

DIGITAL SAFE SPACES

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Doctoral Dissertation

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ABSTRACT

In today's interconnected world, digital spaces have become essential arenas for social interaction, self-expression, and community building. Among these, the concept of digital safe spaces has gained prominence, providing marginalized communities with spaces where they can seek refuge from discrimination, harassment, and oppression. These spaces are crucial for fostering inclusivity, support, and community building. This research departs from these spaces and aims to explore their nature by contributing to the growing literature on digital safe spaces, expanding the knowledge of this area, especially in the Information Systems (IS) field. Positioned in the empirical context of the video game industry, specifically, women in game development and political actions in the gaming sphere, this thesis builds on four interrelated studies and one book chapter, each contributing to a comprehensive understanding of digital safe spaces. These studies provide a conceptualization of digital safe spaces based on characteristics and types and discuss the importance of the cultivation of digital safe spaces to create a sense of safeness. In addition, digital safe spaces are examined as desired territories for participants who can potentially experience transformation through their participation in these spaces. By providing this multi-faceted analysis, this thesis contributes to the discourse on safety, safeness, inclusivity, and social change, offering insights for scholars interested in issues of marginalization, resistance, and digital technologies.

Keywords: Digital safe spaces, cultivation, safeness, territories, women, video game industry, game jams, Discord, Twitch, politicization

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I would like to take some lines in this dissertation to reflect on my journey and express my gratitude to everyone who contributed to my reaching the final line. My research path began many years before my Ph.D., back when I was still in my home country, Colombia. One day, while daydreaming (typical of me), I thought, “I want to study abroad and write a thesis on women in the video game industry.” As a gamer and a woman in STEM (I have a bachelor’s in electronic engineering), I have always wanted to explore the role of women in technology, but opportunities were limited at that time. After years of searching for a suitable master’s program, I made my way to snowy Umeå in Sweden, in 2017 to study IT Management. There, I wrote my master’s thesis on women game developers and game engines, finally pursuing my passion. But then, as I was wrapping up my thesis, my then-supervisor, Taline Sandberg Jadaan, informed me of a Ph.D. position focused on the intersection of gender and digital technologies. Without hesitation, I jumped on the chance, feeling it was my destiny. This is how my journey into doctoral research began. This thesis is very dear to my heart as it allowed me to further investigate the role of women in the video game industry, my motor for many years.

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LIST OF PAPERS

This thesis is based on the research described in the following appended papers and book chapter. I refer to them and their studies in the text with their respective numbers:

- **Study 1** – Ruiz-Bravo, Nadia (2024) Typification and Characteristics of Digital Safe Spaces: A literature review | Published in Proceedings of the 57th Hawaii International Conference on System Sciences (HICSS-57)
- **Study 2** – Ruiz-Bravo, Nadia; Selander, Lisen; and Roshan, Maryam (2022) The Political Turn of Twitch: Understanding Live Chat as an Emergent Political Space | Published in Proceedings of the 55th Hawaii International Conference on System Sciences (HICSS-55)
- **Study 3** – Ruiz-Bravo, Nadia; Selander, Lisen; and Roshan, Maryam (2024) Preparing, Fostering, and Fallowing: Cultivating Digital Safe Spaces | Published in Proceedings of the Thirty-Second European Conference on Information Systems (ECIS 2024)
- **Study 4** – Ruiz-Bravo, Nadia and Selander, Lisen (2024) Digital Safe Spaces as Spaces of De- and Reterritorialization: Experiences from the Women Game Jam | Published in Proceedings of the 15th Scandinavian Conference on Information Systems (SCIS 2024)
- **Book chapter** – Ruiz-Bravo, Nadia (Forthcoming) Cultivating Digital Safe Spaces for Empowerment: The Women Game Jam Experience | Under revision for publication in the book “Spaces, Bodies, Revolts – Emerging Digital Cultures, Feminist Struggles, and Global Change”

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Part 1

DIGITAL SAFE SPACES

1. INTRODUCTION

Digital platforms have undoubtedly revolutionized communication and information exchange, offering unprecedented opportunities for self-expression, collaboration, and community building (Cui et al., 2022; Stewart & Schultze, 2019; Vaast et al., 2017). In the ever-evolving digital landscape, the concept of safe spaces has garnered significant attention, particularly in the context of marginalized communities¹ (e.g., women and LGBTQ+) seeking refuge from discrimination, harassment, and oppression both physically and online (Andalibi et al., 2018; Clark-Parsons, 2018; McKenna, 2020; Scheuerman et al., 2018). The notion of a safe space has long-standing historical roots in the social movements of the twentieth century, particularly those led by women, LGBTQ+ communities, and anti-racist activists in the United States (Kenney, 2001). Safe spaces are often defined as spaces offering emotional and psychological refuge, built through social relationships that foster collective identity, solidarity, and resistance (Linabary, 2017; Scheuerman et al., 2018; Spaaij & Schulenkorf, 2014; The Roestone Collective, 2014). Digital spaces, such as social media outlets, can be hostile environments for marginalized people whose voices tend to be silenced and where they are at risk of being exposed to behav-

¹ Marginalized communities refer to different groups of people who are excluded from social, economic, and/or cultural life based on social or personal characteristics such as, but not limited to, sex, age, ethnicity, religion or belief, sexual orientation, physical ability, language, social class, education, or immigration status. (Baah et al., 2019; European Institute for Gender Equality, 2024; Sevelius et al., 2020)

iors such as trolling, doxing², and hate speech (Chess & Shaw, 2015; A. Massanari, 2017; Poyane, 2019). Women, in particular, have encountered various forms of harassment, discrimination, and marginalization within digital realms, hindering their ability to fully engage and thrive in these environments (Ammari et al., 2022; Chess & Shaw, 2015; Clark-Parsons, 2018; Cui et al., 2022; A. Massanari, 2017; Watanabe et al., 2022). Digital safe spaces counteract these negative dynamics by providing protection, support, and freedom from harassment and instead nurturing inclusion, social support, and identity-building (Ammari et al., 2022; Clark-Parsons, 2018; Cui et al., 2022).

From a research perspective, studying digital safe spaces can enhance the understanding of how intersectionality operates online, adding depth to discussions on inclusion, representation, and how identity influences experiences in digital spaces. Also, as the Information Systems (IS) turn more critically to the decolonization of IS research (Masiero, 2023; Petrakaki et al., 2023), the exploration of safe spaces and how they might relate to theories of resistance and counterpublics—spaces where marginalized groups create alternative narratives and community solidarity outside of mainstream discourse (Kuo, 2018; Renninger, 2015; Travers, 2003; Warner, 2002)—becomes even more important. The study of digital safe spaces can be valuable for understanding how individuals resist dominant narratives, construct identity, and foster agency in environments that often marginalize them, contributing to critical studies on digital activism and social movements (Ahuja et al., 2018; Klassen et al., 2021; Stewart & Schultze, 2019; Sutherland, 2019). Also, the exploration of digital safe spaces can support IS researchers in analyzing the social and technical structures that enable or restrict participation for marginalized groups, illuminating power dynamics that affect who has access to voice and representation in digital spaces (Adam, 2002; Curto-Millet et al., 2022; Curto-Millet & Cañibano, 2023; Masiero, 2023). Focusing on how these spaces provide a sense of safeness³ can also be important for understand-

2 Doxing is to “publish private information about (someone) especially as a form of punishment or revenge.” (Merriam-Webster, 2024c)

3 Safeness refers to the quality of feeling safe, focusing on comfort and security (Heriot-Maitland & Longden, 2022)

ing the ways in which these spaces are discussed and analyzed as potential spaces for social change.

This thesis examines digital safe spaces through four studies and a book chapter, offering a comprehensive analysis of how these spaces function and evolve, as well as the impact they have on those who inhabit them. The first study develops a conceptual understanding and a language to distinguish digital safe spaces from other digital spaces. The second study analyzes the politicization of an open space that is not designed or cultivated to be a safe space. The third study creates a model to understand the cultivation of digital safe spaces. The fourth study reveals how digital safe spaces can be potentially transformative territories. Finally, the book chapter reflects on how cultivating digital safe spaces can potentially create psychological empowerment.

This thesis examines digital safe spaces through two case studies in the video game industry: one focusing on esports communities and another investigating women in game development. IS research has extensively studied various types of digital communities, particularly in traditional business contexts (Bennett et al., 2014; Sandeborg et al., 2020) or in the context of civil organizations (Selander & Jarvenpaa, 2016). However, the video game industry remains understudied despite its significant social and economic impact. With few exceptions (see McKenna, 2020; McKenna et al., 2011; Naidoo et al., 2019), IS research has yet to fully explore the unique dynamics of gaming communities and their practices, creating a notable gap in our understanding of these increasingly important digital spaces. This gap is particularly significant given the industry's ongoing transformation. While traditionally male-dominated, the video game industry has seen a gradual increase in women's participation, both as consumers and creators (Dataspelsbranschen, 2023; GDC & Game Developer, 2024). However, this shift faces persistent challenges as women continue to encounter various forms of marginalization, from online harassment to professional underrepresentation (Anguiano, 2021; Chess & Shaw, 2015; Ochsner, 2019; Weststar & Legault, 2018). While the broader video game industry presents numerous challenges for women, particularly in navigating digital spaces, game jams organized specifically for women and other marginalized groups (e.g., LGBTQ+) have emerged as potential safe havens. These speed-run events, where games are created in a short time-

frame, have surfaced as potential digital safe spaces (Balli, 2018; Freeman & McNeese, 2021; IGDA, 2021; Kennedy, 2018; Paganini et al., 2021). While game jams provide an opportunity to investigate how safeness and inclusivity can be fostered within controlled, community-focused settings, research on women's experiences in these digital safe spaces remains limited. Existing IS research has primarily focused on broader online communities or social media platforms (Bernardi, 2016; Jacobson et al., 2016; Klassen et al., 2021; Sutherland, 2019), leaving a critical gap in our understanding of how digital safe spaces manifest and function in specialized environments like game jams.

1.1. THESIS OVERVIEW – FOUR RESEARCH QUESTIONS AND ONE REFLECTION

This doctoral thesis explores the nature and significance of digital safe spaces through a series of four interconnected studies and one book chapter, which is a reflection piece. Each study delves into different aspects of digital safe spaces, including how they are organized and experienced and how they can be theoretically understood. Collectively, these studies provide a nuanced understanding of their characteristics, challenges, and transformative potential.

The overarching research question of this thesis is:

How can digital safe spaces be conceptualized and cultivated to promote participation, inclusion, and transformation of marginalized groups?

The overall research objective recognizes the need for more research on digital safe spaces, especially in the IS field, which has not yet fully engaged with this notion. The four studies conducted as part of this thesis project open new avenues for exploration. Each study engages with a specific aspect of the overall research objective. Table 1, as well as the following paragraphs, outlines the four studies and their overall positioning within the thesis.

Study 1 addresses two research questions: (1) *what are the main characteristics of digital safe spaces?* and (2) *how can digital safe spaces be typified?* (RQ1). Through a systematic review of Information Systems (IS) and Human-Computer Interaction (HCI) literature, this study develops a

comprehensive understanding of the core elements and distinctive features of digital safe spaces. This conceptual clarity is important for any rigorous investigation of digital safe spaces, safety, and safeness (Haj-Bolouri et al., 2024). The study reviewed 20 peer-reviewed papers published up to May 2023 using thematic analysis. Study 1 forms the foundation for this thesis. As a foundational contribution, it establishes a conceptual framework that distinguishes digital safe spaces from other digital environments through key characteristics: space context (i.e., digital platform affordances, boundaries, rules, resource-intensive work, and designed support) and individual perceptions (i.e., triggers, (perceived) freedom, emergent support, homogeneity, and reaffirmation). Moreover, Study 1 offers a typological outline that can be used as a framework for recognizing the diverse forms digital safe spaces can take, ranging from supportive, confirmative, and activist digital safe spaces. The study is single-authored and was presented at the 57th Hawaii International Conference on System Sciences (HICSS-57) and later published in the conference proceedings.

Study 2 asked the following research question: “*How do roles and associated feature usage emerge and manifest in the politicization of live chats on Twitch?*” (RQ2). This study provides a critical examination of the politicization of an open and public digital space that was decidedly “a-political.” It analyzed 342600 live chat messages from Twitch during a political collective action in 2019 using thematic analysis. Study 2 engages in understanding different actors and the politicization of the space. The dynamics resulting from such politicization are important for improving the understanding of political collective action in digital environments. The analysis offers an example of when a space is not a safe space and underscores the vulnerability associated with open digital spaces. Study 2 is co-authored and was presented at the 55th Hawaii International Conference on System Sciences (HICSS-55) and later published in the conference proceedings.

Study 3 addressed the following research question: “*What is the cultivation process of intended digital safe spaces for marginalized groups?*” (RQ3). This study is the first of two papers on the Women Game Jam (see more details on the case context in section 4.4). It draws on rich qualitative data such as interviews, observations, participation, internal documents, and chat logs. It used a grounded approach to analyze the data and the Gioia approach to organize the analyzed data. Study 3 examines what cultivation

in a digital context can be, what it entails, and the roles of organizers and volunteers in creating and maintaining these spaces. This study emphasizes the significant work, strategies, and practices associated with cultivating digital safe spaces, such as preparing the space, fostering support and rule adherence, and allowing the space to rest. Studying how marginalized groups create and cultivate digital spaces with the intention of making them safe is important for understanding how these groups organize and create specific spaces to exist and explore their identities. Study 3 is co-authored and was presented at the 32nd European Conference on Information Systems (ECIS 2024) and later published in the conference proceedings.

Study 4 asked the research question: “*How do digital safe spaces function as territories, and what is their transformative potential?*” (RQ4). This study continued using the Women Game Jam event as the case study. Instead of focusing on the organizers, it zooms in on the participants of these spaces. It also relies on rich data (i.e., interviews, observations, internal documents, and chat logs) and uses a grounded approach for the analysis. It explores the dynamic processes of de- and reterritorialization within digital safe spaces and analyzes how these spaces can become desired territories for participants fostering potential transformation. This study delves into the importance of digital territories, considering how digital safe spaces can challenge existing social boundaries and power structures. Study 4 is co-authored and was presented at the 15th Scandinavian Conference on Information Systems (SCIS 2024) and later published in the conference proceedings.

The book chapter is a reflective piece written in a popular science format. It examines the effects of cultivating digital safe spaces on participants’ psychological empowerment. It can be seen as an invitation for further research on the role and impact of cultivating digital safe spaces within marginalized groups. This chapter is under revision for publication in the book *Spaces, Bodies, Revolts: Emerging Digital Cultures, Feminist Struggles, and Global Change*.

Together, these four studies and the book chapter provide a comprehensive exploration of digital safe spaces, highlighting their importance for marginalized groups. Based on this deep analysis, digital safe spaces are conceptualized as *complex, socio-political, relational, and emergent spaces full*

of paradoxes that, with proper care and cultivation for safety and safeness, can be potentially transformative spaces for participants.

This thesis contributes to the broader discourse on digital safeness and inclusivity in the IS field, offering valuable insights for scholars and practitioners dedicated to fostering positive and inclusive digital environments. Beyond the IS field, this thesis contributes to the broader discourse on digital cultures, social movements, and gender studies, offering insights into the ways digital spaces can be harnessed for inclusion and social change as well as to support the well-being of users in the digital age. Additionally, by exploring game jams and other gaming spaces, this thesis seeks to shed light on women's experiences in the video game industry, their perceptions of digital safe spaces, and the potential implications for the IS field, cultural studies, media studies, and game studies.

Table 1. Thesis overview

	Study 1	Study 2	Study 3	Study 4	Book chapter
Paper	Typification and Characteristics of Digital Safe Spaces: A literature review	The Political Turn of Twitch: Understanding Live Chat as an Emergent Political Space	Preparing, Fostering, and Following: Cultivating Digital Safe Spaces	Digital Safe Spaces as Spaces of De- and Reterritorialization: Experiences from the Women Game Jam	Cultivating Digital Safe Spaces for Empowerment: The Women Game Jam Experience
Authorship	Ruiz-Bravo, Nadia (single authored)	Ruiz-Bravo, Nadia; Selander, Lisen, and Roshan, Maryam	Ruiz-Bravo, Nadia; Selander, Lisen, and Roshan, Maryam	Ruiz-Bravo, Nadia and Selander, Lisen	Ruiz-Bravo, Nadia (single authored)
Outlet	57th Hawaii International Conference on System Sciences (HICSS-57)	55th Hawaii International Conference on System Sciences (HICSS-55)	32nd European Conference on Information Systems (ECIS 2024)	15th Scandinavian Conference on Information Systems (SCIS 2024)	Book "Spaces, Bodies, Revolts – Emerging Digital Cultures, Feminist Struggles, and Global Change
Research Question	(1) what are the main characteristics of digital safe spaces? (2) how can digital safe spaces be typified?	How do roles and associated feature usage emerge and manifest in the politicization of live chats on Twitch?	What is the cultivation process of intended digital safe spaces for marginalized groups?	How do digital safe spaces function as territories, and what is their transformative potential?	
Methodology	Theoretical and Systematic Literature Review	Scrapped Data-Based Study Thematic analysis	Interview-Based Study Grounded analysis using Gioia approach	Interview-Based Study Grounded analysis	Reflection piece
Role in thesis	Conceptual differentiation from other digital spaces, characteristics and typification	Politicization of digital spaces Example of not a digital safe space	How to cultivate digital safe spaces	Potential transformation for participants of digital safe spaces	Reflection on the potential psychological empowerment that digital safe spaces can create
Additional Comments	Nominated for best paper at HICSS 2024		A research-in-progress study was published at AMCIS 2022: https://aisel.aisnet.org/amcis2022/sig_si/sig_si/5/	Runner-up paper and top three best papers at SCIS 2024	This is not a peer-reviewed paper, but rather a reflection piece. This chapter is under revision for publication.

1.2. STRUCTURE OF THE THESIS

The structure of this thesis is as follows: The introduction section above outlines the main purpose of the thesis, which is to delve into digital safe spaces as this thesis's central area of concern. Following is an explanation of the empirical context in which this thesis is located: the video game industry. Afterward, the theoretical underpinnings are explained in depth. Then, the methodology provides an overview of the case studies, data collection, and data analysis used for this thesis. Next, the key takeaways present the most salient points of the four studies and the book chapter and expand the insights of each of them. Lastly, the discussion and contributions of this thesis are presented in depth. Finally, the conclusion, limitations, and future work are outlined.

2. VIDEO GAME INDUSTRY AS EMPIRICAL CONTEXT

This thesis examines digital safe spaces within the video game industry, focusing specifically on women in game development and game jam communities. The video game industry is the largest entertainment industry in terms of revenue (184 billion USD in 2023 (Wijman, 2024)) compared to the music industry (28.6 billion USD in 2023 (IFPI, 2024)) and the movie industry (26 billion USD in 2022 (Arora, 2023)). It encompasses various platforms, including consoles, PCs, mobile devices, and cloud gaming, offering diverse experiences from immersive virtual reality to casual smartphone games (Allen & Kim, 2005; GDC & Game Developer, 2024; Landoni et al., 2020). With a global reach and a large and diverse user base (people of all ages and genders play video games (GDC & Game Developer, 2024)), video games have become a significant cultural and social phenomenon. However, even though nearly half the population that plays games are women (45% (Le Ngoc, 2024)), the video game industry and the gaming community are known for being unfriendly toward women and minority groups (e.g., LGBTQ+) (Allsup, 2021; Anguiano, 2021; Burgess & Matamoros-Fernández, 2016; Chess & Shaw, 2015; Klimentov, 2021; A. L. Massanari, 2020; Mortensen & Sihvonen, 2020; Ochsner, 2019).

In 2012, through posts on Twitter (now X) with the #1ReasonWhy hashtag, women in the video game industry shared their various reasons for why leaving the video game industry or choosing not to pursue careers in it (Ochsner, 2019). Research on the event showed three main themes: “(1) Women are evaluated on a different set of standards and by crite-

ria other than their professional accomplishments; (2) Women are denied recognition of their expertise; and (3) Women's voices are silenced, dismissed, and made invisible in ways that may cause them to feel they do not belong in games." (Ochsner, 2019, p. 538) These reasons called for a change in the industry that was expected to deal with those issues; however, two years later, in 2014, Gamergate happened. Gamergate was an online harassment campaign primarily targeting women in the video game industry (Blodgett, 2020; Burgess & Matamoros-Fernández, 2016; Chess & Shaw, 2015; A. Massanari, 2017; A. L. Massanari, 2020; Mortensen & Sihvonen, 2020). This harassment campaign included doxing (i.e., releasing personal sensitive information online), rape threats, death threats, and swatting (i.e., hoax reports to make a SWAT team target a home). The main victims of this campaign had to flee their houses, cancel events, and were later diagnosed with post-traumatic stress disorder (PTSD) due to the psychological violence they had to endure (ibid.). Gamergate evidenced the level of sexism, toxicity, and discrimination that women in the video game industry have faced for years and that they tried to highlight with the #1ReasonWhy hashtag (Ochsner, 2019). Gamergate is now remembered as one of the darkest and worst moments in the industry's history (A. Massanari, 2017; A. L. Massanari, 2020; Mortensen & Sihvonen, 2020). Nonetheless, the "bro culture" persists in many video game studios and game events, making the industry still appear hostile to women (Allsup, 2021; Anguiano, 2021; Klimentov, 2021).

