an asset.[17]

In *PoE*, players are not required to make any financial investments, but the financial model relies on them buying supporter packs and in-game enhancements that arguably streamline the gaming experience. As such, *PoE* is an interesting example of the evolving GaaS model, where the constant dialogue between developers, players and influential content creators is key to achieving long-term success and retaining users' interest. It is developed by the New Zealand-based company Grinding Gear Games and is their only product. The core design idea behind *PoE* is best illustrated by the name of its developer. *Grinding* can be defined as "the process of continually performing a given in-game action until a particular outcome is achieved,"[18] and *gear*

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[15] F. Vaudour, A. Heinze, *Software as a Service: Lessons from the Video Game Industry*, "Global Business and Organizational Excellence" 2020, vol. 2 (39), p. 32.

[16] https://pathofexile.fandom.com/wiki/League (accessed: 2.12.2022).

[17] A. Bernevega, A. Gekker, *The Industry of Landlords: Exploring the Assetization of the Triple-A Game*, "Games and Culture" 2022, vol. 1 (17), pp. 47–69, https://doi.org/10.1177/15554120211014151 (accessed: 2.12.2022).

[18] M.R. Johnson, *The Unpredictability of Gameplay*, Bloomsbury Academic, New York–London 2019, pp. 170–171.

stands for the items that can be looted from the in-game areas and used to enhance the power of a particular playable character. Albeit simple in its basic interactivity patterns, *PoE* consists of multiple layers of strategic and mechanical challenges which increase as players progress through the game's story. Despite the exponential growth of the game since 2013, GGG has arguably retained its "indie markers" in terms of financial, creative, and publishing independence,[19] although the company has had to adjust their communication strategies based on the player count and the changing scope of the game itself. This makes the *PoE* media environment a unique area for studying the evolving strategies of media consumption within the convergent streaming and social media platforms. Whereas "indie games collectively attract only a tiny fraction of the overall audience on streaming platforms,"[20] *PoE* managed to carve its niche in the streaming community, allowing its most popular content creators to develop alongside the changes in the game itself.

Methodology

This study is informed by three main sources of data: in-depth, semi-structured interviews with Twitch content creators (n=7), comments and content distributed by other influential *PoE* content creators, and data obtained through participant observation on game-related digital platforms. Six of the interviews used an open-ended written format, where participants were presented with a questionnaire which served as a scaffolding for further exploration of particular topics via an exchange of e-mails. One half-hour interview was voice recorded on Zoom and subsequently transcribed. The auxiliary data for the study came from online sources: the game's official forums and Reddit channel (r/pathofexile), the poe.ninja website, and the content of *PoE* content creators' Twitch and YouTube accounts. Given the mixed digital ethnography method applied in this study, which allowed me to "focus on the broader structure and context of digital communication,"[21] the interviews were not coded, but merged and interpreted as fieldnotes. This particular approach takes into account the inevitable preconceptions and idiosyncrasies of the researcher, who during the course of this study, engaged in additional 500+ hours of *PoE* playtime and semi-active participation in various activities of the game's community.

The streamers chosen to be interviewed represent a variety of approaches to the content they create. While all respondents stated that *PoE* is the main – and sometimes the only – game they feature while interacting with their audience, their ap-

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[19] M.B. Garda, P. Grabarczyk, *Is Every Indie Game Independent? Towards the Concept of Independent Game*, "Game Studies" 2016, vol. 1 (16), http://gamestudies.org/1601/articles/gardagrabarczyk (accessed: 2.12.2022).

[20] F. Parker, M.E. Perks, *Streaming Ambivalence: Livestreaming and Indie Game Development*, "Convergence" 2021, vol. 6 (27), p. 1735.

[21] P.R. Kavanaugh, R.J. Maratea, *Digital Ethnography in an Age of Information Warfare: Notes from the Field*, "Journal of Contemporary Ethnography" 2019, vol. 1 (49), p. 6.

proach to it varies significantly from person to person. The sample has been selected to reflect these varying approaches. All interviews were anonymized by default, but respondents had the possibility to opt out of anonymity if they wanted to. Interestingly, only one interviewee (Lighty) wished to appear under his true alias, explicitly stating this as the condition to participate in the study. Barring this one exception, in this paper I refer to and quote my respondents based on code names which bear no relationship to their actual identity – as content creators or otherwise. To clarify the diverging positions the respondents occupy in the *PoE* media landscape, I provide a quick overview of their trade.

