Chapter 4
Women (and a Little Bit of Culture) in Simulation Gaming

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Abstract The relation of gender as a cultural construct and games is a complicated one. Research addresses questions of gender representation, influence of gender on game design and development, facilitation, and game preferences. Market research shows that female game developers are still underrepresented in a booming industry. Research into game play and learning by gaming draws conflicting pictures—from competitive male players to female gamers with steep learning curves. In this contribution, we discuss four perspectives through which gender and simulation games are connected, namely, the player as a woman, the female game character, the developer of the game as a woman, and the female facilitator. We refer to related work and our own experiences. However, we aim at initiating a discourse on this topic with our questions rather than providing answers. We hope that readers will develop their own perspective on the relation between gender and simulation gaming and how more diversity would contribute to this field.

Keywords Simulation gaming · Gender · Women · Facilitation · Diversity · Equality

4.1 Introduction

When we talk about gender topics in the world of simulation and gaming, a lot of the content is driven by harassment, sexism, and bias. Since the "Gamergate" incident (Chess & Shaw, 2015; Massanari, 2017; Mortensen, 2018), when social media were

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misused to promote anti-feminist activism in the games industry, it is common knowledge that this field of practice and research struggles with finding its own approach towards diversity, inclusiveness, and equality, when it comes to gender representation and work. Gaming as an industry is more than just fun—it's big business. The market research firm NewZoo estimated the mobile gaming sector hit $68.5 billion in 2019. It is estimated that the global gaming market will amount to 268.8 billion US dollars annually in 2025, up from 178 billion US dollars in 2021. North America is set to remain the top-grossing gaming market worldwide despite strong growth in the Asian region. In-game purchases are estimated to account for the more than 74 million US dollars worldwide in 2025. When looking into the number of players of video games, it's about 60% male and 40% female. Statistics tell us further that 75% of developers of video games worldwide between 2014 and 2017 are male and about 22% are female and 3% are transgender/others. We must note that most of the data available comes from market research, not from scholarly sources (Nieborg & Hermes, 2008). As data from different market researches yield similar results, these results can be seen as trustworthy though.

Yet, somehow, in the otherwise diverse, global, and professional network of simulation and gaming, topics around gender and (simulation) games aren't discussed at large—as if to protect the own group from discomfort and possible negative tensions. This avoidance might be a reason why the ISAGA network did not address this topic for almost 50 years with an open discussion. When using the search term "gender" in the journal site of SAGE's Simulation & Gaming journal, 222 results were shown (data from 14.06.2021). However, when looking into the titles, only eight paper titles include "gender." The majority of the papers focuses on gender preferences (e.g., Cassell & Jenkins, 2000; Carr, 2005) or different effects of games related to gender (e.g., Nadolny & Halabi, 2016; Hopp & Fisher, 2017; Yörük Açıkel et al., 2018). One young woman at the 50th ISAGA conference in Warsaw 2019 raised the question directed to the representation and role of female game scientists and practitioners within the network and asked for a spontaneous meeting during the conference. The broad title of this meeting was "Women in Games." The allocated meeting room filled up quickly. It was obvious that the setting was different to the rest of the conference: While being moderated by one woman, all participants were sitting in a circle and many stories and experiences were shared with each other. It was not easy to get the "hot topics" out immediately. The contrary happened. One of the members who was with the organization from the very beginning jumped in and made a clear statement that there was never any harassment or negative initiative towards women within ISAGA. She praised the men who supported her research and one could get the impression that she tried to avoid any discussion right away in nervous agitation to protect the men in the network. Luckily the conversation opened up and it became clear that the topic "women and games" had been a taboo in the ISAGA network. A number of related questions, focused on simulation games, have not yet been addressed, such as the following: "Do women play different than men? Are games designed by men biased? Are there hidden social manipulations in the way female characters are introduced in the games? Does it make a difference if a woman is the facilitator or a man? What happens to a group in

a game, when there is a minority of women playing?" All of a sudden it was clear that these questions are relevant and important not only for the network itself but also for the profession and education. If there is a cultural or ethical bias, this needs to be addressed, and the network needs to work towards solutions. Work on gender and games can be found in the scientific literature; however little is known about its effect specifically in the domain of simulation games. This is what inspired us to look closer into literature, combine it with our own experiences, and formulate some recommendations for future work within ISAGA.