Important efforts to make the video game industry more diverse and inclusive have shown slow but steady improvements (Bailey et al., 2021). For instance, in 2023, the percentage of women working in the industry was 23%, an increase from previous years (Dataspelsbranschen, 2024; GDC & Game Developer, 2024; Le Ngoc, 2024). In addition, several initiatives, projects, educational programs, and mentorships have become more prevalent in the industry. The objectives are to promote women's participation in gaming events, conferences, and panels and to encourage and inspire (aspiring) women game professionals to join (Le Ngoc, 2024).

Among the initiatives and events for promoting women's participation in game development, game jams have emerged as critical arenas (IGDA, 2021; Kennedy, 2018; Paganini et al., 2021; Paganini & Gama, 2020; Saldanha et al., 2024). Game jams are events where, in a short amount

of time—typically 48 hours—people form teams and create prototypes of games (Grace, 2016; Kultima, 2015). The participation of women in ‘regular’ game jams tends to be low due to fear, a generalized perception of game jams as a gendered context where women do not belong, and the unequal power dynamics between men and women that prevail in those spaces (Ferraz & Gama, 2019, 2020; Saldanha et al., 2024). This is why women-, LGBTQ-, Black-, Indigenous-only game jams have had better chances of being spaces where marginalized groups felt less fear of participating in game development (Dirks et al., 2018; Into Games, 2021; Laiti et al., 2021). These targeted game jams provide an ideal empirical context for studying digital safe spaces, as they illuminate both the challenges of creating inclusive environments and their potential to transform participants’ relationship with game development and the broader industry. By examining this empirical context, this thesis aims to contribute to a deeper understanding of digital safe spaces and to inform strategies for fostering inclusive and supportive online environments across various contexts.

3. THEORETICAL UNDERPINNINGS

3.1. SPACES AND PLACES

The concepts of “space” and “place” are often used interchangeably, as if they mean the same. However, even though the two concepts are associated and interconnected (Massey, 2005; Tuan, 1977), they are not synonyms. Various fields have engaged in understanding and differentiating these terms, and over the years, they have been reframed to fit the changing times and circumstances. Space and place have been described as being “basic components of the lived world.” (Tuan, 1977, p. 3). Space has been used to describe something experienced and connected to the spatial perception of the world (e.g., front-back, up-down) (Tuan, 1977). Place, on the other hand, has often been associated with a physical location where human relations occur (ibid.). Tuan (1977), from the human geography field, argues that since infancy, humans experience the notion of space and place through their senses. As they advance in life, the experience of space and place is constructed in symbolic and conceptual ways. For the author, space allows movement, and only when it is inhabited (by humans) it turns into a place. Many places can exist within a given space. Tuan considers that “[t]he ideas “space” and “place” require each other for definition” (p. 6), and while “space” is related to freedom and spaciousness, “place” is security and stability, but one is needed to understand the other: “*From the security and stability of place we are aware of the openness, freedom, and threat of space, and vice versa.*” (Tuan, 1977, p. 6)

Harrison and Dourish (1996) suggest that “[w]e are located in “space,” but we act in “place.” (p. 69). For the authors, there is an intrinsic relationship between behavior and action, which they call behavioral framing, where what is important is the “sense of place.” (Harrison & Dourish, 1996, p. 67) The key principle that Harrison and Dourish describe is: “[s]pace is the opportunity; place is the understood reality.” (p. 67) These authors consider that a place is a space that has been filled with social meaning. Places can help frame human behavior. For them, “the sense of place transforms the space.” (p. 69). Later, Dourish (2006) would reframe space as a “collective product [that is the] outcome of shared forms of practice and meaning-making.” (Dourish, 2006, p. 304) Here, the author discusses technologies and considers them “means through which we encounter space.” (p. 304). Dourish concludes that “[p]lace and space are both products of social practice, albeit different systems of practice.” (p. 306).

Other authors, such as Massey (2005), argue that space is constituted through human relations and interactions, which allow for a multiplicity and plurality of existences; it is not static or fixed; rather, it is always in the “process of being made.” (Massey, 2005, p. 8) Before Massey, Lefebvre (1974) talked about space as being produced through human relations. He called this process “social space,” in which the production of space incorporates social actions. Lefebvre developed a conceptual triad of space: 1) Spatial practice (perceived space), which relates to the physical creation or organization of space by various actors (e.g., architects, landlords, and states); 2) Representations of space (conceived space), which are the discourses created about social space (including imagined conceptualizations of it); and 3) Representational spaces (lived space), which are the lived experiences of people in the social space. Lefebvre concludes that “[s]ocial space thus remains the space of society, of social life.” (Lefebvre, 1974, p. 35)

In organization studies, Dacin et al. (2024) dig deeper into the meaning of place (rather than space) for organizations by extending previous studies where first, place is considered to be made, socially and physically, by people; second, place is considered a lived experience; and third, place is considered fixed and invariant. The extension of the conceptualization of place in organizations is made by treating place as stable yet dynamic,

adding new types of places (i.e., physical, digital, and polymorphic), and deepening the discussion of power dynamics in places (Dacin et al., 2024).

Focusing now on the IS field, the concepts of space and place have been discussed differently depending on their application. Haj-Bolouri et al. (2024) explain in their framework the conceptualization of space in IS and how to apply it depending on the phenomenon to be studied. In their work, space is presented as multifaceted and complex. The framework is divided into four special themes: 1) Representing space, which is related to the “materialization of space through formal, verifiable characteristics” (Haj-Bolouri et al., 2024, p. 416) (e.g., physical space, safe space); 2) Differentiating space, which relates to the socio-political perspective of space as it considers that space is constructed by social practices (e.g., social space, cultural space); 3) Disclosing space, which is linked to the phenomenological perspective of space, considering that space is an enabler of phenomena to occur (e.g., collaborative space, digital space); and lastly, 4) Intuitive space, which considers that space is materialized through intuition, innate senses, and immersive feelings (e.g., flow) (e.g., hybrid space, shared space).

In this thesis, I understand space as socially constructed by human relations and as an enabler of action and existence within it (Haj-Bolouri et al., 2024; Lefebvre, 1974; Massey, 2005). If I use Haj-Bolouri et al.’s (2024) framework, my understanding of space would fall under both the representing space and the differentiating space. However, the phenomenon explored in this thesis (i.e., digital safe spaces) calls for a mixed understanding of the concept, so no single special theme from Haj-Bolouri et al.’s framework applies fully.

3.2. DIGITAL SPACES

Digital space refers to any environment that exists through digital technology, including both private and public spaces accessed via electronic devices (Benyon, 2014; Mütterlein & Fuchs, 2019). Digital spaces are often characterized by interactivity, connectivity, and the ability to hold content that can be interacted with in various ways (ibid.). They are often situated on digital platforms (e.g., social media) that can congregate a large number of users who can communicate, connect, and form relationships

(Benyon, 2014; Mütterlein & Fuchs, 2019). Digital platforms mediate between actors (e.g., users and organizations) and serve as the technological infrastructure that enables the creation and access of digital spaces (Tilson et al., 2012; Yoo et al., 2012; Zittrain, 2006). They provide the necessary tools, interfaces, and connectivity for users to interact within these digital environments (ibid.). We can think of digital platforms as the world where digital spaces are accessed and located. Digital spaces, as spaces in the digital realm, are formed by virtual boundaries (i.e., conceptual rather than physical) to create (digital) containers for people to interact (Haj-Bolouri et al., 2024; Mütterlein & Fuchs, 2019; Saunders et al., 2011). Therefore, they can also be considered social spaces constructed by user interactions and relations within specific digital platforms such as social media platforms, blogs, and forums (Lambach, 2020; Linabary, 2017).

In the literature, terms such as cyberspace, online space, and virtual space have been used to talk about phenomena associated with digital spaces; however, these terms have differences between them. For instance, online spaces specifically refer to areas that are accessible via the Internet (Berger, 2020). These are interactive, networked spaces like websites, social media platforms, and forums (Berger, 2020; Staudt Willet & Carpenter, 2021; Van Doorn, 2011; Yan et al., 2018). While all online spaces are digital, not all digital spaces are online (e.g., an offline digital database) (Benyon, 2014). Virtual spaces refer to immersive digital environments where users interact through digital representations (often avatars), such as in virtual worlds or virtual reality environments (Davies, 2004; Goel et al., 2011; Mütterlein & Fuchs, 2019; Saunders et al., 2011). Virtual spaces can also be online, but they are characterized by a higher level of simulated physicality, like 3D worlds in video games or virtual reality spaces (ibid.). Online spaces and virtual spaces emerge as subsets of digital spaces (Benyon, 2014; Mütterlein & Fuchs, 2019). Cyberspace, on the other hand, is more related to digital space in that, in recent times, the term digital space has come to, in a way, replace the term cyberspace to talk about everything that has to do with the Internet (Benyon, 2014). In a general sense, the term cyberspace is often used as an umbrella term to describe the interconnected global network created by the Internet and telecommunications (Graham, 1998; Janelle & Hodge, 2000; Lambach, 2020). Cyber-

space includes all the digital interactions and data exchanges taking place through networked connections, including email, chat rooms, forums, websites, and the underlying data and systems infrastructure (Lambach, 2020). It is a term that captures the entirety of the internet-connected world. Similarly, digital space is used as a broader term that encompasses all digital environments. In the words of Benyon (2014), “[t]he digital space is the world of virtual reality, databases, spreadsheets, the internet, music, electronic books, films and videos, Facebook, Twitter, phone calls, Skype and all things digital. It is the same as the popular term “cyber-space,” but by foregrounding the digital, we highlight other issues. Digital space concerns digital technologies and how people interact with them and through them.” (p. 37)

3.3. DIGITAL SAFE SPACES

Safe spaces are considered private spaces created separately from the ‘general’ public spaces, used as emotional or psychological refuges from violence and harassment, focusing on creating collective identity, solidarity, sense of community, and providing a space for organization and resistance (Kenney, 2001; Linabary, 2017; Spaaij & Schultenkorf, 2014; The Roestone Collective, 2014). The notion of safe space can be traced back to twentieth-century social movements, especially those led by women, the LGBTQ+ community, and anti-racist activists, primarily in the United States (Kenney, 2001). These spaces have been reconceptualized by The Roestone Collective (2014) as “safe, paradoxical spaces” (p. 1355) where the creation and cultivation of safe spaces means negotiating “paradoxical binaries: safety/danger, inclusivity/exclusivity, public/private, and so forth.” (p. 1355) The reason behind this reconceptualization lies in the fact that safe spaces are created as a response to “unsafe” spaces (The Roestone Collective, 2014). “Safe spaces are constituted by comfort and fear: [t]hey can offer persons with marginal and stigmatized identities a space of pride and security (...); yet safe spaces primarily exist because of the prejudice and hatred toward these identities.” (Adams, 2018, p. 1) Unsafe spaces can be perceived differently by different groups of society depending on how a space is used and controlled (Hartal, 2017; The Roestone Collective, 2014), making the idea of safety “an imaginary construction reliant on

ritualized forms of control” (Audrey Thompson, quoted in The Roestone Collective, 2014, p. 1349). Safety, then, can be understood as relational to the idea of threat and danger, making safe spaces function mostly as relational spaces as well (Gilbert, 2024; The Roestone Collective, 2014). The Roestone Collective argues that safe spaces should be cultivated to deal with the paradoxical nature of the phenomenon.

One type of safe space that is often discussed in the literature is the “separatist space.” A separatist space is a highly controlled space that tends to have rigid boundaries and strict acceptance criteria (Clark-Parsons, 2018; Linabary, 2017; The Roestone Collective, 2014). These spaces, although important for creating resistance and organization, tend to have problems with the sense of safety, as they are viewed as a form of social control (The Roestone Collective, 2014). Separatist spaces often suffer from internal divisions and conflicts, which can undermine the concept of safety, have a “depoliticizing effect,” and result in the emergence of re-marginalized groups within these spaces (Clark-Parsons, 2018; Linabary, 2017; The Roestone Collective, 2014). Even with their challenges and limitations, separatist spaces continue to be formed (physically and digitally) as a ‘radical’ response to oppression and violence in other spaces (*ibid.*). Safe spaces have also been associated with or considered “counter-spaces” or “counter-publics.” (Clark-Parsons, 2018; Linabary, 2017) Counterpublics are “discursive arenas where members of subordinated social groups invent and circulate counter discourses to formulate oppositional interpretations of their identities, interests, and needs” (Fraser, 1992, p. 123, quoted in Linabary, 2017, p. 75). In counter-spaces, members can discuss and organize resistance ‘freely’ without the surveillance of dominant groups having an emancipatory potential (Clark-Parsons, 2018; Linabary, 2017).

In the digital realm, the general conceptualization of safe spaces applies. However, digital technologies add certain complexities to these spaces. For instance, creating (digital) boundaries and maintaining them is a challenge that physical safe spaces seldom have to deal with since (physical) delimitations are usually not hard to maintain (some exceptions can be seen in the work of Hartal, 2017). However, in digital spaces, boundary work has many layers. Research on boundary work indicates that this work is relational, involving the negotiations of paradoxical constitutions of the space (Clark-Parsons, 2018). Boundary work can occur in three dimensions that

are constantly under construction: “(1) what and whom the group provides *safety from*, (2) who the group provides *safety for*, and (3) what the group provides the *safety to do*.” (Clark-Parsons, 2018, p. 2133) Other aspects of boundary work include choosing the digital platform to create the space (e.g., Facebook, Discord), as not all digital platforms allow the same levels of member interaction and security negotiations (e.g., security layers in the platform, data privacy) (Ammari et al., 2022; Cui et al., 2022; Haimson et al., 2020; Johnson et al., 2022). Boundary work in digital safe spaces also involves the selection of members (inclusion and exclusion process). Digital identity screening is a common practice used for this selection, where, via questions and forms, it is determined if someone ‘belongs’ to the space or not (Ammari et al., 2022). This practice can sometimes be challenging because people do not always respond truthfully and can create fake identities or personas (ibid.).

General rules in digital safe spaces tend to include variations of “no hate speech” in order to prevent marginalized members from being re-marginalized by other members’ comments (Ammari et al., 2022; Gibson, 2019). Members who do not follow the rules of the space may be censored, warned, or expelled, depending on the severity of the infringement. However, not all ‘bad’ comments are made maliciously, and some may just be unintentionally ignorant. Moderation practices are power-sensitive, and the process of censoring comments may cause the members of the space to refrain from participating (Gibson, 2019). The moderation process, in theory, is meant to protect the members of the space from harm, but in practice, it has a self-silencing effect (also called the “spiral of silence”) (Gibson, 2019; Noelle-Neumann, 1974). Research on the area showed that moderation practices may indeed cause a spiral of silence but are also critical for setting the norms and shaping the style, affect, and topics of discussion in the space, helping with boundary setting as well (Ammari et al., 2022; Gibson, 2019).

In this thesis, I further explore the notion of digital safe spaces, adding new language and a conceptual frame to do so. I also expand the concept of cultivation and propose a territorial understanding of safe spaces as potential spaces for transformation.

4. METHODOLOGY

4.1. RESEARCH SETTING(S)

This thesis uses three different research settings to explore the concept of digital safe spaces: one literature review and two case studies. The **literature review** (Study 1) focuses on understanding the concept of digital safe spaces as it has been explored in the IS field and other related fields, such as Human-Computer Interaction (HCI). This exploration gave me a great opportunity to better understand the gaps in the literature and provide useful language to comprehend the concept more deeply, thereby adding knowledge to the area of research. The first case study (Study 2) is related to the video game industry, more specifically, the gaming sphere of esports. This research examines the **Blizzard-Hong Kong case**, exploring digital political activism and the politicization of gaming spaces. While the paper does not specifically examine “safe spaces,” the case reveals how a gaming community became anything but safe for its members. The Blizzard-Hong Kong case offered a unique window into the social and political power of video game community activism. The second case study (Studies 3 and 4) examines the **Women Game Jam (WGJ)**, a game development event for marginalized communities. As the central case of this thesis, this longitudinal study explores the creation and cultivation of digital safe spaces in game development. The WGJ case provides critical insights into both the design of digital safe spaces and their transformative impact on participants.

The following sections detail the specific methodological approaches, data collection, and analysis for each study. For the different paper projects, I collected different types of data: the literature review synthesizes academic papers, the Blizzard-Hong Kong case analyzes secondary data, including scraped chat logs, and the Women Game Jam case draws on primary data through interviews and ethnographic fieldwork.

4.2. LITERATURE REVIEW (STUDY 1)

4.2.1. PAPER COLLECTION

The literature review follows Webster and Watson (2002) guidelines for conducting such a study in information systems research. The authors suggest beginning with leading journals in the field to find the source material. Following this guideline, I started the search in the “basket of eleven⁴” (the eleven most important journals in the IS field) using the Scopus database to identify articles relevant to the concept of digital safe spaces. The search process had two main boundary conditions: (1) papers that include or theorize concepts related to marginalized (online) communities, boundary work in digital spaces, and emotional support, and (2) papers that explore the concepts of emotional and psychological safety or safeness. To make the search more specific and avoid unrelated papers, I decided to include the papers that would NOT be considered if they appeared in the search: (1) papers about computational or technological safety (e.g., cybersecurity, data privacy), and (2) papers that talk about medical or organizational/business safety.

The first search with terms such as “digital/online/virtual,” “safe*,” “space*,” and “communit*,” (to see more details on the terms, see Study 1 in Part 2) resulted in 442 papers. A first screening of their abstracts showed that most of the papers were unrelated to digital safe spaces, such as technological security, data privacy, cybercrime, e-commerce, and marketing. Due to these unrelated papers, many terms needed to be excluded (e.g., “crime,” “data privacy,” “cybersecurity” (see more on Study 1 in Part 2)) for a second search. The second search with the excluded terms resulted in 42 papers, but screening these papers again showed that most were about technological security, marketing, blockchain, and medicine, and therefore, those terms were excluded as well. After cleaning the 42 papers of unrelated topics, there were only 3 relevant papers from the basket of eleven.

Due to the low number of relevant papers in the basket of eleven journals, the search needed to be extended. Here, Webster and Watson (2002)

⁴ <https://aisnet.org/page/SeniorScholarListofPremierJournals>. The basket of eleven is constituted by the following journals: Decision Support Systems, European Journal of Information Systems, Information & Management, Information and Organization, Information Systems Journal, Information Systems Research, Journal of the AIS, Journal of Information Technology, Journal of MIS, Journal of Strategic Information Systems, and MIS Quarterly.

also suggested examining other outlets, including conference proceedings, that are relevant to the area of information systems. For this literature review, the journal Information Technology and People (ITP) and the Association for Information Systems (AIS) library, which included the most relevant conference proceedings in the IS field (i.e., ICIS, HICSS, ECIS, and AMCIS), were included to enrich the paper collection pool. This additional search showed a similar pattern with topics as the first and second search rounds (i.e., data security, marketing, organizational issues). The search in AIS and ITP resulted in 155 papers. After excluding terms and conducting first and second screenings, nine relevant papers were found (5 AIS and 4 ITP). In total, in the IS field, there were 12 papers relevant to digital safe spaces (3 from the basket of eleven, 5 from AIS, and 4 from ITP).

Due to the limited number of relevant papers in the initial search, the review expanded to neighboring academic fields, following Webster and Watson's (2002) recommendation to look beyond information systems literature. After a keyword search in the Scopus database, I found that fields such as Human-Computer Interaction (HCI) and Computer Supported Cooperative Work (CSCW) had the most papers related to digital safe spaces. To make the study commensurable in terms of time and resources, I decided to focus only on the papers found in the HCI field and on the Proceedings of the ACM on Human-Computer Interaction, as it is one of the most important outlets in the field.

