
This is the **accepted version** of the journal article:

Torres Díaz, Juan Francisco; Feliu i Samuel-Lajeunesse, Joel; Gil-Juárez, Adriana. «Are inclusion and diversity even possible? A best-fit framework synthesis of video game development ethnographies». *Games and Culture*, Vol. 21, Num. 6 (2025), p. 1379-1403 DOI 10.1177/15554120251323334

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Title

Are inclusion and diversity even possible? A Best-Fit Framework Synthesis of video game development ethnographies.

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Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the Consejo Nacional de Humanidades, Ciencias y Tecnologías from México (Scholarship number 836632).

Ethical approval and informed consent statements

The present investigation subscribes to the European Code of Conduct for Research Integrity of All European Academies (ALLEA).

https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/european-code-of-conduct-for-research-integrity_horizon_en.pdf

Abstract:

This article synthesizes qualitative evidence from ethnographies within video game development companies. A best-fit framework synthesis was conducted, combining the strengths of framework and thematic analysis to interpret the results of 55 ethnographic studies. The analysis revealed that the field of video game development is dominated by the technologists and publishers with economic and cultural capitals determining the positions within the field. Within every studio cultural, economic, and social capitals significantly influence developers' experiences, with persistent issues of job precarity, extended working hours, and underrepresentation of marginalized groups. Developers often face limited creative freedom and significant control which affects their work dynamics and inclusion efforts. Despite these challenges, some studies highlighted peripheral areas where diversity is actively sought and valued. The findings underscore the need for targeted interventions at multiple ecological levels to foster a more inclusive and diverse video game development industry.

Key words: Best-Fit framework synthesis, game development, ethnographies, capitals, inclusion

" If you've got to spend your life making a living at something, you might
as well do your best to glamorize it a little ".

- Paco Ignacio Taibo II.

From its humble beginnings, whether at the University of Cambridge in 1952 or at Brookhaven National Laboratories in 1958 (DeMaria, 2019), video game development has gone from being an isolated and localized practice to being considered a desirable profession where one can make

a living creating cultural products (Stone, 1995). Since the 1970s, the great mythology of video games began with the birth of Atari as an international commercial company (Donovan, 2010), since then the industry has been on an unstoppable course, and with it the mythology surrounding it has grown, wrapped in glamour, fame, money, recognition and passion. However, the industry is quite different between what companies really do and what consumers and potential future employees believe (Bulut, 2015a). According to Jennifer Whitson (2020) we tend to learn about the world of video game development through design textbooks, project postmortems, and academic studies of the industry. These references are extremely valuable; however, the vast majority lack a day-to-day approach to development as it naturally occurs within studios, leaving out many of the more complex parts of the industry (Kultima, 2018). Common within the medium are issues of job precarity (Browne, 2015; Bulut, 2015b, 2020; Farmer, 2021; O'Donnell, 2008), stress and burnout related to the widespread practice of extended hours, better known as crunch (Gidley & Palmer, 2022, 2023), harassment, sexism and gender-based violence (D'Anastasio, 2018), and lack of gender and racial diversity and inclusion (Fisher & Harvey, 2012; Johnson, 2010, 2013, 2014).

To this day, the industry is still dominated by a standard subject model: a male, white, heterosexual, young man between the ages of 25 and 40, with upper-middle socioeconomic status and a college education (Bulut, 2021; Consalvo, 2008; D'Anastasio, 2018; Farmer, 2021; Fisher & Harvey, 2012; Johnson, 2010, 2014, 2018; Romie, 2016). Studies such as Bailey et al. (2021) confirm that although the number of women in the industry has increased, female developers are still the minority. International surveys, such as those conducted by the International Game Developers Association (IGDA, 2022), or national surveys, such as the White Paper on Spanish Video Game Development (DEV, 2023), repeat what we already know:

two thirds of the workforce is made up of the type of male subject described above. In this context of not only demographic but also symbolic domination (Johnson, 2013), it becomes essential to understand the stratification of the industry, the power dynamics, and the testimonies of access to the industry from different perspectives.

Empirical studies that attempt to address the everyday life of development are scarce (O'Donnell, 2014; Sotamaa, 2021), and they are usually based on methodologies that focus on interviews, documentary review, and software deconstruction. Even rarer are the investigations that give us an everyday view through an ethnographic approach (Whitson, 2020). The reason is simple: the industry has legal practices against the disclosure of information, each person within the industry signs NDA's that prohibit them from talking about their work and the projects developed; in addition, there is a distrust towards academia (Nieborg, 2011). Because of this difficulty in accessing the sector, those ethnographies that manage to show us everyday aspects of the industry take on a special value, so it is important to make the most of their contributions.

For this reason, we are interested in knowing how these ethnographies have addressed the issue of inclusivity and diversity in video game development. Therefore, the purpose of this article is to conduct a qualitative synthesis of the evidence generated in ethnographies of video game development, to systematize the findings of these studies, and to assess their contributions to diversity and inclusion. There are currently more than thirty methods for conducting a synthesis of qualitative evidence (Noyes et al., 2018). For the present article, we chose to use the Best-Fit framework synthesis method, following the suggestion of Flemming and Noyes (2021). This method combines the strengths of a framework analysis with those of a thematic analysis by interpreting the results of other studies from deductive categories generated from a specific theoretical framework; at the same time, it allows us to generate inductive and descriptive

categories about topics that are important but do not fit into the framework. In other words, there is an *a priori* theoretical vision, but this perspective is not imposed on all the data, since those issues that fall outside the theory can be understood under emergent categories.

In this way, we can fulfill Whitson's (2018) suggestion of continuing to learn from ethnographies of videogame development, while also positioning them as one of the most valuable and necessary avenues within game studies. Therefore, the *a priori* theoretical framework must allow us to be sensitive to both the more structural elements found in companies and institutions, as well as the day-to-day practices and feelings of developers. Also, it must be able to help us understand the state of diversity and inclusion in the industry. In the next section we break down the key concepts of our framework, Pierre Bourdieu's field, capital(s) and habitus, and show how they can be combined with Nira Yuval Davis' contributions to the concept of intersectionality.

Constructivist structuralism and situated intersectionality

The first concept is the notion of field developed by Bourdieu. A field is a network or configuration of objective positions occupied by agents or institutions; these positions are structured on the basis of the distribution of species of power (or capital) with more value for the specific field (Bourdieu & Wacquant, 1992). Every field is a site of struggle, where actors seek to impose a dominant definition of who can participate (Bourdieu, 1993). In the specific case of the video game field, the central struggle lies in defining who can be called a "video game maker," thereby determining who has access to the space (Keogh, 2021). By considering the production, distribution, and consumption of video games as a field, we can better understand the network of relationships between agents and institutions and how power is distributed within it; and why,

despite the changes that have occurred in the way video games are created, the field continues to present such a pronounced dominance by the standard subject mentioned above

Wherever there is a field, there are capitals, which constitute the currency that, by virtue of its possession or lack of it, determines the *position* that each agent or institution occupies in the field, whether as dominant or dominated, as hegemony or periphery. For Bourdieu (1986), capital appears in three basic forms. First, economic capital, which is directly perceived in the form of money or economic goods such as property rights. Second, cultural capital, which can exist in three different forms: (a) in the embodied state, which is manifested in the practices, skills, or attitudes that a person has acquired and internalized; an example in video game development is the knowledge of coding and the use of specific software in design and art creation; (b) in the objectified state, which is flaunted in cultural goods that are valued by peers, such as books on development or video game-related collectibles; and (c) in the institutionalized state, which includes credentials or certificates endorsed by an educational institution, such as university degrees. Third, social capital is expressed through the ties, connections, and contacts available to an actor. A fundamental nuance is that we can define symbolic capital in terms of the possession and recognition of the capitals described above, or, in other words, that recognition of status is granted to an agent in the knowledge that he or she possesses the requisite species of economic or cultural power (Bourdieu, 1990a).