"Tobias" considers himself a speedrunner, which means that he focuses on optimizing gameplay strategies to reach a particular in-game content as fast and as efficiently as possible.[22] He regularly participates in official race events, often claiming top spots. "John" streams regularly, but focuses more on casual viewers, occasionally engaging with other community figures to create content. Lighty is a streamer who made himself recognizable by playing a solo self-found mode of the game[23] and by setting a goal of finding every unique item in *PoE*. He fosters a community-based approach, with a well-maintained Discord channel and a very regular stream schedule. "Angela" is a part-time streamer and content creator focusing on lore-related videos, especially on the YouTube platform. "Raphael" focuses on mechanics-related content and regularly participates in the most popular *PoE*-related podcasts. "Patrick" specializes in similar topics as Raphael, but is much more active on YouTube and Twitch, and puts significantly more attention to the production value of his content. My last respondent, "Damian," is very active both on Twitch and YouTube. Out of all the participants, he registered the most significant increase of subscribers and viewers during the period of this study, and is most known for his build guides and content explaining the game mechanics to the more casual audience.

The idea was to solicit opinions on various *PoE* features in the context of the GaaS model from a wide range of content creators – not in terms of their numbers, but rather a broad variety of specific goals and interests. It is important to note that the aforementioned participants recognized that there is a probability that their real internet aliases could be disclosed given the specific niche they cater to in the community of *PoE* content creators.

The other delineating factor in choosing the particular group of informants was their subscriber and viewer counts. The interviewed personas placed roughly in the middle on the popularity curve of the *PoE* streamers, having between 13,000 and

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[22] R. Scully-Blaker, *A Practiced Practice: Speedrunning Through Space with de Certeau and Virilio*, "Game Studies" 2014, vol. 1 (14), http://gamestudies.org/1401/articles/scullyblaker (accessed: 2.12.2022); F. McKissack, L. May, *Running with the Dead: Speedruns and Generative Rupture in Left 4 Dead 1 and 2*, "Games and Culture" 2018, vol. 5 (15), pp. 544–564, https://doi.org/10.1177/1555412018821528 (accessed: 2.12.2022).

[23] Solo self-found (abbreviated SSF) stands for playing without interacting with other players and only using items found by a particular character during a given playthrough.

75,000 subscribers on YouTube and ranging from 13,000 to 62,000 followers on Twitch. Their responses are juxtaposed with the content and communication strategies of the most popular *PoE* content creators, especially Zizaran (195,000 YT subscribers / 371,000 Twitch followers as of 24th September 2022), the second most watched *PoE* streamer during the period of this study.[24] This method was chosen to highlight the opinions of content creators who aspire to improve their status in the *PoE* social media ecosystem rather than to rely solely on data from individuals who have already achieved success in that regard. Every one of my interviewees engaged in video content production on the YouTube platform, and some actively posted on dedicated digital social media platforms.

Transactional Play

To build an understanding of the digital media circuit, which forms a scaffolding for the live service model employed by *Path of Exile*, it may be useful to think about a list of transactions needed to achieve success according to in-game gameplay metrics such as "progression level," measured in obtained items and experience points. These transactions are usually trade-offs: players exchange their playtime for a chance to improve either their skill or their in-game progression and/or status. Based on the claims of my respondents and other online data such as league achievement tiers, *PoE* strived to position itself as a game of skill, where goals could be achieved through strategic decisions and meticulously planned actions. This differentiates GGG's title from its direct competitors, such as the *Diablo* game series. In the latter, achieving the majority of in-game goals depends on the combination of time investment (involving "tedious by design" [Damian] repetitive actions, i.e. grinding) and luck. Moving from strategy-driven to purely luck-based mechanics in *PoE* as of patch 3.19 (September 2022) has been heavily criticized in the community. The relatively high players retention rates were maintained due to what could be called a *channel of anticipation*, a term invoked in the field of electronic sports research by Veli-Matti Karhulahti. Describing the process of leveling in the *League of Legends*, he notes that:

> The process isn't related to any avatars or other anthropomorphic entities, but to my personal faceless profile with a made-up name as its label. The whole system seems to be an ornamental thing, more or less: new levels don't change or add to performance in any meaningful way, and matches follow the same formula regardless of the account level.[25]

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[24] The first place in terms of viewership statistics belongs to Quin69, but as a variety streamer (i.e. someone who periodically switches between played games) he has been excluded from the study. Data according to sullygnome.com (accessed: 2.12.2022).