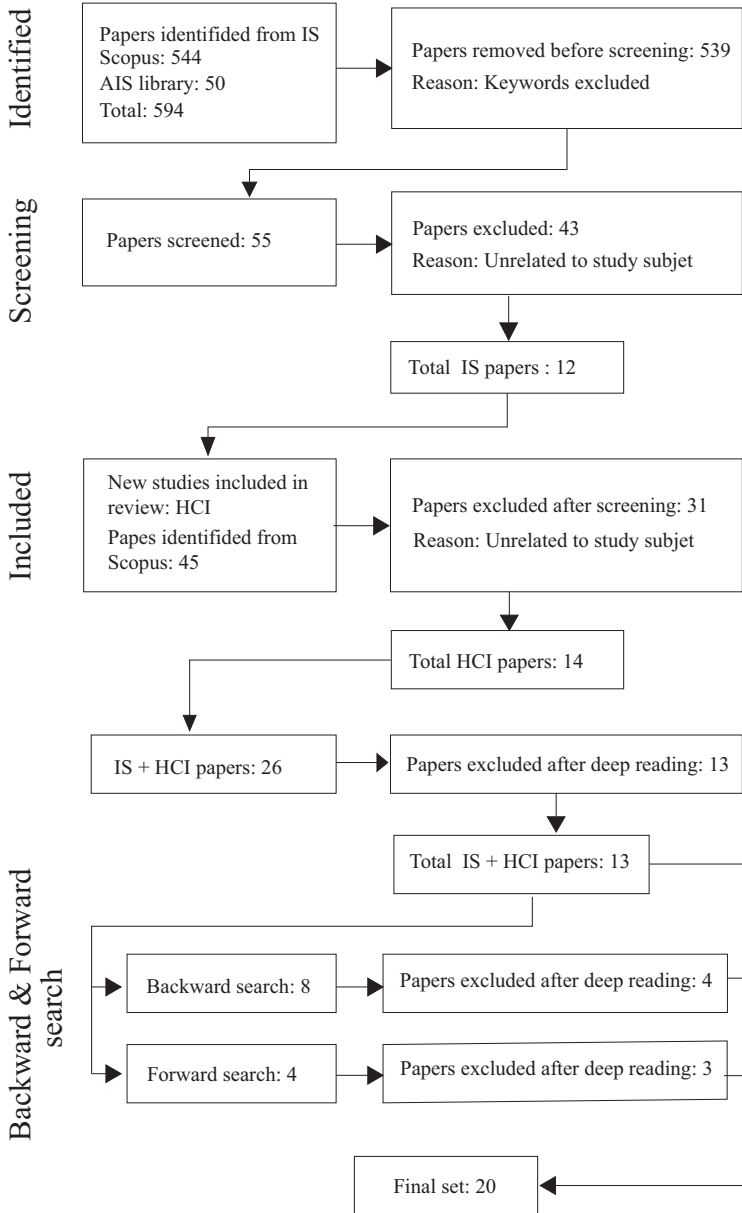
For the new search, I used the exact keywords to investigate the IS field. The search resulted in 45 papers; but after two rounds of screening and removing unrelated topics, the list was reduced to 14 relevant papers from HCI. The complete set of papers, joining the ones from IS and HCI, was 26: 12 from the IS field and 14 from HCI. These 26 papers became my primary set of papers, which I used to conduct a manual *backward* search to find prior research within the reference list of said set (Webster & Watson, 2002). This search led me to find 12 more (relevant) papers. Following Webster and Watson's (2002) last guideline to complete the literature review process, I conducted a manual *forward* search on Google Scholar to find the publications that came after the primary set of papers (i.e., citations). The forward search resulted in six relevant papers. All the primary, backward, and forward papers were read in-depth, and after additional filtering, the final set of papers was 20 (see Table 2). To provide a visualization of the process I just explained, I used the Prisma flow diagram (Haddaway et al., 2022) as inspiration and developed my version of it (see Figure 1).

Table 2. Literature review final set of papers

Primary/ Backward/ Forward	Outlet	Name of paper	Author(s)	Year
Primary	HICSS	Social Media and the Black Travel Community: From Autonomous Space to Liberated Space	Sutherland T.	2019
Primary	HICSS	Safe Spaces & Free Speech: Effects of Moderation Policy on Structures of Online Forum Discussions	Gibson A.	2017
Primary	ICIS	How Do Online Communities of Patients Aggregate on Twitter? An Affordance Perspective	Bernardi R.	2016
Primary	HICSS	Mining for Social Skills: Minecraft in Home and Therapy for Neurodiverse Youth	Zolyomi, A. and Schmalz, M.	2017
Primary	HICSS	How do the women of Open Source support each other?	Singh, V. and Brandon, W.	2020
Primary	ISJ	Creating convivial affordances: A study of virtual world social movements	McKenna B.	2020
Primary	ITP	The role of blogs in restoring the self-integrity of women victims of intimate partner sexual violence	Watanabe C.Y.V.; Diniz E.H.; Scornavacca E.	2022
Primary	ACM-HCI	Moderation as Empowerment: Creating and Managing Women-Only Digital Safe Spaces	Ammari T., Nofal M., Naseem M., Mustafa M.	2022
Primary	ACM-HCI	“We Gather Together We Collaborate Together”: Exploring the Challenges and Strategies of Chinese Lesbian and Bisexual Women’s Online Communities on Weibo	Cui Y., Yamashita N., Lee Y.-C.	2022
Primary	ACM-HCI	Trans Time: Safety, Privacy, and Content-Warnings on a Transgender-Specific Social Media Site	Haimson O.L., Buss J., Weinger Z., Starks D.L., Gorrell D., Baron B.S.	2020

Primary	ACM-HCI	Safe enough to share: Setting the dementia agenda online	Lazar A., Dixon E.	2019
Primary	ACM-HCI	Social Norm Vulnerability and its Consequences for Privacy and Safety in an Online Community	Dym B., Fiesler C.	2020
Primary	ACM-HCI	More than a Modern Day Green Book: Exploring the Online Community of Black Twitter	Klassen S., Kingsley S., McCall K., Weinberg J., Fiesler C.	2021
Backward	ACM-HCI	Safe Spaces and Safe Places: Unpacking Technology-Mediated Experiences of Safety and Harm with Transgender People	Scheuerman M.K., Branham S., and Hamidi F.	2018
Backward	ACM-CSCW	Making "Safe": Community-Centered Practices in a Virtual World Dedicated to Children with Autism	Ringland K., Wolf C., Dombrowski L., and Hayes G.	2015
Backward	Computers in Human Behavior	Nurturing health-related online support groups: Exploring the experiences of patient moderators	Coulson, N.S. and Shaw, R.L.	2013
Backward	ACM-HCI	Social support, reciprocity, and anonymity in responses to sexual abuse disclosures on social media	Andalibi N., Haimson O., De Choudhury M., and Forte A.	2018
Forward	Computers in Human Behavior	Resistance and Sexuality in Virtual Worlds: An LGBT Perspective	McKenna B., and Chughtai H.	2020
Forward	ACM-HCI	"It's a lonely disease": Cultivating Online Spaces for Social Support among People Living with Dementia and Dementia Caregivers	Johnson J., Arnold V., Piper A.M., Hayes G.	2022
Forward	Sociology of Crime	Hatred She Wrote: A Comparative Topic Analysis of Extreme Right and Islamic State Women-Only Forums	Lokmanoglu A., Veilleux-Lepage Y.	2020

Figure 1. PRISMA-inspired visualization of the data collection process



4.2.2. PAPER ANALYSIS

The literature review was a concept-centric study in accordance with Webster and Watson's (2002) guidelines. Its main purpose was to understand how digital safe spaces are understood in the literature. To this end, I started analyzing the set of papers using thematic analysis to identify the main concepts related to digital safe spaces. Thematic analysis identifies patterns and themes in qualitative data by systematically coding and categorizing the data into meaningful themes (Boyatzis, 1998; Braun & Clarke, 2006).

I used the qualitative analysis software Atlas.ti to code and analyze the set of papers. I started open-coding each paper to allow the authors' voices to come forward. In the first round of analysis, I observed patterns related to marginalized communities' struggles, boundary maintenance, and moderation work. I used these patterns as first-order codes. Later, by carefully clustering the first-order codes, I began developing the second-order codes. These second-order codes were related to the type of safety, the digital platform used, and the resources employed to maintain the space safely. A third round of analysis was conducted, and based on the second-order codes, I identified ten specific characteristics that made digital safe spaces distinct from other digital spaces. I organized these new codes into two categories with five characteristics in each:

- *Space context* characteristics: digital platform affordances, boundaries, rules, resource-intensive work, and designed support
- *Participant perceptions* characteristics: triggers, (perceived) freedom, emergent support, homogeneity, and reaffirmation

I conducted a final round of analysis, and by clustering the previously mentioned characteristics, I identified three main themes that I categorized as types of digital safe spaces: supportive, confirmative, and activist. I created a concept matrix based on these findings, which can be seen in Table 3. More information about the results of this study can be found in Part 2. For a summary of the methodology, see Table 4.

Table 3. Concept matrix

Type of Digital Safe Space	Main Associated Characteristics	
	Space context	Participant perceptions
Supportive	Designed support, digital platforms affordances (anonymity), resource-intensive work	Emergent support, triggers, (perceived) freedom
Confirmative	Boundaries, rules, digital platform affordances (connectivity and communication)	Reaffirmation, homogeneity, emergent support, triggers, (perceived) freedom
Activistic	Digital platform affordances (anonymity), rules, boundaries, designed support	(Perceived) freedom, triggers, emergent support, homogeneity

Table 4. Methodology Study 1 summary

Methodology Study 1	
Research strategy	Theoretical and systematic literature review
Paper collection	<p>Systematic literature search based on Webster and Watson’s (2002) guidelines</p> <p><u>Type</u>: Concept-centric study</p> <p><u>Publications searched</u>: Basket of eleven, Information Technology and People journal, Association for Information Systems (AIS) library, Proceedings of the ACM on Human-Computer Interaction</p> <p><u>Paper selection criteria</u>: papers that include or theorize concepts related to marginalized (online) communities, boundary work in digital spaces, and emotional support papers that explore the concept of emotional and psychological safety or safeness.</p> <p><u>Papers NOT considered</u>: papers about computational or technological safety (e.g., cybersecurity, data privacy) papers that talk about medical or organizational/business safety.</p> <p><u>Database</u>: Scopus</p> <p><u>Keywords used</u>: “digital,” “online,” “virtual,” “safe*,” “space*,” “social,” “media,” “communit*”</p> <p><u>Search example</u>: SRCTITLE(“European Journal of Information Systems”) AND(digital safe* space*) OR(online safe* space*) OR(social media safe*) OR(online communit* safe*)</p> <p><u>Additional searches</u>: Backward and forward search</p> <p><u>Set of papers</u>: 20 papers for in-depth analysis</p>
Paper analysis	<p>Thematic analysis</p> <p>Four rounds of analysis</p> <p><u>1st round</u>: Open coding and inductive analysis. Identification of first patterns related to digital safe spaces. Developed first-order codes.</p> <p><u>2nd round</u>: Clustering of first-order codes into second-order codes. Iterative inductive analysis.</p> <p><u>3rd round</u>: Clustering second-order codes into identification of ten characteristics of digital safe spaces and organization into two categories. Iterative inductive analysis.</p> <p><u>4th round</u>: Clustering of characteristics into identification of three types of digital safe spaces.</p>

4.3. BLIZZARD-HONG KONG CASE (STUDY 2)




4.3.1. BACKGROUND

On October 6th, 2019, during a Grandmasters Asia-Pacific esports championship of the game *Hearthstone*⁵, the winner of the round, known as Blitzchung, voiced his support for the Hong Kong protests occurring at the time. Putting on goggles and a gas mask, he said, “Free Hong Kong, the revolution of our times,” in an after-tournament interview streamed on the digital platform Twitch. Blizzard Entertainment, the video game company that owns the game and hosts of the event, punished the esports player by banning him from the current tournament, removing his prize money (around USD 4000), and prohibiting him from playing in another Grandmaster tournament for a year. Blizzard also punished the “casters” (interviewers) by firing them. Blizzard said the punishment was because the player and the casters broke the tournament rules by bringing political discussions, offending the public, and (or) causing damage to Blizzard’s brand (Blizzard Entertainment, 2019). The punishments triggered a wave of backlash from the gamer community, which led to boycott campaigns, loss of sponsors, physical protests, and even letters from the U.S. Congress aimed at pressuring Blizzard to reconsider the punishment decision (Chalk, 2019; Kelly, 2019; Wyden et al., 2019). Gamer protestors took over different digital platforms to bring the conversation about the situation in Hong Kong to the gamer community. On Twitch, where the Grandmaster championship was still being played, protestors flooded the chat in every official *Hearthstone* channel livestream to protest.

After all the protests and pressure, Blizzard decided to reduce the punishment for the player, returning the prize money and lowering the ban to six months, and rehiring the casters, but with a six-month ban as well. Nonetheless, this did not diminish the heated sentiments of the gamers, and the protests continued for weeks.

5 <https://hearthstone.blizzard.com/en-us>

4.3.2. TWITCH

Twitch is a live video streaming platform owned by Amazon and operated by Twitch Interactive (Kim, 2014). This platform had approximately 9.36 million active streamers in April 2021 (Clement, 2021) and 4,39 million concurrent viewers in January 2023 (TwitchTracker, n.d.). Among the many features and characteristics of Twitch, the embedded chat function that is displayed and streamed along with the live video is one of the unique traits of this platform (Diwanji et al., 2020; Ford et al., 2017). In the chat, stream viewers can interact with the streamer (the person doing the stream), creating a sense of closeness that other platforms do not have or are still exploring (ibid.). The behavior in the chat can vary depending on the type of streamer and channel. Still, in one of the most viewed streaming channels—esports—broadcasts are often chaotic and fast-paced, making them a strange experience for a person new to esports (Diwanji et al., 2020; Ford et al., 2017). This chaotic behavior is known as chat spamming or merely spamming. Spamming refers to massive messaging of a particular phrase, emote, or word in the chat (Seering et al., 2017). Contrary to regular spam, which has malicious intentions, chat spam is simply a mindless action people engage in to have fun in the chat while watching a stream, similar to the way fans shout and cheer in a physical stadium (Poyane, 2019). Messages in the chat, either spam or not, tend to be accompanied by emotes. Emotes are “Twitch-specific emoticons that viewers and streamers use to express a number of feelings in [the] chat”⁶. Examples of emotes include the following: (KEKW), (LUL), (Swift-Rage).

There are other actors besides the stream’s viewers in the chat, such as moderators. “Moderators (also known as mods) ensure that the chat meets the behavior and content standards set by the broadcaster by removing offensive posts and spam that detract from conversations”⁷. The moderators’ role is essential for the streamers, especially for big video game companies that broadcast esports, as the mods ensure that good practices are maintained in the chat.

6 <https://www.twitch.tv/creatorcamp/en/learn-the-basics/emotes/>

7 https://help.twitch.tv/s/article/guide-to-building-a-moderation-team?language=en_US

Twitch has been primarily used by both video game players and video game companies (big and small) to live-stream recreational video gaming and broadcast esports championships. Increasingly, people are turning to Twitch to engage in political conversations and actions. The New York Times covered some of these occurrences and reported that Twitch has “transformed into an unexpected hub of social activism.” (Lorenz, 2020) Politicians from all over the world (e.g., USA, Sweden, and Russia) and even governmental institutions (mostly from English-speaking countries) have found on this platform a way to reach young voters (Basu, 2020; Foxall, 2017). This shows a growing interest in this platform as a political space, and its users (mostly video gamers) are increasingly becoming the target of this interest.

4.3.3. DATA COLLECTION

The Blizzard-Hong Kong controversy had major exposition through a New York Times article published in October 2019 (Allen Clark, 2019). This article highlighted a significant moment of political activism in the gaming community. It immediately caught my attention as an exciting case of politicization. Based on that article, I found my way to the Twitch channel that was streaming the Hearthstone esports championship⁸ and started observing the interactions in the live chats. Seeing the large number of messages shared by the minute, I decided I needed to scrape the live chats in order to study them. I scraped 25 different live chats on Twitch, from the 9th of October 2019 to the 1st of December 2019, using Python scripts. The dates were chosen based on the activity seen in the chats, meaning that the activity and conversation related to the Blizzard-Hong Kong incident spread over two months on Twitch. The 25 chatlogs had 342,600 messages in total (see Table 5). The streamed videos accompanying the chat logs were also scraped only to see if the conversations in the live chats matched the live streams. However, this was not the case in the majority of the cases, so the streamed videos were dismissed from the data pool.

⁸ <https://www.twitch.tv/playhearthstone/videos>

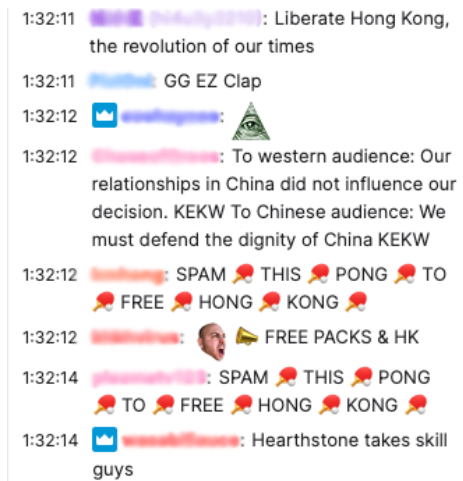
Table 5. Summary of data collection Blizzard - Hong Kong case

#	Date	Broadcast	# Comments
1	09-10-2019	Hearthstone Collegiate Championship Fall 2019 - Week 4, Day 2	3548
2	11-10-2019	Hearthstone Grandmasters Asia-Pacific Season 2 - Playoffs Day 1	18357
3	11-10-2019	Hearthstone Grandmasters Europe Season 2 - Playoffs Day 1	40374
4	12-10-2019	Hearthstone Grandmasters Asia-Pacific Season 2 - Playoffs Day 2	8270
5	12-10-2019	Hearthstone Grandmasters Europe Season 2 - Playoffs Day 2	23587
6	13-10-2019	Hearthstone Grandmasters Asia-Pacific Season 2 - Playoffs Day 3	10271
7	13-10-2019	Hearthstone Grandmasters Europe Season 2 - Playoffs Day 3	29565
8	15-10-2019	Hearthstone Collegiate Championship Fall 2019 - Week 5, Day 1	2495
9	16-10-2019	Hearthstone Collegiate Championship Fall 2019 - Week 5, Day 2	1813
10	22-10-2019	Hearthstone Collegiate Championship Fall 2019 - Week 6, Day 1	2763
11	23-10-2019	Hearthstone Collegiate Championship Fall 2019 - Week 6, Day 2	2611
12	29-10-2019	Hearthstone Collegiate Championship Fall 2019 - Week 7, Day 1	3136
13	30-10-2019	Hearthstone Collegiate Championship Fall 2019 - Week 7, Day 2	2497
14	01-11-2019	BlizzCon 2019 Opening Ceremony	63950
15	01-11-2019	Hearthstone Global Finals 2019 - Day 1	31808
16	02-11-2019	Hearthstone Global Finals 2019 - Day 2	40652
17	15-11-2019	Hearthstone Global Games 2019 - Week 1, Day 1	6136
18	16-11-2019	Hearthstone Global Games 2019 - Week 1, Day 2	5209
19	17-11-2019	Hearthstone Global Games 2019 - Week 1, Day 3	7818
20	22-11-2019	Hearthstone Global Games 2019 - Week 2, Day 1	9681
21	23-11-2019	Hearthstone Global Games 2019 - Week 2, Day 2	6081
22	24-11-2019	Hearthstone Global Games 2019 - Week 2, Day 3	5189
23	29-11-2019	Hearthstone Global Games 2019 - Round of 16 - Week 3, Day 1	5275
24	30-11-2019	Hearthstone Global Games 2019 - Round of 16 - Week 3, Day 2	5608
25	01-12-2019	Hearthstone Global Games 2019 - Round of 16 - Week 3, Day 3	5906
		Total of comments	342600

4.3.4. DATA ANALYSIS

The chat logs were prepared in Excel and converted into a format compatible with the qualitative analysis program Atlas.ti. The 342600 messages were coded manually as they were short (in length) and, therefore, quickly coded (see the example in Figure 2). In addition, the data set had a high level of redundancy (around 30% of the messages in each chat log were categorized as spam (see Figure 2)).

Figure 2. Example of the live chat on Twitch during one of the Hearthstone championships in October 2019



I approached the dataset using thematic analysis, which allowed me to explore the large dataset I had collected and identify specific patterns. The analysis process was exploratory, and I often iterated between the dataset and the theory. The first round of analysis of the chat log messages started by open coding the most repetitive messages, which resembled spam, and the messages opposing them. This early analysis of the data led me to recognize its political nature. Therefore, I engaged in understanding the literature on digital platforms, especially chat rooms, in social and political activism (Guimaraes et al., 2019; Kavada, 2015; Leong et al., 2020). While developing the codes, I could identify different dynamics and behaviors of various groups of actors in the live chats on Twitch. The first group identified was the “mobilizers,” who were the proponents of the

political conversation in the chat and opposed Blizzard’s measures. Two main actors comprised this group: spammers and awareness creators. The second group was the “opponents,” who opposed the mobilization against Blizzard and mimicked the mobilizers. The two main actors were mimics and critics. The third group was the “moderators,” who tried to return the chat to its original state of non-political talks, and the last group was the “spectators,” who were mostly bystanders and bots that did not engage in the political conversation. To help visualize the data analysis results, I developed a dynamic model of the interactions between the actors. More about the results of this study can be found in Part 2. For a summary of the methodology, see Table 6.

Table 6. Methodology Study 2 summary

Methodology Study 2	
Research strategy	Empirical case study
Data collection	Scrapped data from digital platform Twitch <u>Type of data:</u> Chatlogs <u>Size of data:</u> 25 chatlogs, 342600 messages
Data analysis	Thematic analysis Three rounds of analysis <u>1st round:</u> Open coding and inductive analysis. Identification of first patterns related to politization of the chatroom. Developed first-order codes. <u>2nd round:</u> Clustering of first-order codes into second-order codes. Iterative inductive analysis. <u>3rd round:</u> Clustering second-order codes into themes. Iterative inductive analysis. Identification of four groups of actors of the space.

4.4. WOMEN GAME JAM CASE (STUDIES 3 AND 4)

4.4.1. BACKGROUND

The Women Game Jam (WGJ) is an annual event designed for women, including cis, trans, and non-binary people interested in video game development. As indicated already, a game jam is a speed-run event, usually

non-competitive, where groups of people come together to create game prototypes (Grace, 2016; Kultima, 2015). Research about game jams indicates that in most mixed-group game jams (i.e., not targeted to a specific group and where mostly cis-men participate), the participation of women and minorities tends to be very low due to various factors such as experiences of sexism, homophobia, racism, and other various types of discrimination in these spaces (Ferraz & Gama, 2020; Paganini & Gama, 2020). Another factor contributing to women's low participation in game jams is the perception of a lack of knowledge or skills in game development (Ferraz & Gama, 2019; Kennedy, 2018). These factors contribute greatly to the lower number of women applying for jobs in the video game industry because fewer women have a portfolio to show, which lowers their competitiveness for a position against other potential (male) candidates that do (Bailey et al., 2021; Weststar & Legault, 2018). This is why game jams and events explicitly designed for women or marginalized groups, such as the WGJ, have been created to counteract all these factors and promote participation in the industry.