Our main aim is to improve the debate around the development and use of simulation games in organizational contexts and to make both their study and their implementation and usage as inclusive as possible. Our intention is not to blame one gender side or to emphasize stereotypes. We also acknowledge the fact that gender is a cultural construct and that there are more and more individuals who cannot identify themselves with these. In our opinion, we first need to shed light on some of the misalignments that hit female-identifying (or nonbinary) individuals more often than those identifying themselves as male. Gender gaps, game content, and other data that is openly accessible will be used to underpin our thoughts. We hope to be provocative in our statements so to start an open and constructive dialogue between gamers, researchers, and practitioners. We will approach games through four different lenses:

1. The player as a woman.
2. Female game characters.
3. The developer of the game as a woman.
4. The female facilitator.

4.2 The Player as a Woman

In the commercial sector, the need to find out what women like and what they expect from a game is essential for business. In academia, researchers have examined the types of games that men and women prefer to play and whether they have different preferences for distinct game elements, especially in relation to video game play. Studies show, for example, that male players prefer competition, while female players prefer collaboration (Kivikangas et al., 2014). In their study, Kivikangas et al. (2014) found that male players indeed preferred competition over collaboration, but could not find the opposite for the female players. Jenson and de Castell (2010) could not find that distinction, too, as the girls in their study also reported to enjoy competition in game play. Hamlen (2010) provides an overview of research showing numbers on game play leading to assumptions that boys tend to play video games much more often than girls just around 10–15 years ago. She also emphasizes that differences in game play may have implications for the use of technology and technology-related careers in later life:

> It is thought that girls' lack of interest in video games and other technologies may later hurt their chances of entering technology-related fields and their ability to utilize the technologies needed to complete tasks needed for particular careers and activities (Hamlen, 2010: 294).

Eglesz et al. (2005) explored game play preferences in adults, finding that male video game players like playing in teams more than female players. Their results suggest that males report more often than females that they are motivated by challenge, the acquisition of new games, and the need for variety. From a business of market research perspective, we again see a blend of similarities and differences in gaming habits. Generally, both genders seem to favor similar types of games. Men and women both list strategy games as one of their top three genres on PC, console, and mobile. Additionally, the favored franchise on each platform is the same: Candy Crush Saga on mobile, Call of Duty on console, and World of Warcraft on PC.

There is a lot of interest to better understand what motivates people to play games and whether distinct player types can be differentiated, not only along gender lines, and including the field of simulation games. From a playing and experience perspective, the model of Bartle (1996) and his four player types of achiever, explorer, socializer, and killer is one of the most accepted ones and has since been combined with Kolb's (1984) learner types and applied to games for learning (Konert et al., 2013, 2014; Hamdaoui et al., 2018). Lopez-Fernandez et al. looked into video games addiction, including the ability of young girls and boys to play video games. Their result is as follows: It is not about the gender—but the time the kids use to play and the types of games they prefer. In that study, the authors, too, found that the boys play much longer than girls (Lopez-Fernandez et al., 2019). Dindar (2018) summarizes a number of studies into game play preferences, stating that males seem to prefer game types such as shooter, strategy, and role-playing games, while female players tend to like board, puzzle, and skill games. His analysis shows that, even in 2018, a gap between game play time still exists between the genders, with male participants in their study reporting to play more often and having higher perceived gaming skills.

While a number of studies as mentioned above exist that explore the use of video games, it is difficult to find data for business games used in professional training. The abovementioned studies may impact this field, especially when we think of designing games for a diverse group of players, taking into account different preferences and motivations of players.