[25] V.-M. Karhulahti, *Esport Play: Anticipation, Attachment, and Addiction in Psycholudic Development*, Bloomsbury Academic, New York–London 2020, p. 6.

Nevertheless, the researcher kept performing the repetitive actions required to unlock new heroes and increase his personal gaming skill. This activity was largely disconnected from the periodical ludic instances of individual matches. Thus, "*League of Legends* play becomes an anticipation channel of betterment,"[26] a promise of development on a personal level through even the most repetitive and "unfun" actions. The notion of such *anticipation* is what has been the selling point of the game, largely transmitted by content creators who achieve access to content and subsequently broadcast said content to the thousands of viewers who may realistically never get access to a particular end-game boss or difficult area. The progression curve in *PoE* has been succinctly summarized by one of my respondents: "There's lot of things that people think are maybe harder than they are, but a lot of it is just timegating, you just have to zone out and do it" (Lighty). Time is not only a commodity through which players can achieve progress, but also a valuable resource in managing the expectations of diverse groups participating in the game-centered digital media circuit on Twitch, YouTube, Reddit, and the game's official forums. The labor of content creators partially lies in alleviating the boredom instigated by the game's time-consuming progression curve. As early as 2017, Aphra Kerr pointed out that streamers "have become of interest to game companies who see them as another form of marketing/advertising to boost circulation through brand recognition and buzz."[27] The content created thanks to non-trivial playtime investment (which does not warrant any financial compensation when broadcasted)[28] contributes to the *anticipation*. The accessibility of such content for the average player from the developer's perspective could be considered an afterthought, because the digital recording of it is available, and players could "live vicariously" through the work of streamers. However, the game watched does not yield the same financial gains as the game played, at least not to GGG. Thus, there is a need to introduce a sustainable financial model for the game to thrive.

While there is a difference between the *PoE* version of GaaS and user-centered models of communication pertaining to Kickstarter or other crowdfunding platforms,[29] the microtransaction-based monetization arrangement heavily incentivizes developers to clearly put forward their rationale when introducing new expansions or making changes to the existing content. Some, but not all, mechanics unique to a par-

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[26] Ibidem, p. 11.
[27] A. Kerr, *Global Games: Production, Circulation and Policy in the Networked Era*, Routledge, New York 2017, p. 134.
[28] M.R. Johnson, *Behind the Streams: The Off-Camera Labour of Game Live Streaming*, "Games and Culture" 2021, vol. 8(16), pp. 1001–1020; J. Woodcock, M.R. Johnson, *The Affective Labor and Performance of Live Streaming on Twitch.Tv*, "Television and New Media" 2019, vol. 8 (20), pp. 813–823.
[29] A.N. Smith, *The Backer-Developer Connection: Exploring Crowdfunding's Influence on Video Game Production*, "New Media and Society" 2015, vol. 2 (17), pp. 198–214, https://doi.org/10.1177/1461444814558910 (accessed: 2.12.2022).

ticular league are implemented into the "core" version of the game after the league ends. When a particular mechanic is integrated with the default *PoE* experience and is associated with collecting new types of items, there is an incentive for GGG to design a new, purchasable stash tab to alleviate inventory management issues for dedicated players and to secure an additional element of the revenue stream. This synergy, however, is not without its problems. One of my interviewees explicitly expressed concerns over the amount of content that is incorporated into the core game after a particular league ends. Angela said that:

> in terms of mechanics, the last year especially it's felt like the game has too much focus on "new" additions. Every league has to have new currency, new interactions. It's content bloat, at this point. If they're not going to shelve old mechanics, constantly adding new ones is not great.