The WGJ is intended to be a safe space for women⁹ and non-binary individuals to explore what it is to be a game developer. It is promoted as a space where everyone is welcomed, regardless of background or identity, and it focuses on team building, learning, and empowerment. The main purpose of the WGJ is to provide its participants with a welcoming community where they can network with others who share the same interests and learn from the experience. Importantly, the WGJ is advertised as a space where no previous knowledge in game development is required, which is extremely important for attracting women and minorities to participate in a game jam.

4.4.2. WGJ HISTORY AND ORGANIZATION

The WGJ was born as a collaborative endeavor in Brazil and Germany in 2018. Later, only Brazil continued organizing the event, and in 2019, many other Latin American countries joined (i.e., Argentina, Brazil, Chile,

9 From here on in the text, I use the term “women” in the broader sense, which includes cis and trans women

Colombia, Mexico, and Peru). The event was originally a physical/onsite event in its beginnings (2018 – 2019), but due to the COVID-19 pandemic in 2020, the event was moved online (2020 – 2021). Then, starting in 2022, some countries decided to host it in a hybrid format. Through the years, and thanks to the online possibility after 2020, more countries have shown interest in hosting the event, transforming it into a worldwide event with around 1,700 participants (also called jammers) in 2023. In the 2024 WGJ edition, 16 countries were hosting the event: Argentina, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Kenya, Mexico, Namibia, Nigeria, Peru, Spain, South Africa, Sweden, and Uruguay.

Discord, a multipurpose digital platform featuring text, video, and audio channels, was the central hub for organizing and running the Women Game Jam event. Popular among gaming communities, Discord's features and role in this case study are detailed in section 4.4.3.

The WGJ's organization members are volunteers and work as a loosely-coupled organization—non-hierarchical/horizontal type of organization where its members act independently (Ingersoll, 1993; Weick, 1976). The structure of the organization of the WGJ is as follows:

- Global committee: Formed by representatives of each of the hosting countries participating each year in the event. The global committee is the responsible group for all the general administrative parts of the event (e.g., admitting new countries, Discord server, registration forms, and WGJ global social media).
- Local committees: Each host country should have a local committee to help organize the specific aspects of the event. For instance, if the country decides to hold a hybrid event, the local committee will have to find a venue and local sponsors. Additionally, local committees help find mentors and other volunteers for the event. It is common for some local team members to work as mentors or volunteers as well.
- Mentors and other volunteers: These are not part of any committee, but they help with two main roles during the event: mentoring (mentors) and monitoring (monitors), and sometimes both. Mentoring is done by people with advanced knowledge of video game development or professional experience. Monitoring is done by volunteers willing to help the organizers oversee the digital space and act as the link between the jammers and the organizers.

4.4.3. DISCORD

Discord is a multipurpose digital platform (VoIP, instant messaging, and digital distribution) that includes text, image, video, and audio channels (Jiang et al., 2019; Maggio, 2019). Video game communities widely use it, but in recent years it has become more popular in other communities (Conway et al., 2021; Kruglyk et al., 2020).

Some of the most salient features of Discord are its servers and channels. Servers are the specific spaces on Discord (Discord, 2022; Librarian, 2021): according to Discord’s developer documentation, servers are also referred to as “guilds” and “represent an isolated collection of users and channels.” (Discord Developer Portal, n.d.) These channels are “made by specific communities and friend groups. Most servers are small and invitation-only. Some larger servers are public. Any user can start a new server for free and invite their friends to it” (Discord, 2022). Channels are separate spaces within a server (Librarian, 2021). There are two types of channels, text and voice channels. In the text channels, “users can post messages, upload files, and share images for others to see at any time” (Discord, 2022). In the voice channels, “users can connect through a voice or video call in real-time, and can share their screen with their friends” (ibid.), and it can also be used as a streaming platform (usually for video game playing) (Pearson, 2022; Witman, 2020). Channels are indicated by the hash symbol (“#”) (unrelated to the usage of hashtags on social media platforms) before the name of the channel (e.g., #announcements) (Maggio, 2019). Discord allows (and encourages) bots to perform specific tasks on servers, such as moderation in text channels or restricting access to the server (Discord, n.d.-a, n.d.-b; Kiene & Hill, 2020).

4.4.4. DATA COLLECTION

My initial contact with the Women Game Jam (WGJ) began when I participated in the 2021 event. Following the game jam, I contacted the organizers and asked if I could research their ongoing work in preparing for the upcoming WGJ in 2022 and beyond. They agreed and invited me to observe their regular meetings, granting me full access to their internal documents. I began the research by documenting my experiences from

WGJ 2021, drawing on my perspective as a participant and my access to the Discord server.

My research with the WGJ spanned from 2021 to 2024, involving multiple phases of data collection. The first phase combined my experience as a participant in WGJ 2021 with observations of organizing meetings, interviews with all 2021 organizers, and access to internal discussions on the organizers' Discord server. Having participated in the jam gave me valuable context for understanding the organizing meetings, which began a month after WGJ 2021 ended. In those meetings, the organizers discussed and reflected on the (past) event. The remaining six meetings I observed were related to the strategic work of setting up 2022's WGJ. After the first meetings, I conducted nine interviews with all the organizers of the WGJ 2021. In my interviews, I asked about the purpose of doing the WGJ, the ideation and creation process, the work required to take care of and set up the space, and how they perceived the event went that year (2021). The organizers interviewed were all women representing eight countries in Latin America (Colombia, Brazil, Mexico, Chile, Peru, Argentina, Bolivia, and Puerto Rico) and one in Africa (Zambia). The interviews were in-depth, semi-structured, and audio-recorded using the communication program Zoom for transcription purposes. All the interviewees were informed about the study's objectives, both in text (document) and orally (briefing before the interview). I asked for their verbal consent to record the interviews before they started. This consent was also recorded as part of the data management agreement. The first round of data collection concluded when the WGJ 2022 was about to start.

After the interviews and observations, I asked the organizers if I could participate in the WGJ 2022 as a researcher, not a jammer. They agreed and granted me early access to the Discord server and a role similar to the volunteers so I could see their conversations during the event. I also asked them to include a question about consent for all the participants of WGJ 2022 in the registration form. The idea of this question was twofold: one was to inform and obtain the consent of the participants to be observed (by me) during the time of the event, and the other was to ask them if they were willing to be interviewed for this research after the event as part of the second round of data collection. As an observer of the WGJ 2022, I took notes before, during, and after the event. The event lasted three days, but

conversations in the Discord server started before the event and continued for a couple of days after it ended. After the WGJ was over, I interviewed twelve jammers. During the interviews, I asked them about their experience in the WGJ 2022 and its impact on them afterward. The interviewees were women and non-binary people from different countries in Latin America (i.e., Colombia, Chile, Argentina, Brazil, Mexico, Peru). I followed the same principles as with the first round of interviews: in-depth, semi-structured, and audio-recorded using Zoom for transcription purposes. After interviewing the jammers, I also recognized the importance of the volunteers, especially the mentors, who helped the organizers and the jammers during the event. I interviewed three mentors. In the interviews, I asked them about their roles at the WGJ, how they got involved, and their experiences. The interviewees were women and men from different countries in Latin America (i.e., Colombia and Chile). All the interviews with the mentors were in-depth, semi-structured, and audio-recorded for transcription purposes. All the participants were informed about the study's objective and gave verbal consent to the recording before the start of the interviews. Overall, the second round of data collection included observations of the WGJ 2022, discussions on the WGJ Discord server by jammers, organizers, and mentors, continued online observation of the organizational meetings, interviews with mentors and volunteers, jammers, and additional organizers of WGJ 2022, as well as additional internal documents, chats, and discussions on WhatsApp. The second round of data collection concluded when the WGJ 2023 was about to start.

For the WGJ 2023, I decided to participate as a jammer again to experience the jam with new eyes and perspectives that I had gained through years of researching the WGJ. With that in mind, I planned to interview a few more jammers to validate my learnings and gain further insights into how the WGJ was being experienced. The new round of data collection included my online participation in the WGJ 2023, interviews with jammers from the WGJ 2023, continued online observation of the organizational meetings, and more internal documents, chats, and discussions on WhatsApp and Discord. This last round of data collection concluded when the preparations for WGJ 2024 started. See Table 7 for a summary of all the data collection.

Table 7. Summary of data collection (WGJ case)

Type of data	Data source	Data details	Use in the analysis
Interviews	Interview with WGJ 2021-2022 organizers	10 interviews with host-country organizers (14 hours 7 minutes): Organizers: Colombia, Brazil (x2), Mexico, Chile, Peru, Argentina, Bolivia, Puerto Rico, Zambia	To understand how the organizers had created the WGJ, their reasons for doing it, and what outcomes they have seen through the years.
	Interview with WGJ 2022-2023 jammers	12 interviews with jammers (8 hours 58 minutes) Interviews in Spanish: 8 Interviews in English: 4	To understand how the jammers experienced the WGJ and what effects, if any, the event had in them.
	Interview with WGJ 2022 mentors and volunteers	3 interviews with mentors and volunteers (2 hours 30 minutes) Volunteers: Colombia (x2) and Chile	To understand how the other volunteers engaged in the WGJ, their experiences, and outcomes they have seen.
Observations	Observation of online meetings (2021–2024)	17 online meetings (18 hours 25 minutes): 3 post-mortem meetings 14 organizational meetings	To understand the process of organization and creation of the event.
	Observation of WGJ 2022	Observation amounting to 110 hours. Access to the WGJ 2022 Discord server.	To understand the results of the organization process of the event.
Participations	Participation at the WGJ 2021 as a jammer	Participation amounts to 96 hours. Access to the WGJ 2021 Discord server.	To understand the setup of the event and the interviews, observations, chats, and internal documents.
	Participation at the WGJ 2023 as a jammer	Participation amounts to 120 hours. Access to the WGJ 2023 Discord server.	To solidify the understanding of the longitudinal study of the event.
Chats and documents	Discord server and WhatsApp chats (2020 – 2024)	Discord: More than 300 messages. WhatsApp: More than 1000 messages.	To understand how the organizers strategized and organized among themselves for each event.
	Internal documentation (2020 – 2024)	20-plus internal documents: WGJ 2020 post-mortem WGJ 2021 post-mortem WGJ 2021 guidelines WGJ 2021 presentation results WGJ code of conduct and inclusion policy WGJ 2022 presentation results	To understand the internal organization of the WGJ and the organizers' ways of strategizing for the event.

4.4.5. DATA ANALYSIS – STUDY 3

The first round of data collection was mostly the data used for Study 3, including interviews with participants and organizers, observations, chat logs, and internal documents. I analyzed the data in a grounded way inspired by the Gioia approach to organize the codes I developed in the analysis of the data set. The Gioia approach acknowledges the importance of a grounded way of analyzing data as it recognizes the informants as knowledgeable in their area (Gioia et al., 2013; Magnani & Gioia, 2023). Following Gioia’s approach, I analyzed my data in an interpretative way using principles of open coding to develop first-order codes (informant-based codes) that would inform the development of second-order codes (researcher-based codes) by going back and forth between data and theory that would evolve into aggregate dimensions (ibid.). I used the qualitative analysis software Atlas.ti to facilitate the analysis.

The interviews and observation notes were organized in different Word documents to facilitate the analysis. While analyzing the interviews with the organizers and the observations of their meetings, I saw indications that the purpose of the WGJ was not ‘only’ to be a refuge from gaming’s toxic environments but rather to be a space so nice, warm, and cozy that the participants felt like they were at a “slumber party” (a term used by the organizers to describe the WGJ). The organizers’ strategies to create the WGJ were all about making the participants feel cared for, nourished, and safe. I connected this with the notion of safe spaces and safeness, which focuses on the feeling of comfort and security. I developed the first-order codes based on that and started reading about safe spaces (Kenney, 2001; The Roestone Collective, 2014) and then about digital platforms as digital safe spaces (Clark-Parsons, 2018; Linabary, 2017). An initial analysis led me to theorize about cultivating digital safe spaces and the roles actors can have in these spaces. These became second-order codes. A research-in-progress paper was published with this initial analysis. In that paper, I presented two preliminary aspects when building and cultivating a digital safe space: 1) setting up the space by selecting the participants and config-

uring the digital platform, and 2) cultivating the space with the custodians (Ruiz-Bravo & Roshan, 2022). The custodians were the people taking care of the space and protecting it from harm.

Through discussions following the research-in-progress presentation, my focus shifted away from roles and custodians to the concept of cultivation. Revisiting the data revealed the significance of two key meetings held after WGJ 2021, where organizers evaluated the event's successes and challenges. These reflection sessions highlighted a crucial aspect of cultivating digital safe spaces: the need to pause, evaluate, and adjust practices based on the community's experiences. I turned to the field of agriculture to learn more about the process of cultivation (of plants) and noticed that a crucial part of it was letting the soil rest for a while before preparing it for cultivation again. This resting time is called "fallowing," which is a concept I adopted for my analysis from then on. From these new lenses, I reworked the second-order codes and then developed aggregated dimensions matching this new analysis. The aggregated dimensions describe the process of cultivating digital safe spaces in three phases: *preparing*, *fostering*, and *fallowing*. See Table 8 for a representation of the data structure and analysis used for Study 3.

Table 8. Data structure analysis (first- and second-order codes and aggregated dimensions)

Illustrative quote	1 st order code	2 nd order code	Aggregate dimension
Men are also able to join, but with some rules	Selecting jammers	Selecting	Preparing
We had male and female tutors and volunteers. (...) What I wanted was something I call “positive masculinity.”	Selecting volunteers		
[With] Discord, you can make it invitation only, (...) and that’s important because a troll is going to try to enter anyway.	Configuring Discord	Configuring	
For example, this year, we had a therapy room for whenever they needed to talk to a therapist. (...)	Supporting jammers	Supporting	Fostering
And always telling the mentors or volunteers, like: “Hey, if (...) you feel like you don’t know how to help them, come to us as well.” Like: “Whatever it is, but we’ll find a solution.”	Supporting volunteers		
So when something happens, we just try to be there as soon as possible and try to take care of it.	Monitoring the space	Monitoring	
We could organize a meeting for a couple of weeks after (...) so we can all rest from the jam and Gamescom 🙏.	Letting the space and the organizers rest	Resting	Following
Reducing the number of channels was a good idea. Having a separate Discord for the organization also seems to be a good plan.	Conserving what worked	Reflecting	
Too many social networks to look after, so we didn’t manage to use/retweet/share all content that was made by all countries; - This is sad T_T	Identifying what didn’t work		
We could make a mentor-only event, so they know each other and also network between them. This was suggested by one of our mentors (CL).	Improving the space with suggestions		

To help visualize the data analysis results, I developed a process model for cultivating digital safe spaces. The use of models and graphical representations “can be useful tools for the development and verification of theoretical ideas” and can act as “an intermediary step between the raw data and a more abstract conceptualization.” (Langley, 1999, pp. 700–702) More about the results of this study is in Part 2. For a summary of the methodology, see Table 9.

Table 9. Methodology Study 3 summary

Methodology Study 3	
Research strategy	Ethnographic study
Data collection	<p>Primary data: Interviews and observations Complimentary data: Participation in game jam event, internal documents and chatlogs</p> <p>Rich data on ten interviews, 136 hours of observations, 96 hours of participation and more than 20 internal documents and more than 1000 chatlogs. Data was separated in Word documents to facilitate the analysis.</p>
Data analysis	<p>Gioia approach <u>Data structure:</u> first- and second-order codes, and aggregated dimensions. <u>Initial analysis:</u> Open coding and inductive analysis. Identification of first patterns related to cultivation of digital safe spaces and roles involved. Back and forth between data and theory. Developed first- and second-order codes. Published a research-in-progress paper with this initial analysis. <u>Additional analysis:</u> Iterative inductive analysis. Revisiting data for additional overlooked information. Back and forth between data and theory. Identification of important phase in the process of cultivating digital safe spaces related to letting the space to rest. Reworking second-order codes and developing three aggregated dimensions. Identification of phases of cultivating digital safe spaces. Development of process model to visualize the analysis.</p>

4.4.6. DATA ANALYSIS – STUDY 4

Study 4 draws on data from the first three rounds of data collection, yet moves slightly away from the focus on the organizers to that of the participants. To manage this extensive dataset, I organized all materials into separate Word documents. New interviews were transcribed, with Spanish interviews translated into English only when necessary. To facilitate the analysis and not miss important information, I divided the data into organizers (which included the volunteers' interviews) and participants (which included all the other interviews). I uploaded the data materials to the qualitative analysis software Atlas.ti to assist with the data analysis.

Inspired by the grounded methodology, I started analyzing the data using open coding and interpretative analysis (Charmaz, 2014; Glaser, 1992; Urquhart, 2013). The first group of data involved the WGJ organizers, and I used my previous analysis of it as the basis for this part of the study. I understood the WGJ as a digital safe space that was cultivated as such; however, after reanalyzing the data set, I started seeing that some aspects of this cultivation—such as the creation of boundaries, the monitoring, and the mentoring—related to control and power, which are aspects of territory. With this in mind, I started reading about the territorialization of digital spaces (Lambach, 2020, 2022). This led me to understand the work of the organizers, mentors, and volunteers as an active design of the space as a territory.

The second group of data included the participants (i.e., jammers) of the WGJ. My participation at WGJ 2021 and 2023 gave me important insights, providing nuances to the analysis. Since this batch of data was new, I spent more time understanding the experiences and perspectives of the participants. I noticed early in the analysis that the WGJ experience was transformative for the participants. First, I understood this feeling of transformation as an empowering process, where they left the WGJ feeling ready to take on new positions in the video game industry. However, this analysis did not fully resonate across my data. Another round of analysis made me realize that the transformation I was seeing was more related to a repositioning process, where the participants transitioned from being a minority in their own gaming spaces to being a majority in the WGJ. During this third round of analysis, the concept of deterritorialization caught my attention. This concept helped me explain the transformative

effect of the WGJ on its participants—what is referred to as de- and reterritorialization in the literature.

The organizers’ data concerned designing a digital space as a territory, and the participants’ data concerned de- and reterritorialization and its potentially transformative effect on them. Part 2 provides more information about the study’s results. Table 10 summarizes the methodology.

Table 10. Methodology Study 4 summary

Methodology Study 4	
Research strategy	Ethnographic study
Data collection	<p>Primary data: Interviews and observations Complimentary data: Participations in game jam event, internal documents and chatlogs</p> <p>Rich data on 25 interviews, 136 hours of observations, 216 hours of participation and more than 20 internal documents and more than 1000 chatlogs. Data was separated in Word documents to facilitate the analysis.</p>
Data analysis	<p>Inspired by grounded methodology <u>Data structure:</u> Organizers’ data and participants’ data. <u>Organizers’ data analysis:</u> Open coding and inductive analysis. Identification of intentionality to design the digital space as a territory. Back and forth between data and theory. <u>Participants’ data analysis:</u> Open coding and inductive analysis. Back and forth between data and theory. Identification of important phases of potential transformation for the participants related to de- and reterritorialization.</p>

4.5. ETHICAL CONSIDERATIONS

During my research for this thesis, I encountered several ethical dilemmas that made me consider the ethical implications of my work. Three main issues have been vital for me to consider when considering these implications: the first is related to collecting data, the second to data management, and the third to my safety as a researcher.

4.5.1. COLLECTING DATA

I started my research journey by analyzing the Blizzard-Hong Kong case, where I had to scrape data from many live chats on Twitch. Here is where I encountered my first ethical dilemma. Scraped data has the problem of privacy and consent from the people I collected the data from (Hård af Segerstad et al., 2016). The scraped data gave me access to thousands of nicknames and messages of people who did not give me their consent to read what they shared in those live chats. None of the participants knew that I would analyze what they wrote. Should I continue the analysis without asking any of the chat's participants for their consent? Is it relevant that I ask for consent? Should I cover or delete their nicknames when I present data examples in the paper? Is it essential for my study to show any nicknames? These are only a few questions I posed myself when I was writing that paper (Study 2).

Having the General Data Protection Regulation (GDPR) rules in mind, I tried to solve the issues presented before (Radley-Gardner et al., 2016). For the issue of consent, I did not see the need to ask for it. This decision was a bit utilitarian, but since I analyzed the data in bulk, due to the quantity of the data and the types of messages (highly redundant in content), the specifics of the comments in the live chat were practically lost or completely irrelevant. For the privacy of the participants of the live chat issue, I decided that since their names were already pseudonymized (they use nicknames and aliases on Twitch), I would blur or cover the nicknames of the participants completely when I presented examples of the data in the paper. In addition, considering that in those live chats is close to impossible to find any specific message (by hand), the probability of finding the examples used in the paper was minimal.

I followed a different path in terms of data collection when I started researching the Women Game Jam. I decided I would not scrape data anymore but rather have interviews and observations of meetings this group of women would have. This time, I had minor problems with the data collection because I asked for consent from every person I interviewed. In general, for the rest of the papers I researched related to the Women Game Jam, I followed the GDPR and the Swedish Ethical Review Act on how to collect data and present it (e.g., pseudonymization) (Radley-Gardner et al., 2016; Swedish Council for Higher Education, 2019).

