

Edited by Olli Sotamaa and Jan Švelch

Game Production Studies



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Table of Contents

In	troduction: Why Game Production Matters? Olli Sotamaa & Jan Švelch	7
La	abour	
1.	$\label{thm:continuous} \begin{tabular}{ll} Hobbyist Game Making Between Self-Exploitation and Self-Emancipation \\ Brendan Keogh \end{tabular}$	29
2.	Self-Making and Game Making in the Future of Work <i>Aleena Chia</i>	47
3.	Should I Stay or Should I Go? The Circulations and Biographies of French Game Workers in a 'Global Games' Era Hovig Ter Minassian & Vinciane Zabban	65
4.	Intermediating the Everyday: Indie Game Development and the Labour of Co-Working Spaces Pierson Browne & Brian R. Schram	83
D	evelopment	
5.	Game Developers Playing Games: Instrumental Play, Game Talk, and Preserving the Joy of Play Olli Sotamaa	103
6.	Game Development Live on Twitch: Observations of Practice and Educational Synergies Mia Consalvo & Andrew Phelps	123
7.	Unity Production: Capturing the Everyday Game Maker Market Chris J. Young	141
8.	More Than One Flop from Bankruptcy: Rethinking Sustainable Independent Game Development John Banks & Brendan Keogh Amsterdam University	159

Publishing & Monetization

9.	How to Study Game Publishers: Activision Blizzard's Corporate History David B. Nieborg	179
10.	Who Creates Microtransactions: The Production Context of Video Game Monetization Lies van Roessel & Jan Švelch	197
11.	Regulating In-Game Monetization: Implications of Regulation on Games Production Matthew E. Perks	217
Re	egional Perspectives	
12.	Promises of the Periphery: Producing Games in the Communist and Transformation-Era Czechoslovakia Jaroslav Švelch	237
13.	Construction and Negotiation of Entrepreneurial Subjectivities in the Polish Video Game Industry ${\it AnnaM.Ozimek}$	257
14.	The Development of Greater China's Games Industry: From Copying to Imitation to Innovation Akinori 'Aki' Nakamura & Hanna Wirman	275
Be	fore and After: Towards Inclusive Production Studies, Theories, and Methods Aphra Kerr	293
Co	mplete Bibliography	309
Ind	dex	347



Introduction: Why Game Production Matters?

Olli Sotamaa & Jan Švelch

Abstract

In the introduction, the editors of this collection argue for the importance of game production studies at a point when the public awareness about the production context of video games has, arguably, never been higher. With so many accounts of video game development permeating player and developer communities, the task of game production studies is to uncover the economic, cultural, and political structures that influence the final form of games by applying rigorous research methods. While the field of game studies has developed quickly in the past two decades, the study of the video game industry and different modes of video game production have been mostly dismissed by game studies scholars and requires more attention.

Keywords: production studies, game industry, game production, platform studies, indie, sociology of work

In August 2018, *Kotaku*'s reporter Cecilia D'Anastasio (2018) broke a story about the culture of sexism in the video game studio Riot Games, best known for its multiplayer hit *League of Legends* (Riot Games 2009). While structural inequalities based on gender have been observed before in both academic (see Consalvo 2008; Harvey and Shepherd 2017; Huntemann 2013; Shaw and Homan 2013) and journalistic writing (e.g. Kelleher 2015; Parker 2017), this exposé focused on one particular company and, thanks to extensive investigative work, shared the experiences of Riot's disadvantaged, discriminated, and harassed female employees. It contributed to the wave of critical reporting about production practices in the video game industry (see also Schreier 2017) and deservedly won the Writers Guild of America Digital News award. D'Anastasio showed concrete evidence of problematic hiring

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and promotion practices and the negative impacts of 'bro culture' on the well-being of employees who did not fit the bill of a white male 'core gamer'. Consequently, Riot temporarily suspended its COO, started an internal investigation, and initiated an arguably positive change to its working culture (D'Anastasio 2019). In the same year, the Game Workers Unite movement was founded (Weststar and Legault 2019) and several other stories about precarious working conditions followed through 2019 (Schreier 2018; 2019). Video game production issues have entered public discussion and appear to be something that players and fans want to read about. Whereas previous video game controversies revolved primarily around in-game representation, whether it was violence in the late 1970s (Kocurek 2012) or objectification and sexism in the mid-2010s and, by extension, toxic player communities (Massanari 2017), the new breaking stories uncover the behind-the-scenes realities of how games are made and at what cost.