One of the authors, Claudia Schmitz, can connect her observations from more than 20 years of facilitating business board games in international companies with the purpose of talent and management development, based on scientific insights. When she started in the early 2000s to facilitate business board games in the industry, Claudia worked for engineering companies like Bombardier, Daimler, SAP, and Microsoft. As the training sessions and their structure represents a microcosmos of the company itself, it was no wonder that there were hardly any women in the training sessions. In sessions with 18 individuals (representing an average group size for a session), there was perhaps one woman on average—which makes about 6% of the group. Yet, 1 woman and 17 men is a very unbalanced group structure and Claudia observed behavior specific to most minorities in groups: They try to adapt. But there was one difference. If this one woman was from Human Resources or Finance department and felt outside their comfort zone in a now male dominated environment, they often showed a very passive and service-oriented

behavior. On the other hand, if the only woman was a scientist or engineer, she was used to male colleagues and competition in the field and was sometimes even dominant in the game. Often, the group had to be made aware of the imbalance, and the session started with a slightly provocative welcome such as the following: "Congratulations to the group—you have one woman on your board" or "What is going on here, there is not one woman in the group!" Depending on the culture of the company, this was considered "normal," and the fact that most of them had never thought about this under- or non-representation of female colleagues was strange to say the least.

From these early days, some improvements have been made in large companies. The session-composition since around 2010 has grown to approximately 30% female participants, and some companies reached a 50:50 balance in 2020, according to Claudia. As some companies have a clear goal to promote women in management, the bonus of managers depends on their efforts to get more women up the career ladder. Even when this is a company indicator for all managers, there are still significant country-specific differences, depending on the culture, structure, and history.

Most of Claudia's clients organize workshops with EMEA groups (people working in Europe, Middle East, and Africa). Usually, the group is composed of a mix of European Union (EU) nationals. A repeating identified pattern is that women who are educated in the eastern part of Europe (ex-GDR, Poland, Russia) are more engaged, active, and leading the games than German, Dutch, or British women. When it comes to Southern European countries, the women selected by their bosses are usually not the ones taking over an active role and often do not represent a management role, but rather the HR or Marketing department. From Claudia's observations, one can easily get the impression that there is no desire to develop the professional skills and knowledge of these women and that they delegated solely with the intention to fulfil a gender quota. In Claudia's experience, these women usually play safe, try not to engage with the men at the table, and do service jobs. In the break, they tell the "real" stories about their bosses and the overbearing behavior in a male-dominated world. The dominating culture in the real world is very much reflected in the way companies select players, how these players behave, and, finally, what they learn. When the women do not take their roles in the games seriously and do not fully engage, they leave without having gained major educational insights. If they observe a game instead of playing it, they are out of the learning zone.

One author, Heide Lukosch, designs and researches simulation games since more than 12 years. She often worked in male-dominated domains, too, such as the police, fire fighting services, and the transportation domain. While she also observed an imbalance in numbers of men and women during her game sessions, a look into the data of the game sessions could not reveal any significant difference in game play performance or preferences—if any, the results were often surprising and showed that contrary to common belief, in two particular studies, the female players outperformed the male players in a game session with a digital game or had a steeper learning curve within the game when being less experienced game players (Lukosch et al., 2017; Lukosch & Cunningham, 2018). This is in line with studies showing that

boys seem to be more interested in the use of games for learning, yet others state that girls show at least the same performance and engagement in serious games as boys (Fraga-Varela et al., 2021). However, the same study summarizes the result of some research as a difference in playing styles, but not in performance, and that "women collaborate and are more willing to accept experiences with serious games, while men are more competitive" (Fraga-Varela et al., 2021: 2).

For one subtype of simulation games, wargames, that simulate strategies and are often used in military training, but also in business, 99% of its designers and players are men, according to the PaxSim site. An article on this type of games, which can be considered a subtype of simulation games, summarizes answers the author previously had posted to wargaming forums, trying to explore the reasons for the low number of female players in this area. There were many thoughtful reactions, but also some really disturbing answers of male players, such as the following:

- Women prefer shopping for shoes.
- Women prefer wine and manicures.
- I [contributor] was trying to impose "quotas."
- That encouraging more women to wargame was like demanding more male shop clerks at Victoria's Secret.
- If women were interested, they would form their own clubs.
- That it was good to include women, unless they were those pushy "social justice warrior" types.

