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Diversifying BARBIE & MORTAL KOMBAT:

INTERSECTIONAL PERSPECTIVES AND
INCLUSIVE DESIGNS IN GAMING



EDITED BY:

YASMIN B. KAFAI, GABRIELA T. RICHARD AND BRENDESHA M. TYNES

PREFACE BY JUSTINE CASSELL

DIVERSIFYING BARBIE AND MORTAL
KOMBAT

Intersectional Perspectives and Inclusive Designs in Gaming

Yasmin B. Kafai, Gabriela T. Richard, and Brendesha M. Tynes, Editors

*Carnegie Mellon: ETC Press
Pittsburgh*

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<http://press.etc.cmu.edu/>

ISBN: 978-1-365-26883-0 (print)

ISBN: 978-1-365-31818-4 (ePUB)

Library of Congress Control Number: 2016949963

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FOREWORD

BY JUSTINE CASSELL

Two decades have passed since Henry Jenkins and I organized a conference called *From Barbie to Mortal Kombat: Gender and Computer Games*. The conference was one of a series of events sponsored by the MIT Women Studies Program as a part of an attempt to examine issues concerning women and cyberspace.

When we first organized the conference in 1996 and edited the subsequent volume in 1998, Henry Jenkins and I felt that we were documenting a specific moment in history—a turning point from a time when women were excluded from the community of serious gamers. We thought we could document the move away from a time when women had a hard time finding their place in the game industry, and to a time when gaming by women, games developed for all kinds of women gamers, and games that broadened the roles that women played in games were about to break onto the scene. I remember a conversation about wanting to get the book out on shelves quickly before discussions about women and gaming were no longer relevant.

And so, 20 years on, it's natural to ask if discussions about women and gaming are still relevant. What a question! While I'm thrilled that volumes like this one will enrich the shelves of academics and professional gamers everywhere, I'm sorry to report that the discussion is still very much relevant. In fact, as the co-editors and many of the authors report, the conference that led to *Diversifying Barbie to Mortal Kombat* took place immediately post-GamerGate—an attack against women gamers that targeted their physical safety as well as their identity as gamers. It is tragic that still today the norms of gender and of gamer collide in such dangerous ways.

And yet, while we mourn the need to protect our physical safety when we dare to speak out about the need to make space for women in games—as players, designers

and theorists—we would do well also to celebrate a new era in which these conversations are so much more complicated than they could have been in 1998 when the original *Barbie to Mortal Kombat* volume was published. Today, due to the introduction of theoretical constructs such as intersectionality and “reconstructive feminism,” it is clear that the multiple intersecting identities that we navigate and negotiate can no longer be disassociated from one another, and that “different” and “same” are both equally inadequate monikers with which to understand genders.

In 1998, I wrote:

Gender, then, involves active choices that are always in flux and that are determined by many things (race, class, age, peers, immediate context). Thus, the kinds of activities that have been described as “what girls really do” are not neutral or isolated acts, but involve the person becoming and acting in the world as part of the construction of a complex identity. In this case, we might argue that designing ‘games for girls’ misses the point. If we come up with one activity, or complex of activities that girls want, then we know that we must have only tapped in to one context in which girls are girls.

This new volume opens up the contexts and constructions of identity in ways that allow us to better understand what it means and what it could mean to be a gamer, and to better design for all the glorious instantiations of gamer today and in the future.

THE NEED FOR INTERSECTIONAL PERSPECTIVES AND INCLUSIVE DESIGNS IN GAMING

BY YASMIN KAFAI, GABRIELA RICHARD AND BRENDESHA TYNES

Our title *Diversifying Barbie and Mortal Kombat* makes reference to two previous successful publications: *From Barbie to Mortal Kombat* published in 1996 and *Beyond Barbie and Mortal Kombat* published in 2008. The commercial franchises of Barbie™ and Mortal Kombat™ have become cultural icons and continue to provide poignant illustrations of the key issues surrounding gender, diversity and gaming. Two decades ago, many people believed that girls and women were not interested in games and computers, though perspectives varied as to why. However, when *Barbie Fashion Designer* entered the market in 1996, it became the most successful software game of the year. *Mortal Kombat*, on the other hand, was a popular game at the time that exemplified the model of violent video games targeted toward boys' assumed preferences. There was great interest in video gaming because it served as one of the few portals into technology available more widely at home. The first book edition *From Barbie to Mortal Kombat* (Cassell & Jenkins, 1998) illuminated the gaming landscape in the 1990s and was also one of the first academic books on gender in gaming cultures.

Fast forward a decade, and the gaming landscape proved to have changed with a growing number of female gamers who could no longer be ignored. But the persistence of stereotyping women characters and players, and the lack of their participation in the gaming industry continued. The second book edition *Beyond Barbie and Mortal Kombat* (Kafai, Denner, Heeter & Sun, 2008a) focused not only on this growing market segment of female gamers but also the growing prominence of international gaming and the growing role of gaming in education. The work presented in the volume moved beyond North America to showcase international

developments in gaming cultures and broadened our perception of serious gaming, which was rapidly gaining a foothold in education. Recent events have revealed that these issues, particularly around gendered participation, have not nearly been resolved. This is most evident with the continued gender stereotyping and harassment associated with #GamerGate as well as with the continued lack of workplace diversity in gaming and technology in Silicon Valley. Encouragingly though, these persistent challenges have now moved from solely being topics of discussion among academics and gamers to mainstream media and public attention.