This collection arrives at a point when public awareness about the production context of video games has arguably never been higher. But game production studies does not matter only because it makes for a good story. A critical reflection of video game production can uncover the economic, cultural, and political structures that influence the final form of games, whether it is a commercial blockbuster developed by publicly traded companies with the help of countless outsourcing partners, an unexpected indie sensation created by a small team in a co-working space, or an activist game made by an individual living on the margins of the video game industry. The power and appeal of these narratives can be seen in the documentaries that celebrate and glorify the successful video game projects (Akiaten 2019; Chartier 2019; Pajot and Swirsky 2012) and even in the fictionalized TV series Mythic Quest: Raven's Banquet. Unfortunately, some of these stories can lead to the normalization of unsustainable and unhealthy working practices as they make it seem that crunch, and overwork in general, are needed if one aims for greatness in the form of a critically acclaimed bestselling game. With so many accounts of video game development permeating player and developer communities, the task of game production studies is to make sense of it all and, by applying rigorous research methods, address pressing concerns about video game production without succumbing to myths and official narratives. In that sense, this collection provides an ideal starting point for anyone interested in in-depth analyses of video game production by directly engaging in current discussions about precariousness of video game development based on original empirical research. However, it also ventures beyond these core trending topics and explores overlooked areas, such as local video game development cultures in post-socialist Eastern



European countries, China, or France, and also themes such as monetization or publishing, which have been studied only rarely from the perspective of production, but, as our authors show, are highly relevant and formative with regard to how video game companies operate as commercial enterprises.

The State of Game Production

The global video game industry has witnessed significant changes over the past decade or so. Similar to other media industries, game developers and publishers have moved from producing independent titles and material goods to providing constantly updated digital services (Sotamaa and Karppi 2010; Švelch 2019). These shifts are visible in popular new business models like free-to-play and the new roles, responsibilities, and occupations associated with game production, such as data analysts (Kerr 2017; Whitson 2019). Digital distribution platforms, accessible development tools, and new audiences also spawn 'informal game development practices' (Keogh 2019), which turn game production into a process that is both inherently global and intensely localized.

This volume questions the idea of the video game industry as one entity, a monolith. The chapters provide numerous situated readings of game making practices, environments, and cultures, which highlight the sometimes contradictory and competing approaches that define the current modes of video game production. Based on their study of the international music industry, John Williamson and Martin Cloonan (2007, 305) have argued 'that the notion of a single music industry is an inappropriate model for understanding and analysing the economics and politics surrounding music.' In a similar vein, any homogenous perception of the video game industry must be contested. Modes of video game production vary locally and regionally. They are platform-specific, apply several different funding and business models, and involve a variety of different actors. Given this multifaceted nature of video game production, its academic study necessarily includes a diverse set of theoretical approaches and empirical phenomena.

While the field of game studies has developed quickly in the past two decades, it still feels as if the study of the video game industry and different modes of video game production have been mostly dismissed by game studies scholars. The definitional discussions have often focused on the interplay between games and their players, relegating the study of game making to a marginal role. Games as designed objects have attracted attention from game design research (Kultima 2018; Lankoski and Holopainen



2017) but this approach has focused primarily on design processes and methods and less on the cultural, political, or economic contexts of game development.

Important early exceptions that have paved the way for the critical study of video game production include *Digital Play: The Interaction of Technology, Culture, and Marketing* (2003) by Stephen Kline, Nick Dyer-Witheford, and Greig de Peuter and *The Business and Culture of Digital Games* (2006) by Aphra Kerr. In the past decade, a few book-length academic volumes have touched upon the critical issues of the video game industry (Conway and deWinter 2015; Fung 2016; Kerr 2017; O'Donnell 2014; Ruggill et al. 2017; Zackariasson and Wilson 2012), but none of them have put the focus solely on video game production. At the same time, film studies and media studies have discussed the importance of 'production studies' (M. J. Banks, Conor, and Mayer 2016; Caldwell 2008; Mayer, Banks, and Caldwell 2009), but these volumes have only rarely addressed video games.

While a scholar of game industry and production can draw inspiration from various different fields, there remains a dearth of conferences, gatherings, or journals dedicated to the study of game production. With this volume, we want to address this shortage and to understand the idiosyncrasies associated with different modes of game making. At the same time, our primary aim has not been to demarcate a new field. Instead, we have invited an inspiring group of authors to explore what game production studies could mean. We hope this discussion can continue in the years ahead and help create more forums for the study of video game production. Given the vantage point at the intersection of video games, cultural industries, global production networks, and creative labour, we believe that the potential audience for game production studies is broad.

The Origins of the Edited Collection

This volume had several starting points. We had both touched upon some aspects of game production in our previous projects (Jørgensen, Sandqvist, and Sotamaa 2017; Sotamaa, Jørgensen, and Sandqvist 2020; Švelch 2016; 2017), but sometimes had trouble finding relevant academic literature. While some of the aforementioned pioneering works (e.g. Kerr 2006; Kline, Dyer-Witheford, and De Peuter 2003) provided convincing examples of how to write critically about the video game industry in general and game production in particular, posing more specific questions related to local game development cultures, specific production platforms, labour issues,



or policies often required borrowing conceptual and methodological tools from other fields.