We want to acknowledge that these comments might be highly biased, and selected from internet forums, not from (evidence-based) peer-reviewed sources. However, this article shows that female players and designers are highly underrepresented in the field of wargaming and that there seems to be a strong opinion about what the reasons for this are. Simulation games are slightly different—these games are often introduced by the management or the HR department of an organization, and as Claudia's examples show, it is often the preselection within an organization that determines who (and of which gender) participates in the workshop and plays the business game. As research community, we should acknowledge this, as well as the influence each player provides to the game experience, and that more diversity will lead to a richer learning outcome.

4.3   Female Game Characters

Within a sample of (entertainment) games studied, Williams et al. (2009) found that 40% did not include any female characters at all. Furthermore, the same study found that in games that did include female representation, these were in secondary roles with females portrayed in overly sexualized ways or as victims of aggression. Another study showed that male game characters engage more frequently in leadership and achievement-based tasks compared to females (Thompson & Zerbinos, 1995). Kaye and Pennington (2016) emphasize the risk that comes from such

representations and how they can form a certain image of female characters and female players. It is also undeniable that games are becoming increasingly important in popular culture (Nieborg & Hermes, 2008). Popular culture is influencing how "we" perceive ourselves and what "we" think is expected from members of a culture—for example, from girls and women. Culture is created by people who follow a pattern. People do so because the "right" or expected behavior is the key for recognition, for rewards, and for social acceptance. Behavior learned in a culture is also represented in games. Games themselves are part of culture, including their settings, their characters, their heroes, and heroines. Thus, a cultural perspective on games helps us to identify the cultural identity of games and of gaming as practice (Nieborg & Hermes, 2008).

When we talk about female characters in games, we can see many parallels to literature and the film industry. Remember the American film Alien (1979) with Sigourney Weaver as Ripley? Perhaps the first female action hero of mainstream American cinema. In the film script, the role was defined as a male and only later changed to a woman. Perhaps this makes the behavior of the heroine so natural? There is also another early example from Japan: *Lady Snowblood* is a film from 1973 with the actor Meiko Kaji. The film is based on the manga series Snowblood and tells the story of Yuki who takes revenge. However, we can even go back to Greek mythology to find examples of one of the most common female game types—the so-called damsel in distress (King & Douai, 2014; Hayes, 2020), with Andromeda as the most famous example. Andromeda was tight to a rock when Perseus sailed by, fell in love, and came to a rescue. Fairy tales such as Snow White or Sleeping Beauty follow this scheme, as does the story of the movie *King Kong* (1933). Princess Peach, character in many Nintendo games, follows the same pattern—captured by the "evil" side, Mario as superhero has to come to her rescue.

However, not all game characters follow this scheme. Even the earliest female characters in video games show characteristics of heroines—like the "sexy" bounty hunter Samus Aran, called a female human. She is the heroine of the science fiction adventure game series Metroid (1986) by the Japanese company Nintendo. She is a typical Manga girl and often presented wearing a little bikini only. More known to the public is Lara Croft. She is a fictional character and the main heroine of the video game franchise Tomb Raider, from 1996 onwards. She is presented as a highly intelligent and athletic English archaeologist who loves ancient tombs. However, even these heroines are presented very differently than their male counterparts—they are often relegated to the role of sexy companion rather than lead character (Gittelman, 2014). Lara Croft was created by a team at British developer Core Design that included Toby Gard. In this context, the story of designer Gard is an interesting one, who is said to have refused to make the heroine sexy. Gard tried to follow his own idea of how to present women in the games, and in 2014 Gard founded a new studio called Tangentlemen. However, as the name almost reveals— it is a game studio, at least by then an all-male game studio. And here we arrive at an important point—how can men create characters that are real women, and not a fictional outcome of men's fantasies? This question bothers female designers as well. In 2014, Ayla Arthur, @fourarmsdemon, asks herself and her colleagues why this

happens over and over again. Male characters have some personality, but female actors all "look like cookie-cutters with long legs, small wastes and big chests" (medium.com).