Essential concepts of structuralist constructivism, such as the notions of capital(s), allow us to understand how the establishment and maintenance of inequalities in a field is structured from the relationships between class, race, and gender (Woodward, 2018). From these intersections, Helga Nowotny (1981) develops the notion of emotional capital, which she defines as knowledge, relationships, and skills focused on emotional management and care. According to

the author, this capital is mainly valued in the private sphere, traditionally assigned to women through all the mechanisms of male domination and *symbolic violence* (Bourdieu, 2002). In the public sphere, only in certain fields such as medicine or education (through activities labeled as "feminine" such as nursing or teaching children) this type of capital is seen as desirable. Yuval-Davis (2015) warns us of the complexity of experiences when considering the intersections of identities and contexts, how different forms of oppression intersect simultaneously and specifically in each context, which we must be attentive to recognize the different positions within each interaction.

The next relevant notion is that of *habitus*. For Bourdieu (1990b):

“It ensures the active presence of past experiences, which, deposited in each organism *in the form of schemes of perception, thought and action*, tend to guarantee the 'correctness' of practices and their constancy over time, more reliably than all formal rules and explicit norms.” (p. 54, emphasis added).

In simple terms, the *habitus* is a set of *dispositions* that ensures consistency in our social actions across different contexts. It should be clarified that the *habitus* is never a mechanical replica of social structures; each person experiences different contexts that can reinforce or challenge our *habitus*, creating inconsistencies and ruptures (Wacquant, 2018). These multiple structures of a *habitus* come from experiences related to the various axes of social division that shape us as intersections - gender, race and class, etc. (Yuval-Davis, 2015). These different intersections are constituted by one another but cannot be reduced to one another; each has a different ontological basis that establishes power dynamics, symbolic exchanges, and position in the social hierarchy (Stoetzler & Yuval-Davis, 2002).

In the case of gender, the power dynamics are shaped around the ideas of sexuality and reproduction (Yuval-Davis, 2015), in which, according to Bourdieu (2002), femininity has historically been constructed with less value than masculinity in the market of symbolic goods; anything associated with the feminine generally has a passive connotation as opposed to the active masculine. In the case of class, the discourse is sustained around the ideas of production and consumption (Bourdieu, 1987). While the idea of race and racialization is associated with discourses in which the myth of a "common origin" is exalted, whether biological, cultural or historical, which draws boundaries of inclusion/exclusion (Yuval-Davis, 2015). In this sense, we believe it is important to acknowledge that each of us possesses diverse gender *dispositions* (habitus), class dispositions, and racial/cultural dispositions. In addition to this sensitivity to the different types of habitus, Stoelzer and Yuval-Davis (2002) raise the importance of analyzing both marginalized and hegemonic experiences, because for a liberating and emancipatory movement to take place, it is necessary to understand how people at the center of power think and act.

Below, we present the steps taken to achieve a qualitative synthesis of the ethnographies conducted in video game companies to understand the barriers to diversity and inclusion they present.

Method

To achieve our objective, we followed the PRISMA protocols for a systematic review approach (Page et al., 2021). As a first step, we searched and identified ethnographies conducted in the field. **Table 1** shows the databases we used, as well as the keywords and their combinations. **In a**

field like video games, which is inherently interdisciplinary, there are various terms by which workers within the industry can be identified. Recently, authors such as Sotamaa and Svelch (2021) and Keogh (2023) have proposed alternative terms like “game production” and “gamemaker,” respectively. These terms challenge the dominant concept of “development” as a definition tied to hegemonic production in the video game industry. In our case, the decision to use the terms “video game developer” and “game development” is a deliberate theoretical choice, grounded in our goal of examining how inclusion and diversity have been addressed within this hegemonic “industry.” Ultimately, this decision represents a trade-off: while we may overlook ethnographies conducted in peripheral and alternative production spaces, we gain a body of texts that—consciously or unconsciously—reproduce the idea of development as the primary space of creation, a space where historically, there have been limited changes regarding diversity and inclusion.

The limits we set for the search were texts in English, with keywords in the title, abstract or keywords; except in Google Scholar, whose search options only allow searching in the title or all text fields, so we chose the latter. The types of articles we selected were articles, books, dissertations, theses, and proceedings. Finally, we considered all studies published up to the date of the search, March 2023.

Table 1 Search strategy for the review

Databases: SCOPUS, Web of Science, Emerald and Google Scholar.	
Limits: Language (English), In Title/Abstract/Key words,	
Document: Article, Books, Dissertation, Thesis and Proceedings	
Date of publication: All times	
Search strategy: 1 OR 2 OR 3 OR 4	
1	* ethnographic game developers
2	*ethnographic game development
3	*game development ethnography
4	* ethnography game developers
Example (SCOPUS)	TITLE-ABS-KEY (*ethnographic game developers*) OR TITLE-ABS-KEY (*ethnographic game developers*) OR TITLE-ABS-KEY (*ethnographic game developers*) OR TITLE-ABS-KEY (*ethnographic game developers*) OR TITLE-ABS-KEY (*ethnographic game developers*)

In the PRISMA scheme below (**Figure 1**), we show the total of 115 articles identified and selected from all databases. We then used Zotero tools to remove duplicate studies (n = 7). We then examined the remaining studies to identify those whose focus went beyond video game development, focusing on software development companies or content creation for social networks or marketing, for which we searched for keywords such as *software* and/or *digital content*; we excluded 16 studies in this step.

[Insert Figure 1.]

Finally, we evaluated the studies (n=92) according to the following inclusion criteria: 1) *Type of study*, empirical studies reporting direct data from ethnography; 2) *Context*, ethnographic studies conducted within video game development spaces such as companies, incubators and accelerators; 3) *Techniques used*, studies whose main source of information are field diaries or ethnographic interviews. Studies had to meet all inclusion criteria. The three authors reviewed the texts in depth, with the first author reviewing all the studies and the remaining two authors

each reviewing half of the articles, so that each study received two different reviews. We held agreement and disagreement meetings to resolve the discrepancies. Finally, we excluded thirty-seven studies because they did not meet one or more of the criteria. Therefore, we selected fifty-five articles for the present analysis.

Quality assessment

We assessed the selected articles using the Critical Appraisal Skills Program (CASP) checklist for qualitative studies (2023). This checklist consists of ten questions that assess the validity, clarity and usefulness of each study. We followed the same procedure, with the lead author rating all articles and the remaining authors dividing the articles in half. Most of the articles (n=48) satisfactorily met all the quality conditions, only five articles did not meet the condition of a rigorous analysis, and two others had only some other section where their quality could not be determined, but they provided interesting information and, met half or more of the conditions, so they were not discarded (see **Appendix 1**).

Best-Fit Framework Analysis

Once the quality of the studies was assured, we proceeded with qualitative evidence synthesis (Grant & Booth, 2009). The first step was the operationalization of the categories in our *a priori* framework. This process involved identifying the key theoretical concepts from Pierre Bourdieu (1990a, 1990b)—field, capital(s), habitus, and symbolic violence—and Yuval-Davis’s concept of situated intersectionality (2015, 2016)—belonging—and adapting them to the field of video game development. All authors reviewed the operationalizations until consensus was reached across all categories (see Appendix 2). Together, these categories allowed us to reevaluate the findings from the

ethnographies within video game companies to understand how the dynamics within such a hegemonic industry allow for diversity and inclusion.

Coding

Once our a priori framework was developed, we began coding our texts, which involved two procedures: deductive coding based on our a priori categories and inductive coding based on codes *in vivo* (Flemming & Noyes, 2021). The second method, unlike the first, allows for the development of emerging categories using the language expressed within the research. For example, in our case, the concept of "game talk" proposed by O'Donnell (2014) represented an important idea that we believed should not be overlooked within our a priori categories. This is precisely where the main strength of the Best-Fit analysis framework lies.

We used ATLAS.ti software (version 9.1.7) to perform the coding of the 55 studies included in our study. The lead author coded all documents; during this process, we held sessions in which all researchers discussed coding from the framework, resolved coding disagreements, and generated new thematic categories. These sessions continued through the synthesis process, where we decided on the final categories that would be part of the findings for this article.

Results

The analysis resulted in 240 codes from which we collected a total of 6,582 citations.

Table 2 shows each of our a priori categories, as well as the number of citations generated within each category; and the **Appendix 3** shows one hundred thematic categories, as well as the number of citations generated by each category. Combining these two tables, the ten categories with the highest presence across ethnographic studies were embodied cultural capital (n=518), creativity (n=506), developers (n=266), testers

(n=242), economic capital (n=233), passion (n=224), gamer (n=214), community (n=200), indie (n=200), and gender habitus (n=191).