In 2016, we (Olli Sotamaa, Kristine Jørgensen, and Ulf Sandqvist) acquired funding from The Joint Committee for Nordic Research Councils in the Humanities and Social Sciences (NOS-HS) for a project called Game Production Studies Initiative (GAMEWORK). A more concrete idea of an edited collection started to materialize in Autumn 2018. Within the Centre of Excellence in Game Culture Studies - funded by Academy of Finland and coordinated by Tampere University – we initiated a Game Production & Political Economy Reading Circle. Our readings provided important insights into the themes we wanted to cover in the volume. When we began to invite potential authors for the edited collection, we already had an idea about the particular scholars whose work could offer useful conceptual tools and empirical contributions to the study of video game production. Luckily, most of the scholars we contacted saw the value of the project and agreed to become contributors or recommended other potential authors. Our deliberate goal was to include scholars in different phases of their academic career, including senior scholars, postdocs, and PhD candidates.

The Scope and Context of this Volume

To us, game production studies is a specific perspective that emphasizes the cultural, economic, political, and social circumstances in which games are created and the production cultures associated with video game development. However, our goal is not to stake out our own field of interest in opposition to other traditions and paradigms, but rather to highlight the valuable connections between what is sometimes treated or may appear as isolated lines of scholarly inquiry. For example, the interest in co-creation of games (see J. Banks 2013; Grimes and Feenberg 2009; Kücklich 2005; Sotamaa 2007) has, in a way, sidestepped and, in some cases, preceded systematic study of game production. While this strand of research looks at very particular situations in which players themselves become 'creators' - for instance, by modding or inhabiting online worlds - and, in that sense, relates to the general debates about participatory cultures (Jenkins 2006) in the mid-2000s, the hobbyist communities that are at the centre of these practices are also key to understanding professional video game production, as many of the chapters of this edited collection explicitly show.

Similarly, the academic works investigating indie games unavoidably engage with the production context as one of the potential markers of the



proclaimed independence (Garda and Grabarczyk 2016). In that sense, the 2013 special issue of *Loading: The Journal of the Canadian Game Studies Association* and many individual articles published over the years are relevant for game production studies and vice versa. If one of the defining characteristics of indie game development is the rejection of mainstream, commercial video game production, then it is also important to study the point of reference, in order to be able to analyse whether indie lives up to its promise. While indie is not the primary focus of our collection, it plays a role in chapters that highlight the production realities of independent game developers.

Platform studies (Montfort and Bogost 2009), both the titular book series and the thematic area, is also closely related to video game production. Understood broadly as 'standards of specification', platforms clearly influence video game production as they impose constraints on the creativity of developers. While platform studies scholars shine the spotlight on the technical aspects of platforms, for example by analysing the inner workings of video game hardware, production studies might aim to show how producers interact with these tools and how they operate within the boundaries of the available hardware infrastructure. Both approaches are valuable and mutually beneficial. In this collection, Chris J. Young combines these two perspectives and looks at the local strategies of Unity Technologies, the company behind the eponymous game production platform, to show how it establishes its foothold among everyday game makers. Mia Consalvo and Andrew Phelps discuss the suitability of Twitch, a streaming platform with its own algorithmic but also media logics, for learning game development, although their particular usage of the term resembles the broader definition proposed by Tarleton Gillespie (2010).

Many of the chapters draw from the sociology of work and, in particular, from research that has been done about creative, innovative, and artistic work (e.g. McRobbie 2016; Menger 1999; Neff 2012). Staying true to the interdisciplinary nature of production studies, our contributors often bring a comparative mindset, highlighting both the potential similarities and differences between various production cultures. Aleena Chia's chapter engages specifically with theory about the future of work and what role video game production can play in it, but many of our other authors, including Brendan Keogh, Hovig Ter Minassian, Anna M. Ozimek, Olli Sotamaa, and Vinciane Zabban, also ground their research in the sociology of work.

The last connection that we want to highlight is historical research. Video game historiography has been criticized for being too focused on the official narratives and facts (Huhtamo 2005; Nooney 2013). While this



tracked the evolution of video game industries, production cultures often went unnoticed. This collection looks primarily at current issues, hence most chapters are based on empirical material collected in the 2010s, but it also features chapters that contribute to the larger body of video game history. For example, Akinori Nakamura and Hanna Wirman present a historical overview of the development of the video game industry in Greater China, while Jaroslav Švelch explores the peripheral position of Czechoslovak video game production in the 1980s and early 1990s.

Methods and Methodologies

Miranda Banks, Bridget Connor, and Vicki Mayer (2016, x) suggest that production studies emphasizes 'specific sites and fabrics of media production as distinct interpretative communities, each with its own organizational structures, professional practices, and power dynamics.' Game production studies must also consider these tensions and conflicts between individual developers' agency and the social and economic conditions within which this agency is embedded. While this volume is interested in the everyday meaning-making practices of individuals who develop games, we also want to understand the economic, social, and cultural circumstances in which these activities take place.