4.5.2. DATA MANAGEMENT

After collecting the data, another main issue for me was how to handle it. The large data I collected for my first paper put me in a position of needing enough (digital) space to store it. I knew since the beginning that I did not want to keep it in any cloud since I was aware of these services' several issues. In addition, these issues were not only in terms of space vs. price but of the legality of storing potentially sensitive data in a cloud. I knew I needed a hard drive with enough space to put all the data from the first paper and the future data. In the end, I got an external hard drive with adequate space. However, the type of data I started to collect from the Women Game Jam became more sensitive than expected. During some interviews, the participants talked about their personal lives or mentioned aspects of their sexuality, which led me to another ethical dilemma. How should I manage this sensitive data? Should I try to eliminate sensitive information from the transcriptions? But what about the recordings? Will the data lose context if I eliminate that sensitive information? I had so many questions and worries about that issue that it was challenging to see a good way of handling it. Suddenly, it was not enough that I had enough space to store the data, but now I needed to deal with data that contained sensitive information.

I had several conversations with my supervisor and the head of the project, searching for a 'good fit' to manage the data I collected. One of my biggest fears was that I would accidentally lose the hard drive, and all that data got exposed; or that someone would hack the hard drive while in use and extract that data to expose it. These may look like exaggerated scenarios, but as a researcher, I worry about the safety not only of the data but the well-being of the participants. In this aspect, I align with the ethics of care premise of "relationships over individual principles" (franzke et al., 2019, p. 66). Thankfully, none of the scary scenarios happened, and I figured out how to handle that sensitive data. In terms of the storage of the data, I decided that two external hard drives were necessary (one as a backup of the other in case one gets lost); one hard drive was locked in a safe, and the other could be used more regularly but only from secure locations; and both hard drives needed to be encrypted, and password secured. In terms of the management of sensitive information, the head of my research project assured me that the research project had ethical approval, which meant that I had the clearance to work with that data without any issues.

4.5.3. SECURITY

The last ethical challenge for me was the security issue, not the security of my study participants but my security as a researcher. When I started my research journey, I had my master's thesis experience as background. My master's thesis was about women video game developers and how they used game engines to be part of the video game industry. Since that study, I have been aware of the risks of researching that area. The video game industry has been known for its "unwelcomeness" of women. Since Gamergate (i.e., an online harassment campaign against women in the video game industry), researchers have been the target of the same violent treatment (A. Massanari, 2017; A. L. Massanari, 2020). As a researcher in gender, inclusion, and safe spaces in the video game industry, I am aware of my vulnerable position. I know that I am exposed to potential harm from the part of angry internet mobs, trolls, and other harmful parties.

Knowing these potential risks, I had several discussions with my supervisor about whether to follow or not a particular stream of research. On a few occasions, we even decided to change the course of the study because of the potential harm I could attract. This particular security issue posed a significant ethical dilemma for me. Choosing between different topics not because of the study value but because of potential harm to my integrity is difficult. In addition, I must guard not only my physical safety but also my emotional and psychological safety. Collecting data from digital platforms filled with hatred towards anyone who speaks about certain video game industry issues is challenging. Being exposed to such violent messages is emotionally and psychologically draining. Recently, I read a paper exposing a potential additional threat to my research. The article written by Adrienne Massanari (2018) explores a terrifying website called the Professor Watchlist, where particular academics on college campuses in the USA are listed for advancing "the leftist propaganda" (A. L. Massanari, 2018). Although I am not based in the USA, and that site focuses primarily on US-based academics, they can still start broadening their horizons or inspire other alt-right parties to create their (local or more international) websites. This potential threat added tension to my emotional and psychological state. To tackle these threats and challenges, I had to be mindful of my decisions concerning what type of (online) information to follow. In addition, the several conversations I had with my supervisor and the head of the project have brought me some tranquility as they assured me that they (and the university) had my back.

5. KEY TAKEAWAYS FROM THE STUDIES

This thesis advances the discourse on digital safe spaces, focusing on safety, diversity, and inclusivity. In this section, I summarize the main takeaways and insights from each study and the book chapter, expanding on key concepts and discussions. Together, they highlight the importance of creating positive and inclusive digital spaces where marginalized groups, in this case, women (aspiring) game developers, can exist and prosper. These insights enrich broader discussions on digital cultures, gender, and social change within the IS field and beyond, such as gender, cultural, media, and game studies.

5.1. CHARACTERISTICS AND TYPES OF DIGITAL SAFE SPACES (STUDY 1)

Prior to this research, the concept of digital safe spaces lacked a clear definition and theoretical grounding. Through Study 1, I addressed this gap by conducting a systematic literature review (detailed methodology in section 4.2 and in Part 2) guided by two research questions: (1) *what are the main characteristics of digital safe spaces?* and (2) *how can digital safe spaces be typified?* Study 1 led me to identify ten distinctive characteristics and three types of digital safe spaces. It is important to note that the ten characteristics are transversal to all types of digital safe spaces, which means that the characteristics are not what define the types of safe spaces but rather their purpose and specific usage.

5.1.1.1. CHARACTERISTICS OF DIGITAL SAFE SPACES

The ten characteristics identified in Study 1 are divided into two groups based on their attributes: *space context* characteristics and *participant perception* characteristics. These characteristics are often connected and inter-related, meaning that sometimes one characteristic depends on another. Each space may have any number of characteristics, so it does not need to have them all to be considered a safe space. Table 11 summarizes the two groups with their attributes and associated characteristics.

Table 11. Summary of the characteristics of digital safe spaces

Group	Attribute	Characteristics
Space context	The more “tangible” aspects of digital safe spaces.	Digital platform affordances Boundaries Rules Resource-intensive work Designed support
Participant perception	The perceptions that participants have about the digital safe space. “Intangible” aspects of digital safe spaces.	Triggers (Perceived) freedom Emergent support Homogeneity Reaffirmation

Space context characteristics are the ones that are associated with what the digital safe space offers to its participants. These are the more “tangible” aspects of digital safe spaces. The set of characteristics identified as part of the space context are:

1. *Digital platform affordances* are the possibilities of action offered by different digital platforms. The most essential affordances for digital safe spaces are anonymity, connectivity, and customization.
2. *Boundaries* define the limits of the digital space and can create a sense of safety and belonging among its members. Setting boundaries can be a balancing act between protecting the space’s participants and “gatekeeping” access from people who might need to be part of the community or group but are excluded.

3. *Rules* establish the expectations for behavior inside the space. The space's administrators often decide the rules, which are then presented in written form to the participants, who are expected to agree to follow them. By defining what is and is not acceptable behavior, rules can help prevent harassment, bullying, hate speech, and other harmful behavior that can create an unsafe environment for participants.
4. *Resource-intensive work* refers to the time, effort, and resources needed to create and maintain an adequate digital space that keeps its members safe. These resources include technological and human resources. Resource-intensive work is often shared among all members of the space, including admins, moderators, and participants.
5. *Designed support* refers to the kind of support that is built in the digital safe space. This characteristic tends to be explicitly stated in the space's description or rules (e.g., Description: "This is a space for support," Rules: "Please be supportive of each other").

Participant perceptions characteristics are associated with the individual perceptions about the digital safe space they are part of. These perceptions are subjective and may not necessarily align with the reality or objective of the space. These are more "intangible" aspects of digital safe spaces. The characteristics associated with the participant perceptions are:

1. *Triggers* are the motivations for creating or joining a digital safe space. They are often associated with threats that individuals may feel outside the safe space. Marginalized groups (e.g., patients, Black, Indigenous communities) may better identify triggers.
2. *Perceived freedom* is the feeling of freedom in a digital safe space. This perceived freedom is subjective and may or may not align with the space's objectives. Perceived freedom does not mean complete freedom, and members may face sanctions depending on the space's rules.
3. *Emergent support* is the kind of support that emerges from the participants' interactions without the mandate of the space's rules (as it was for the designed support). It can be felt as solidarity by the space's members, and it may manifest as participants sharing experiences and information and relying on each other for advice.

4. *Homogeneity* is the perceived similarity between individuals within a community or group. It may strengthen members' sense of belonging and connection to one another. However, it is important to note that homogeneity can also have downsides, such as reinforcing stereotypes, limiting exposure to diverse perspectives, and excluding individuals who may benefit from the space but do not fit within the homogeneous group.
5. *Reaffirmation* helps reinforce the community's shared values and beliefs. It can take the form of identity reaffirmation (e.g., gender, sexual, or racial), ideology reaffirmation (e.g., religious or political), or a combination of both. Reaffirmation can help provide positive reinforcement and validation of the individual's experiences and perspectives. This validation can increase community members' self-esteem, self-worth, identity, confidence, and resilience.

5.1.2. TYPES OF DIGITAL SAFE SPACES

The three types of digital safe spaces identified in Study 1 were: *supportive*, *confirmative*, and *activistic*. These types are not defined by their characteristics, as the characteristics apply to all types of digital safe spaces. Some characteristics may be more evident than others, but in general, all characteristics can be found in all three types of digital safe spaces. Instead, the types of digital safe spaces are defined by how they are used and with what purpose they were created. It is important to note that these types are not the only ones that may exist, but rather they are meant to provide an initial framework for understanding digital safe spaces.

Supportive digital safe spaces are primarily designed to provide emotional and psychological support to their members. These spaces foster an environment where members feel cared for and supported by both fellow members and administrators. Key characteristics of these spaces include *designed support*—built into the space to offer assistance—and *emergent support*, where solidarity naturally arises and is celebrated among participants. These spaces are often created for vulnerable groups, such as victims of abuse or individuals with stigmatized medical conditions.

Confirmative digital safe spaces are designed to enable individuals to freely express their identities and ideas without fear of discrimination or prejudice. Key characteristics of these spaces include *reaffirmation*—the reinforcement of shared identities or beliefs—and *homogeneity*, as they often bring together individuals with common experiences or perspectives. Examples of confirmative digital safe spaces include those created for and by the LGBTQI+ community, the Black community, and Indigenous communities.

Activistic digital safe spaces serve as platforms for organization, resistance, and collective action around social and political issues. These spaces are often created by and for activists seeking to promote social justice and drive societal change. Due to the political nature of their purpose, activistic digital safe spaces are designed with strong *boundaries* to protect their members from potential harm and tend to prioritize *homogeneity* to maintain focus on their specific goals and mobilization efforts. Examples of activistic digital safe spaces include those created to support women’s rights, LGBTQI+ advocacy, and other social justice movements.

5.2. POLITICIZATION OF AN OPEN DIGITAL SPACE (STUDY 2)

While the previous section established what constitutes a digital safe space, Study 2 provides a critical contrast by examining an open digital space. Through analysis of a live chat interaction, this study reveals how seemingly neutral, open online environments can rapidly transform into contested spaces. The case demonstrates how an absence of protective mechanisms and moderation can lead to politicization and confrontation among participants. Study 2 explores a digital collective action that occurred in 2019 on Twitch, a platform widely used by gamers (read section 4.3.2 in the Methodology section for more information about the platform), involving the protests in Hong Kong and the video game company Blizzard (also known as Activision-Blizzard) (more details about the case study can be found in section 4.3). The research question leading this study was “*How do roles and associated feature usage emerge and manifest in the politicization of live chats on Twitch?*”

The key contribution of Study 2 was the identification of four interconnected actors: *mobilization*, *opposition*, *moderators*, and *spectators*. The **Mobilization** group consisted of activists advocating for their cause, using political slogans and longer, more politically charged messages. The **Opposition** group consisted of chat members opposing the politicization of the space. They reacted to the political messages from the Mobilization group by expressing frustration and dissatisfaction with the sudden politicization of the live chat. The **Moderators** acted as keepers of the space's rules and regulations. In the politicization of the Blizzard-Hong Kong case, the Moderators were an essential group in the functioning of the live chat, and in the case of a politicization process, they were key to returning the space to its original "a-political" state. Last, the **Spectators** included both human users and bots and were at the margins of the conflict between the Mobilization and Opposition groups.

The variety of actors identified in Study 2 shows how Twitch live chats foster opinion heterogeneity (i.e., diversity of voices in a social network space) rather than echo chambers. The public and open nature, along with the "chaotic" messages, political or not, made the space everything but safe. The Blizzard-Hong Kong case is an example of how public, heterogeneous, and open spaces, despite clear rules and moderation, are rarely safe. In the Blizzard-Hong Kong case, the live chat was not designed or thought of as a space where political views could be respectfully discussed or respectful communication fostered; on the contrary, the live chat was mostly unregulated, and moderation only came in after the disruption of the space happened.

5.3. CULTIVATING DIGITAL SAFE SPACES (STUDY 3)

Research on digital safe spaces says that the perception of safety is crucial for their survival and that they need to be constantly taken care of and cultivated to stay safe (Linabary, 2017; The Roestone Collective, 2014). In addition, some paradoxes exist naturally in digital safe spaces (e.g., safety/danger, inclusivity/exclusivity, public/private), making it essential that these spaces are deliberately cultivated to navigate these paradoxes (The

Roestone Collective, 2014). However, the literature on digital safe spaces has yet to delve much into what cultivation entails, what it involves, and how a safe space can be cultivated. I took on this challenge for Study 3. Through a longitudinal study, I delved into unpacking the cultivation process of digital safe spaces using the organization of the event Women Game Jam (WGJ) as my case study (more details about the case study and the methodology can be found in section 4.4). Study 3 focused on the organizational aspect of cultivating digital safe spaces rather than the outcome of the event. Study 3 did not delve into how the participants felt about the cultivation but instead how the organizers of the space reasoned and worked to cultivate their space. The research question leading this study was, “*What is the cultivation process of intended digital safe spaces for marginalized groups?*”

Study 3’s key contribution lies in identifying that cultivation of digital safe spaces manifests in three phases: *preparing*, *fostering*, and *fallowing*¹⁰. These terms were borrowed from the original agricultural meaning of cultivation, where the cultivation of plants was seen as a process of growth and evolution, and it matched perfectly the process explored in Study 3. The (agricultural) meaning of cultivation, according to the Merriam-Webster dictionary, refers to preparing and fostering the soil from which plants can grow or develop. Cultivation of digital safe spaces then evolves through these three stages (i.e., preparing, fostering, and fallowing) and may alternate between being “open” and “closed” to its participants as a critical mechanism for keeping the space safe.

5.3.1. PREPARING

This first phase of cultivation occurs when the space is closed to the participants, and it involves deciding the guidelines and rules of the space, the inclusion and exclusion criteria, and setting up boundaries to ensure the safety of the participants (Clark-Parsons, 2018; Cui et al., 2022; Haimson et al., 2020). Preparing needs a significant amount of time to be devoted to discussing better ways to design the space, understanding and adjusting

¹⁰ Agricultural term that means dormant or inactive. It is often used to describe when a cultivated land is allowed to rest and lie idle for some time (Merriam-Webster, 2024a).

the digital platform and its affordances, and even spending money on special features for the digital platform (if required). Preparing involves two main activities: *selecting* and *configuring*. **Selecting** is focused on choosing insiders and outsiders of the space, agreeing upon the inclusion and exclusion criteria, and creating mechanisms to ensure that only accepted people enter the space. The selection process is a form of boundary work. **Configuring** concerns shaping the digital platform to receive the participants and adding security layers. Configuring the digital platform requires being tech-savvy and knowing its specific features.

5.3.2. FOSTERING

The second phase of cultivation occurs when the space is opened to the participants. It involves taking care of the space and the participants and ensuring that the rules and norms regarding how to behave are followed. Fostering is a form of maintenance and boundary work aimed at ensuring adherence to the rule systems and protecting norms and beliefs (Miccilotta & Washington, 2013; Raynard et al., 2021), which requires resource-intensive work on time and energy from the organizers and moderators of the space. Fostering involves two main activities: *supporting* and *monitoring*. **Supporting** involves making the participants feel cared for and supported so that they can experience emotional refuge in the space. Supporting can be part of designed support, where it is part of the space's rules, or it can be something that admins and organizers actively do to encourage more of that behavior. Supporting the participants is seen as an activity that fosters a sense of community and belonging. **Monitoring** involves overseeing the space and ensuring its rules are being followed. Depending on the size of the space, monitoring might be challenging for a small group of people, which is why it is often carried out by many. Monitoring also involves moderating discussions and imposing sanctions on those breaking the rules.

5.3.3. FALLOWING

The third phase of cultivation occurs when the space is closed to the participants. The notion of fallowing in digital safe spaces is one of the most important contributions of Study 3. Fallowing can be understood as a temporal suspension and a time to reflect and improve the quality of the digital safe space. The fallowing time can be of any length the organizers deem necessary. After the preparing and fostering phases, the fallowing phase is necessary to preserve the admins and organizers' engagement, revitalize their efforts, and recover. The periodic closure of the digital safe space can be crucial for its long-term maintenance because long periods of safeguarding a space can tax the emotional and energetic state of the admins, organizers, and moderators. Fallowing is about resting and reflecting upon what had happened during the digital safe space's active phase and paving the way for a safer space the next time it is opened. It includes conserving what had worked well and identifying what had worked less well during the active time to improve it. The fallowing time in agriculture is an essential part of cultivation because if the soil is not well-rested, the land will suffer degradation (FAO Regional Office for Asia and the Pacific, 1998; Klemick, 2011). Taking the agricultural example as an illustration, if a digital safe space is not well-rested, the people inhabiting it and its caretakers may exhaust their energy, making the space slowly die out. Fallowing can be associated with the evolving phase in the literature of communities of practice, where there are periods of "lower energy and rediscovery," and these are sometimes needed for the community to achieve longevity (Wenger et al., 2023, p. 87).

Fallowing involves two main activities: *resting* and *reflecting*. **Resting** involves taking time to rest from the maintenance and boundary work that the digital safe space requires. The resting period is vital for the admins, organizers, and moderators of the space because taking care of safe spaces is emotionally and energetically taxing. Resting is about taking a bit of distance from the space and the situations it may bring. It is also about the recovery of energy and finding strength again for another round of cultivation. **Reflecting** involves evaluating how the digital safe space is going (or went) and what can be done to improve it in terms of safety or any other aspect deemed necessary. Reflecting includes conserving what had worked

well when the space was active and identifying what had worked less well to change it. It is important for the reflection time to also evaluate previous reflections and acknowledge how much the space has changed since the beginning to be aware of the evolution.

All three phases of cultivation focus both on providing a sense of safety and a sense of safeness to the participants (read more in section 6.1). The first one relates more to the Preparing phase, and the latter to the Fostering and Fallowing phases.

5.4. DIGITAL SAFE SPACES AS DESIRED TERRITORIES (STUDY 4)

Study 3 explored how digital safe spaces could be cultivated, but this was analyzed from the perspective of the space organizers, so the participants' perspectives were missing from the analytical spectrum. In Study 4, through the longitudinal study of the Women Game Jam as my case study, I explored the cultivation effect on participants, their experiences, and what changed for them after being part of the event (more details about the methodology can be found in section 4.4.6). Study 4 used the concept of territory as a heuristic device to explore participants' experiences within the digital safe space. The research question leading this study was, "*How do digital safe spaces function as territories, and what is their transformative potential?*"

Territory is often associated with states and geographical locations and has been described as having specific dimensions or characteristics such as space, which are the environmental and material features, demarcation or boundaries, and constitution, which includes ideas and power relations (Lambach, 2020, 2022). In a more sociological sense, territory can also refer to any stable and organized system of meaning, identity, or power, such as a nation, a culture, a language, or a psyche (Deleuze & Guattari, 1983, 1987). Digital spaces have been studied as territories in various forms, often related to the role of the state in the digital realm, data privacy, and cybersecurity (Daskala & Maghiros, 2006; Koulos, 2022; Lambach, 2020; Möllers, 2021; Morris, 2022). According to Lambach (2020), digital spaces can be territorialized—that is a process by

which a “contested space is formed and brought under the control of some actor” (p. 488)—by three main actors on the internet: regular users (*Private Territories*), government states (*States and State Territories*), and private companies (*Corporate Territories*). Each actor creates borders and boundaries and exerts control over different aspects of the internet and digital spaces. In *Private Territories*, regular users and content creators make and use (digital/online) territories to organize and manage their communities, often “piggybacking” onto corporate territories (e.g., Discord, Facebook, WhatsApp) (Lambach, 2020). These users ‘materialize’ their territories by creating names and logos to identify their spaces, creating boundaries to protect them (often creating an inside/outside), and displaying power using moderators and administrators that can censor or ban other space users (Lambach, 2020). *States and State Territories* are “cyber-analogies to physical state territor[ies]” (p. 494) and tend to communicate and exert control over the space using national firewalls, “kill switches,” and data location laws. “States reterritorialize the “national territory” in cyberspace” (p. 494). *Corporate Territories* are created by companies that exert their control and create boundaries by using digital rights management software, limited licenses, cookies, and signup requirements. “Corporations engage in “border management” by defining the level of access other corporations have to their territories, data, and users” (Lambach, 2020, p. 498). For Study 4, I focused only on *Private Territories* for the general analysis of the phenomena.

In Study 4, digital safe spaces were identified as having territorial characteristics, such as a designated space, established boundaries, control, and power relations. It is important to note that in the context of digital safe spaces, boundaries and control are necessary to keep the members of the space as safe as possible from outside harm. However, as noted by The Roestone Collective (2014) and Clark-Parsons (2018), if these borders are too rigid and the control too strict, they can become separatist spaces where the tensions that emerge can break or divide the space.