Table 2 Framework *a priori* categories and their number of citations

Code	N° Citations
Embodied Cultural Capital	518
Economic Capital	233
Gender Habitus	191
Social Capital	168
Habitus Other	100
Symbolic Capital	80
Emotional Capital	50
Symbolic Violence	48
Racial Habitus	40
Institutionalized Cultural Capital	35
Belonging Social Location	25
Belonging Ethics and Politics	17
Class Habitus	15
Field	11
Belonging Identification and Emotion	11
Objectified Cultural Capital	9

In the following, we present the analysis of the ethnographies based on our *a priori* framework. The logic of the analyses follows the order in which we introduced our theoretical concepts: we begin by describing the development of video games under the notion of field, then

we analyze the valued capitals and the dominant habitus, then we describe the complexity of identifying belonging in intersectional categories due to the dominant identity label of gamer. Finally, the thematic analysis addresses the category of creativity and its relationship to control, militarization, and working conditions.

The field of video game development

In recent years, Brendan Keogh (2021, 2023) has conceptualized the field of video game production in a way that challenges the traditional notion of an industry. In our case, while naming “the field video game development” may seem like a subtle and insignificant difference, it positions us on different analytical scales. Keogh’s (2023) approach is much broader, as it includes peripheral and alternative spaces of creation, whereas our approach, by using the term “development,” aligns more closely with the hegemonic image of the industry. As we explained earlier, this decision is deliberate, as we aim to understand how this dominant production field is structured.

Any field can be mapped to identify how it is structured, who the main actors are, what their current and possible positions are, and what specific capitals are at stake in this structuring. A crucial point to consider is that we can only understand a specific state in the evolution of any field. Bourdieu (1993) reminds us that every field is a site of struggle and, as such, is in constant transformation. In Figure 2, we present a map that reflects the state of the field video game development between 2010 and 2015. Over the past decade, this field has undergone significant changes, as Keogh (2023) suggests, a more in/formalized industry has been generated.

Our cartography is composed as a Cartesian plane, where the Y-axis (vertical) is defined by the economic capital possessed by each actor, while the X-axis (horizontal) is determined by

the cultural capital, understood as the intellectual properties under the control of each actor; these can range from characters, stories and/or technological patents.

The domain of this field belongs to the technologists, a term adopted by Johnson (2010). There are currently three companies that can be grouped under this term: Nintendo, Sony and Microsoft. Their dominance lies in the development of specialized video game consoles and the DevKits required for video game production (Browne, 2015; O'Donnell, 2014). These companies have the resources and logistical structure to publish and distribute their own video games, and throughout their history they have acquired dozens of other developer studios to work exclusively for them (Johnson, 2010).

At the center of the field, we found the publishers. They play two indispensable roles, the first consists in financing the development studios, it is in this agreement that the publishers acquire control over the projects, determining the times and limits of development; this is perfectly in line with what Bourdieu (1988) has described in other fields where cultural capital is dominated by economic capital, in this case all the work of the developers is subordinated to the guidelines of the publishers who provide the financing. It is common for this funding to end in many cases in an acquisition, where the developer studio becomes part of the publisher. The second role derives from the first and is the distribution of video games to the market for consumption. Even with the rise of virtual stores for free distribution, such as Steam, Google Play, Epic Store or App Store, publishers continue to perpetuate their power; it is almost impossible for a developer to be visible in the sea of video games that are published every day, so it is necessary to have the support of a publisher to stand out (Gómez, 2014; Gómez and González-Pérez, 2015).

At the bottom of the field are the developers' studios. Within this space we place a subdivision. In his dissertation, Browne (2015) presents a scheme created by Jason Della Rocca to explain the typology of studios along two axes: creative freedom and legal freedom. We keep the Y-axis (vertical) as economic capital, while the X-axis (horizontal) is the creative freedom proposed by Della Rocca. Following this new logic, we find three possible spaces: 1) AAA, those companies with high economic production values but less creative freedom; 2) AA, development companies that have emerged in recent years that have high production values, and, as relatively new studios they propose IPs with greater freedom; and finally, 3) Indie, which, without losing sight of the proposal on the multiple definitions of the term proposed by Lipkin (2013), in our mapping we associate it with those actors who have more limited economic capital but have enormous creative freedom.

The different possible positions of developers are structured according to the logic that in the art world the self-proclaimed true art is separated from the mass content (Bourdieu, 1993). Independent developers find value in their creative freedom, and although they want to be able to live from their creations, they are not willing to commit to a large corporation, they are not "sellouts" despite being in a precarious economic situation; they find value in creating "honest and true" video games. For its part, AAA production is the place where economic security is most common - it is not the norm, as according to Bulut (2015) precarity is present throughout the industry, just in different intensities - but creators often feel like they are on a production line where they have little to no influence in the games they create. As Browne (2015) describes: "in mainstream industries, creative labor (art, engineering, design) has often been pitted against business concerns (marketing, management, community development)" (p. 26).

[Insert Figure 2]

Capitals and habitus in video game production

Development studios are typically organized into several teams, each with its own software skills and management (Ash, 2010, 2016). The most mentioned teams within studios are design, coding, art, and testers. Designers are the superstars of the industry due to the embodied cultural capital they possess, supported by the notion of "fun"; their job is to create fun mechanics that provide players with hours of entertainment (Banks, 2009, 2013). This cultural capital is not something that can be learned, it is something more artisanal, one cannot pedagogically learn what is fun, one simply develops the expertise to create fun experiences. This non-explicit craft knowledge allows designers to be at the highest point of development (Bourdieu, 1993), forming an elite that is difficult to access.

In a second place we have the coders; in a field so dependent on technology, it is not surprising that the holders of such cultural capital occupy a dominant place within companies, often being the meeting point between the different teams. They are the ones who translate "fun" concepts into code that can be implemented in the game, just as they translate art into a world that can be explored (Tran & Biddle, 2008, 2009). Then, as part of the so-called creative jobs (Cohendet & Simon, 2007), we have the art team. The cultural capital that this group possesses comes from, among other things, their attachment to visual arts practices such as drawing, sculpture, writing, and music, as well as the notions of aesthetics associated with them (Jørgensen, 2019). This type of knowledge is in a dominated position within the field of video games, as Pelletier (2022) reports, it is the technological capabilities of each generation that have dictated the type of aesthetics allowed, whether in the early 8-bit or 16-bit consoles to the present day,

where more realism is sought. In other words, historically, art has been at the service of game mechanics and technology. At the bottom rung of jobs directly related to video game development are testers. They are in a distinct position because their job is to find bugs so that artists, coders, and designers can fix them. Despite the fact that ensuring product quality is an essential job, testers are perceived as lacking cultural capital, they are seen without any skills and knowledge, in short, they are considered deskilled (Bulut, 2014).

Although each of these jobs has a specific cultural capital, they all share two fundamental characteristics: game talk and passion for video games. Game talk is a concept created by O'Donnell (2014) to refer to the cultural capital that allows developers to talk about complex concepts through references to old games, gameplay mechanics, specific missions or levels, and particular sensations created in a video game – a similar concept is found in Peppler and Kafai's (2010) gaming fluencies. In the authors' words: "This vernacular works because games provide developers with discursive resources to describe abstract concepts of the game, such as its mechanics. Since there is no "discipline" of game development, games themselves have become a kind of *lingua franca*." (O'Donnell, 2014, p. 42).

This *lingua franca* is essential within the field of development and is reinforced by the expression of passion, which ultimately becomes a *disposition (habitus)* essential to access the field of video game development (Bulut, 2015). It even becomes an explicit mandate within companies, as shown by Morgan Romine (2016) who, in her observation of the BlueSky Games studio, notes that among the studio's eight values, number three expresses "Be passionate, love video games, have fun." Both, talking about and being

passionate about video games are learned from the childhood and adolescence of developers and excludes those who have not had that opportunity. Ultimately, passion at all levels becomes a double-edged sword, as it is a fundamental part of workers' *dispositions*, but at the same time it is directly related to crunch and work precarity. As Consalvo (2008) describes, no one is exempt from this phenomenon; in order to prove that they are truly passionate about video games, developers tend to fall into a perpetual state of "self-imposed" exploitation.