Game production studies does not suggest a singular new methodology or field of inquiry. This volume draws inspiration both from top-down analysis favoured, for example, by political economists and the bottom-up ethnographic approaches that describe the practices, experiences, and opinions of different people involved in video game production. While many of the chapters are based on interviews as the main method of empirical research - although Chris J. Young, for example, has a more longitudinal approach than others – other methods are also represented, including: document analysis in David B. Nieborg's case study of Activision Blizzard; symposium ethnography in Pierson Browne and Briand R. Schram's exploration of the labour of directors of co-working spaces; analysis of journalistic coverage as part of regulatory space by Matthew E. Perks; content analysis of job listings and frequency analysis of in-game credits in Lies van Roessel and Jan Švelch's chapter; and qualitative analysis of developer streams on Twitch by Mia Consalvo and Andrew Phelps. It is not always clear how one should conduct a study of game production culture, and together these chapters can provide an overview of different available methodological approaches.



One of the underlying themes of the volume is to observe how global game industry trends interact with local and regional production cultures (see also Fung 2016; Penix-Tadsen 2019; Wolf 2015). Games are never created in a vacuum. Instead, they are shaped by networks of human and non-human actors that are dependent on historical and cultural contexts. The chapters in this collection provide insights into a geographically diverse set of game making sites, including Australia, Canada, China, Czechoslovakia, Finland, France, Germany, Poland, and the US. The particularities of local game development environments highlight how methodologies and scholarly approaches need to be adjusted when applied in different circumstances. It is thus also possible to escape naïve empiricism. Instead of promising to reveal the 'authentic' developer experiences, the authors are aware that the individual opinions and attitudes need to be interpreted in connection to situated contexts and larger discussions around the video game industry.

Sections

While acknowledging the breadth of issues related to game production studies, one edited collection can only cover so much. This means that we had to abandon certain themes; not because they did not belong but for practical reasons and to achieve our aim of a coherent and focused exploration of this particular research area. We realized early on, for example, that although analogue game production (see Trammell 2019) is relevant to game production studies as a whole and its analysis can unveil shared connections within production networks between digital and non-digital games (Tyni 2020), we would not be able to do this topic justice given the space constraints.

Throughout its four sections, this edited collection addresses not only the central topics of current scholarly discussions about video game production, but also highlights less exposed areas that, in our opinion, deserve more attention. The former is represented by the two first sections of this collection: Labour and Development, respectively. Chapters from these sections deal with the prominent issues of highly contingent, precarious, and often self-exploitative work in video game industries, but also look at how development itself is influenced by game creation engines or streaming platforms. In the next section, our contributors look at Publishing & Monetization as aspects that are generally considered important, after all they deal with money, but which are rarely studied from the perspective of production studies. The chapters in the last section, Regional Perspectives,



look at video game production in specific markets and regions and show how these zones have historically evolved in unique ways and how they now fit into global video game production networks.

Labour

The Section Labour focuses on the issues related to work practices and labour conditions within the established structures of the video game industry, but also outside of it, for example, in the hobbyist scenes or regarding the roles of cultural intermediaries, such as managers of co-working spaces. In Chapter 1, Brendan Keogh discusses how hobbyist game creators negotiate their own work practices between self-exploitation and self-emancipation. Based on interviews conducted in Australia, Canada, Germany, and the Netherlands, Keogh shows the complex and paradoxical situation of many of his respondents, who reject the overwork and misogyny of the traditional video game industry but simultaneously suffer from similarly precarious working conditions while developing their own independent games. He concludes that while these game creators cannot fully escape the realities of the neoliberal capitalism of contemporary creative industries, they are 'making do' within these constraints, also by avoiding the perceived drudgery of the industrialized video game production. In Chapter 2, Aleena Chia interrogates the importance of work and leisure in the post-work era, suggesting that everyday practices of game making as a form of serious leisure can contribute to a narrative of self in the present moment characterized by short-term and precarious work. Chia synthesizes theory on post-work, creative industries, and game production, and draws from her ethnographic research with gaming hobbyists to propose a compelling vision in which leisure practices can provide continuity and a sense of accomplishment for identity building. In Chapter 3, Hovig Ter Minassian and Vinciane Zabban explore the career trajectories of workers in the French video game industry, finding parallels with developments in the creative and artistic fields, which have also experienced an oversupply of passionate young professionals. Although France has a relatively diverse local scene, which includes global companies, smaller studios, and indie developers, it remains a rather narrow labour market with a high turnover. Based on 31 biographical interviews, Ter Minassian and Zabban show how their respondents deal with these precarious working conditions, both on an individual and a collective level, highlighting four particular trajectories: switching to a different company; going to work abroad; going indie; or leaving the video



game industry and switching to a different career. In Chapter 4, Pierson Browne and Brian R. Schram analyse the impacts of indie game development on workplace organization. By stripping away the corporate structure of traditional video game studios, indie development relies on the work of cultural intermediaries to fulfil the roles that were previously handled by producers and other 'support' staff. Drawing from ethnographic data gathered during the 2017 Indie Interfaces Symposium in Montreal, Browne and Schram show how managers and directors of co-working spaces have to engage in undervalued and often gendered relational labour on top of their managerial and organizational duties.