When we look at entertainment games as cultural artifacts, they contribute to our perception of aspects like gender, age, race, and culture. However, this of course also holds for serious or simulation games. There are only very few studies on the representation of characters, including their gender, in simulation or serious games. If any, studies in these fields focus on the use of games and differences in gender, player types, or former experiences and expectations (see, for a summary, Fraga-Varela et al., 2021). However, there are many aspects in simulation games that relate to the representation and perception of gender—not only the use of male and female characters but also the profession they represent (Are male characters representing the doctor, the manager, and the female ones the nurses and secretaries, or is there a mixed picture painted?) and the use of inclusive language, making women more visible in games. Because simulation games are used for learning in its widest definition, it is important to show the diversity of human life—across and within gender boundaries, to show characters that enable learning not based on stereotypes and sexist imagines, but enable critical reflection on what females and males represent in our society, and in the systems that form the reference for games, and for the learning happening when playing them.

4.4   The Game Developer as a Woman

Since Gamergate, the discussion around women in the games industry has changed and has become more open to point out problems and challenges that need to be addressed by an industry that aims to be a diverse, inclusive, and a safe work space for everyone. The rapidly increasing interest of women in gaming as a pastime led to the development of an extensive body of research exploring their experiences and preferences as players (Cassell & Jenkins, 2000; Carr, 2005) as well as the representations of women in games (Ivory, 2006; Kennedy, 2002). However, significantly less efforts are invested into understanding the experiences of female game designers and their contribution in the gaming industry. Perhaps one of the most illustrative and familiar to the reader example of this is the game of Monopoly. The game, originally titled "The Landlord's Game," was developed by Elizabeth Magie Phillips in Illinois and was patented in 1904 with the intention to educate about the greediness in the real estate market of the early days of last century (NPR, 2015). Nonetheless, most of the credit is usually attributed to Charles Darrow, who claimed ownership of the idea three decades later, leaving Elizabeth Magie Phillips's contribution unacknowledged until after her death. The trends in the gaming industry in the past two decades showcase similar patterns. According to a survey conducted in 2005 by the International Game Developers Association (IGDA), female-identifying game developers represent only 11.5% of the gaming industry workforce. In addition, the report also identifies a significant pay gap, women earning on average

approximately $9000 less than men in equivalent job positions. While by 2019 the number of female-identifying game developers has doubled, reaching 24% of the survey respondents (IGDA), there remains no doubt that the industry is still heavily male dominated.

An explanation of the underrepresentation of women in gaming is offered by Fullerton, Morie, and Pearce (2007). The authors introduce the concept of "hegemony of play," referring to the exclusive power structures within the game industry that limit the conception of play and player by catering to a primarily white, male-dominated audience. In doing so, the production environment fails to address the needs and preferences of "minority players," such as women and girl players, as well as perpetuates a set of exclusive cultural beliefs and norms regarding game and game play. It is precisely because the majority of mainstream games are created by men and target a male audience that male players are more likely to identify as gamers and to pursue a career as developers themselves (Ochsner, 2017; Deuze et al., 2007).

The underrepresentation of women in the game industry starts, as Weststar and Legault (2018) explain, at the very beginning of their career path as game developers, with the initial phase of exposure (or lack thereof) to games. Increasingly more research claims that the different interest in the types of games played by girls and boys are not explained by the gendered preferences, but rather by a different level of skills (Jenson et al. 2007; Carr, 2005; Weststar & Legault, 2018). In fact, when girls are given the platform to play and develop their abilities, such as a girls-only video game club (Jenson et al., 2011), they exhibit behaviors traditionally attributed to males. When pursuing an education in game-related fields, women too appear to be outnumbered by their male counterparts, only 25% of the student respondents to the IGDA (2015) identifying as female.