The key contribution of Study 4 is how the digital safe space becomes a desired territory where participants envision they can be or express themselves as they do not have the chance in other spaces or territories. This desired territory becomes a critical aspect for potential participants of digital safe spaces because it is what motivates them to join. I have talked in

Study 1 about how one of the characteristics of digital safe spaces is the *triggers* that make people want to escape and find shelter in digital safe spaces, but triggers are often associated with negative feelings and reactions to hostile spaces (e.g., prejudice, stigma, discrimination). However, the concept of desired territories is associated with the positive aspects people imagine a digital safe space can be or offer them (e.g., freedom of expression or a better community to be part of).

Study 4 found that desired territories could help participants deterritorialize from less welcoming spaces and reterritorialize in the digital safe space to make it their own. Deterritorialization is a concept that comes from cultural studies, sociology, and philosophy, and it refers to how social, cultural, and economic phenomena lose connection to specific geographic locations or territories, weakening established territorial boundaries and identities (Deleuze & Guattari, 1983, 1987). According to Deleuze and Guattari (1983; 1989), deterritorialization is also a positive process of creating new territories, new connections, and new modes of expression. It is transformational. These authors suggest that deterritorialization can be a source of resistance and creativity, especially for marginalized and oppressed groups, who can use it to challenge the dominant norms and values and to invent new forms of life and expression. Deterritorialization can be seen as an act of resistance in this way. Reterritorialization refers to the process by which a place or territory undergoes a redefinition or restructuring of its identity, meaning, and cultural significance (Deleuze & Guattari, 1983, 1987; Lambach, 2020). In a broader sense, reterritorialization involves reorganizing social, cultural, political, or economic practices within a particular space (Lambach, 2020). In essence, reterritorialization captures spaces' dynamic and evolving nature and how they adapt to changing circumstances (Lambach, 2020).

In Study 4, the deterritorialization process was identified as happening when participants moved from other digital spaces or territories, mainly from spaces where they were unwelcomed and located in the digital safe spaces where they perceived it was a better space for them. The deterritorialization brought them new connections, new ways of relations, and new ways of expression. The reterritorialization in Study 4 was identified when the participants started making the digital safe space their own by engaging with other participants and, in this way, restructuring and redefining the space and their identities within it.

5.5. DIGITAL SAFE SPACES FOR EMPOWERMENT (BOOK CHAPTER)

Study 3 and Study 4 explored the cultivation process of digital safe spaces and their potential transformative effect. By becoming desired territories where participants can de- and reterritorialize, these spaces can foster transformation. The book chapter reflected on the impacts of cultivating digital safe spaces on the participants' psychological empowerment and transformation.

The concept of empowerment varies greatly between fields and perspectives, and for the reflection on the book chapter, I used the idea of psychological empowerment of Zimmerman (1995). Psychological empowerment happens at the individual level of analysis and "includes active engagement in one's community and an understanding of one's sociopolitical environment" (Zimmerman, 1995, p. 582). In psychological empowerment, two aspects are relevant: empowering processes, which are how people become empowered, and empowered outcomes, which are the consequences of those processes. Among the empowering processes, they must create opportunities for community members to develop skills. These processes may include empowering individuals who may act as mentors who help others. Empowered outcomes can be understood as the consequences of empowering processes. Since psychological empowerment looks different for different people, takes different forms in various contexts, and is a dynamic variable that changes and fluctuates over time, it is not easy to measure the empowered outcomes. However, three components of psychological empowerment are relevant when assessing outcomes: the intrapersonal component, which is when an individual "believes he or she has the capability to influence a given context" (Zimmerman, 1995, p. 590); the interpersonal component, which is the understanding of "how the system works in that context" (p. 590); and the behavioral component, which is the behavior or the actions taken "to exert control in the context" (p. 590). All three components must be measured to capture psychological empowerment fully.

In the book chapter, I used the previous definition of psychological empowerment to reflect upon how digital safe spaces such as the WGJ may fit the characteristics of an empowering process. There, I argued that the

three phases of cultivation (i.e., preparing, fostering, and fallowing) have an incidence in individuals' (psychological) empowerment. In the chapter, I reflected that, as digital safe spaces may have empowering processes, they can also have empowerment outcomes, including its three components (i.e., intrapersonal, interpersonal, and behavioral components). For instance, in Study 4, it was evidenced that after their involvement in the WGJ, the participants appeared to believe they could, in a way, influence the video game development context by participating in more game jams (intrapersonal component), creating their portfolios and sending them to different companies and studios to find jobs there, and, for some of them, creating their own studios (behavioral component). Based on this, the empowerment outcome of the WGJ, as an empowering process, was that the participants experienced (psychological) empowerment after participating in it. In the book chapter analysis, I argued that cultivating the WGJ as a digital safe space enabled the participants to find conditions and opportunities to gain security in their own skills and capabilities, materializing this security into empowerment. This means that digital safe spaces, especially cultivated as explained in Study 3 (i.e., preparing, fostering, and fallowing), have the potential to generate (psychological) empowerment in their participants.

6. DISCUSSION AND CONTRIBUTIONS

This thesis responds to recent calls in Information Systems (IS) for deeper exploration of marginalization and social injustices and digital technologies. First, it explores the general characteristics and types of these spaces, creating a clear language and conceptualization of the phenomenon (Study 1). This also adds to the discussion about spaces in the IS field (Haj-Bolouri et al., 2024). Second, it explores the politicization of an open and public digital space that could be used as a comparative example with closed and private digital safe spaces (Study 2). This study showed the politicization of an “a-political” digital space, adding insights to research on collective action and digital technologies (Ahuja et al., 2018; Kavada, 2015; Leong et al., 2020; Selander & Jarvenpaa, 2016; Stewart & Schultze, 2019). Third, this thesis engages in understanding the processes through which digital safe spaces are organized and cultivated (Study 3). It examines the power dynamics at play within these spaces, as well as the social and technical structures that either enable or restrict participation (Adam, 2002; Curto-Millet et al., 2022; Curto-Millet & Cañibano, 2023; Masiero, 2023). Fourth, it explores the experiences of marginalized individuals—specifically women (aspiring) game developers—within digital safe spaces, engaging with critical studies on how marginalized individuals resist dominant discourses to form community and identity (Study 4). Particularly, this last part connects with the studies about counterpublics in IS research (Masiero, 2023; Renninger, 2015; Stewart & Schultze, 2019; Sutherland, 2019). These experiences of the participants are analyzed through the lens of desired territories and the processes of deterritorialization and reterri-

torialization, which also contribute to the discourse about space, control, and power within digital spaces (Curto-Millet & Cañibano, 2023; Haj-Bolouri et al., 2024; Lambach, 2020).

In the following sections, I elaborate on additional contributions that derived from working with this summary chapter. These contributions target mainly the IS field but also contribute to other fields such as media and cultural studies, game studies, critical studies, and data justice.

6.1. CULTIVATING SAFENESS

This thesis brings forward the importance of cultivating “safeness” in digital safe spaces rather than only focusing on creating or increasing safety for the participants. Research on safe spaces has tended to define them from the sense of safety they provide to their members (The Roestone Collective, 2014). Safety is relational to the idea of threat and danger (which act as triggers) and is focused on reducing said threat (i.e., safety seeking) involving vigilance, threat monitoring, and behaviors aimed at avoiding or neutralizing potential danger (Gilbert, 2024; Heriot-Maitland & Longden, 2022; The Roestone Collective, 2014). The sense of safety is a building block to the creation of safe spaces, but the other building blocks are also notions such as solidarity, a sense of community, and support that constitute a sense of safeness. The sense of safeness is focused on the presence of positive, supportive, and trustworthy resources, both social and environmental, and it involves feelings of being calm, secure, and free from danger (Gilbert, 2024; Heriot-Maitland & Longden, 2022; Nguyen et al., 2022). Safeness applied to society leads to social safeness, which refers to the sense of safeness derived from positive social relationships and interactions and includes feelings of belonging, being cared for, and connectedness within a social context (ibid.). In online settings, the social safeness felt from online relationships can help improve the mental well-being of people (Nguyen et al., 2022). The literature on safe spaces has focused less on the sense of safeness. This thesis, through the study of the Women Game Jam (Studies 3 and 4), expands the understanding of digital safe spaces by highlighting the importance of cultivating digital safe spaces and the work and resources needed to do so. The findings demonstrate how well-cultivated digital safe spaces can transform participants’ self-perception and profes-

sional confidence, potentially contributing to broader social change. Based on this, I argue that digital safe spaces should both be spaces for safety (i.e., a refuge from harm) and for social safeness (i.e., a space for care and connection). Digital safe spaces that focus on creating a sense of safeness by cultivating them to be spaces for support, nourishment, and connection are spaces that can potentially be transformative for the participants. By theorizing about cultivating safeness in digital safe spaces, I engage with broader critical discussions on the importance of increasing the safeness and social safeness in people, especially marginalized groups, relevant to fields like psychology, gender studies, and data justice.

6.2. DIFFERENTIATING DIGITAL SAFE SPACES

This thesis offers two distinctive case studies that could be used to analyze the differences between digital safe spaces, such as the one in Studies 3 and 4 (i.e., Women Game Jam), and other digital spaces, such as the one in Study 2 (i.e., Blizzard-Hong Kong). From a general perspective, the Women Game Jam case study (Studies 3 and 4) brings forward the importance of having a closed, invite-only, private space that has clear boundaries and strict inclusion criteria to create a sense of safety and safeness for the participants. This space was formed to be a safe haven for women interested in game development, and it was focused on support and well-being. As opposed to this type of space, the Blizzard-Hong Kong case study (Study 2) brings forward the type of “chaos” that open and public spaces may receive. The lack of moderation and rules invited a more heterogeneous type of crowd that behaved in unpredicted and “trolling” ways, making it *not* a safe space. Abstracting from the two case studies and using the findings from Study 1 as well, general differences can be traced between digital safe spaces (DSSs) and other digital spaces (ODSs) (see a summary in Table 12): First, DSSs tend to be private spaces (some exceptions can be seen in Cui et al., 2022; Sutherland, 2019) that use this to protect their participants from harm (Ammari et al., 2022; Clark-Parsons, 2018; Scheuerman et al., 2018). They are used as a refuge from harm, harassment, or discrimination. ODSs may be public and open and not necessarily focused on the protection or safety of their participants. They are usually not used as a refuge. DSSs focus on fostering support and

bringing well-being to their participants (Andalibi et al., 2018; Ringland et al., 2015). ODSs focus on other things, such as general communication, entertainment, or commerce, and they do not necessarily prioritize well-being and support (Bulygin et al., 2020; Faraj et al., 2016; Ford et al., 2017). DSSs tend to be highly moderated or monitored to keep the space safe from harmful behavior (Ammari et al., 2022; Gibson, 2019). ODSs may have minimal or inconsistent moderation, making them prone to unexpected abusive behavior, trolling, or toxicity (Blodgett, 2020; Demsar et al., 2021; A. Massanari, 2017). Finally, DSSs are cultivated to be safe (Clark-Parsons, 2018; Linabary, 2017). ODSs do not have such cultivation. This differentiation contributes to the conversation about spaces within the information systems field and in media and cultural studies. It can also be broadened and serve as a basis for examining the differences among various digital spaces, such as open-source and fan communities.

Table 12. Summary of comparison between digital safe spaces and other digital spaces

Digital safe spaces (Study 1, 3, 4)	Other digital spaces (Study 2)
Closed and private (invite-only)	Open and public
Refuge from harm, harassment, or discrimination	Not a refuge
Focused on support and well-being	Focused on entertainment, general communication, or commerce
Highly moderated	Minimal/inconsistently moderated
Cultivated	Not cultivated

6.3. DIGITAL SAFE SPACES IN THE SPATIAL FRAMEWORK

In a general sense, this thesis may be interpreted from the perspective of the spatial framework proposed by Haj-Bolouri et al. (2024). At least three out of the four spatial themes proposed in the framework are discussed in the findings of this thesis. For instance, from the *representative space* theme (i.e., “materialization of space through formal and verifiable characteristics” (p. 10)), the public digital space of Twitch (Study 2) and the closed digital space of Discord (Study 3 and 4) posed issues related to boundary work,

moderation, and permeability of the space (especially Twitch). Related to the *differentiating space* theme (i.e., materialization of space through social practices), both digital safe spaces (Study 1, 3, and 4) and *not* digital safe spaces (Study 2) are constructed through social practices and relational experiences. And related to the *disclosing space* theme (i.e., “materialization of space as an emerging phenomenon” (p. 12)), the phenomenon studied in the *not* digital safe space (Study 2) emerged and changed the space as the mobilization was being unfolded both out and inside the digital space. This thesis, however, sought to give a more holistic view of digital safe spaces as opposed to only focusing on one spatial theme. Based on this and through the studies in this thesis, I conceptualize digital safe spaces as *complex, socio-political, relational, and emergent spaces full of paradoxes that, with proper care and cultivation for safety and safeness, can be potential transformative spaces for participants.*

6.4. PRACTICAL CONTRIBUTIONS

This thesis presents several insights and recommendations for practitioners who engage or are interested in creating digital safe spaces, both event-type safe spaces such as game jams and hackathons and more long-term safe spaces. First, practitioners can use the list of characteristics and types of digital safe spaces provided in Study 1 as inspiration to help design and create their own digital spaces and recognize the characteristics they include. Second, practitioners can also take inspiration from cultivating for safeness and see if they can apply all the phases of cultivation (i.e., preparing, fostering, and fallowing) identified in Study 3. For building digital safe spaces that are not event-type spaces, admins and organizers can especially consider applying the fallowing phase, as the fallow time can be vital for the sustainability of the space, ensuring the energy recovery of all implicated (admins and participants alike). Third, practitioners can take inspiration from the politicization that occurred on Twitch’s live chats presented in Study 2 and plan ahead if they are planning to have a more open space that may receive a more heterogeneous crowd. They may want to put in place more moderation or include clear rules that help participants feel safer. Fourth, practitioners can also take inspiration from the findings in Study 4 and consciously create a space where the boundaries and purpose

of the space are communicated in a way that makes their digital safe space a desired territory. They may also recognize the potential transformative effect their space may have on the participants, especially if they are marginalized groups. Practitioners should remember that digital safe spaces have to negotiate paradoxes and that they should strive to make their space as safe as possible, knowing that “no digital space can ever be truly safe for all participants at all times.” (Clark-Parsons, 2018, pp. 2141–2142).

7. CONCLUSIONS

This thesis has explored the notion of digital safe spaces in depth through four interconnected studies and one book chapter. Each study brought attention to different aspects of these spaces, such as their characteristics and types, this way developing a language to distinguish digital safe spaces from other digital spaces; the importance of cultivating these spaces (especially letting them rest for their sustainability); and the perception of these spaces as desired territories where participants could experience potential transformation. Together, these studies allowed for a conceptualization of digital safe spaces as *complex, socio-political, relational, and emergent spaces full of paradoxes that, with proper care and cultivation for safety and safeness, can be potential transformative spaces for participants*. This thesis contributes to the broader discourse on digital safe spaces and the growing interest in the IS field for more studies about marginalized groups, counterpublics, inclusion, and how to support well-being and social change in digital spaces. Beyond the IS field, this thesis contributes to discourses about gender in game development spaces, the video game industry, and game jams relevant to feminist, cultural, media, and game studies.

8. LIMITATIONS AND FUTURE RESEARCH

8.1. LIMITATIONS AND RESEARCH OPPORTUNITIES OF THE NOTION OF DIGITAL SAFE SPACES

In this section, I will mainly discuss the limitations of the notion of digital safe spaces and, in a general manner, mention whether that limitation applies to this thesis. The respective papers, which are included in Part 2 of this thesis, provide additional and specific limitations.

As I have shown in this thesis, the notion of digital safe spaces is useful to understand how marginalized groups, in this case, women, form, cultivate, and leverage these spaces to create community, support, and the potential for transformation. However, I cannot pretend that this notion does not have its limitations in theoretical and practical terms. I discussed before that the perception of a space as safe was important to participants who seek to be part of a digital safe space. The concepts of “safeness” and “safety” are subjective, and what feels safe for one person may not feel safe for another. Participants may enter these spaces with the expectation of complete protection from harm, only to experience safety breaches due to internal tensions and feuds, extreme or not enough moderation, platform vulnerabilities, or malicious infiltrated actors (Cui et al., 2022; Scheuerman et al., 2018). This discrepancy between expectation (or desire) and reality can lead to disappointment, distrust, and further emotional harm

(read more on Scheuerman et al., 2018). As the literature on digital safe spaces has remarked, “no digital space can ever be truly safe for all participants at all times.” (Clark-Parsons, 2018, pp. 2141–2142) Digital safe spaces have to deal with paradoxes (The Roestone Collective, 2014) that may create more problems than solutions for organizers and admins of these spaces. These paradoxes can also cause theoretical challenges for researchers who may struggle to frame digital safe spaces in a positive light only. It is essential to take into consideration the gray areas of the concept when discussing it in the future. In this research, I have shown some paradoxes that arise when creating a digital safe space (e.g., inclusion and exclusion), but I have mostly focused on the sense of safeness (as opposed to the sense of safety) as an aspect that should be paid more attention to in research. I recognize this is a limitation of this research.

Another issue with digital safe spaces is moderation. Attempts to moderate safe spaces may sometimes be perceived as forms of censorship, where certain voices or opinions are excluded to maintain a particular sense of security (Gibson, 2019). This can become more problematic when the rules of the space are overly restrictive or used to silence dissenting voices. Balancing the right to free expression with the need for safety is complex, and it needs careful treatment to avoid leading participants to self-censoring processes (Gibson, 2019; Noelle-Neumann, 1974). In addition, when large digital safe spaces rely on automated systems for moderation, which usually take the form of bots, they can misinterpret context and either over-censor or fail to flag harmful content (Brewer et al., 2020). This can undermine the sense of safety and lead to both false positives and negatives in content moderation (ibid.). The moderation issue is a great opportunity to continue researching moderation strategies (both manual and automated) in digital safe spaces, where due to the nature of the spaces, moderation can take different forms. In this research, moderation has not been the focal point, and I recognize this as a limitation of the research.

Boundary management can also be problematic when the inclusion and exclusion of participants in a digital safe space becomes too rigid. Digital safe spaces are built on the idea that some people may be left out of the space due to safety concerns (Haimson et al., 2020). However, “gate-keeping” access to a person who might need such a space can be the source of some tension. As with moderation, boundary management is a balanc-

ing act between protecting the participants inside the space and excluding people who may want to or should be part of it (Haimson et al., 2020; Johnson et al., 2022). Organizers and admins must constantly negotiate the limits of the space they created and agree on who is in and out of it. In this research, I have explored this aspect, but only from the perspective of the ones that got included, which I recognize as a limitation. Researchers can take this as an opportunity to explore boundary work and strategies to maintain a digital safe space from all angles (e.g., the ones that got excluded and included).

I also recognize that digital safe spaces may, inadvertently, may also create echo chambers. These spaces are built to be secluded from other digital spaces, and for this exact reason, participants may be exposed only to like-minded views, limiting their engagement with other or diverse perspectives (Wiener, 2017). Depending on the type of digital safe space (e.g., activist digital safe space), this lack of engagement with other perspectives can hinder constructive debate and critical thinking, leading to tensions and polarization. Not all digital safe spaces create echo chambers, but they may be at risk if not managed well. In addition, the reliance on digital platforms owned by big companies (e.g., Meta) to create these spaces makes digital safe spaces be at the mercy of changing algorithms, often coming from corporate agendas and profit motives, that may affect the echo chamber effect on these spaces. Much more research on the algorithmic effect on digital safe spaces is needed to understand how these communities are affected or even how they use these algorithms to their advantage. The echo chamber effect is not a focal point in this research mostly because it did not appear in the data. The Women Game Jam was a space for creativity and exploration, and it was expected to include diverse perspectives, so there was no evidence of echo chambers in the studies.

Lastly, there is the issue of digital safe spaces being used by groups of people who actively seek to hurt others. The same mechanisms used by marginalized communities to create and cultivate digital safe spaces to find shelter from harm can be used by dominant/oppressor groups (e.g., white supremacists) or dangerous groups for society (e.g., pedophiles) to form “safe” spaces (for them) to plot to harm or harm other members of society (e.g., marginalized individuals) (Lokmanoglu & Veilleux-Lepage, 2020; Maggio, 2019). Digital safe spaces start from the desire to find a separate

space to exist, find community and support, and be away from the public eye. Oppressors and dangerous groups may want to find the same types of things in a “safe” space, but instead of using that space to improve society, they galvanize the mechanisms of the “safe” spaces to avoid getting caught (Lokmanoglu & Veilleux-Lepage, 2020). It is common that these groups form their own digital “safe” spaces outside of mainstream digital platforms and use more unmonitored platforms such as 8chan (A. Massanari, 2017), Telegram (Lokmanoglu & Veilleux-Lepage, 2020), or Discord (Blout & Burkart, 2021) (although after the ‘Unite the Right’ rally in 2017, Discord changed their policies to monitor the Discord servers more (Brown, 2020; Graggle, 2021)). I call upon future research to explore more the mechanisms these dominant/oppressor groups or dangerous groups employ to create their “safe” spaces (or dangerous spaces), how they differ from the mechanisms employed by marginalized communities, and how can these spaces be identified to avoid the harm they may cause to other groups of society. This thesis did not analyze this phenomenon, as it focused solely on digital safe spaces used by marginalized communities.