Development

The Section Development takes a closer look at the everyday realities of video game development across various levels, from individual developers to local scenes and regional industries. In Chapter 5, Olli Sotamaa explores how play, which is usually considered a leisure activity, is instrumentalized as part of video game work. First, Sotamaa analyses how playfulness is embodied in the working environments of Finnish game studios and how it is connected to the highly gendered hobbyist origins of the local video game industry. Based on interviews, he then shows the many functions of play within the context of video game production, ranging from team building activities to analytic gaming and benchmarking. In order to preserve the pleasure of play, video game workers develop specific strategies, such as choosing genres or forms outside their professional interest, including analogue games or larps. In Chapter 6, Chris J. Young explores the impact of accessible game development tools, such as the Unity engine, on opening up video game production to hobbyists. At the same time, it is Unity that benefits from the indie rhetoric 'everyone can make a game' by establishing a dominant position in the market. Based on ethnographic research carried out in Toronto's development scene, Young shows how Unity's slogan 'democratize game development' is enacted on a local level through local representatives, workshops, or sponsorship. By providing an accessible game-making tool along with support, Unity is able to tether communities of everyday game makers to its platform ecology. In Chapter 7, John Banks and Brendan Keogh analyse strategies of Australian indie developers that aim to create a sustainable business. Sustainability itself is a contested and problematic notion in an environment characterized by precarious working conditions, as Banks and Keogh show using individual cases, ranging from



a studio opting for a 'games as service' model to achieve a steady stream of revenue to a team funding its first game by helping other studios from the area. Sustainability is thus highly contingent. For some, it means being able to live off making their own games without the need to take outside contract work, although this alone can be hard to achieve; for others it might be not relying on game development as the main source of income. In Chapter 8, Mia Consalvo and Andrew Phelps study the relatively niche sector of video game development live-streaming by taking an in-depth look at two cases. In addition to analysing the formal aspects of the streams and comparing them to the much more studied variety streams, Consalvo and Phelps also focus on their co-creative aspects and investigate the potential educational value of live-streamed video game development. In this regard, the regular streaming schedule, which is incentivized by the platform Twitch, can be beneficial for learning, but it can also lead to burnout.

Publishing & Monetization

The Section Publishing & Monetization highlights issues of video game production that often go unnoticed in game research but which are crucial for the understanding of the economics of the video game industry and have clear implications for creative practices as well. In Chapter 9, David B. Nieborg presents both a case study of a highly influential video game company Activision Blizzard grounded in critical political economy and a methodological framework for studying similar publicly traded publishers. In the context of platformization of cultural production, Nieborg argues that, despite the advent of digital distribution channels, publishers still wield a lot of power through the means of financing, distribution, and marketing, which manifests itself in the way these companies 'format' cultural commodities. By analysing official documents, such as earnings calls transcripts, Nieborg traces the impact of financial decisions on video game titles from Activision Blizzard's portfolio, focusing in particular on the Destiny franchise and the acquisition of the mobile developer King. In Chapter 10, Lies van Roessel and Jan Švelch focus on the production context of in-game monetization. While microtransactions have captured the attention of scholars most recently due to the controversy over loot boxes, the current research almost exclusively deals with audience reception. Van Roessel and Švelch present a mixed methods exploration, combining interviews, content analysis of job listings, and in-game credits, of the specific game development task of monetization design and implementation. Although monetization is



often downplayed in official communication, the findings suggest that monetization-related responsibilities are both integrated into existing roles and professions but are also handled by specialists. In Chapter 11, Matthew E. Perks investigates the recent attempts at regulation of in-game monetization. Amidst the recent loot box controversy, which was triggered by *Star Wars: Battlefront 2* in November 2017, publishers were engaging in forms of self-regulation to placate players and prevent further government oversight, although several countries, such as Belgium, have subsequently established laws banning loot boxes. Perks tracks the journalistic coverage of these public discussions and shows that regulation is not dependent on singular actors, such as a state, but that various stakeholders and self-regulatory organizations affect what is ultimately considered an accepted form of microtransactions.

Regional Perspectives

The Section Regional Perspectives is grounded in case studies that highlight the local and regional specificities of video game production. In Chapter 12, Jaroslav Švelch explores the notion of periphery in the context of video game production focusing both on the differences in infrastructures and textual strategies. While often interpreted in negative terms, periphery can also be a thriving environment, for example by giving birth to an active community of hobbyist game creators as was the case in the 1980s and early 1990s in Czechoslovakia. Here, obsolescent platforms, such as the ZX Spectrum, enjoyed a second life thanks to homebrew games and the general dearth of new hardware. While somewhat isolated from the centre of the video game industry by the Iron Curtain, Czechoslovak game creators still played some foreign titles but poached from them in order to create new creole forms and sub-genres. In Chapter 13, Anna Ozimek looks at another former Warsaw Pact country - Poland - and shows how its game industry was established thanks to the commercial success of locally developed games, including the Witcher series. Despite the economic growth and consequent government interest in games as an export commodity, the Polish video game industry has been criticized for precarious working conditions. Ozimek argues that the current state of the industry can be explained by the post-socialist entrepreneurial discourses, which emphasize meritocracy and individual resilience. Based on 44 interviews, Ozimek articulates how Polish video game development professionals reflect on these working conditions, often being distrustful of collective mobilization



and aiming instead to find employment in the somewhat fantasized West. In Chapter 14, Akinori Nakamura and Hanna Wirman chronicle the history of the video game industry in Greater China by dividing it into five distinct periods. Synthesizing Nakamura's earlier work, which was published in Japanese, the chapter provides an overview of the historical developments, supported by case studies from the individual periods. Overall, the industry in Greater China has evolved from an early era of piracy in the 1980s through a stage of imitation and innovation in the early 2000s before establishing a local indie scene in the 2010s. Nakamura and Wirman also pay attention to the influence of foreign companies that set up their subsidiaries in Greater China.