Moreover, six of my respondents mentioned "tediousness by design" (Damian), issues with abundance of in-game loot resulting in "mindless clicking" (John), concerns that "[the] game feels like a chore due to having so little in terms of quality-of-life features" (Patrick), and gameplay being "somewhat monotonous" (Tobias). In a similar spirit, Lighty mentioned that "some have said that *PoE* has deemed inconvenience as equal to fun, and in some representation that's true." The issue of designing gameplay to artificially prolong the interaction of players with the content is tied to the key pillar of monetization implemented in the *PoE* GaaS model – the paid features known as microtransactions. Microtransactions in *PoE* function either as purely aesthetic (cosmetic) enhancements[30] or convenience add-ons, the usability of which increases with advancements in the game; the more (formerly) league-specific loot is acquired, the greater the need to purchase dedicated storage spaces. In *PoE*, one of the microtransaction categories are stash tabs (inventory spaces), through which players can buy additional space to store and manage the items they find while progressing through the game. The fact that some microtransactions are bundled in more controversial forms of distribution such as randomized loot boxes (called "Mystery Boxes") raises concerns in the game's community. Even though *PoE*'s implementation of loot box gambling[31] does not directly affect any elements of gameplay, some of the most popular streamers – like Zizaran – publicly voiced their reluctance to actively promote this form of microtransaction, and are hesitant to open on stream the loot boxes they have received from GGG.[32]

Aside from the critique towards certain in-game mechanics, the recurring theme in my interviewees' answers was the realization that most of the issues connected with *PoE* and its GaaS design cycle cannot be resolved in a straightforward, simple

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[30]   M. Felczak, *Aesthetics and Cosmetic Microtransactions in Path of Exile* [in:] *Proceedings of DiGRA 2018*, 2018, http://www.digra.org/wp-content/uploads/digital-library/DIGRA_2018_paper_259.pdf (accessed: 2.12.2022).

[31]   R.K. Lundedal Nielsen, P. Grabarczyk, *Are Loot Boxes Gambling? Random Reward Mechanisms in Video Games* [in:] *Proceedings of DiGRA 2018*.

[32]   https://www.youtube.com/watch?v=2vl37WQMIWM&ab_channel=Zizaran (accessed: 2.12.2022).

way. For example, Raphael said that "a lot of the issues that have plagued the game the longest are the ones that are hardest to solve, and anyone who says they could 'just do X' or 'just change Y' and fix it are either naïve or disingenuous." Non-variety content creators (i.e. those focused on one game only) are to some extent employees of the company that actively develops the game they play. Their labor is thus institutionalized, and their actions are subject to the company's terms of service, even if they voice their concerns against particular systems integrated in the gameplay, such as paid aesthetic enhancements and loot boxes.

Aspirational Boredom

For a GaaS game like *PoE*, streamers are instrumental in introducing selected aspects of new gameplay elements to a larger audience. As noted by T.L. Taylor, "at the base level, game live streaming is an exteriorization of an otherwise-unspoken ludic process,"[33] and that "exteriorization" oftentimes involves choosing whether (and when) to engage in new league mechanics. The most popular content creators must carefully consider the pros and cons of testing out mechanics and challenges introduced along with the new leagues if they wish to remain competitive in the official "races" hosted alongside new league launches, which are usually sponsored by GGG and include monetary awards for top contenders. When, after a failure, Zizaran screams that he should "stop doing the league mechanics"[34] as it impedes his chances of success, he also gives testament to the conundrum of online broadcasts: the incentive to show (and promote) new content must be balanced with the incentive to compete at the highest level. Live entertainment value is constantly at odds with in-game efficiency. An official *PoE* Reddit user succinctly summed up the gameplay of another successful *PoE* streamer, SteelMage:

> Tuned in to his stream and saw him doing the same delve node 20 times in a row with a timer and logout macro. Mindnumbing shit.[35]

New content in each league could be divided into two categories: the so-called "league mechanics" and endgame challenges. While the first category highlights features designed to appear throughout the whole game from the very beginning, the second category – and interacting with the new content – requires non-trivial time investment to reach. League-specific mechanics are notoriously hard to balance, and are usually subject to patches during the first days and weeks of each league. Reaching endgame content requires consistency, which in itself is one of the pre-requisites

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[33] T.L. Taylor, *Watch Me Play: Twitch and the Rise of Game Live Streaming*, Princeton University Press, Princeton–Oxford 2018, p. 81.

[34] https://www.youtube.com/watch?v=xfYcxMonNWg (accessed: 2.12.2022).