8.2. PERSONAL FUTURE RESEARCH

As part of my personal future endeavors, I would like to make use of the rich data I collected for this thesis and continue exploring avenues related to digital safe spaces. For instance, I would like to explore the paradoxical tensions derived from digital safe spaces and not digital safe spaces, such as public vs private and closed vs open. Also, the Women Game Jam initiative comes from Latin American countries and is primarily widespread in the “Global South” (i.e., Latin American and African countries). Based on that, I would love to study digital safe spaces designed and created by Latin American minds and how this influences the dynamics of the space, what is expected to happen there, and the type of relations that work there. This can add to the growing interest in the IS field for decolonizing IS research (Masiero, 2023; Petrakaki et al., 2023). Like Srinivasan (2012) said, “[t]he digital world need not solely be conceived in Western, elite terms, but instead can and should be re-envisioned as a space that empowers the values, priorities, and ontologies held by global users from the ‘margins,’ within the developing world [because these] users ... hold the potential to

dramatically influence research on digital cultures, particularly around the question of whose voices drive the architectures, algorithms, and languages of new media.” (cited by Sharma et al., 2019, p. 61) Regarding this, I would like to compare participants’ experiences in game jams, specifically the Women Game Jam, from the northern part of the world (e.g., Europe) and the southern part (e.g., Latin America). Also, how do South American game jams differ from game jams created by other parts of the world (e.g., Global Game Jam created in the USA)? Lastly, the book chapter included in this thesis is not a peer-reviewed paper, which creates an opportunity for me to turn it into a journal paper where the issue of empowerment and digital safe spaces can be explored. It would be interesting to study how digital safe spaces play a role (or not) in empowerment processes.

REFERENCES

- Adam, A. (2002). Exploring the gender question in critical information systems. *Journal of Information Technology*, 17(2), 59–67. <https://doi.org/10.1080/02683960210145959>
- Adams, T. E. (2018). Looking Out: Gay Bars, Safe Spaces, and the Pulse Massacre. *Qualitative Inquiry*, 24(5), 338–339. <https://doi.org/10.1177/1077800417741390>
- Ahuja, M. K., Patel, P., & Suh, A. (2018). The Influence of Social Media on Collective Action in the Context of Digital Activism: An Affordance Approach. *Proceedings of the 51st Hawaii International Conference on System Sciences 2018*, 2203–2212.
- Allen Clark, P. (2019, October 21). *What to Know About Blizzard, Hong Kong and the Controversy Over Politics in Esports* [News]. Time. <https://time.com/5702971/blizzard-esports-hearthstone-hong-kong-protests-backlash-blitzchung/>
- Allen, J. P., & Kim, J. (2005). It and the Video Game Industry: Tensions and Mutual Shaping. *Journal of Information Technology*, 20(4), 234–244. <https://doi.org/10.1057/palgrave.jit.2000048>
- Allsup, M. (2021, July 22). *Activision Blizzard Sued Over 'Frat Boy' Culture, Harassment (1)*. <https://news.bloomberglaw.com/daily-labor-report/activision-blizzard-sued-by-california-over-frat-boy-culture>
- Ammari, T., Nofal, M., Naseem, M., & Mustafa, M. (2022). Moderation as Empowerment: Creating and Managing Women-Only Digital Safe Spaces. *Proceedings of the ACM on Human-Computer Interaction*, 6(CSCW2), 1–36. <https://doi.org/10.1145/3555204>
- Andalibi, N., Haimson, O. L., Choudhury, M. D., & Forte, A. (2018). Social Support, Reciprocity, and Anonymity in Responses to Sexual Abuse Disclosures on Social Media. *ACM Transactions on Computer-Human Interaction*, 25(5), 1–35. <https://doi.org/10.1145/3234942>

- Anguiano, D. (2021, July 28). Activision Blizzard employees walk out over harassment and 'frat boy' culture allegations. *The Guardian*. <https://www.theguardian.com/us-news/2021/jul/28/activision-blizzard-walkout-allegations-harassment-frat-boy-culture>
- Arora, K. (2023, November 17). *Council Post: The Gaming Industry: A Behemoth With Unprecedented Global Reach*. Forbes. <https://www.forbes.com/councils/forbesagencycouncil/2023/11/17/the-gaming-industry-a-behemoth-with-unprecedented-global-reach/>
- Baah, F. O., Teitelman, A. M., & Riegel, B. (2019). Marginalization: Conceptualizing patient vulnerabilities in the framework of social determinants of health—An integrative review. *Nursing Inquiry*, 26(1), e12268. <https://doi.org/10.1111/nin.12268>
- Bailey, E. N., Miyata, K., & Yoshida, T. (2021). Gender Composition of Teams and Studios in Video Game Development. *Games and Culture*, 16(1), 42–64. <https://doi.org/10.1177/1555412019868381>
- Balli, F. (2018). Game Jams to Co-Create Respiratory Health Games Prototypes as Participatory Research Methodology. *Forum Quality Sozialforschung/ Forum: Qualitative Social Research*, 19(3). <http://dx.doi.org/10.17169/fqs-19.3.2734>
- Basu, T. (2020, October 21). *AOC's Among Us livestream hints at Twitch's political power* [News]. MIT Technology Review. <https://www.technologyreview.com/2020/10/21/1011038/aocs-among-us-livestream-hints-at-twitchs-political-power/>
- Bennett, W. L., Segerberg, A., & Walker, S. (2014). Organization in the crowd: Peer production in large-scale networked protests. *Information, Communication & Society*, 17(2), 232–260. <https://doi.org/10.1080/1369118X.2013.870379>
- Benyon, D. (2014). *Spaces of Interaction, Places for Experience* (1st ed. 2014). Springer International Publishing. <https://doi.org/10.1007/978-3-031-02206-7>

- Berger, V. (2020). Phenomenology of Online Spaces: Interpreting Late Modern Spatialities. *Human Studies*, 43(4), 603–626. <https://doi.org/10.1007/s10746-020-09545-4>
- Bernardi, R. (2016). How Do Online Communities of Patients Aggregate on Twitter? An Affordance Perspective. *Thirty Seventh International Conference on Information Systems, Dublin 2016*, 19.
- Blizzard Entertainment. (2019, October 8). *Hearthstone Grandmasters Asia-Pacific Ruling*. <https://playhearthstone.com/en-us/blog/23179289/>
- Blodgett, B. M. (2020). Media in the Post #GamerGate Era: Coverage of Reactionary Fan Anger and the Terrorism of the Privileged. *Television & New Media*, 21(2), 184–200. <https://doi.org/10.1177/1527476419879918>
- Blout, E., & Burkart, P. (2021). White Supremacist Terrorism in Charlottesville: Reconstructing ‘Unite the Right’. *Studies in Conflict & Terrorism*, 1–22. <https://doi.org/10.1080/1057610X.2020.1862850>
- Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. sage.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Brewer, J., Romine, M., & Taylor, T. L. (2020). Inclusion at Scale: Deploying a Community-Driven Moderation Intervention on Twitch. *Proceedings of the 2020 ACM Designing Interactive Systems Conference*, 757–769. <https://doi.org/10.1145/3357236.3395514>
- Brown, A. (2020, June 30). *Discord Was Once The Alt-Right’s Favorite Chat App. Now It’s Gone Mainstream And Scored A New \$3.5 Billion Valuation*. Forbes. <https://www.forbes.com/sites/abram-brown/2020/06/30/discord-was-once-the-alt-rights-favorite-chat-app-now-its-gone-mainstream-and-scored-a-new-35-billion-valuation/>

- Bulygin, D., Musabirov, I., Suvorova, A., Konstantinova, K., & Okopyni, P. (2020). Between an Arena and a Sports Bar: Online Chats of eSports Spectators. *arXiv:1801.02862 [Cs]*. <http://arxiv.org/abs/1801.02862>
- Burgess, J., & Matamoros-Fernández, A. (2016). Mapping sociocultural controversies across digital media platforms: One week of #gamer-gate on Twitter, YouTube, and Tumblr. *Communication Research and Practice*, 2(1), 79–96. <https://doi.org/10.1080/22041451.2016.1155338>
- Chalk, A. (2019, October 18). Bipartisan members of congress call on Blizzard to reverse Blitzchung punishment [News]. *PC Gamer*. <https://www.pcgamer.com/bipartisan-members-of-congress-call-on-blizzard-to-reverse-blitzchung-punishment/>
- Charmaz, K. (2014). *Constructing grounded theory* (2nd edition). Sage.
- Chess, S., & Shaw, A. (2015). A Conspiracy of Fishes, or, How We Learned to Stop Worrying About #GamerGate and Embrace Hegemonic Masculinity. *Journal of Broadcasting & Electronic Media*, 59(1), 208–220. <https://doi.org/10.1080/08838151.2014.999917>
- Clark-Parsons, R. (2018). Building a digital Girl Army: The cultivation of feminist safe spaces online. *New Media & Society*, 20(6), 2125–2144. <https://doi.org/10.1177/1461444817731919>
- Clement, J. (2021, May 19). *Global active streamers on Twitch 2021*. Statista. <https://www.statista.com/statistics/746173/monthly-active-streamers-on-twitch/>
- Conway, M., Scrivens, R., & Macnair, L. (2021). Right-Wing Extremists' Persistent Online Presence: *International Centre for Counter-Terrorism - The Hague*, 25.

- Cui, Y., Yamashita, N., & Lee, Y.-C. (2022). ‘We Gather Together We Collaborate Together’: Exploring the Challenges and Strategies of Chinese Lesbian and Bisexual Women’s Online Communities on Weibo. *Proceedings of the ACM on Human-Computer Interaction*, 6(CSCW2), 1–31. <https://doi.org/10.1145/3555148>
- Curto-Millet, D., & Cañibano, A. (2023). The Design of Social Inclusion Interventions: A Paradox Approach. *Journal of the Association for Information Systems*, 24(5), 1271–1291. <https://doi.org/10.17705/1jais.00795>
- Curto-Millet, D., Lindman, J., & Selander, L. (2022). “The Voices of the Subjugated”—A Feminist Critique of Information Systems Research. *AMCIS 2022 Proceedings*. Americas Conference on Information Systems (AMCIS). https://aisel.aisnet.org/amcis2022/sig_si/sig_si/11
- Dacin, M. T., Zilber, T. B., Cartel, M., & Kibler, E. (2024). Navigating Place: Extending perspectives on place in organization studies. *Organization Studies*, 45(8), 1191–1212. <https://doi.org/10.1177/01708406241252944>
- Daskala, B., & Maghiros, I. (2006). Digital territories. *2nd IET International Conference on Intelligent Environments (IE 06), 2006*, v2-221-v2-221. <https://doi.org/10.1049/cp:20060698>
- Dataspelsbranschen. (2023). *Swedish Games Industry 2023—Game Developer Index* (p. 68). Dataspelsbranschen. <https://dataspelsbranschen.se/s/GameDeveloperIndex2023-EN-WEB.pdf>
- Dataspelsbranschen. (2024). *Swedish Games Industry 2024—Game Developer Index* (p. 76). Dataspelsbranschen. https://dataspelsbranschen.se/s/GameDeveloperIndex-2024_WEB.pdf
- Davies, C. (2004). Virtual space. *Space: In Science, Art and Society*, 69–104.

- Deleuze, G., & Guattari, F. (1983). *Anti-Oedipus: Capitalism and schizophrenia*. University of Minnesota Press.
- Deleuze, G., & Guattari, F. (1987). A Thousand Plateaus: Capitalism and Schizophrenia. *Journal of Interdisciplinary History*, 19(4), 657. <https://doi.org/10.2307/203963>
- Demsar, V., Brace-Govan, J., Jack, G., & Sands, S. (2021). The social phenomenon of trolling: Understanding the discourse and social practices of online provocation. *Journal of Marketing Management*, 37(11–12), 1058–1090. <https://doi.org/10.1080/0267257X.2021.1900335>
- Dirks, S., Van Pelt-Deen, M., & Muijres, E. (2018). Playing with refugees and other minorities during the Games [4Diversity] Jam. *Proceedings of the International Conference on Game Jams, Hackathons, and Game Creation Events*, 34–38. <https://doi.org/10.1145/3196697.3196705>
- Discord. (n.d.-a). *Discord Bots*. Discord Bots. Retrieved 14 April 2022, from <https://discord.bots.gg/>
- Discord. (n.d.-b). *Discord Moderator Academy*. Discord. Retrieved 14 April 2022, from <https://discord.com/moderation/1500000178701321:-Auto-Moderation-in-Discord>
- Discord. (2022, May 12). *What is Discord | A Guide for Parents and Educators*. Discord. <https://discord.com/safety/360044149331-What-is-Discord>
- Discord Developer Portal. (n.d.). *Discord Developer Portal—API Docs for Bots and Developers*. Discord Developer Portal. Retrieved 13 December 2021, from <https://discord.com/developers/docs/resources/guild>
- Diwanji, V., Reed, A., Ferchaud, A., Seibert, J., Weinbrecht, V., & Sellers, N. (2020). Don't just watch, join in: Exploring information behavior and copresence on Twitch. *Computers in Human Behavior*, 105, 106221. <https://doi.org/10.1016/j.chb.2019.106221>

- Dourish, P. (2006). Re-space-ing place: 'place' and 'space' ten years on. *Proceedings of the 2006 20th Anniversary Conference on Computer Supported Cooperative Work - CSCW '06*, 299. <https://doi.org/10.1145/1180875.1180921>
- European Institute for Gender Equality. (2024, July 26). *Marginalized groups* | European Institute for Gender Equality. European Institute for Gender Equality. https://eige.europa.eu/publications-resources/thesaurus/terms/1175?language_content_entity=en
- FAO Regional Office for Asia and the Pacific. (1998). *Poverty Alleviation and Food Security in Asia: Land Resources*. Food and Agriculture Organization of the United Nations, Regional Office for Asia and the Pacific. <https://books.google.se/books?id=j2A2GwAACAAJ>
- Faraj, S., Von Krogh, G., Monteiro, E., & Lakhani, K. R. (2016). Special Section Introduction—Online Community as Space for Knowledge Flows. *Information Systems Research*, 27(4), 668–684. <https://doi.org/10.1287/isre.2016.0682>
- Ferraz, C., & Gama, K. (2019). A Case Study About Gender Issues in a Game Jam. *Proceedings of the International Conference on Game Jams, Hackathons and Game Creation Events 2019*, 1–8. <https://doi.org/10.1145/3316287.3316290>
- Ferraz, C., & Gama, K. (2020). Female participation in game jams: A case study on gender issues in game development marathons. *SBC { Proceedings of SBGames 2020}*, 4.
- Ford, C., Gardner, D., Horgan, L. E., Liu, C., tsaasan, a. m., Nardi, B., & Rickman, J. (2017). Chat Speed OP PogChamp: Practices of Coherence in Massive Twitch Chat. *Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems*, 858–871. <https://doi.org/10.1145/3027063.3052765>
- Foxall, S. (2017, March 12). *Swedish politician uses his own Hearthstone stream to explain eSports legislation* [News]. PCGamesN. <https://www.pcgamesn.com/hearthstone/hearthstone-sweden-parliament-twitch-stream>

- franzke, aline shakti, Bechmann, A., Zimmer, M., Ess, C., & the Association of Internet Researchers. (2019, October 6). *Internet Research: Ethical Guidelines 3.0*. <https://aoir.org/reports/ethics3.pdf>
- Freeman, G., & McNeese, N. J. (2021). A Tale of Creativity and Struggles: Team Practices for Bottom-Up Innovation in Virtual Game Jams. *Proceedings of the ACM on Human-Computer Interaction*, 5(CSCW1), 1–27. <https://doi.org/10.1145/3449150>
- GDC, & Game Developer. (2024). *2024 State of the Game Industry* (p. 37).
- Gibson, A. (2019). Free Speech and Safe Spaces: How Moderation Policies Shape Online Discussion Spaces. *Social Media + Society*, 5(1), 205630511983258. <https://doi.org/10.1177/2056305119832588>
- Gilbert, P. (2024). Threat, safety, safeness and social safeness 30 years on: Fundamental dimensions and distinctions for mental health and well-being. *British Journal of Clinical Psychology*, 63(3), 453–471. <https://doi.org/10.1111/bjc.12466>
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology. *Organizational Research Methods*, 16(1), 15–31. <https://doi.org/10.1177/1094428112452151>
- Glaser, B. G. (1992). *Basics of grounded theory analysis*. Sociology Press.
- Goel, Johnson, Junglas, & Ives. (2011). From Space to Place: Predicting Users' Intentions to Return to Virtual Worlds. *MIS Quarterly*, 35(3), 749. <https://doi.org/10.2307/23042807>
- Grace, L. (2016). Deciphering Hackathons and Game Jams through Play. *Proceedings of the International Conference on Game Jams, Hackathons, and Game Creation Events*, 42–45. <https://doi.org/10.1145/2897167.2897175>

- Graggle. (2021, May 25). *How Trust- Safety Addresses Violent Extremism on Discord*. Discord. <https://discord.com/safety/how-trust-safety-addresses-violent-extremism-on-discord>
- Graham, S. (1998). The end of geography or the explosion of place? Conceptualizing space, place and information technology. *Progress in Human Geography*, 22(2), 165–185.
- Guimaraes, A., Balalau, O., Terolli, E., & Weikum, G. (2019). Analyzing the Traits and Anomalies of Political Discussions on Reddit. *Proceedings of the Thirteenth International AAAI Conference on Web and Social Media (ICWSM 2019)*, 205–213.
- Haddaway, N. R., Page, M. J., Pritchard, C. C., & McGuinness, L. A. (2022). PRISMA2020: An R package and Shiny app for producing PRISMA 2020-compliant flow diagrams, with interactivity for optimised digital transparency and Open Synthesis. *Campbell Systematic Reviews*, 18(2), e1230. <https://doi.org/10.1002/cl2.1230>
- Haimson, O. L., Buss, J., Weinger, Z., Starks, D. L., Gorrell, D., & Baron, B. S. (2020). Trans Time: Safety, Privacy, and Content Warnings on a Transgender-Specific Social Media Site. *Proceedings of the ACM on Human-Computer Interaction*, 4(CSCW2), 1–27. <https://doi.org/10.1145/3415195>
- Haj-Bolouri, A., Conboy, K., & Gregor, S. (2024). Research Perspectives: An Encompassing Framework for Conceptualizing Space in Information Systems: Philosophical Perspectives, Themes, and Concepts. *Journal of the Association for Information Systems*, 25(2), 407–441. <https://doi.org/10.17705/1jais.00830>
- Hård af Segerstad, Y., Kullenberg, C., Kasperowski, D., & Howes, C. (2016). Studying Closed Communities On-line: Digital Methods and Ethical Considerations Beyond Informed Consent and Anonymity. *Internet Research Ethics for the Social Age. New Challenges, Cases, and Contexts*.