Coda

Finally, it is clear that the field of game studies can benefit from more detailed studies of game production. Still, too often the complex processes and networks of game making are ignored, despite making an important contribution to what kind of games are produced and what forms of play are preferred. As much as games revolve around 'player cultures', they are also rooted in the cultures of game production. This volume includes a rich and diverse selection of fine-grained empirical studies of game production and industry. In this sense, the book should be of interest not only to game scholars, but also to practitioners, students, teachers, and policymakers.

We also believe that game production studies can play a role in imagining a more sustainable and less exploitative future. Producing and powering technologies associated with gaming consumes and despoils significant amounts of natural resources. As Richard Maxwell and Toby Miller (2012, 180) point out '[a]n electronic game's life cycle begins in the extractive industries and ends in the salvage and recycling dump.' At the same time, games have the power to translate ecological ideas to people. Cultural industries and policies around them necessarily connect the questions of environmental sustainability to forms of social, cultural, and economic sustainability (Duxbury, Kangas, and Beukelaer 2017). Many chapters in this book document and analyse game developers' discussions around uncertainty, precarity, and (dis)continuity. While some developers seem to be aware of the trade-offs associated with the current game production environment, the efforts to find sustainability in different levels – global and local ecosystems, companies, and individuals – can be in conflict with



each other. Entrepreneurial discourses mobilize a specific conception of sustainability, whereas independent developers often express alternative ideas. Moreover, ambitions change over time and opportunities to achieve any kind of sustainability are not equally divided. As Jennifer R. Whitson, Bart Simon, and Felan Parker (2018, 16) argue, 'emphasizing sustainability talk in games is an important avenue of study because it can reorient cultural entrepreneurship discourse in more positive directions.' Rethinking the ways to evaluate success can lead towards a more equitable and sustainable work ethic – and this applies both to the people who produce games and those who study game production.

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References

- Akiaten, Brandon. 2019. *Raising Kratos*. Documentary. Sony Interactive Entertainment.
- Banks, John. 2013. *Co-Creating Videogames*. Bloomsbury Academic. New York: Bloomsbury Publishing.
- Banks, Miranda J., Bridget Conor, and Vicki Mayer (eds) 2016. *Production Studies, the Sequel! Cultural Studies of Global Media Industries*. New York: Routledge.
- Caldwell, John Thornton. 2008. *Production Culture: Industrial Reflexivity and Critical Practice in Film and Television*. Console-Ing Passions. Durham, NC: Duke University Press.
- Chartier, Jean-Simon. 2019. *Playing Hard*. Documentary. MC2 Communication Média. Consalvo, Mia. 2008. "Crunched by Passion: Women Game Developers and Workplace Challenges." In *Beyond Barbie and Mortal Kombat: New Perspectives on Gender and Gaming*, edited by Yasmin B. Kafai, Carrie Heeter, Jill Denner, and Jennifer Y. Sun, 177–93. Cambridge, MA: MIT Press.
- Conway, Steven, and Jennifer deWinter (eds) 2015. *Video Game Policy: Production, Distribution, and Consumption*. New York: Routledge.
- D'Anastasio, Cecilia. 2018. "Inside The Culture Of Sexism At Riot Games." *Kotaku*. 7 August 2018. https://kotaku.com/inside-the-culture-of-sexism-at-riot-games-1828165483; last accessed 19 August 2020.
- ——. 2019. "Riot Employees Say Company Has Made Real Progress Fixing Its Sexism Issues." *Kotaku*. 7 August 2019. https://kotaku.com/riot-games-and-sexism-one-year-later-1837041215; last accessed 19 August 2020.
- Duxbury, Nancy, Anita Kangas, and Christiaan De Beukelaer. 2017. "Cultural Policies for Sustainable Development: Four Strategic Paths." *International Journal of Cultural Policy* 23 (2): 214–30. https://doi.org/10.1080/10286632.2017.1280789.
- Fung, Anthony (ed.) 2016. *Global Game Industries and Cultural Policy*. Cham: Palgrave Macmillan.
- Garda, Maria B., and Paweł Grabarczyk. 2016. "Is Every Indie Game Independent? Towards the Concept of Independent Game." *Game Studies* 16 (1). http://gamestudies.org/1601/articles/gardagrabarczyk; last accessed 19 August 2020.
- Gillespie, Tarleton. 2010. "The Politics of 'Platforms." *New Media & Society* 12 (3): 347–64. https://doi.org/10.1177/1461444809342738.
- Grimes, Sara M., and Andrew Feenberg. 2009. "Rationalizing Play: A Critical Theory of Digital Gaming." *The Information Society* 25 (2): 105–18. https://doi.org/10.1080/01972240802701643.
- Harvey, Alison, and Tamara Shepherd. 2017. "When Passion Isn't Enough: Gender, Affect and Credibility in Digital Games Design." *International Journal of Cultural Studies* 20 (5): 492–508. https://doi.org/10.1177/1367877916636140.