Another commonality among developers is that they mostly share a masculinized gender habitus. In each position, it is presented with specific nuances, for example, designers reinforce practices related to militarization or violence in the mechanics of their video games (Keogh, 2015; Styhre, 2020). Programmers, as representatives of the technological component, are linked to the idea that science and technology are the domain of men, this idea is what Johnson has called techno-masculinity (2018). Artists, for their part, tend to reproduce aesthetic ideas associated with the hypermasculine, hyperfeminine and hypersexualized. As Stone (1985) mentions when talking about the development of video games, in the 1980s the presence of female characters was common for the sole purpose of exposing them to the gaze of the protagonist, and although there has definitely been a change since those years, hypersexualized stereotypes are still reproduced (Johnson, 2010). Even the testers reproduce a masculinized habitus by maintaining a workspace associated with the ideals of the college fraternity. As mentioned by Bulut (2015a) in his description of the tester pit, toys, junk food, talk about competition and jokes very characteristic of American fraternities

abound, something that has been present since the beginning of the industry (Stone, 1985).

Sotamaa (2021) perfectly describes how the industry in general is divided along gender lines, with creative positions dominated by men, while other positions such as marketing and human resources are considered feminine. This dominant masculine *habitus* in creative positions is reproduced and perpetuated on a daily basis. Recently, Foust (2024), also relying on the concept of habitus, argues that misogyny is a prevalent *disposition* in some video game companies. This conclusion is particularly evident through the analysis of the lawsuit filed by the California Department of Fair Employment and Housing (DFEH) against Activision Blizzard in 2021. The lawsuit highlights the daily experiences of workers, including assault, harassment, and structural sexism. According to Foust, assault is a behavior so severe that it is universally regarded as unacceptable. Harassment, on the other hand, is often more subtle, manifesting in jokes and comments, which makes it harder to prove its seriousness or intent in a legal context. Lastly, structural sexism refers to invisible practices, such as the lack of consideration for or promotion of women within the company, either because they are seen as less capable or as a form of retaliation for resisting the company's sexist culture. While not all employees engaged in these behaviors, they were nonetheless perceived as common occurrences, reinforcing the misogynistic *disposition* (habitus) within Activision Blizzard. This normalization of such behavior helps explain the significant challenges in creating safe, diverse, and inclusive spaces (Johnson, 2013).

The gamer: categorical belonging and masculinity

The ethnographies collected do not allow for much exploration of the experience of belonging and the multiple intersections within the field of video game development. We

attribute this to two fundamental factors, the first having to do with the apparent demographic and symbolic dominance of masculinity, while the second is the need to be labeled as a gamer in order to belong.

Regarding the first factor, the gender gap in video game production is a historical problem (Stone, 1985) that unfortunately persists to this day. The solution to this problem is more complex than simply "adding more women to the industry" because, as Fisher and Harvey (2012) mention, if the dominant narrative is not challenged, attempts at inclusivity have a high probability of failure. Ultimately, every habitus seeks to reproduce itself regardless of the actor exercising it, or in other words, when women enter the field, they are forced to adopt some masculinized *dispositions* – through symbolic violence at best, and physical violence or harassment at worst – in order to fit in (Bourdieu, 2002).

For this reason, gender-centered studies such as Johnson (2010, 2013, 2018), Romine (2016), Shaw (2015), or Westecott et al. (2019) are essential. However, this centrality has sometimes overshadowed and left out more intersectional visions interested in analyzing gender along with class and race. The development of video games has a middle-class tinge, the prices of consoles and video games in all countries make them an entertainment accessible only to middle- and upper-class strata. According to Bourdieu (1987), video games today serve as a marker of class differentiation. Therefore, when discussing developers, it is important to consider the role of class predispositions.

When examining race and culture, we identify two key aspects: first, each region has its own unique racial and cultural perspective; second, this topic has been somewhat marginalized in the ethnographies within our sample. Regarding the first point, Aphra Kerr, in her book *Global Games* (2017), argues that understanding the production of video games requires attention to two

distinct scales: the global/international level and the local level of each country or even each city. Kerr advocates for a "translocal" perspective, emphasizing that both international conditions and local factors—such as economic, social, and housing circumstances, labor rights, and, in our case, the racial and cultural outlooks of each region—shape the types of video games produced. Our analysis reveals that most of the ethnographies in our sample focus on the Global North, particularly the United States, Canada, the United Kingdom, Australia, and Nordic countries like Finland, Norway, and Sweden. While each of these regions offers a distinct racial and cultural viewpoint, a dominant theme emerges: a Caucasian/white perspective, which reflects the prevailing notion of the "ideal" developer in the field.

Only three articles in our review present different approaches: Gómez (2014) and Gómez & González-Pérez (2015), which focus on Colombia, and Farmer (2021), who analyzes Cape Town as a development hub. This leads us to the second point: even within ethnographies from different geographical contexts, only Farmer (2021) adopts an intersectional approach to examine the impact of racial and cultural perspectives on video game production. This highlights the need for ethnographic studies that follow a translocal framework, aiming to understand the various racial and cultural *dispositions* (habitus) that influence video game development. Among the ethnographies that explore these interests are Farmer (2021), Fisher and Harvey (2012), Johnson (2014), and Peppler and Kafai (2007, 2010).

Regarding the second factor, gamers are typically defined by their passion for video games, often fitting a white, middle-class, masculine *dispositions* (habitus). The logic within the field is that prior identities of gender, class, and race should be erased because one is first and foremost a gamer. This kind of logic is similar to the one

described by Liu (2004) regarding teamwork as a denial of diversity within corporations. Romine (2016) provides an interesting example:

"I talked to several of BlueSky's designers right after they had hired their first woman into the design team, and they consistently described her as passionate. One designer said emphatically "we were looking for passion and she blew everybody's doors off! The chick can communicate with all the same vocabulary. She can dish it as well as anyone else." With some deeper digging, several of those designers mentioned with rich tones of approval that this woman designer had cited *Shadow of the Colossus* as one of her favorite games." p. 134

This designer was glorified because she was enthusiastic and had the same tastes in video games as the rest of the team, making her a *connoisseur*. In this case, Romine (2016) presents us with a successful case where the gamer label is given to a woman, but this is not the general case, although the logic mentioned above dictates that being a gamer erases your other characteristics, it is easier that the honor of being a gamer ends up being given to white-skinned men (Johnson, 2013); women are often mistaken for girlfriends or casual gamers (Fisher & Harvey, 2013). For this reason, we find a double attachment to this label by those who do not fit into being a gamer, or they are people who show greater intensity and proudly carry the gamer credential, accepting the erasure of their characteristics; or on the other hand, they are more reluctant to be called gamers, it is less common for women to called themselves with this label (Shaw, 2015). This makes it more complex to identify places, sensations, and ethics of belonging in different intersections. When those who speak end up seeing themselves primarily as gamers, it becomes almost impossible to open the conversation to diversity and inclusion.

Creativity versus control, militarization and labor

Following the structure proposed by Flemming & Noyes (2021), thematic analysis allowed us to go beyond the limits of the a priori framework to discover and describe other categories that helped us understand what the main interests of ethnographies in video game companies are.

During the thematic analysis, creativity emerged as the most cited category in ethnographies of video game production. However, it has been studied and described from so many discourses that it has become blurred. For example, creativity is a fundamental embodied cultural capital; according to the myth of the field, one cannot make a video game without creativity (Cohendet et al., 2016; Koleva et al., 2015; Tschang & Szczypula, 2006; Young, 2018). It is also the ethos of indie developers who position themselves as different from large corporations that are seen as production lines (Browne, 2015; Styhre, 2020; Styhre & Remneland-Wikhamn, 2021). Similarly, authors such as Grandadam et al. (2013) have noted the tendency for creativity to be concentrated in certain cities, generating particular political and economic dynamics. Creativity is so fundamental that many authors define developers as creative workers and their work as creative labor (Parker & Perks, 2021; Sotamaa, 2021; Vang & Tschang, 2012).