- Harrison, S., & Dourish, P. (1996). Re-Place-ing Space: The Roles of Place Collaborative Systems. *Computer Supported Cooperative Work '96*, 10.
- Hartal, G. (2017). Fragile subjectivities: Constructing queer safe spaces. *Social & Cultural Geography*, 1–20. <https://doi.org/10.1080/14649365.2017.1335877>
- Heriot-Maitland, C., & Longden, E. (2022). *Relating to voices using compassion focused therapy: A self-help companion*. Routledge.
- IFPI. (2024). *Global Music Report 2024—State of the Industry* (Global Music Report No. 2024; p. 29). https://ifpi-website-cms.s3.eu-west-2.amazonaws.com/GMR_2023_State_of_the_Industry_ee2ea600e2.pdf
- IGDA. (2021, August 20). Women Game Jam – IGDA. *IDGA*. <https://igda.org/event/women-game-jam/>
- Ingersoll, R. (1993). Loosely coupled organizations revisited. *Research in the Sociology of Organizations*, 11, 81–112.
- Into Games. (2021, September 8). *The Women in Games Game Jam 2021*. Eventbrite. <https://www.eventbrite.co.uk/e/165881059715?aff=efbneb>
- Jacobson, S., Myung, E., & Johnson, S. L. (2016). Open media or echo chamber: The use of links in audience discussions on the Facebook Pages of partisan news organizations. *Information, Communication & Society*, 19(7), 875–891. <https://doi.org/10.1080/1369118X.2015.1064461>
- Janelle, D. G., & Hodge, D. C. (2000). Information, Place, Cyberspace, and Accessibility. In D. G. Janelle & D. C. Hodge (Eds.), *Information, Place, and Cyberspace* (pp. 3–11). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-662-04027-0_1

- Jiang, J. A., Kiene, C., Middler, S., Brubaker, J. R., & Fiesler, C. (2019). Moderation Challenges in Voice-based Online Communities on Discord. *Proceedings of the ACM on Human-Computer Interaction*, 3(CSCW), 1–23. <https://doi.org/10.1145/3359157>
- Johnson, J., Arnold, V., Piper, A. M., & Hayes, G. R. (2022). ‘It’s a lonely disease’: Cultivating Online Spaces for Social Support among People Living with Dementia and Dementia Caregivers. *Proceedings of the ACM on Human-Computer Interaction*, 6(CSCW2), 1–27. <https://doi.org/10.1145/3555133>
- Kavada, A. (2015). Creating the collective: Social media, the Occupy Movement and its constitution as a collective actor. *Information, Communication & Society*, 18(8), 872–886. <https://doi.org/10.1080/01369118X.2015.1043318>
- Kelly, M. (2019, October 8). *After Hearthstone player’s ban, Blizzard is in hot water with lawmakers* [News]. The Verge. <https://www.theverge.com/2019/10/8/20905181/blizzard-hearthstone-player-ban-marco-rubio-ron-wyden-china-hong-kong-protests-blitzchung>
- Kennedy, H. W. (2018). Game Jam as Feminist Methodology: The Affective Labors of Intervention in the Ludic Economy. *Games and Culture*, 13(7), 708–727. <https://doi.org/10.1177/1555412018764992>
- Kenney, M. (2001). *Mapping gay L.A.: The intersection of place and politics*. Temple University Press.
- Kiene, C., & Hill, B. M. (2020). Who Uses Bots? A Statistical Analysis of Bot Usage in Moderation Teams. *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems*, 1–8. <https://doi.org/10.1145/3334480.3382960>
- Kim, E. (2014, August 25). *Amazon Buys Twitch For \$970 Million In Cash*. Business Insider. <https://www.businessinsider.com/amazon-buys-twitch-2014-8>

- Klassen, S., Kingsley, S., McCall, K., Weinberg, J., & Fiesler, C. (2021). More than a Modern Day Green Book: Exploring the Online Community of Black Twitter. *Proceedings of the ACM on Human-Computer Interaction*, 5(CSCW2), 1–29. <https://doi.org/10.1145/3479602>
- Klemick, H. (2011). Shifting cultivation, forest fallow, and externalities in ecosystem services: Evidence from the Eastern Amazon. *Journal of Environmental Economics and Management*, 61(1), 95–106. <https://doi.org/10.1016/j.jeem.2010.07.003>
- Klimentov, M. (2021, February 10). Riot Games CEO Nicolas Laurent accused of gender-based harassment, misconduct in new lawsuit. *Washington Post*. <https://www.washingtonpost.com/video-games/2021/02/09/riot-games-laurent-lawsuit/>
- Koulos, T. (2022). A digital territory to be appropriated: The state and the nationalization of cyberspace. *Open Research Europe*, 1, 119. <https://doi.org/10.12688/openreseurope.14010.2>
- Kruglyk, V., Bukreiev, D., Chorny, P., Kupchak, E., & Sender, A. (2020). Discord platform as an online learning environment for emergencies. *Ukrainian Journal of Educational Studies and Information Technology*, 8(2), 13–28. <https://doi.org/10.32919/uesit.2020.02.02>
- Kultima, A. (2015, June 22). Defining Game Jam. *Proceedings of the 10th International Conference on the Foundations of Digital Games (FDG 2015)*. International Conference on the Foundations of Digital Games (FDG), USA.
- Kuo, R. (2018). Racial justice activist hashtags: Counterpublics and discourse circulation. *New Media & Society*, 20(2), 495–514. <https://doi.org/10.1177/1461444816663485>
- Laiti, O., Harrer, S., Uusiautti, S., & Kultima, A. (2021). Sustaining intangible heritage through video game storytelling—The case of the Sami Game Jam. *International Journal of Heritage Studies*, 27(3), 296–311. <https://doi.org/10.1080/13527258.2020.1747103>

- Lambach, D. (2020). The Territorialization of Cyberspace*. *International Studies Review*, 22(3), 482–506. <https://doi.org/10.1093/isr/viz022>
- Lambach, D. (2022). Space, scale, and global politics: Towards a critical approach to space in international relations. *Review of International Studies*, 48(2), 282–300. <https://doi.org/10.1017/S026021052100036X>
- Landoni, P., Dell'era, C., Frattini, F., Messeni Petruzzelli, A., Verganti, R., & Manelli, L. (2020). Business model innovation in cultural and creative industries: Insights from three leading mobile gaming firms. *Technovation*, 92–93, 102084. <https://doi.org/10.1016/j.technovation.2019.102084>
- Langley, A. (1999). Strategies for Theorizing from Process Data. *The Academy of Management Review*, 24(4), 691–710.
- Le Ngoc, M. T. (2024, March 28). Spotighting women gamers and how they play and spend on video games. *Newzoo*. <https://newzoo.com/resources/blog/spotlighting-women-gamers-and-how-they-play-and-spend-on-video-games>
- Lefebvre, H. (1974). *The production of space* (Reprinted). Blackwell.
- Leong, C., Faik, I., Tan, F. T. C., Tan, B., & Khoo, Y. H. (2020). Digital organizing of a global social movement: From connective to collective action. *Information and Organization*, 30(4), 100324. <https://doi.org/10.1016/j.infoandorg.2020.100324>
- Librarian. (2021, April). *Beginner's Guide to Discord*. Discord. <https://support.discord.com/hc/en-us/articles/360045138571-Beginner-s-Guide-to-Discord>
- Linabary, J. R. (2017). *Constructing Digital 'Safe' Space: Navigating Tensions in Transnational Feminist Organizing Online* (Purdue University). ProQuest Dissertations & Theses. http://gateway.proquest.com/openurl?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&cres_dat=xri:pqm&rft_dat=xri:pqdiss:10608601

- Lokmanoglu, A., & Veilleux-Lepage, Y. (2020). Hatred She Wrote: A Comparative Topic Analysis of Extreme Right and Islamic State Women-Only Forums. In D. M. D. Silva & M. Deflem (Eds.), *Sociology of Crime, Law and Deviance* (pp. 183–205). Emerald Publishing Limited. <https://doi.org/10.1108/S1521-613620200000025011>
- Lorenz, T. (2020, November 10). How Hasan Piker Took Over Twitch. *The New York Times*. <https://www.nytimes.com/2020/11/10/style/hasan-piker-twitch.html>
- Maggio, E. (2019). How an Internet Platform Galvanized the Alt-Right/Neo-Nazi Movement in America. *Journal of Counterterrorism & Homeland Security International*, 24(3), 26–31.
- Magnani, G., & Gioia, D. (2023). Using the Gioia Methodology in international business and entrepreneurship research. *International Business Review*, 32(2), 102097. <https://doi.org/10.1016/j.ibusrev.2022.102097>
- Masiero, S. (2023). Decolonising critical information systems research: A subaltern approach. *Information Systems Journal*, 33(2), 299–323. <https://doi.org/10.1111/isj.12401>
- Massanari, A. (2017). #Gamergate and The Fappening: How Reddit’s algorithm, governance, and culture support toxic technocultures. *New Media & Society*, 19(3), 329–346. <https://doi.org/10.1177/1461444815608807>
- Massanari, A. L. (2018). Rethinking Research Ethics, Power, and the Risk of Visibility in the Era of the “Alt-Right” Gaze. *Social Media + Society*, 4(2), 205630511876830. <https://doi.org/10.1177/2056305118768302>
- Massanari, A. L. (2020). Gamergate. In K. Ross, I. Bachmann, V. Cardo, S. Moorti, & M. Scarcelli (Eds.), *The International Encyclopedia of Gender, Media, and Communication* (1st ed., pp. 1–5). Wiley. <https://doi.org/10.1002/9781119429128.iegmc014>

- Massey, D. B. (2005). *For space* (1. publ., repr). Sage.
- McKenna, B. (2020). Creating convivial affordances: A study of virtual world social movements. *Information Systems Journal*, 30(1), 185–214. <https://doi.org/10.1111/isj.12256>
- McKenna, B., Gardner, L. A., & Myers, M. D. (2011). Social Movements in World of Warcraft. *Social Movements*, 8.
- Merriam-Webster. (2024a). Definition of FOLLOWING. In *Merriam-Webster*. <https://www.merriam-webster.com/dictionary/following>
- Merriam-Webster. (2024b). *Definition of MACHISMO*. <https://www.merriam-webster.com/dictionary/machismo>
- Merriam-Webster. (2024c, September 1). *Definition of DOXING*. <https://www.merriam-webster.com/dictionary/doxing>
- Micelotta, E. R., & Washington, M. (2013). Institutions and Maintenance: The Repair Work of Italian Professions. *Organization Studies*, 34(8), 1137–1170. <https://doi.org/10.1177/0170840613492075>
- Möllers, N. (2021). Making Digital Territory: Cybersecurity, Techno-nationalism, and the Moral Boundaries of the State. *Science, Technology, & Human Values*, 46(1), 112–138. <https://doi.org/10.1177/0162243920904436>
- Morris, C. (2022). Digital displacement: The spatialities of contentious politics in China's digital territory. *Transactions of the Institute of British Geographers*, 47(4), 1075–1089. <https://doi.org/10.1111/tran.12559>
- Mortensen, T. E., & Sihvonen, T. (2020). Negative Emotions Set in Motion: The Continued Relevance of #GamerGate. In T. J. Holt & A. M. Bossler (Eds.), *The Palgrave Handbook of International Cyber-crime and Cyberdeviance* (pp. 1353–1374). Springer International Publishing. https://doi.org/10.1007/978-3-319-78440-3_75

- Mütterlein, J., & Fuchs, C. (2019). *Digital Technologies and their Influence on Spaces*.
- Naidoo, R., Coleman, K., & Guyo, C. (2019). Exploring gender discursive struggles about social inclusion in an online gaming community. *Information Technology & People*, 33(2), 576–601. <https://doi.org/10.1108/ITP-04-2019-0163>
- Nguyen, L., Phillips, C. V., Rodriguez, A., Young, A. R., & Ramdass, J. V. (2022). Relationships matter! Social safeness and self-disclosure may influence the relationship between perceived social support and well-being for in-person and online relationships. *Journal of Applied Social Psychology*, 52(12), 1211–1220. <https://doi.org/10.1111/jasp.12921>
- Noelle-Neumann, E. (1974). The Spiral of Silence a Theory of Public Opinion. *Journal of Communication*, 24(2), 43–51. <https://doi.org/10.1111/j.1460-2466.1974.tb00367.x>
- Ochsner, A. (2019). Reasons Why: Examining the Experience of Women in Games 140 Characters at a Time. *Games and Culture*, 14(5), 523–542. <https://doi.org/10.1177/1555412017709418>
- Paganini, L., Ferraz, C., Gama, K., & Alves, C. (2021). Promoting Game Jams and Hackathons as more Women-Inclusive Environments for Informal Learning. *2021 IEEE Frontiers in Education Conference (FIE)*, 1–9. <https://doi.org/10.1109/FIE49875.2021.9637301>
- Paganini, L., & Gama, K. (2020). Engaging Women's Participation in Hackathons: A Qualitative Study with Participants of a Female-focused Hackathon. *International Conference on Game Jams, Hackathons and Game Creation Events 2020*, 8–15. <https://doi.org/10.1145/3409456.3409458>
- Pearson, C. (2022, March 3). *What is Discord And What is it Used For?* <https://store.epicgames.com/en-US/news/what-is-discord-and-what-is-it-used-for>

- Pérez, O. F. R., & Morales, A. (2020). Machismo. In B. J. Carducci, C. S. Nave, J. S. Mio, & R. E. Riggio (Eds.), *The Wiley Encyclopedia of Personality and Individual Differences* (1st ed., pp. 243–246). Wiley. <https://doi.org/10.1002/9781119547181.ch305>
- Petrakaki, D., Chamakiotis, P., & Curto-Millet, D. (2023). From ‘making up’ professionals to epistemic colonialism: Digital health platforms in the Global South. *Social Science & Medicine*, 321, 115787. <https://doi.org/10.1016/j.socscimed.2023.115787>
- Poyane, R. (2019). Toxic Communication on Twitch.tv. Effect of a Streamer. In D. A. Alexandrov, A. V. Boukhanovsky, A. V. Chugunov, Y. Kabanov, O. Koltsova, & I. Musabirov (Eds.), *Digital Transformation and Global Society* (pp. 414–421). Springer International Publishing.
- Radley-Gardner, O., Beale, H., & Zimmermann, R. (Eds.). (2016). *Fundamental Texts On European Private Law*. Hart Publishing. <https://doi.org/10.5040/9781782258674>
- Raynard, M., Kodeih, F., & Greenwood, R. (2021). Proudly Elitist and Undemocratic? The distributed maintenance of contested practices. *Organization Studies*, 42(1), 7–33. <https://doi.org/10.1177/0170840619874462>
- Renninger, B. J. (2015). “Where I can be myself ... where I can speak my mind”: Networked counterpublics in a polymedia environment. *New Media & Society*, 17(9), 1513–1529. <https://doi.org/10.1177/1461444814530095>
- Ringland, K. E., Wolf, C. T., Dombrowski, L., & Hayes, G. R. (2015). Making ‘Safe’: Community-Centered Practices in a Virtual World Dedicated to Children with Autism. *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing*, 1788–1800. <https://doi.org/10.1145/2675133.2675216>

- Ruiz-Bravo, N. V., & Roshan, M. (2022). Cultivating Digital Safe Spaces: The case of Women Game Jam on Discord. *AMCIS 2022 Proceedings*, 6.
- Saldanha, L., Marques Da Silva, S., & Ferreira, P. D. (2024). 'Could this really be a place for me?' Women's experiences in game jams and video game communities. *Journal of Gender Studies*, 33(4), 431–445. <https://doi.org/10.1080/09589236.2023.2264222>
- Sandberg, J., Holmstrom, J., & Lyytinen, K. (2020). Digitization and Phase Transitions in Platform Organizing Logics: Evidence from the Process Automation Industry. *MIS Quarterly*, 44(1), 129–153. <https://doi.org/10.25300/MISQ/2020/14520>
- Saunders, Rutkowski, Genuchten Van, Vogel, & Orrego. (2011). Virtual Space and Place: Theory And Test. *MIS Quarterly*, 35(4), 1079. <https://doi.org/10.2307/41409974>
- Scheuerman, M. K., Branham, S. M., & Hamidi, F. (2018). Safe Spaces and Safe Places: Unpacking Technology-Mediated Experiences of Safety and Harm with Transgender People. *Proceedings of the ACM on Human-Computer Interaction*, 2(CSCW), 1–27. <https://doi.org/10.1145/3274424>
- Seering, J., Kraut, R., & Dabbish, L. (2017). Shaping Pro and Anti-Social Behavior on Twitch Through Moderation and Example-Setting. *Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing*, 111–125. <https://doi.org/10.1145/2998181.2998277>
- Selander, L., & Jarvenpaa, S. L. (2016). Digital Action Repertoires and Transforming a Social Movement Organization. *MIS Quarterly*, 40(2), 331–352. <https://doi.org/10.25300/MISQ/2016/40.2.03>

- Sevelius, J. M., Gutierrez-Mock, L., Zamudio-Haas, S., McCree, B., Ngo, A., Jackson, A., Clynes, C., Venegas, L., Salinas, A., Herrera, C., Stein, E., Operario, D., & Gamarel, K. (2020). Research with Marginalized Communities: Challenges to Continuity During the COVID-19 Pandemic. *AIDS and Behavior*, *24*(7), 2009–2012. <https://doi.org/10.1007/s10461-020-02920-3>
- Sharma, V., Nardi, B., Norton, J., & Tsaasan, A. M. (2019). Towards Safe Spaces Online: A Study of Indian Matrimonial Websites. In D. Lamas, F. Loizides, L. Nacke, H. Petrie, M. Winckler, & P. Zaphiris (Eds.), *Human-Computer Interaction – INTERACT 2019* (Vol. 11748, pp. 43–66). Springer International Publishing. https://doi.org/10.1007/978-3-030-29387-1_4
- Spaaij, R., & Schulenkorf, N. (2014). Cultivating Safe Space: Lessons for Sport-for-Development Projects and Events. *Journal of Sport Management*, *28*(6), 633–645. <https://doi.org/10.1123/jism.2013-0304>
- Staudt Willet, K. B., & Carpenter, J. P. (2021). A tale of two subreddits: Change and continuity in teaching-related online spaces. *British Journal of Educational Technology*, *52*(2), 714–733. <https://doi.org/10.1111/bjet.13051>
- Stewart, M., & Schultze, U. (2019). Producing solidarity in social media activism: The case of My Stealthy Freedom. *Information and Organization*, *29*(3), 100251. <https://doi.org/10.1016/j.infoandorg.2019.04.003>
- Sutherland, T. (2019). Social Media and the Black Travel Community: From Autonomous Space to Liberated Space. *Proceedings of the 52nd Hawaii International Conference on System Sciences*, 2186–2194.
- Swedish Council for Higher Education. (2019). *Act on responsibility for good research practice and the examination of research misconduct (2019:504)*. UHR.Se. <https://www.uhr.se/en/start/laws-and-regulations/Laws-and-regulations/act-on-responsibility-for-good-research-practice/>

- The Roestone Collective. (2014). Safe Space: Towards a Reconceptualization: Safe Space: Towards a Reconceptualization. *Antipode*, 46(5), 1346–1365. <https://doi.org/10.1111/anti.12089>
- Tilson, D., Sorensen, C., & Lyytinen, K. (2012). Change and Control Paradoxes in Mobile Infrastructure Innovation: The Android and iOS Mobile Operating Systems Cases. *2012 45th Hawaii International Conference on System Sciences*, 1324–1333. <https://doi.org/10.1109/HICSS.2012.149>
- Travers, A. (2003). Parallel Subaltern Feminist Counterpublics in Cyberspace. *Sociological Perspectives*, 46(2), 223–237. <https://doi.org/10.1525/sop.2003.46.2.223>
- Tuan, Y.-F. (1977). *Space and place: The perspective of experience* (7. print). Univ. of Minnesota Press.
- TwitchTracker. (n.d.). *Twitch Viewers Statistics*. TwitchTracker. Retrieved 23 January 2023, from <https://twitchtracker.com/statistics/viewers>
- Urquhart, C. (2013). *Grounded Theory for Qualitative Research: A Practical Guide*. SAGE Publications, Ltd. <https://doi.org/10.4135/9781526402196>
- Vaast, E., Safadi, H., University of Georgia, Lapointe, L., McGill University, & Negoita, B. (2017). Social Media Affordances for Connective Action: An Examination of Microblogging Use During the Gulf of Mexico Oil Spill. *MIS Quarterly*, 41(4), 1179–1205. <https://doi.org/10.25300/MISQ/2017/41.4.08>
- Van Doorn, N. (2011). Digital spaces, material traces: How matter comes to matter in online performances of gender, sexuality and embodiment. *Media, Culture & Society*, 33(4), 531–547. <https://doi.org/10.1177/0163443711398692>

- Warner, M. (2002). Publics and counterpublics (abbreviated version). *Quarterly Journal of Speech*, 88(4), 413–425. <https://doi.org/10.1080/00335630209384388>
- Watanabe, C. Y. V., Diniz, E. H., & Scornavacca, E. (2022). The role of blogs in restoring the self-integrity of women victims of intimate partner sexual violence. *Information Technology & People*. <https://doi.org/10.1108/ITP-04-2020-0172>
- Webster, J., & Watson, R. T. (2002). *Analyzing the Past to Prepare for the Future: Writing a Literature Review*. 12.
- Weick, K. E. (1976). Educational Organizations as Loosely Coupled Systems. *Administrative Science Quarterly*, 21(1), 1–19.
- Wenger, E., Wenger-Trayner, B., Reid, P., & Bruderlein, C. (2023). *Communities of practice within and across organizations: A guidebook*. Social Learning Lab.
- Weststar, J., & Legault, M.-J. (2018). Women's Experiences on the Path to a Career in Game Development. In K. L. Gray, G. Voorhees, & E. Vossen (Eds.), *Feminism in Play* (pp. 105–123). Springer International Publishing. https://doi.org/10.1007/978-3-319-90539-6_7
- Wiener, G. (2017). *Microaggressions, Safe Spaces, and Trigger Warnings*. Greenhaven Publishing LLC.
- Wijman, T. (2024, February 8). Newzoo's games market revenue estimates and forecasts by region and segment for 2023. *Newzoo*. <https://newzoo.com/resources/blog/games-market-estimates-and-forecasts-2023>
- Witman, E. (2020, December 12). *How to stream on Discord and broadcast your webcam or screen to everyone in a channel*. Business Insider. <https://www.businessinsider.com/how-to-stream-on-discord>

- Wyden, R., Rubio, M., Ocasio-Cortez, A., Gallagher, M., & Mailnowski, T. (2019, October 18). *Wyden Letter to Activision-Blizzard on Hong Kong protest-related ban 2019-10-18*. https://upload.wikimedia.org/wikipedia/commons/6/63/Wyden_Letter_to_Activision-Blizzard_on_Hong_Kong_protest-related_ban_20191018.pdf
- Yan, W., Sivakumar, G., & Xenos, M. A. (2018). It's not cricket: Examining political discussion in nonpolitical online space. *Information, Communication & Society*, *21*(11), 1571–1587. <https://doi.org/10.1080/1369118X.2017.1340499>
- Yoo, Y., Boland, R. J., Lyytinen, K., & Majchrzak, A. (2012). Organizing for Innovation in the Digitized World. *Organization Science*, *23*(5), 1398–1408. <https://doi.org/10.1287/orsc.1120.0771>
- Zimmerman, M. A. (1995). Psychological empowerment: Issues and illustrations. *American Journal of Community Psychology*, *23*(5), 581–599. <https://doi.org/10.1007/BF02506983>
- Zittrain, J. L. (2006). The Generative Internet. *The Harvard Law Review Association*, *119*(7), 1974–2040.