- Huhtamo, Erkki. 2005. "Slots of Fun, Slots of Trouble: An Archaeology of Arcade Gaming." In *Handbook of Computer Game Studies*, edited by Joost Raessens and Jeffrey H. Goldstein, 3–21. Cambridge, MA: MIT Press.
- Huntemann, Nina B. 2013. "Women in Games: The Case of Hardware Production and Promotion." In *Gaming Globally Production, Play, and Place*, edited by Nina B Huntemann and Ben Aslinger, 41–57. New York: Palgrave Macmillan.
- Jenkins, Henry. 2006. *Convergence Culture: Where Old and New Media Collide*. New York: New York University Press.
- Jørgensen, Kristine, Ulf Sandqvist, and Olli Sotamaa. 2017. "From Hobbyists to Entrepreneurs: On the Formation of the Nordic Game Industry." *Convergence: The International Journal of Research into New Media Technologies* 23 (5): 457–76. https://doi.org/10.1177/1354856515617853.
- Kelleher, Susan. 2015. "This Has Got to Change': Women Game Developers Fight Sexism in Industry." *The Seattle Times*. 13 August 2015. https://www.seattletimes.com/pacific-nw-magazine/game-on-women-are-developing-new-video-games-and-a-new-culture/; last accessed 19 August 2020.
- Keogh, Brendan. 2019. "From Aggressively Formalised to Intensely in/Formalised: Accounting for a Wider Range of Videogame Development Practices." *Creative Industries Journal* 12 (1): 14–33. https://doi.org/10.1080/17510694.2018.1532760.
- Kerr, Aphra. 2006. *The Business and Culture of Digital Games: Gamework/Gameplay*. London/Thousand Oaks, CA: Sage Publishing.
- ———. 2017. Global Games: Production, Circulation and Policy in the Networked Era. New York: Routledge.
- Kline, Stephen, Nick Dyer-Witheford, and Greig de Peuter. 2003. *Digital Play: The Interaction of Technology, Culture, and Marketing*. Montréal; London: McGill-Queen's University Press.
- Kocurek, Carly A. 2012. "The Agony and the Exidy: A History of Video Game Violence and the Legacy of Death Race." *Game Studies* 12 (1). http://gamestudies.org/1201/articles/carly_kocurek; last accessed 19 August 2020.
- Kücklich, Julian Raul. 2005. "Precarious Playbour: Modders and the Digital Games Industry." The *Fibreculture Journal*, no. 5. http://five.fibreculturejournal.org/fcj-025-precarious-playbour-modders-and-the-digital-games-industry/.
- Kultima, Annakaisa. 2018. *Game Design Praxiology*. Tampere: Tampere University Press.
- Lankoski, Petri, and Jussi Holopainen. 2017. *Game Design Research: An Introduction to Theory & Practice*. Pittsburgh, PA: ETC Press.
- Massanari, Adrienne. 2017. "#Gamergate and The Fappening: How Reddit's Algorithm, Governance, and Culture Support Toxic Technocultures." *New Media & Society* 19 (3): 329–46. https://doi.org/10.1177/1461444815608807.