However, there is a fundamental incongruity between what creativity means, what it is commonly desired to be, and the actual practices that delimit it. Creativity encounters and confronts three fundamental issues: control, militarization, and working conditions. Regarding the first, there is a strong interest in all companies to be able to control the creative process of video game development (Zackariasson et al., 2006a; Zackariasson et al., 2006b). In organizational ethnographies, references abound to the logics most used by

teams to structure work and control production time and resources, the most used being the Sprint and SCRUM boards (Goh & Clauss, 2018), even in serious games (Gestwicki & McNely, 2012). For their part, Walfisz et al. (2006) highlight the challenges that project managers face in finding the fine balance between guiding teams to meet work deadlines and leaving room for each employee to maintain their autonomy and creativity. We see this interest in control in the early years of the industry. In Stone's (1985) words, ATARI hired managers from companies such as Lockheed, General Dynamics, Martin Marietta, and McDonnell Douglas to oversee the progress of the programmers of the time. This brings us to the link with militarization. The closeness of video games to the military industry and history is deep, historically present not only at the level of proximity of companies or promiscuity of personnel, but also within video games: the military theme dominates the production scene, which limits creativity in both AAA and indies (Bulut, 2014, 2015). Moreover, it is well known that video games are used in military training exercises (Keller, 2023).

Finally, working conditions represent a paradoxical state between myth and reality. As mentioned by Bulut (2015a, 2015b), because video game development is understood as creative labor, it is believed that working in this industry is entering a field of bonanza and glamour where there is no room for precariousness. However, precariousness is the norm, the only difference being the degree. An example of this is the crunch, which is one of the most common experiences of workers, sometimes reaching loads of more than 12 hours of work per day, even in such prestigious studios as Naughty Dog (Schreier, 2020) and many others. This often has an impact on the health of developers, with burnout often cited after the completion of a project (Farmer, 2021; Gidley et al., 2023). Another common practice associated with precariousness is

often unpaid work, both for developers (Banks, 2013; Pelletier, 2022; Sotamaa, 2021, Young; 2018) and for amateurs who dedicate hours of their lives to creating mods without receiving any economic capital in return (Johnson, 2013).

Conclusions

It is difficult to talk about inclusivity and diversity in the day-to-day life of video game development when the field is structured and reproduces forms of middle-class white male *dispositions* (habitus). The actions of developers perpetuate this habitus by establishing symbolic violence that compels those who are different to adapt and change in order to fit into the field. One example of this is the label 'gamer,' whose logic erases and marginalizes alternative ways of being. In response to this dominant logic, two possible reactions emerge: resistance to these hegemonic identities (Shaw, 2015), or the adoption of these masculine modes of development, as described by Consalvo (2008), in the case of female developers who internalize notions of passion and sacrifice in order to belong to the field. If these practices are not questioned, they can escalate into a full *disposition* of misogyny, as demonstrated by Foust (2024) in the Blizzard case, where assault, harassment, and structural sexism became normalized within the company's culture. For these reasons we can respond that inclusion and diversity are hidden and erased within the field.

But where there is power, there is resistance. Although ethnographies show us the centrality of the field as a space not very prone to difference, proposals like those of Westecott et al. (2019) suggest focusing on inclusion, diversity, and belonging within the industry, considering various ecological levels: personal, interpersonal, team, studio,

company, industry, and society. In this way, the dual social definition of habitus and structure is addressed to target changes within the field (Bourdieu, 1990b). In addition, there are ethnographies such as Fisher & Harvey (2012) and Farmer (2021) that delve into peripheral places where diversity is sought as a valuable resource for making video games. It is in these places that future ethnographies should focus on how video game development is lived, experienced, and struggles to open up.

Regarding the thematic analysis, there are two key points we wish to explore. First, new academic studies should help to clarify the concept of creativity and its different definitions, both in the organizational spots and in the field positions, so that the tension with the practices that limit it does not become the elephant in the room. Being creative is very different for a sound designer than for a programmer (Coleman et al., 2005). Similarly, the recognition of creativity is not the same for a female developer on the periphery, who may be denied access, as it is for a male AAA developer recognized for the mechanics of his video games. Creativity exists in the different positions of each agent in the field, but always in tension with control, militarization, and precarious labor. Therefore, different positions will lead to different definitions (Bourdieu et al., 1991); that is, different possibilities for experimentation and expression.

Second, what is said about a topic is as important as what is left unsaid. In this case, during the thematic analysis, we were surprised by the lack of references in the ethnographies regarding topics such as the game-as-a-service paradigm (Dubois & Weststar, 2022), monetization (van Roessel & Svelch, 2021), and data-analytics (Sotamaa et al., 2023), which are forms of production that have significantly shaped the field of video game development in recent years. Only Banks (2009) and Romine (2016) briefly

address the use of data analytics and monetization models in "free-to-play" games, respectively, in a very peripheral way. The remaining ethnographies in this analysis show little interest in these topics. We believe that the reason for this, as previously noted, lies in the exaltation of creativity and the creative processes of designers, programmers, and artists in video game development, which tends to overshadow decisions more closely related to business and marketing aspects. Of course, these topics have been addressed using other methodologies; however, echoing Whitson (2020) once again, it would be important to adopt an ethnographic approach that illustrates how developers make decisions related to game-as-a-service paradigms, monetization, and data-analytics.

One limitation of our analysis is the specific focus on ethnographies of video game development. The field is much broader than this (Keogh, 2023); there is a need for studies that allow us to learn more about how technologists and publishers signify their position and how they attempt to maintain dominance. We believe that certain characteristics of development studios, such as the white, middle-class male *dispositions*, tend to be replicated in other parts of the field, as companies like Sony act as publishers and own studios where symbolic and real violence is replicated, such as the crunch. (Schreier, 2020). However, despite these similarities, as one moves along the vertical axis within the field, economic capital plays a more decisive role, reproducing much more corporatist logics. We know that this suggestion is very complex to follow, due to the fact that the hegemonic industry is maintained under what O'Donnell (2014) has described as the secret society syndrome: if it is extremely complex to access a studio due to all the secrecy and stipulated NDA's, reaching the upper echelons of the field seems almost impossible, but it is necessary to try to break through.

As Paco Ignacio Taibo II mentions in the sentence that opens this article, we all tend to glamorize our work. Specifically, video game development is a field that has often fallen prey to myths, such as the economic value of the industry (Keogh, 2023) or the exciting nature of developers' work (Bulut, 2020). These narratives have obscured many of the darker aspects of development work. For this reason, this research is dedicated to all those scholars who seek to look beyond these hegemonic narratives. Our proposal aims to highlight the ethnographies that reveal the day-to-day life within the field of video game development, which unfolds amidst a maelstrom of creativity, economic dominance, technomascularity (Johnson, 2013), game talk (O'Donnell, 2014), passion (Romine, 2016), misogyny (Foust, 2014), and, particularly, a lack of gender and racial diversity and inclusion (Fisher & Harvey, 2012).

References.

- Ash, J. (2015). Theorizing studio space: Spheres and atmospheres in a video game design studio. In I. Farias & A. Wilkie (Eds.), *Studio Studies: Operations, Topologies & Displacements* (pp. 91-104), Routledge.
- Ash, J. (2010). Architectures of Affect: Anticipating and Manipulating the Event in Processes of Videogame Design and Testing. *Environment and Planning D: Society and Space*, 28(4), 653-671. <https://doi.org/10.1068/d9309>
- ATLAS.ti Scientific Software Development GmbH. (2021). ATLAS.ti Windows (versión 9.1.7) [Qualitative data analysis software]. <https://atlasti.com>
- Banks, J. (2009). Co-creative expertise: Auran Games and Fury - A case study. *Media International Australia*, 130, 77-89. DOI: 10.1177/1329878x0913000110

- Banks, J. (2013). *Co-Creating Videogames*. New York: Bloomsbury Publishing.
- Banks, J., & Humphreys, S. (2008). The Labour of User Co-Creators: Emergent Social Network Markets? *Convergence*, 14(4), 401-418. <https://doi.org/10.1177/1354856508094660>
- Bourdieu, P. (1986). The Forms of Capital. In J.G., Richardson (Ed.), *Handbook of Theory and Research for the Sociology of Education* (pp. 241-258). Greenwood.
- Bourdieu, P. (1987). *Distinction: A Social Critique of the Judgement of Taste*. Harvard University Press.
- Bourdieu, P. (1988). *Homo Academicus*. Stanford University Press.
- Bourdieu, P. (1993). *The Field of Cultural Production*. Columbia University Press.
- Bourdieu, P. (1990a). *In Other Words. Essays Towards a Reflexive Sociology*. Stanford University Press.
- Bourdieu, P. (1990b). *The Logic of Practice*. Stanford University Press.
- Bourdieu, P. (2002). *Masculine Domination*. Stanford University Press.
- Bourdieu, P., Chamboredon, J. & Passeron, J. (1991). *The Craft of Sociology: Epistemological Preliminaries*. De Gruyter. <https://doi.org/10.1515/9783110856460>
- Bourdieu, P. & Wacquant, L. (1992). *An Invitation to Reflexive Sociology*. The University of Chicago Press.
- Browne, P. (2015). *Jumping the Gap: Indie Labour and the Imagined Indie Community* [Master Thesis, Concordia University].