[35] https://www.reddit.com/r/pathofexile/comments/fl4ndf/congrats_steelmage_rank_1_ssfhc_delirium/ (accessed: 2.12.2022).

for successful streaming, and usually involves grinding, here involving a repetition of a fixed set of actions, which rhetorically strengthens the persuasive message of the game.[36] This message ties time investment with dehumanized automation aimed strictly at achieving as much numerical progress – measured inexperience levels or obtained items – as possible without any consideration for the game world narrative frame. The ingrained logic of constant progression, just like the capitalist prerogative of constant GDP growth,[37] is thus enacted through the work of content creators who exhibit the most efficient way of "gaming the system." However, each such gameplay strategy remains subject to changes enforced by the developers, and just as in the capitalist realism described by Mark Fisher, it "entails subordinating oneself to a reality that is infinitely plastic, capable of reconfiguring itself at any moment."[38]

Methods of communication employed by streamers are also crucial in establishing parasocial relations on digital platforms, which positively affects viewer retention. Findings by McLaughlin and Wohn show that the "attributes of the streamer have a greater impact on the likelihood of parasocial phenomena than the viewer's personal characteristics or behavioral characteristics related to watching the stream."[39] While research shows that "suspense and subsequent enjoyment when using Twitch might be explained by the sympathy and relationship to the streaming persona as well as the social dynamics within the channel's community," it is crucial to "consider this difference [between the competitive and non-competitive circumstances – M.F.] in the context of video game streaming and account for a casual versus professional gaming situation."[40] The group of streamers and content creators investigated in this study varies greatly in terms of such a "gaming situation," and their methods of producing content and communicating with the developers and fans differ from one to the other.

Performance-focused Tobias offered a seemingly obvious, albeit still valuable insight with regard to the type of content to be expected from a successful content creator:

> When someone buys a Coca-Cola, they know that they are getting a soda. Similarly, when someone opens a *PoE* stream, they should know what they are going to get. When someone tunes into a Quin69 stream, they know that they are going to be entertained. When someone opens

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36 S.A. Sgandurra, *Fight. Heal. Repeat: A Look at Rhetorical Devices in Grinding Game Mechanics*, "Simulation and Gaming" 2022, vol. 4 (53), pp. 388–399, https://doi.org/10.1177/10468781221106487 (accessed: 2.12.2022).

37 K. Pobłocki, *Kapitalizm. Historia krótkiego trwania*, Fundacja Bęc Zmiana, Warszawa 2017, pp. 162–167.

38 M. Fisher, *Capitalist Realism: Is There No Alternative?*, Zero Books, London 2009, p. 54.

39 C. McLaughlin, D.Y. Wohn, *Predictors of Parasocial Interaction and Relationships in Live Streaming*, "Convergence" 2021, vol. 6 (27), p. 1725.

40 T. Wulf, F.M. Schneider, S. Beckert, *Watching Players: An Exploration of Media Enjoyment on Twitch*, "Games and Culture" 2020, vol. 3 (15), p. 338.

> Zizaran's stream, they know that they are going to get educational content. Streamers that do not have a stream "purpose" will not survive.

This degree of awareness regarding the niche each content creator tries to address is crucial in the context of a game that, throughout its years of development, has reached a significant level of complexity. New players are dramatically less likely to achieve even the most basic progress if their source of information on character build is ill-advised. The official *Path of Exile* forum, with its extensive section dedicated to guides for player-characters development and progression, may seem like a good place to start, albeit it has been claimed that the internal curation policies enforced by GGG allow for prompt deletion of any post that questions or critiques a particular build, thus making the browsable information less reliable.[41] As Angela, a streamer and content creator focused on lore (story-related) videos commented, "there are guides for everything nowadays, so 3rd party information and tools are useful (or necessary) for any player." The mechanical difficulty of the game pushes people to follow content creators blindly, disregarding their own preferences when it comes to the playstyle and goals they wish to achieve during the league. As streamer and prominent community figure Tarke commented on this issue in one of his YouTube videos concerning league start builds for patch 3.17: "If you're going to content creators for build advice, please do keep in mind what the content creator does."[42] The accounts from my interviewees supported the notion that the content which helps GGG with player retention is at the same time important for *PoE* streamers aspiring to grow. According to John, "creating guide content for beginners and early intermediate players on YouTube and playing the 'SEO / Clickbait' game well helps a lot." YouTube guides are integrated with third-party tools and the development cycle of expansions/leagues in a symbiotic system, fueled by new videos by prominent content creators targeting potential new (or returning) players and competitive streamers testing new, aspirational content on Twitch.