Once they entered the gaming industry, female game designers are faced with a multitude of barriers on their paths. Ochsner (2017) sheds light on some of the main aspects disadvantaging female game developers by analyzing the #1ReasonWhy Twitter conversation, launched in 2012 as a response to one user's question: "Why are there so few lady game developers?" Based on a qualitative analysis of the numerous contributions of Twitter users from across the gamer community and the game industry, the author identified three main themes. Firstly, women are evaluated based on different standards than their male counterparts and often by criteria "other than their professional contributions and accomplishments" (Ochsner, 2017: 529). These concern their appearance, clothing, and relationship with men, among many others. Secondly, women do not benefit from the same acknowledgement of their expertise and status, in comparison to their male colleagues. Many of the analyzed tweets contain stories of how women were assumed to be "tagalong" wives or girlfriends, their expertise is denied in hiring situations, and they are assumed to be "in the wrong class in institutionalized educational spaces" (Ochsner, 2017: 535). The last identified theme is that women's voices in the game industry are silenced and made invisible. Often, this takes place through harassment at work, in online play, in educational settings, at industry events, and in the online community. The author explains that harassment became a cultural norm, and women who speak up against it are frequently not taken seriously. As a result, they avoid complaining and

reporting these instances altogether, out of fear of losing their jobs and harming future employment opportunities. Based on the testimonies shared through the #1ReasonWhy Twitter conversation, the need to address the hardships faced by women in the game industry becomes evident.

An impactful way of shaping the culture of gaming into an inclusive space is through design. Games, Albrechtslund (2007) explains, represent realistic settings that allow players to engage in a dynamic process of "sense-making." In other words, they allow for a platform of reconfiguration of the players' worldview, having the potential to directly engage and challenge their values and belief systems. In a similar manner, Flanagan (2009: 6) claims that simulation games can provide the "cognitive and epistemological environments" that facilitate the engagement in issues concerning aspects of the real life in meaningful ways. This occurs due to the fact that individuals seek the fulfillment of the same motivational needs in game worlds as they do in real life: autonomy, competence, and social relatedness (Visch et al., 2013). As games become increasingly more representative of the culture as a whole, the need for developing games that enable responsible play increases (Flanagan, 2009).

One possible way to fulfill this goal is identified by Back and Waern (2013). The authors advocate for a gender-aware approach to game design, which involves an in-depth understanding of everyday practices of the target group. Unlike the "pink" design strategies, identified and criticized by Cassell and Jenkins (2000) (e.g., games involving setups centered around the topics of cooking, dressing up, makeovers, etc.), an approach to constructing games that takes the actual preferences of women into account leads to the development of games that girls would like to play, without necessarily ascribing them features that represent stereotypical aspects of female play. This is especially important in pervasive games, as these are not confined to computer screens but rather engage with the ordinary world (Back & Waern, 2013). A suitable example is the game Codename Heroes, in the design of which Back and Waern (2013) focused on game mechanics (rather than the story content), in an attempt to avoid the risks of being perceived as female-coded, but most importantly to encourage players to perform the activities and strategies they would enjoy and reward that behavior. The game included elements such as collective play, a certain level of secrecy (that would enable control of whom the player choses to enter in contact with, as well as lower the risk for embarrassment in public situations), an environment in which gift giving is possible (but not necessary), and a player structure that prioritizes achievements over status.

While there is still a long way to go towards achieving gender equality in games, we have identified certain attempts in the industry that pave the way towards this goal. One initiative that invest efforts to raise the number of female game developers is the Facebook campaign #shetalksgames, launched in 2018, focusing on promoting women in the video games industry. In 2019, they opened up their perspective and included women in the gaming industry, not limiting it anymore to video games. The campaign works with storytelling—hundreds of women tell their story on why they work in this field, what is important for them, and how their journey looks in the world of games. These stories reveal hard work, long trajectories, wins, and pride.

This new network is supported by Sheryl Sandberg, COO of Facebook and founder of Lean-In and Option B, both initiatives for women. Their mission, as she explains, is building a global gaming community that encourages and inspires women in the gaming industry.