Bulut, E. (2014). Creativity and it's Discontents: A Case Study of Precarious Playbour in the Video Game Industry [Doctoral Dissertation, University of Illinois at Urbana-Champaign].

Bulut, E. (2015a). Glamor Above, Precarity Below: Immaterial Labor in the Video Game Industry. *Critical Studies in Media Communication*, 32(3), 193–207.
<https://doi.org/10.1080/15295036.2015.1047880>

Bulut, E. (2015b). Playboring in the Tester Pit: The Convergence of Precarity and the Degradation of Fun in Video Game Testing. *Television & New Media*, 16(3), 240-258.
<https://doi.org/10.1177/1527476414525241>

Bulut, E. (2020). *A Precarious Game: The Illusion of Dream Jobs in the Video Game Industry*. Cornell University Press. <http://www.jstor.org/stable/10.7591/j.ctvh1dn1r>

Bulut, E. (2021). White Masculinity, Creative Desires, and Production Ideology in Video Game Development. *Games and Culture*, 16(3), 329-341.
<https://doi.org/10.1177/1555412020939873>

Cohendet, P. & Simon, L. (2007). Playing across the playground: paradoxes of knowledge creation in the videogame firm. *Organizational Behavior*, 28, 587-605.
<https://doi.org/10.1002/job.460>

Cohendet, P. & Simon, L. (2016). Always Playable: Recombining Routines for Creative Efficiency at Ubisoft Montreal's Video Game Studio. *Organization Science*, 27(3):614-632. <https://doi.org/10.1287/orsc.2016.1062>

Consalvo, M. (2008). Crunched by passion: Women game developers and workplace challenges.

In Y. B. Kafai, C. Heeter, J. Denner, & J. Y. Sun (Eds.), *Beyond Barbie and Mortal Kombat: New perspectives on gender and gaming* (pp. 177–192). MIT Press.

Coleman, G., Hand, C., Macaulay, C. & Newell, A. (2005, July 6-9). Approaches to auditory interface design - Lessons from computer games [Conference session]. ICAD 05- Eleventh Meeting of the International Conference on Auditory Display, Limerick, Ireland.

https://www.researchgate.net/publication/213800490_Approaches_to_auditory_interface_design_-_Lessons_from_computer_games

Critical Appraisal Skills Programme (2023). CASP Qualitative Studies Checklist. [online]

Available at: <https://casp-uk.net/checklists/casp-qualitative-studies-checklist-fillable.pdf>

D’Anastasio, C. (2018). *Inside the culture of sexism at Riot Games*. <https://kotaku.com/inside-the-culture-of-sexism-at-riot-games-1828165483>

DeMaria, R. (2019). *High Score! Expanded. The Illustrated History of Electronic Games*. CRC Press.

Desarrollo Español de Videojuegos (2023). Libro blanco del desarrollo español de videojuegos.

https://dev.org.es/images/stories/docs/2023_libro_blanco_dev_media.pdf

Donovan, T. (2010). *Replay: The history of Video Games*. Yellow Ant.

Dubois, L.-E., & Weststar, J. (2022). Games-as-a-service: Conflicted identities on the new front-line of video game development. *New Media & Society*, 24(10), 2332-2353.

<https://doi.org/10.1177/1461444821995815>

Farmer, C. (2021). Arrested (game) development: labour and lifestyles of independent video game creators in Cape Town. *Social Dynamics*, 47(3), 455-471,
DOI:10.1080/02533952.2021.1999632

Flemming, K., & Noyes, J. (2021). Qualitative Evidence Synthesis: Where Are We at?
International Journal of Qualitative Methods, 20.
<https://doi.org/10.1177/1609406921993276>

Fisher, S. & Harvey, A. (2012). Intervention for Inclusivity: Gender Politics and Indie Game Development. *Loading...* 7(11), 25-40.
<https://journals.sfu.ca/loading/index.php/loading/article/view/118/183>

Foust, J. (2024). The habitus of misogyny: Bourdieu and the institutionalization of sexist abuse in the video games industry. *Media, Culture & Society*, 46(4), 762-776.
<https://doi.org/10.1177/01634437231219383>

Gestwicki, P. & McNely, B. (2012, October 18-20). A case study of a five-step design thinking process in educational museum game design [Conference session]. Meaningful Play, Michigan State University, East Lansing, Michigan, USA.
<https://meaningfulplay.msu.edu/2012/program.php?presentation=37&type=paper>

Gidley, D., & Palmer, M. (2022). The impact of video game prototyping in an accelerator as viewed via spatial, temporal, and product scales. *International Journal of Innovation*, 10(3), 410–433. <https://doi.org/10.5585/iji.v10i3.20745>

Gidley, D., Palmer, M. & Gharib, A. (2023). Suffering, recovery and participant experience in a video game development accelerator. *Journal of Organizational Ethnography*, 12(1), 31-45. <https://doi.org/10.1108/JOE-07-2022-0023>

- Goh, K. & Clauss, R. (2018). The Role of Space and Time in Balancing Conflicting Pressures Through Routine Dynamics. *Academy of Management Proceedings*, 1.
<https://journals.aom.org/doi/10.5465/AMBPP.2018.172>
- Gómez, C. (2014). *Colombia in the global videogame industry: More than an emerging industry in more than an emerging country (MIB)* [Master Thesis, Universidad EAFIT].
- Gómez, C. & González-Pérez, M.A. (2015). Internationalization of Video-Game Studios from Emerging Markets: A Colombian Case Study Based on an Activity-Based View. In W. Newburry & M.A. Gonzalez-Perez (Eds), *International Business in Latin America. The AIB-LAT Book Series*. Palgrave Macmillan. https://doi.org/10.1057/9781137409126_8
- Grandadam, D., Cohendet, P. & Simon, L. (2013). Places, Spaces and the Dynamics of Creativity: The Video Game Industry in Montreal. *Regional Studies*, 47(10), 1701-1714.
DOI: 10.1080/00343404.2012.699191
- Grant, M. J., & Booth, A. (2009). A typology of reviews: an analysis of 14 review types and associated methodologies. *Health information and libraries journal*, 26(2), 91–108.
<https://doi.org/10.1111/j.1471-1842.2009.00848.x>
- International Game Developers Association. (2022). Developer Satisfaction Survey 2021. Diversity in the Game Industry Report. https://igda-website.s3.us-east-2.amazonaws.com/wp-content/uploads/2022/11/15161607/IGDA-DSS-2021-Diversity-Report_Final.pdf
- Johnson, R. S. (2010). *The digital Illusio: gender, work and culture in digital game production* [Doctoral Dissertation, University of Iowa]. <https://doi.org/10.17077/etd.0cwut566>

Johnson, R. S. (2013). Toward Greater Production Diversity: Examining Social Boundaries at a Video Game Studio. *Games and Culture*, 8(3), 136-160.

<https://doi.org/10.1177/1555412013481848>

Johnson, R. (2014). Hiding in Plain Sight: Reproducing Masculine Culture at a Video Game Studio. *Communication, Culture & Critique*, 7, 578-594.

<https://doi.org/10.1111/cccr.12023>

Johnson, R. (2018). Technomascularity and Its Influence in Video Game Production. In: N. Taylor, & G. Voorhees (Eds.) *Masculinities in Play. Palgrave Games in Context*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-319-90581-5_14

Jørgensen, K. (2019). Newcomers in a Global Industry: Challenges of a Norwegian Game Company. *Games and Culture*, 14(6), 660-679.

