Symposium on the Convergence of Gamification and Financialisation May 31 – June 1, Abertay University

Abstracts (and presenter bios, where available)

A Map of Labor and Finance in Games and Play, and Vice Versa

Alberto Calleo

Economic and financial markets enter the sphere of play and, in reverse, play enters the domain of production becoming "as important in the cultural economy as work was in the industrial economy" (Rifkin, 2001, p. 263). In a consumer society, the exchange and trade of goods is a defining mode of relation and social bonding that can be established both by economic and social obligation (Lehdonvirta & Castronova, 2014). Such modalities range in a variety of forms that combine in a complex technological landscape where historical categories of play and labor keep mutating. The boundaries between game, economy and finance become increasingly difficult to define as the distinctive concept and language of each domain confound with the other in a "simultaneous financialization of play and gamification of finance" (Zeilinger, 2024). Through these converging directions, new relational systems are built though hybrid modalities that intertwine the social dynamics emerging from play with those established by means of financial and productive exchange.

This contribution aims to map of the main trajectories that describe the tensions between games, play, labor and finance in contemporary digital capitalism. In order to delineate the nuanced and mutating landscape of the political economy of play, an analysis matrix is proposed. The discussion adopts a qualitative approach that rather than building a strict taxonomy, aims to critically engage with possible inconsistencies and limits that such schematization may point out.

Bio: Building Engineer-Architect, PhD Student at the Department of Architecture of the University of Bologna. His research interests concern the intersections between digital media practices and design cultures. He conducts research in the field of speculative design and anticipation through the use of video games and interactive media. His research interests include creative applications of 3d modeling, photogrammetry, aerophotogrammetry and laser scanning. He is active on applied research projects with various national companies.

The Value of NFTs in Games

Alesha Serada

Blockchain-based games provide an opportunity to develop and train trading and negotiating skills (Serada, 2020a). They also represent a high-risk environment specifically designed for gambling and speculation (Lee et al., 2019; Scholten et al., 2019; Serada, 2020b). The use of artificial scarcity to construct exchange value has led to highly speculative markets characterized by extreme inequality (Jiang & Liu, 2021; Nadini et al., 2021) and normalized fraudulent behavior (Scharfman, 2023). As illustrated by the failure of artificial scarcity (Serada et al., 2021; White et al., 2022), the confinements of utility value (use-value) are not inherent to the perpetually duplicable digital assets. In my talk, I demonstrate and explain transformations of value designed for entertaining purposes in crypto games. My observations are synthesized into the model of value of NFTs in games based on the data from CryptoKitties, and tested against other crypto games. Such as, the transformation of utility value into played value is accompanied by a parallel process of extension of the lusory attitude on digital assets such as fungible and non-fungible tokens on blockchain.

Eventually, playful gamification (Huotari & Hamari, 2016) of blockchain helps to understand highly volatile cryptocurrency markets as 'money games' (Hütten & Thiemann, 2018).

Bio: Alesha Serada is the principal author of more than 10 academic articles, book chapters, and conference papers on value creation in blockchain, not including minor contributions to various collective projects. Alesha's dissertation presents a threedimensional model of value construction in NFTs, using the longest-running blockchainbased game, CryptoKitties, as an exemplary case. Alesha's educational background includes two BAs - in Oriental Philology and Media and Communication - a MA in Sociology, and a completed PhD with the thesis currently in review at the University of Vaasa, Finland. Beyond blockchain, Alesha's extensive publications cover game studies, weird and horror media.

Powered by Steam, Not Affiliated With Valve Corporation

Anne Mette Thorhauge and Daniel Nielsen

While the demand for skins is a key driver in microtransaction-based business models, the strategic design of game economies (Lehdonvirta & Castronova, 2014) to boost this

demand vary across games and platforms, from lootboxes (Nielsen & Grabarczyk, 2019) over battlepasses (Joseph, 2020) to player driven economies (Thorhauge, 2022).

With the Steam platform, Valve has been at the forefront of business model innovation in the domain of games, and the company's flagship titles profit primarily from their playerdriven economies. These economies reside in the 'steam community market' a secondary market (Lehdonvirta & Castronova, 2014) for specific game items om the steam platform, as well as third party trading sites beyond the platform. Though Valve does not seem to profit directly from these sites, they claim to be 'powered by steam, not a0iliated with Valve corporation' (Thorhauge, 2023).