Gaming the Market

The communication originating from content creators is multi-faceted, as their recipients are both developers and players. A well-designed GaaS model enforces some standards in that regard, especially when it comes to producing or promoting content that may breach the game's terms of service. As was expressed by Patrick:

> I'm 100% transparent about my methods of making currency and I've been asking for a lot of change to many of the methods I myself have "founded" or at least made much more popular

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[41] https://www.youtube.com/watch?v=RZMN1y94yDc&ab_channel=Zizaran (timestamp 8:30) (accessed: 2.12.2022).

[42] https://www.youtube.com/watch?v=9TaCofIxxOE&ab_channel=TarkeCat (timestamp 5:15) (accessed: 2.12.2022).

for a while. Especially "broken" methods which I don't think should have been in the game in the first place.

An analysis of GGG-labeled Reddit posts and other communication indicates that maintaining the balance between the needs of streamers (especially competitive ones) and the rest of the playerbase when designing patches and new league mechanics proves to be the most contentious element of communication between the developers, players, and YouTubers/streamers. Chris Wilson (GGG's chief producer and lead developer) indicated that designing hard, "aspirational" content is worth the time and resources invested due to the work of streamers who consistently feature it on their channels, thus allowing less engaged players to vicariously experience time-gated encounters through their gameplay.[43] In the interviews conducted for this study, maintaining a satisfactory level of communication with the developers appeared among the crucial elements of being successful as a content creator. John remarks that "managing and fostering a positive community, having good relationships with your viewers, other content creators as well as GGG and potential sponsors etc. does become more important as your online presence grows." Influential streamers must be careful not to cross the line in promoting the exploitation of loopholes and bugs to the wider audience. Commenting on a ban issued to 20 users during the *Ultimatum* league, Wilson unequivocally stated that, "If you uncover an exploit in *Path of Exile* and abuse it for your benefit, we will ban you."[44] Among the punished players was at least one prominent streamer, albeit the effective duration of the ban extended to one league only. In another example, Zizaran was quick to pin a comment under one of his popular YouTube videos elaborating on a particular gameplay strategy, reassuring his viewers that he "confirmed with Chris [Wilson] that this method is intended and GGG balanced around it."[45]

Metric-wise, the most important online events in the *PoE* development cycle are new league announcements and subsequent league launches.[46] These are the periods when aspiring streamers and content creators are most incentivized to produce and disseminate content on digital platforms, to capitalize on the increased media attention towards the new league/expansion. With the work of streamers being both precarious and time-consuming,[47] there is also an increased risk of health issues[48] arising

[43] Ch. Wilson, *Designing Path of Exile to Be Played Forever*, Game Developers Conference Presentation, San Francisco 2019, https://www.youtube.com/watch?v=tmuy9fyNUjY&ab_channel=GDC (accessed: 2.12.2022).

[44] https://www.pathofexile.com/forum/view-thread/3087148 (accessed: 2.12.2022).

[45] https://www.youtube.com/watch?v=pa4MVw284Ac&ab_channel=Zizaran (accessed: 2.12.2022).

[46] https://steamcharts.com/app/238960 (accessed: 2.12.2022).

[47] M.R. Johnson, J. Woodcock, *'It's Like the Gold Rush': The Lives and Careers of Professional Video Game Streamers on Twitch.Tv*, "Information Communication and Society" 2019, vol. 3 (22), pp. 336–351.

[48] S.L. Anderson, *Watching People Is Not a Game: Interactive Online Corporeality, Twitch.Tv and Videogame Streams*, "Game Studies" 2017, vol. 1 (17).

from unstable or outright dangerous work conditions. My respondents pointed out RSI (repetitive strain injury) as specifically tied with the demands of *PoE* gameplay (John, Patrick).

Wilson admitted that his company "monetize[s] very heavily towards the start of our leagues,"[49] and it is crucial for GGG to keep attention on the game at these times. An instance occurred when, during server issues that precluded most players from logging into the game during the launch of *Ultimatum*, GGG allowed selected streamers to bypass the waiting queue and play. In a subsequent Reddit post, Wilson reconstructed the company's rationale behind this decision, stating that GGG did not want to lose money devoted to "paid influencer marketing,"[50] as some streamers took sponsorship money to showcase the game during the league launch. The aftermath of this situation led some streamers to publicly criticize the company for its decision. However, it must be noted that one of my interviewees explicitly mentioned "streamer privilege" among the important factors in their work, but did not offer further comments on that matter. One of my informants – a veteran playing since the *PoE* beta – succinctly commented on the application of work ethics in relation to the affordances of the game: "You can be as much of a scumbag as the game allows you to be in trade league. And I would borderline say they [GGG] encourage it because there's nothing to stop you from doing it."