An earlier initiative with a comparable objective is European Women in Games, created in 2011 with the intention to acknowledge the achievements of women in the European games industry. The winners are recognized during the annual European Women in Games Conference. The network today has ambassadors in 36 countries and became a network for professionals with 5000 members in May 2020. Two examples of females in this network are Frederique Doumic, CEO of OUAT Entertainment, which she cofounded in 1999 in Angouleme, France. OUAT Entertainment creates and publishes video games for women and kids, referring to them as "casual games." Louise Murray is the Head of Fable Franchise at Microsoft Games Studio Lionhead, where she has been leading the development on Fable 3. Previously, she was awarded the BAFTA Award in the Action Adventure category for her work on Fable 2 in 2009.

Fortunately, a positive picture is also painted when looking at our own professional organization, ISAGA. In June 2021, from 107 members in total, 41 were identified as female (38.32%). Many of them are senior lecturers, professors, and/or experienced game designers and facilitators from all over the world. Simulation games in the community of ISAGA are commonly used for education and (professional) training, decision-making, research, and other "serious" purposes. They provide a general language and relate to the play aspect of human culture (Klabbers, 2006). They provide engaging and safe environments and are highly accepted tools especially among the younger generation. Only very few studies look into the relation between gender and simulation or serious games (e.g., Lukosch et al., 2017; Lukosch & Cunningham, 2018). However, our own experience shows that while many game designers of simulation and serious games are women, especially when we talk about games for learning, many developers of these games still are men—mainly because they come from disciplines with a high number of male representatives, such as computer science or software engineering.

4.5 The Female Facilitator

In simulation games, the facilitator plays an important role (Schwägele et al., 2021). The facilitator prepares a games session, supports the game play, and facilitates the debriefing or reflection phase(s) during a game session. In this role, a facilitator has a huge impact on the results and effects of a simulation gaming session. Again, there is unfortunately only little research on the role of the facilitator in simulation games and even less on the influence of gender on simulation game facilitation.

Hence, we have to look into the business side of games again—starting with the very facilitation of games, the one of casino games. An interesting study by Karin Weber (1998) about female facilitators in the gaming industry highlights the

situation of female senior executives and their career path in the casino industry. The study discusses reasons why females are underrepresented in the high management of casinos and finds explanations in their behavior, in bias and discrimination, despite the same level of abilities and education of both genders. The story is not different from other women who like to climb the ladder to the top: automotive, IT, or the service industry reveal accounts of women who are disadvantaged yet make it to the top in small numbers.

Facilitation in games research is a niche topic, and thorough research is limited. On the Australian site "The Commons—The Social Library," Holly Hammond shares her experiences of what happens in discussions and why men often have a higher percentage of contributions in a seminar or conference than the women have. She argues that this might be the case because men are socialized to speak up, while women often are not. More importantly, she also shows what a facilitator can do to encourage more women to take part in a discussion. For example, a (female?) facilitator can balance a discussion, when the first questions and statements are from men. She would simply ask "And what do women think about this—let me hear from you" and point to a woman in the room. A facilitator could also deliberately take the first question or comment from a female participant, to also encourage other women to step up and contribute.

The US military has strict diversity rules. In the governmental research organization RAND, women work in the war game design department. One of them, Becca Wasser, is a senior policy analyst at RAND Corporation and states in a New York Times Magazine article on war games:

> This eye toward inclusivity can also be seen when women run games, as female facilitators are more inclined to encourage different voices to contribute to discussion and in turn gain a greater range of insights into the particular problem at hand. It is not so much that female war gamers approach the critical problems differently or focus a game on "soft" security issues like gender and humanitarian affairs. Rather, they are likely to have different perspectives, based in part on their experiences navigating a man's world. By not having female game designers, facilitators or players, opportunities to uncover new and innovative strategies are falling by the wayside.