In the paper, we explain how third-party trading sites turn the Steam platform into their market infrastructure through the use of trading bots, and their role in terms of converting platform value into regular currency. Moreover, we discuss the role of Chinese skin-trading in Steams general platform economy, given the significance of Chinese trading site Buff163.

Bios:

Anne Mette Thorhauge is an associate professor in Communication and IT at Center for Tracking and Society at University of Copenhagen. Her background is in media and communication studies, and she researches games in the platform economy with a focus on the player-driven economies that emerge in a beyond specific games and platforms, and how these economies intersection with wider economic practices on the internet.

Daniel Nielsen, a Ph.D. candidate in media studies at Charles University, transitioned from a role as a user researcher at Massive Entertainment, a Ubisoft Studio in Malmo, Sweden, to pursuit his research in game studies. Focused on player labor in video game culture, his work explores the creative contributions of players, addressing power imbalances as well as corporate capture and control of grassroots fan activities. His main interests are audience studies and the political economy of digital labor in the creative industries.

The Ludic and the Digital

Ashley Woodward

This paper proposes to contribute to understanding of the convergence of gamification and financialisation by examining two fundamental concepts underlying it, those of the ludic and the digital. It proceeds by revisiting these concepts in the works of Jean Baudrillard, especially in 1979's *De la séduction*. Here, Baudrillard presents the game as having a logic of rules, and of establishing a dual relation of challenge and one-upmanship between

players. This is a logic which he sees as governing the metaphysics and social dynamics of pre-capitalist societies. The game is embodied in sacred rituals, and in forms of exchange which embed social relations in which there are genuine stakes. However, he posits that a different form of the ludic functions in late capitalism, alongside digital technologies. In digital networks a new, 'cold' (rather than passionate) form of playfulness acts simply to lubricate the circulation of capital. This ludic, digital logic is one of maximum circulation and minimum intensity, in which nothing is really at stake because all game playing supports the smooth functioning of the capitalist system, regardless of local winners or losers, or small transformations of local parts of the global system. In recent years Baudrillard's work has been recognised as prescient with respect to issues such as 'post-truth,' and I will argue that 'gamification' is another area in which rereading the theorist of hyperreality today gives us powerful insights into the contemporary situation.

Digital Tokens, Playful Finance, and Datafication in Child Finance Apps

Bjørn Nansen and Lauren Bliss

Child finance apps are popular digital platforms that incorporate features for both parents and children, enabling the setting and tracking of chores, the payment of allowances or pocket money, as well as supporting and managing children's saving and spending habits. A key feature across these apps is the inclusion of game design elements, such as digital tokens, which have been described more broadly as the 'playful finance' of FinTech platform economies (Langley and Leyshon, 2021; Lai and Langley, 2023). Related research on children's chore apps notes that such in-app rewards promote extrinsic rather than intrinsic incentives in compensating children for their household labour (Bjering et al., 2015).

In this presentation, we build on this prior work, and the recent work of Rachel O'Dwyer on digital tokens (2023), which highlights how they turn digital transactions into information, create detailed records for datafying life, and drive the development of platform economies. Methodologically, we draw on a wider analysis of the operational features of finance apps using a feature analysis approach (Hasinoff and Bivens, 2021), which offers a preliminary summary of how these finance apps are reshaping children's household labour, financial literacy, consumer socialisation, and economic agency.

In this study, we identified the prevalence of gamified features in which children are incentivised to save money, complete chores, or learn about finances through digital rewards such as points, tokens, or badges upon completion of financial learning activities (e.g. "money missions" with the GoHenry app), household chore tasks (e.g. earn S'mores

tokens with the S'moresUp app), or personalised savings goals (e.g. "cool card designs" and savings scores with the FLX app). We find that these children's finance apps leverage playful elements to both develop and datafy children's economic activity. In doing so, they ambiguously enable and exploit children's economic learning, labour, and value, ultimately creating conditions for the lifelong tracking of children's digital finances by the finance industry.