<https://doi.org/10.1177/1555412017723265>

Keller, J. (March 22, 2023). The US military will fight the next big war with Xbox-style video game controllers. *Task and Purpose*. <https://taskandpurpose.com/tech-tactics/us-military-video-game-controllers-war/>

Keogh, B. (2015). Between Triple-A, indie, casual, and DIY. In K. Oakley & J. O'Connor (Eds.), *The Routledge companion to the cultural industries* (pp. 152–162). Abingdon: Routledge.

Keogh, B. (2021). The Cultural Field of Video Game Production in Australia. *Games and Culture*, 16(1), 116-135. <https://doi.org/10.1177/1555412019873746>

- Keogh, B. (2023). *The Videogame Industry Does Not Exist: Why We Should Think Beyond Commercial Game Production*. The MIT Press.
- Kerr, A. (2017). *Global Games Production: Circulation and Policy in the Networked Era*. Routledge Taylor & Francis Group.
- Koleva, B., Tolmie, P., Brundell, P., Benford, S. & Egglestone S. (2015, October 5-7). From Front-End to Back-End and Everything In-Between: Work Practice in Game Development [Conference session]. Annual Symposium on Computer-Human Interaction in Play (CHI PLAY '15). Association for Computing Machinery, New York, NY, USA.
<https://doi.org/10.1145/2793107.2793131>
- Kultima, A. (2018). *Game Design Praxiology*. [Doctoral Dissertation, University of Tampere].
<https://trepo.tuni.fi/handle/10024/103315>
- Lipkin, N. (2013). Examining Indie's Independence: The Meaning of "Indie" Games, the Politics of Production, and Mainstream Cooptation. *Loading...*, 7(11), 8-24.
<https://journals.sfu.ca/loading/index.php/loading/article/view/122/149>
- Nowotny, H. (1981). Women in Public Life in Austria. In C.F. Epstein & R.L. Coser (Eds.) *Access to Power: Cross-National Studies of Women and Elites* (pp. 147–156). George Allen & Unwin.
- Noyes, J., Booth, A., Cargo, M., Flemming, K., Garside, R., Hannes, K., Harden, A., Harris, J., Lewin, S., Pantoja, T., & Thomas, J. (2018). Cochrane qualitative and implementation methods group guidance series—paper 1: Introduction. *Journal of Clinical Epidemiology*, 97, 35–38. <https://doi.org/10.1016/j.jclinepi.2017.09.025>

O'Donnell, C. (2008). The work/play of the interactive new economy: video game development in the United States and India. [Doctoral Dissertation, Rensselaer Polytechnic Institute].

O'Donnell, C. (2009). The everyday lives of video game developers: Experimentally understanding underlying systems/structures. In Games as Transformative Works, Carlson, R. (Ed.) Special Issue Transformative Works and Cultures, 2.
<https://doi.org/10.3983/twc.2009.073>.

O'Donnell, C. (2011). Games are not convergence: The lost promise of digital production and convergence. *Convergence*, 17(3), 271-286. <https://doi.org/10.1177/1354856511405766>

O'Donnell, C. (2012). This is not a Software Industry. In P. Zackariasson & T. L. Wilson (Eds.) *The Video Game Industry. Formation, Present State, and Future*. (pp. 17-33). Routledge.

O'Donnell, C. (2014). Developer's Dilemma. *The Secret World of Videogame Creators*. The MIT Press.

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., et al. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*, 372(71). <https://doi.org/10.1136/bmj.n71>

Parker, F., & Perks, M. E. (2021). Streaming ambivalence: Livestreaming and indie game development. *Convergence*, 27(6), 1735-1752.
<https://doi.org/10.1177/13548565211027809>

Pelletier, C. (2022). Charming work: An ethnography of an indie game studio. *Convergence*, 28(2), 561-578. <https://doi.org/10.1177/13548565211072636>

Peppler, K. & Kafai, Y. (2007, September 24-28). What Videogame Making Can Teach Us About Literacy and Learning: Alternative Pathways into Participatory Culture [Conference session]. DiGRA International Conference: Situated Play, Tokyo, Japan

<http://www.digra.org/digital-library/forums/4-situated-play/>

Peppler, K. & Kafai, Y. (2010). Gaming Fluencies: Pathways into a Participatory Culture in a Community Design Studio. *International Journal of Learning and Media*, 1(4), 1-14.

<https://scholarworks.iu.edu/dspace/items/da85d075-90b8-49c6-bbff-25478fae309b>

Roessel, L. & Švelch, J. (2021). 10. Who Creates Microtransactions: The Production Context of Video Game Monetization. In O. Sotamaa & J. Svelch (Ed.), *Game Production Studies* (pp. 197-216). Amsterdam: Amsterdam University

Press. <https://doi.org/10.1515/9789048551736-012>

Romine, M. (2016). *Fractured Imaginaries: An Ethnography of Game Design*. [Doctoral Dissertation, University of California, Irvine].

https://escholarship.org/content/qt0xf0h1p2/qt0xf0h1p2_noSplash_455e6911bbdbfa13e7aab8575a9c9b82.pdf

Schreier, J. (2020). *As Naughty Dog Crunches On The Last Of Us II, Developers Wonder How Much Longer This Approach Can Last*. Kotaku. [https://kotaku.com/as-naughty-dog-](https://kotaku.com/as-naughty-dog-crunches-on-the-last-of-us-ii-developer-1842289962)

[crunches-on-the-last-of-us-ii-developer-1842289962](https://kotaku.com/as-naughty-dog-crunches-on-the-last-of-us-ii-developer-1842289962)

Shaw, A. (2015). *Gaming at the Edge: Sexuality and Gender at the Margins of Gamer Culture*. University of Minnesota Press.

Sotamaa, O. (2021). Studying Game Development Cultures. *Games and Culture*, 16(7), 835-854.

<https://doi.org/10.1177/15554120211005242>

Sotamaa, O., & Svelch, J. (2021). *Game Production Studies*. Amsterdam University Press.

Sotamaa, O., Tyni, H., & Myöhänen, T. (2024). 'Even if the algorithm is a terrible workmate, you just need to learn to live with it': Perceptions of data analytics among game industry professionals. *European Journal of Cultural Studies*, 27(4), 558-576.

<https://doi.org/10.1177/13675494231168568>

Stoetzler, M., & Yuval-Davis, N. (2002). Standpoint theory situated knowledge and the situated imagination. *Feminist Theory*, 3(3), 315-333.

<https://doi.org/10.1177/146470002762492024>

Stone, A. (1995). *The War of Desire and Technology at the Close of the Mechanical Age*. The MIT Press.

Styhre, A. (2020). *Indie Video Game Development Work. Innovation in the Creative Economy*. Palgrave Macmillan.

Styhre, A., & Remneland-Wikhamn, B. (2021). The video game as agencement and the image of new gaming experiences: the work of indie video game developers. *Culture and Organization*, 27(6), 476–489. <https://doi.org/10.1080/14759551.2021.1919893>

Tran, M. & Biddle, R. (2008, November 3-5). Collaboration in serious game development: a case study. [Conference session]. FuturePlay Academic Games Conference, Toronto Ontario, Canada. <https://dl.acm.org/doi/abs/10.1145/1496984.1496993>

Tran, M. & Biddle, R. (2009). An ethnographic study of collaboration in a game development team. *Loading...*, 3(5) article no. 70.
<https://journals.sfu.ca/loading/index.php/loading/article/view/70/63>

- Tschang, F.T. & Szczypula, J. (2006). Idea Creation, Constructivism and Evolution as Key Characteristics in the Videogame Artifact Design Process. *European Management Journal*, 24(4), 270-287. <https://doi.org/10.1016/j.emj.2006.05.003>
- Vang, J. & Tschang, F.T. (2013). Unpacking the spatial organization of the US videogames industry: lessons for research on experience industry clusters. In J. Sunbo & F. Sørensen (Eds.), *Handbook on the Experience Economy* (405-423). Edward Elgar
- Wacquant, L. (2018). A Concise Genealogy and Anatomy of Habitus. In T. Medvetz & J. Sallaz (Eds.), *The Oxford Handbook of Pierre Bourdieu* (pp.528-536). Oxford University Press.
- Walfisz, M., Zackariasson, P. & Wilson, T. (2006). Real-time strategy: Evolutionary game development. *Business Horizons*, 49(6), 487-498.
<https://doi.org/10.1016/j.bushor.2006.04.001>
- Westecott, E., Stein, S., Cheryl, H. & Kashfia, R. (2019, August 6-10) In Situ: Researching corporate diversity initiatives with game developers. [Conference session]. DiGRA International Conference: Game, Play and the Emerging Ludo-Mix, Kyoto, Japan.
<http://openresearch.ocadu.ca/id/eprint/2793/>
- Whitson, J. R. (2018). Voodoo software and boundary objects in game development: How developers collaborate and conflict with game engines and art tools. *New Media & Society*, 20(7), 2315-2332. <https://doi.org/10.1177/1461444817715020>
- Whitson, J. R. (2020). What Can We Learn From Studio Studies Ethnographies? A “Messy” Account of Game Development Materiality, Learning, and Expertise. *Games and Culture*, 15(3), 266-288. <https://doi.org/10.1177/1555412018783320>