Claudia's own experiences as a female facilitator for the last 20 years is that women run simulations different than men do. In her experience, most men like fun, competition, and winners. These stereotypes are driving the session and the learning. Male facilitators please the expectation and make them feel good, talking about the fun and supporting the competitive atmosphere. This was the standard for many years, but it is changing. The change comes not from the game industry or facilitators' insights, but rather from the customers. The Human Development departments try to change their mindset inside the company towards diversity and collaboration. The "old boys" games are out. In a complex interconnected world with global trade and intercultural settings, we need to be more diplomatic, more aware of the system, and we need to identify the win-win solutions to cooperate. Games and facilitators with win-lose mindsets are unable to bring new perspectives. Opposite to this, Claudia's observations are that when women facilitate games, they can swing around the model structure and the facts and figures. Women tend to reflect more and bring

the focus on behavior, mindset, and the goal itself. Usually, it is not about winning but about surviving, finding a niche or catching the momentum. But winning means also building up a clear strategy and setting it up on a solid structure. In theory, men and women facilitators have a similar belief about what a good facilitator should do, but the reality is different. Male facilitators like to be the stars of the show, building up time pressure and speed. They can be like a dancing Darwish, swirling around and getting anybody excited. It is all about their own expectations on what makes a good game and what is fun, being rewarded with a loud round of applause at the end. Good show. Great seminar. Everybody is happy. But did the participants learn?

When Claudia facilitates, she usually asks: What is the goal of the game? And the answer today is, "We want to learn how to run a business." The intention is, thus, not just to win but also to observe, reflect, conduct a root cause analysis, and identify potential scenarios. Claudia finds working together with male co-facilitators being often difficult, as men in game sessions like to drive speed in the simulation and do not like the interruptions for transfer, reflection, and observation. Claudia also experiences little room for cooperation. Nonetheless, the goal of the gaming sessions is first and foremost learning. Therefore, Claudia's preferred co-facilitator is another woman. In her experience, communication has proven to require significantly less effort, so much so that the facilitators can understand each other even without using words. They can balance their respective weaknesses, stop each other, and bring moments of thinking on the events that took place during the simulation. This is a very personal reflection that male partners never really understood. They are best friends and share a lot, but working together on stage is not an option for her.

Heide has facilitated games with both male and female colleagues. Both models worked well, and she does not have a preference. While two female facilitators may indeed be more patient and let more room for reflection, that very much depends on the style of the facilitator, not their gender. To enable participants to open up during a gaming session, especially during debriefing and reflection, it might be helpful to have a diverse representation in the facilitator team—related to gender, culture, age, skills, and knowledge about the field the simulation games is addressing.

4.6 Conclusion and Discussion

We used many examples from the entertainment games field, from popular and social media and from the business domain to discuss the relationship between women and games. Our own experiences and observations show that the representation, game play, design, and facilitation of simulation games in relation to gender is an overlooked field of research. Therefore, we needed to make use of related fields, but moreover have been able to pose important questions rather than providing insightful answers.

In this contribution, we explored the relationship between simulation games and women, starting from a panel discussion held at the ISAGA conference 2019, looking into the scientific literature, and added our personal perspective to it. We

want to provoke you as a reader with our perspectives, so that you start developing your own approach to this topic and maybe include this perspective (more) in your own doing and playing. We identified four main areas of interest—women as players, as characters, as game developers, and as game facilitators. While gender is only one aspect (and a societal construct) that might or might not influence how we behave, how we play, and what we learn from a simulation gaming session, it is one that has a large effect on the group composition of many simulation gaming sessions, especially in corporate environments. Approached as a cultural artefact, the way gender is represented in games also shapes how "we" think we should behave, react, and look. In still too many games, female characters take over the role of the inactive "damsel in distress" that has to be rescued by her male counterparts and/or inhibits an inactive, serving role (administrator/secretary/service in any kind). Games made by a mainly Western, white, and male community of game developers represent their worldview and what they think the "average" player expects from a game. The discussion on inclusiveness, on the one hand, and the toxic work environment in the games industry is one to still continue and hopefully will lead to better working circumstances for all involved in the industry. Finally, how we facilitate games and how we address the target group and their composition and how the session participants can benefit from diversity is a responsibility of all who work with simulation games—regardless of their gender, age, cultural background, worldview, or geographical location. In the first book on simulation games, Richard Duke (1974) called them a "multilogue language" that connects disciplines and people— and we hope that they still have this power that we all can leverage to learn and work together.

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