Bios:

Bjørn Nansen works in the media and communication studies program at the University of Melbourne. His research explores digital technologies in family life, and covers areas including children's mobile technology use, digital parenting, household technology adoption, death and digital memorialisation, and family data tracking technologies. His work is based in interdisciplinary approaches to research, and draws on a mix of ethnographic, participatory, and digital research techniques. He is the author of Young Children and Mobile Media: Producing Digital Dexterity (2020, Palgrave), and co-author of Death and Digital Media (2018, Routledge) and Digital Domesticity: Media, Materiality, and Home Life (2020, Oxford University Press).

Lauren Bliss is a research fellow at the University of Melbourne, focusing on figurations of family, parenting and everyday life in reaction videos. Her research focuses on visual culture across screen media, with particular interest in intersections of cinema and social media. She is the author of the Maternal Imagination of Film and Film Theory (2020, Palgrave).

Towards a Political Economy of the Financialisation of Play

Daniel Joseph

Taking as a starting point Zeilinger's (2024) argument that "more and more video games are designed to take the form of complex capitalism simulators, whereas more and more digital finance products are designed to be experienced as if they were games", this paper presents a brief exploration of the conditions in which the financialisation of play will occur: a global inflationary spiral, high interest rates, spiralling production costs, mass layoffs, declining capital investment, and the rapid introduction of generative AI tools into production workflows. By analysing a variety of trade press and industry consultancy publications I ask what is the economic outlook of the digital games industry and its recent experiments with assorted financial instruments (blockchain and other digital marketplace currencies) and the app-based fintech world. The paper concludes that the spread of

financial play will be highly uneven as it comes into conflict with the general goals of finance capital and the business model of platform owners.

"Hello can I apply for scholarship?": Digital Labor in Crypto Games

Daniel Nielsen and Anne Mette Thorhauge

Academics find it difficult to comprehend crypto games; some dismiss any labor-related aspects and declare them to be speculative games (Backe, 2023); others call attention to its exploitative, crypto-colonialist tendencies (Lu et al., 2023) and raise concerns about the decentralized, empowering promises that crypto games make (Egliston & Carter, 2023, p. 2). Although the design of the game may encourage the idea that cryptocurrency games are speculation games, scholars and managers (Parayno et al., 2023) as part of the culture and labor construction of cryptocurrency games aim to remove unpredictability (Johnson, 2018), thereby detaching this gamification element.

We employed scraped data sets, mixed-methods textual and thematic analysis of "job applications" from four active Axie Infinity Discord communities in order to gain a deeper understanding of how players contract themselves in pay-to-earn games. Our findings show that, in an attempt to outmaneuver competitors, candidates first try to establish themselves as professionals by eliminating humorous overtones and referring to play as work. In addition to submitting to insecure and self-exploitative working conditions. Secondly, applicants aim to establish a sympathetic connection by discussing instances of financial distress, such as COVID-19 leading to unemployment or unlucky family members requiring medical attention.

Bios: See above.

Mobile Cell

Dominic Smith

This paper invites reflection on the terms of its title to suggest possibilities for educational renewal in a context of intensive financialisation and gamification.

I begin by foregrounding how contradictions materialised in the smartphone as enabler of 'surveillance'/ 'cloud' capitalism (Zuboff 2019; Varoufakis 2023) are manifested in higher education through in-class proprietary extraction platforms such as SEAtS, Mentimeter, and TurnItln. Next, I consider philosophical perspectives on smartphones and institutionalised education. The paper is critical of two tendencies: 1. to understate the

contradictions materialised in the smartphone (e.g. Ferraris and Serres), 2. to remain at a macro-level theoretical consideration that understates educational practice (e.g. Foucault, Deleuze and Brown). I argue that these tendencies overlook what can be conceptualised as '*mobile cells*'. By this, I mean parts/cells of a body that can be epistemically privileged in terms of their capacity to shed light on the contradictory and mobile wholes of gamified/financialised education. I conclude that the smartphone is one such mobile cell today, the classroom another, and that the tensions between these mobile cells imply that another - more imaginative and collectivist - vision of education must be presupposed in plain sight by the full range of extractivist platforms.