Twitch and other streaming platforms offer "quantified modes" for measuring success, such as viewership and subscriber counts, which puts emphasis on the performance of streamers.[51] In *PoE*, this ties up with the expansions' development cycle: viewership metrics on digital platforms in the first week of a new league are usually much higher than in other time frames. Live "reaction" to the official, live-streamed announcement of a new league can be recorded on Twitch and put up by an employed helper on a dedicated YouTube channel without the need for the content creator to take a break from his or her own live streaming activities, which is an increasingly common practice among the most popular *PoE* streamers. The workload of maintaining a steady flow of online content is thus not only offset by live chat moderators,[52] but also shared among the persons responsible for editing, animating, and curating such content. Testament to this are comments posted on YouTube from the streamers'

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[49] Ch. Wilson, *Designing…*, op. cit.

[50] Idem, *Ultimatum Launch: Server Issues and Streamer Priority*, Topic posted on r/pathofexile, 17.04.2021, https://www.reddit.com/r/pathofexile/comments/msmty4/ultimatum_launch_server_issues_and_streamer/ (accessed: 2.12.2022).

[51] M.R. Johnson, M. Carrigan, T. Brock, *The Imperative to Be Seen: The Moral Economy of Celebrity Video Game Streaming on Twitch.Tv*, "First Monday" 2019, vol. 8 (24), https://journals.uic.edu/ojs/index.php/fm/article/view/8279 (accessed: 2.12.2022).

[52] D. Recktenwald, *Toward a Transcription and Analysis of Live Streaming on Twitch*, "Journal of Pragmatics" 2017, vol. 115, pp. 68–81, https://doi.org/10.1016/j.pragma.2017.01.013 (accessed: 2.12.2022); C. Ford et al., *Chat Speed OP: Practices of Coherence in Massive Twitch Chat* [in:] *CHI17 Extended Abstracts*, Denver 2017, pp. 858–871, http://library.usc.edu.ph/ACM/CHI 2017/2exab/ea858.pdf (accessed: 2.12.2022).

account, but signed by a different person's alias.[53] In the context of existing ethno-graphic studies focusing on the personalized affective work of streamers,[54] the diversifying methods of collaboration and content production of streamers and their closest workmates deserve to be noticed as a new emerging standard of professional game-related content production focused on digital platforms.

In the GaaS model, close cooperation with content creators may yield long-term benefits to developers. Live streaming is particularly suited to conveying a sense of authenticity to viewers,[55] as the content creators interact both with the game and their audience in real-time, with very limited options to alter the content on the go. It has been argued that Twitch "itself is particularly suited to influencing, due in large part to the core activities of the streamers" and "the gameplay is itself already a form of advertising."[56] This puts a specific amount of pressure on content creators who view streaming as an integral part of their work; Damian explicitly stated that "I do not play *PoE* off stream unless I am making content." There is also additional pressure to adjust streamed content to the current state of the game – as the same respondent comments, "[while streaming] I tend to focus on builds that I think give some value to my viewer. I tend to focus on builds they might want to play themselves." Although most major changes are announced beforehand and introduced with the start of a new expansion/league, issues with in-game balance[57] may incentivize GGG to take action after the official launch and enforce subsequent changes. The crucial features associated with the "servitization" of work, which, according to industry surveys, can be identified as work intensification and increased pressure to innovate within the constraints of an already established operational framework,[58] can also be used to describe the activity of aspiring content creators in the *PoE* case study.

Conclusion

Existing studies on games as a service have highlighted the labor conditions for game industry workers employed by specific companies and elaborated on the changing

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[53] https://www.youtube.com/watch?v=9DltAJLnOpc&ab_channel=Zizaran (accessed: 2.12.2022).

[54] See M.R. Johnson, J. Woodcock, *'It's Like the Gold Rush'…*, op. cit.