- Maxwell, Richard, and Toby Miller. 2012. "Warm and Stuffy': The Ecological Impact of Electronic Games." In *The Video Game Industry: Formation, Present State, and Future*, edited by Peter Zackariasson and Timothy L. Wilson, 179–97. Routledge Studies in Innovation, Organization and Technology. New York/Abingdon: Routledge.
- Mayer, Vicki, Miranda J. Banks, and John Thornton Caldwell (eds) 2009. *Production Studies: Cultural Studies of Media Industries*. New York: Routledge.
- McRobbie, Angela. 2016. *Be Creative: Making a Living in the New Culture Industries*. Cambridge, UK/Malden, MA: Polity Press.
- Menger, Pierre-Michel. 1999. "Artistic Labor Markets and Careers." *Annual Review of Sociology* 25: 541–74.
- Montfort, Nick, and Ian Bogost. 2009. *Racing the Beam: The Atari Video Computer System*. Platform Studies. Cambridge, MA: MIT Press.
- Neff, Gina. 2012. *Venture Labor: Work and the Burden of Risk in Innovative Industries*. Cambridge, MA: MIT Press.
- Nooney, Laine. 2013. "A Pedestal, A Table, A Love Letter: Archaeologies of Gender in Videogame History." *Game Studies* 13 (2). http://gamestudies.org/1302/articles/nooney; last accessed 19 August 2020.
- O'Donnell, Casey. 2014. *Developer's Dilemma: The Secret World of Videogame Creators*. Inside Technology. Cambridge, MA: The MIT Press.
- Pajot, Lisanne, and James Swirsky. 2012. *Indie Game: The Movie*. Documentary. BlinkWorks Media.
- Parker, Laura. 2017. "How Australia's Gaming Industry Is Leading the Way in Fighting Sexism." *The Guardian*, 25 August 2017. https://www.theguardian.com/culture/2017/aug/26/how-australias-gaming-industry-is-leading-the-way-in-fighting-sexism; last accessed 19 August 2020.
- Penix-Tadsen, Phillip (ed.) 2019. *Video Games and the Global South*. Pittsburgh, PA: ETC Press.
- Riot Games. 2009. League of Legends. PC. Los Angeles, CA: Riot Games.
- Ruggill, Judd Ethan, Ken S. McAllister, Randy Nichols, and Ryan Kaufman (eds) 2017. *Inside the Video Game Industry: Game Developers Talk about the Business of Play*. New York: Routledge.
- Schreier, Jason. 2017. Blood, Sweat, and Pixels: The Triumphant, Turbulent Stories behind How Video Games Are Made. First edition. New York: Harper Paperbacks.
- ——. 2018. "Inside Rockstar Games' Culture Of Crunch." Kotaku. 23 October 2018. https://kotaku.com/inside-rockstar-games-culture-of-crunch-1829936466; last accessed 19 August 2020.
- ——... 2019. "How BioWare's Anthem Went Wrong." *Kotaku*. 2 April 2019. https://kotaku.com/how-biowares-anthem-went-wrong-1833731964; last accessed 19 August 2020.



- Shaw, Sue, and Gill Homan. 2013. "HR Issues in the Computer Games Industry: Survival at a Price." In *Changing the Rules of the Game: Economic, Management and Emerging Issues in the Computer Games Industry*, edited by Sabine Hotho and Neil McGregor, 122–41. London: Palgrave Macmillan UK. https://doi.org/10.1057/9781137318411_8.
- Sotamaa, Olli. 2007. "Let Me Take You to The Movies: Productive Players, Commodification and Transformative Play." *Convergence: The International Journal of Research into New Media Technologies* 13 (4): 383–401. https://doi.org/10.1177/1354856507081961.
- Sotamaa, Olli, Kristine Jørgensen, and Ulf Sandqvist. 2020. "Public Game Funding in the Nordic Region." *International Journal of Cultural Policy* 26 (5): 617–32. https://doi.org/10.1080/10286632.2019.1656203.
- Sotamaa, Olli, and Tero Karppi. 2010. "Games as Services." Final Report. TRIM Research Reports. Tampere: University of Tampere.
- Švelch, Jan. 2016. "'Footage Not Representative': Redefining Paratextuality for the Analysis of Official Communication in the Video Game Industry." In *Contemporary Research on Intertextuality in Video Games*, edited by Christophe Duret and Christian-Marie Pons, 297–315. Hershey, PA: IGI Global.
- ——. 2017. "Playing with and against Microtransactions: The Discourses of Microtransactions Acceptance and Rejection in Mainstream Video Games." In *The Evolution and Social Impact of Video Game Economics*, edited by Casey B. Hart, 101–20. Lanham, MD: Lexington Books.
- ——. 2019. "Resisting the Perpetual Update: Struggles against Protocological Power in Video Games." *New Media & Society* 21 (7): 1594–1612. https://doi.org/10.1177/1461444819828987.
- Trammell, Aaron. 2019. "Analog Games and the Digital Economy." *Analog Game Studies* VI (I). http://analoggamestudies.org/2019/03/analog-games-and-the-digital-economy/; last accessed 19 August 2020.
- Tyni, Heikki. 2020. "Double Duty: Crowdfunding and the Evolving Game Production Network." *Games and Culture* 15 (2): 114–37. https://doi.org/10.1177/1555412017748108.
- Weststar, Johanna, and Marie-Josée Legault. 2019. "Building Momentum for Collectivity in the Digital Game Community." *Television & New Media* 20 (8): 848–61. https://doi.org/10.1177/1527476419851087.
- Whitson, Jennifer R. 2019. "The New Spirit of Capitalism in the Game Industry." *Television & New Media* 20 (8): 789–801. https://doi.org/10.1177/1527476419851086.
- Whitson, Jennifer R, Bart Simon, and Felan Parker. 2018. "The Missing Producer: Rethinking Indie Cultural Production in Terms of Entrepreneurship, Relational Labour, and Sustainability." *European Journal of Cultural Studies*, December, Online First. https://doi.org/10.1177/1367549418810082.



Williamson, John, and Martin Cloonan. 2007. "Rethinking the Music Industry." *Popular Music* 26 (2): 305–22.

Wolf, Mark J. P. 2015. Video Games around the World. Cambridge, MA: MIT Press. Zackariasson, Peter, and Timothy L. Wilson (eds) 2012. The Video Game Industry: Formation, Present State, and Future. Routledge Studies in Innovation, Organization and Technology. New York/Abingdon: Routledge.

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