Bio: Dominic Smith is Senior Lecturer in Philosophy at the University of Dundee, where he researches philosophy of technology and media. Dominic's latest books are Exceptional Technologies: A Continental Philosophy of Technology (2018) and Contingency and Plasticity in Everyday Technologies (2022, with Natasha Lushetich and Iain Campbell). Dominic's current project involves thinking about how philosophy of technology can be broadened to speak to issues in philosophy of education, design, and creativity, with a focus on the work of Walter Benjamin.

Collecting Stuff in Video Games: Consumerism, Hoarding, and Sustainability

Hadi Mehrpouya and Tom Brock

This paper examines the phenomenon of digital hoarding in video games, specifically how in-game consumerism, characterised by the collection and consumption of digital items, mirrors broader consumerist trends. It analyses popular games such as PUBG Mobile to highlight the complexities of digital consumerism in gaming spaces, arguing that player engagement with virtual goods is both a reflection and contributor to consumerist ideologies, whilst also affording spaces for agency and belonging. Drawing on a range of theoretical insights from the sociology of consumption and new materialism, the chapter delves critically into 'looting' and 'hoarding' practices in video games to reveal the 'disposability' of virtual items and, ultimately, how player themselves are 'disregarded' as they are accumulated for data analytics. In response, the chapter offers an alternative way of thinking about 'collecting stuff' in games through a case study of the video game Unpacking, arguing that it helps players forge more sustained and, thus, sustainable relationships with virtual items and themselves.

Gamification in Blockchain-Based Climate Finance

Inte Gloerich

In recent years, the Blockchain for Good sector – in which blockchain is applied to address societal issues – has seen an increase of projects that aim to contribute to the fight against climate change. Many of these projects use gamification to entice user engagement with nature, to increase financing for sustainable projects, or, sometimes, to fund a scam.

Examples of blockchain-based climate finance projects include carbon credits connected to cryptocurrencies, NFT collectibles representing endangered animals, and close-to real-time tracking systems of the health of trees on a blockchain. By tokenising nature – whether that be trees, animals, or carbon – these blockchain systems aim to disintermediate it, providing token-holders with a feeling of unprecedented levels of direct influence. Gamification takes shape in diverse ways, such as rarity features that increase the value of an NFT, game-like maps of territories to conquer, and features that are responsive to real-time natural conditions.

In this presentation, I relate these developments to a context of gamified environmentalism and critically discuss the sociocultural implications of gamification and financialisation via blockchain. For example, what behavior is incentivised when rarity features allocate different values to different animals? Or, is tokenisation capable of representing biodiversity?

Bio: Inte Gloerich is a PhD researcher in the Department of Media and Culture Studies at Utrecht University and the Institute of Network Cultures. Her PhD research features a critical analysis of blockchain imaginaries with a specific attention to the blending of rationalism and mysticism in such imaginaries. More broadly, her work is concerned with emerging technologies and their sociocultural implications. She co-edited Money- Lab Reader 2: Overcoming the Hype (with Geert Lovink and Patricia de Vries, 2018) and State Machines: Reflections and Actions at the Edge of Digital Citizenship (with Yiannis Colakides and Marc Garrett, 2019).

Run to Earn and Stake to Lose: A Convoluted Embrace of Gamified Fintech among Chinese Disadvantaged Individuals

Jiaxi Hou

This project is based on a two-year ethnographic exploration of how a group of disadvantaged individuals in China engaged with STEPN, a Web3 game application, to make ends meet during and after the global Covid-19 pandemic. In the offline context, the

subject of this project ranges from peasants, precarious workers, self-employed entrepreneurs, housewives, and retirees with little or no pensions. While most of them lacked prior knowledge or experience of blockchain-based financial tools and services, they were drawn to STEPN's gamification and financialization features. This allowed them to earn game tokens by jogging outdoors with STEPN NFT sneakers. Engagement with this gamified fintech provided essential supplementary income when other livelihood strategies were scarce or could hardly produce satisfactory economic outcome. More importantly, it encouraged a positive outlook on gamified fintech within a subaltern context. However, this is not just a story of how gamified technologies and financial tools empower the marginalized social groups. It also highlights how these disadvantaged individuals faced discrimination, structural constraints, and complex precarities imposed by both Chinese state authorities and the volatile global crypto market. This case study, thus, aims at reflecting on how means of domination have been reconfigured through the impacts of gamified fintech.