[55] J. Woodcock, M.R. Johnson, *Live Streamers on Twitch.Tv as Social Media Influencers: Chances and Challenges for Strategic Communication*, "International Journal of Strategic Communication" 2019, vol. 4 (13), pp. 321–335; J. Dux, *Social Live-Streaming: Twitch.Tv and Uses and Gratification Theory Social Network Analysis* [in:] *8th International Conference on Computer Science, Engineering and Applications*, 2018, pp. 47–61, https://doi.org/10.5121/csit.2018.80305 (accessed: 2.12.2022).

[56] J. Woodcock, M.R. Johnson, *Live Streamers…*, op. cit., p. 326.

[57] In *PoE*, balance issues most often manifest in the discrepancy of power between the playable characters, or the emergence of gameplay strategies that provide much better character progression than any of their counterparts.

[58] J. Weststar, L.-É. Dubois, *From Crunch to Grind: Adopting Servitization in Project-Based Creative Work*, "Work, Employment and Society" 2022, no. X, https://doi.org/10.1177/09500170211061228 (accessed: 2.12.2022).

dynamics of the digital entertainment industry.[59] This paper shows the importance of content creators as potentially invaluable contributors to the GaaS model, and highlights their role in modelling audience expectations and proliferating modes of content engagement that alleviate some of the design decisions introduced in numerous patches. This institutionalized labor of content creators, which is subjugated to the live service model curated by the developers, could be characterized by the notions of transactional play, aspirational boredom, and gaming the markets. These three elements stand for the commodification of play time (e.g. by promoting the "effective" use of gameplay session), substituting actual play with broadcasted footage (which highlights structural inequalities between "normal" players and content creators), and actively shaping the in-game economy, respectively.

The *PoE* case study contributes to the existing works on players as content creators in evolving production, distribution and monetization models by highlighting how the notions of economic success are intertwined with models of engagement with content both in-game and on popular digital platforms. The acquisition of a GGG majority stake by the Chinese multimedia company Tencent in 2018 and its influence on the arguably drastic changes introduced in recent leagues is outside the scope of this study, albeit it remains an important context for the subsequent analysis of global design trends regarding multiplayer online games.

In providing a descriptive answer to the main research question of this paper, concerning the role of creators in maintaining the life cycle of a game in the live service model, it is important to take into account content creators' economic ties with the interests of the digital platforms they operate on as well as with the developers of the game they specialize in. Content creators actively influence factors important for *PoE* to successfully function in the GaaS model, including the in-game economy, post-release/real-time testing of new content and soliciting player engagement through guides and other materials published on online platforms such as YouTube and Twitch. The work of content creators significantly lowers the level of entry for new players by untangling the intersecting layers of complicated in-game systems and presenting them in an easy-to-follow way in YouTube videos and written guides. With such a big reliance on content creators to popularize, test and advertise its content, *PoE* as a GaaS game features many elements that in practice cannot be interpreted and learned solely through playing the game, but must be deciphered and acknowledged with the aid of third-party tools and resources, many of which require significant cultural "gaming capital"[60] to be used properly. In online digital games, a certain level of players' expertise "concerns their respective sociocultural con-

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59   Besides works cited previously, see also D.B. Nieborg, T. Poell, *The Platformization of Cultural Production: Theorizing the Contingent Cultural Commodity*, "New Media and Society" 2018, vol. 11 (20), pp. 4275–4292, https://doi.org/10.1177/1461444818769694 (accessed: 2.12.2022).

60   M. Consalvo, *Cheating: Gaining Advantage in Videogames*, The MIT Press, Cambridge, MA 2007.

texts,"[61] and the *PoE* case study proves that these contexts could be shaped by content creators to a very significant degree.

Moving forward and developing the line of research presented in this paper, it may be beneficial to look closer at the ethical and physiological aspects of content creators' work, including the psychological burden of constantly negotiating the terms of service agreements and the risks of injuries associated with prolonged exposure to mechanics designed to be time- and action-consuming. The existence of the aforementioned issues could be found in the data analyzed in this study, but more needs to be done to build a better understanding of creative labor economies on digital platforms.[62]

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[61] S. Donaldson, *Mechanics and Metagame: Exploring Binary Expertise in League of Legends*, "Games and Culture" 2015, vol. 5 (12), p. 427.

[62] C. Meisner, A.M. Ledbetter, *Participatory Branding on Social Media: The Affordances of Live Streaming for Creative Labor*, "New Media and Society" 2022, vol. 5 (24), pp. 1179–1195, https://doi.org/10.1177/1461444820972392 (accessed: 2.12.2022).

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