- Woodward, K. (2018). The Relevance of Bourdieu's Concepts for studying the intersections of poverty, race, and culture. In T. Medvetz & J. Sallaz (Eds.), *The Oxford Handbook of Pierre Bourdieu* (pp.629-644). Oxford University Press.
- Young, C.J. (2018). Game Changers: Everyday Gamemakers and the Development of the Video Game Industry. [Doctoral Dissertation, University of Toronto].
<https://tspace.library.utoronto.ca/handle/1807/89734>
- Yuval-Davis, N. (2015). Situated Intersectionality and Social Inequality. *Raisons politiques*, 58, 91-100. <https://doi.org/10.3917/rai.058.0091>
- Yuval-Davis, N. (2016). Power, Intersectionality and the Politics of Belonging. In: Harcourt, W. (Ed.) *The Palgrave Handbook of Gender and Development*. Palgrave Macmillan.
https://doi.org/10.1007/978-1-137-38273-3_25
- Zackariasson, P., Styhre, A. & Wilson, T. (2006a). Phronesis and creativity: Knowledge work in video game development. *Creativity and Innovation Management*, 15(4), 419-429.
DOI:10.1111/j.1467-8691.2006.00400.x
- Zackariasson, P., Walfisz, M., & Wilson, T. L. (2006b). Management of Creativity in Video Game Development: A Case Study. *Services Marketing Quarterly*, 27(4), 73–97.
https://doi.org/10.1300/J396v27n04_05

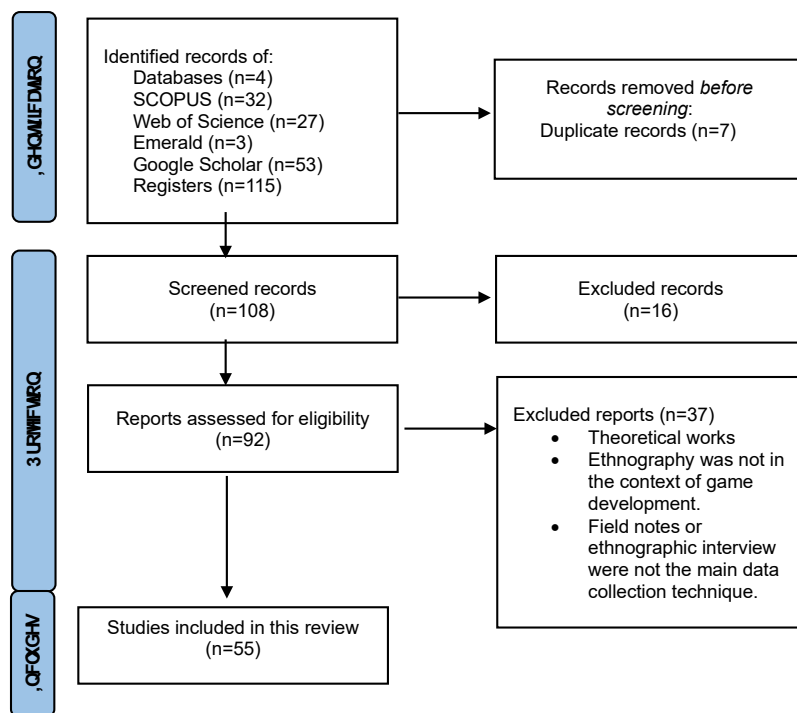
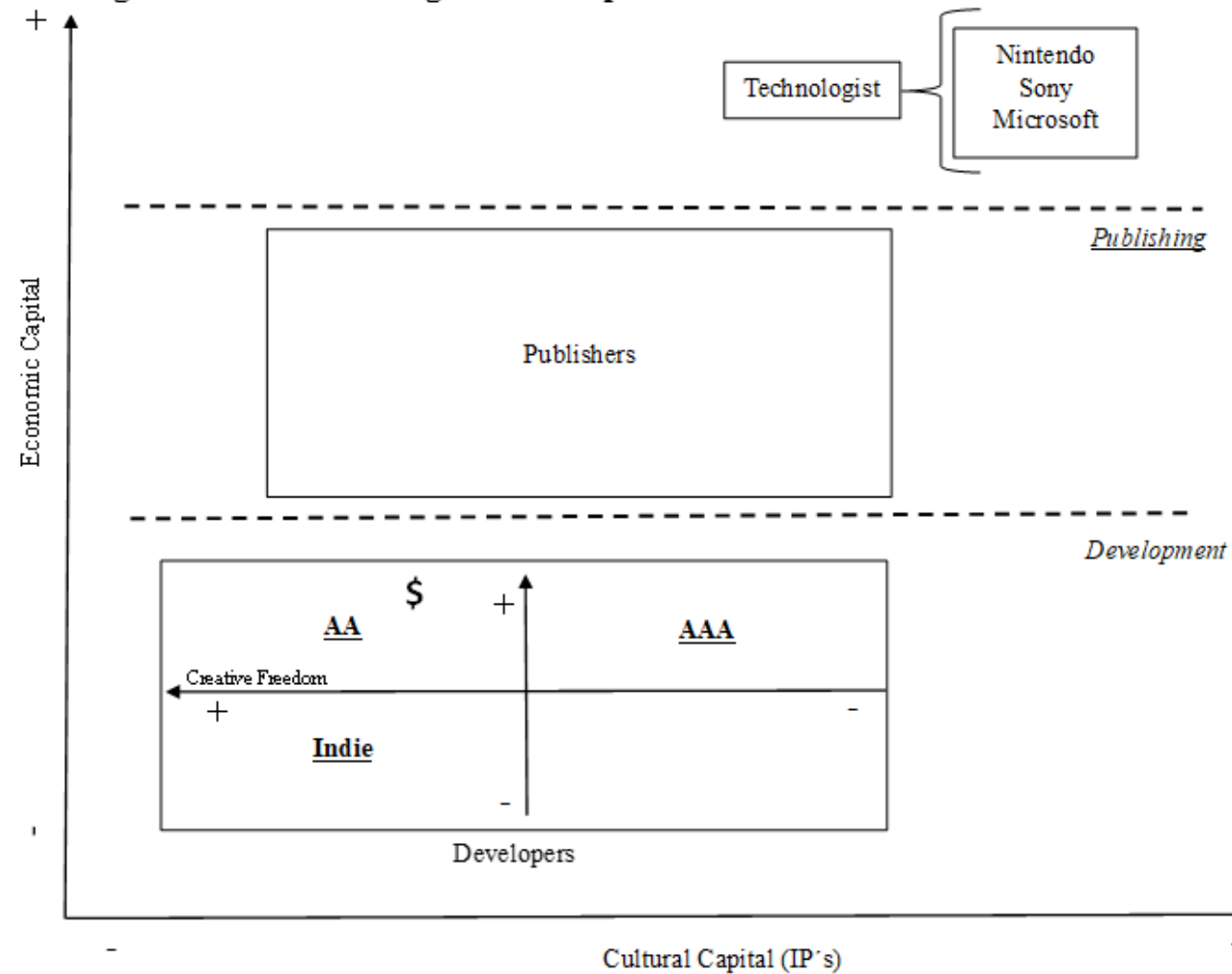


FIGURE 1 | PRISMA flowchart detailing the identification, screening, and eligibility phases prior to framework synthesis.

Figure 2. Field of video game development



Note: In the developer area, the axis of creative freedom directions is reversed, this means that the further we move to the left of the diagram, the more creative freedom the studios have.