Bio: Jiaxi Hou is a PhD candidate from Graduate School of Interdisciplinary Information Studies at the University of Tokyo. She is interested in how various technologies intervene and reshape socio-economic inequalities in East Asian contexts. Her doctoral project concentrates on how the Chinese disadvantaged population engages into video sharing, live-streaming, digital fandom, and crypto profiteering to look for new life chances. Before entering the post-graduate program in UTokyo, she has worked as an independent documentary producer in Beijing. Her work *2306* investigated the cramped living conditions among Chinese migrant workers.

Money, The Metaverse & The Magic Circle

Rachel O'Dwyer

The term 'metaverse', like the term 'blockchain', is both vague and capacious, mashing together visions for the future of gaming and augmented reality with scenes from *Ready Player One*. For all its varied meanings, most agree it refers to *one* place, in the sense that the internet is one place with shared standards and multiple offerings. Each platform wants to be the monopoly – a hermetically sealed 'magic circle' where, as Mitch Zamara, a metaverse game designer puts it, 'You are the central bank, you are the regulator, you are the Federal Reserve. You get to do everything.' Platforms are now competing to see who will build the world and develop the standards for how items are rendered, who will manage identity, and, perhaps most crucially, act as a payment rail for processing the purchase and transfer of digital items.

But as things stand today, there are many islands and many tokens and many ways of rendering virtual things. You cannot take your Tama-gotchi to *Animal Crossings*, any more than you can wear your phygital Nikes to walk from Linden to Decentraland. Each game is its own 'magic circle'. What kinds of issues, from duping to real money trading threaten that economy and what solutions, from sinks and drains keep it afloat? And what might fungible tokens look like in the future of gaming?

Bio:

Rachel O'Dwyer is a lecturer in Digital Cultures in the National College of Art and Design, Dublin. She is the author of *Tokens*, (Verso 2023), longlisted for the FT Schroders Book of the Year Award 2023 and a Wired, GQ and LA Times 2023 book of the year. She was formerly a research fellow in Connect, the Centre for Future Networks and Communications in Trinity College Dublin and a visiting Fulbright Tech Impact Scholar in collaboration with the IMTFI at University of California, Irvine. Her research focuses on the intersection of online culture and online economies with a particular focus on digital money.

Umpire Governments and Labor Tournaments: Toward a History of Game Form in Capitalism

Samuel Pizelo

In Fernand Braudel's seminal history of capitalism, he notes the deep commonality between games and capitalist development, speculating: "It might be fun to try and write the history of capitalism within the parameters of a special version of games theory." (Braudel 1979). More recently, histories of finance and the market-form have established the discursive impact of games and gambling on market regulations and diffuse metaphors of fairness and competition (Oriard 1991; de Goede 2005; Fabian 2013). This convergence independently legitimized games as economic models for both John von Neumann and Émile Borel. By the 1930s, the USSR had re-entrenched capitalist logics into economic planning through "socialist competition;" quasi-markets explicitly modeled on sports and game tournaments (Nelson 2012; Priestland 2019). By the 1960s, the link between games and markets was so normalized that Milton Friedman argued markets ought to behave as semi-autonomous fair games, with the government acting as mere "rule-maker and umpire" (Friedman 1962). This talk answers Braudel's call for a history of games in/as capitalism by arguing that historically specific game forms and play cultures influenced the development of market capitalism. Following recent work linking games to neoliberalism (e.g., Jagoda 2020), I suggest that denaturalizing the link between games and markets can help us design alternatives to the 'capitalist realism' of our moment.

Bio: Samuel Pizelo is a scholar of games, computation, and systems thinking completing his PhD at UC Davis. His dissertation, "Modeling Revolution: A Global History of Games as Model Systems," tells a long history of games as modeling technologies central to the development of computational technology and systems thinking. His research has appeared in *Representations*, *ROMchip*, and *Digital Humanities Quarterly* and is forthcoming in *Game Studies*. For more information, see www.samuelpizelo.com.