It is time to revisit the discussion on gender, diversity, and games and offer new perspectives on who plays, how they play, where and what they play, why they play, and with whom they play. And, considering these questions, how can we diversify access, participation and design for such play? While it is hard to pinpoint a single event as the instigator for such diversification, several occurrences around both the treatment of and the lack of representation of women in technology have played a particularly critical role. Just in 2014 and 2015 we have seen the occurrence of three events—#GamerGate, #1ReasonWhy and #RealDiversityNumbers, exemplified through their Twitter hashtags—that, in fact, have been in the making for decades. They help to solidly frame our discussions around the need for diversifying *Barbie* and *Mortal Kombat* and ultimately why all of this matters if games and gaming are to rise to the social, educational, and cultural aspirations that many hold for them.

HARASSMENT OF WOMEN IN GAMING COMMUNITIES

Much of Fall 2014 was dominated by the discussions around GamerGate. The controversy started within the gaming community as a seemingly personal feud between a game designer and her ex-boyfriend. It then moved onto becoming a larger discussion about the harassment of women in the gaming industry. Finally it escalated to death threats. To briefly summarize, GamerGate started when a female game developer was accused by her estranged boyfriend of trading sexual favors with a gaming journalist in exchange for positive reviews of her game, *Depression Quest*. To this end, her ex-boyfriend took to social media to post “evidence” of her affair and promiscuity in the game industry. This one case was used as confirmation of women’s inability to succeed in the industry due to their own personal failings and willingness to manipulate and trade sexual favors to get ahead. Accusations flew back and forth, and the fighting eventually made the front page of the *New York Times* (Wingfield, 2014) when gaming activist Anita Sarkeesian became the target of Gamergate’s ire. Sarkeesian had previously been targeted by anti-feminist backlash based on her widely successful Kickstarter campaign (2012) to release a new video

series entitled “Tropes vs. Women in Video Games,” that would examine the extensive gender stereotyping of female characters in commercial video gaming, released under the label *Feminist Frequency*. However, during the height of GamerGate, in summer 2014, the first of her video series was released, making her once again the center of internet-based harassment, doxing and threats. Eventually her invited talk at Utah State University had to be cancelled because someone e-mailed the school, threatening to commit mass murder: “This will be the deadliest school shooting in American history, and I’m giving you a chance to stop it,” the message read. “I have at my disposal a semi-automatic rifle, multiple pistols, and a collection of pipe bombs.” What initially started as a mere but necessary academic exercise escalated into a threat of mass violence followed by an investigation of the FBI.

In 2015, the discussions around GamerGate continued and increasingly began to more explicitly address the lack of diversity in gaming. Not only did we see hashtag campaigns and academic panels exposing harassment against women in gaming and industry, such as #1ReasonWhy and #1ReasonToBe, but these topics were also discussed in two recent films. The film *GTFO: A Film about Women in Gaming* directed by Shannon Sun-Higginson (2015) includes a range of people involved in different aspects of gaming, each offering his or her own individual perspective(s) on the reasons why and how harassment occurs, why it stubbornly persists, and ways people have countered biases from overwhelming male or male-assumed players. The second film is actually a series developed by Samantha Blackmon, a professor at Purdue University and the founder of the blog *Not Your Mama’s Gamer*. Blackmon successfully launched a Kickstarter campaign in July 2015 to open up a more public conversation about race and representation in video games. Her proposed video series *The Invisibility Blues* would build on the work that Anita Sarkeesian started but shifts the focus to the underrepresentation of people of color in gaming, addressing the lack of nuance, stereotyping, and their absence in design and discussions, while also providing examples of diverse characterizations.

Harassment of women in gaming has unfortunately been a part of the gaming culture since its early days. This harassment has often happened behind the scenes among gamers (Richard, 2013b). Now, however, gaming is becoming a more publicly understood and visible phenomenon, particularly with the rise of gaming as spectator sport, leveraging venues such as Twitch.tv. Even GamerGate was a public representation of this shift. Although participants framed their effort as critiquing ethics in gaming journalism, they came under fire for namely directing their attacks and harassment at female and feminist game designers, players, and critics, labeling them “social justice warriors” in order to vilify them. While there is obviously much

more to this complex and still on-going story, one thing is clear: the harassment and stereotyping of women in gaming is no longer an academic issue but one that has entered the public discussion and points towards the need to address the lack of diversity in games within the industry and wider culture.

LACK OF DIVERSITY IN SILICON VALLEY

The discussion about the lack of diversity is not just typical of gaming but is characteristic of (and has been amplified by) the lack of diversity in Silicon Valley (*The New York Times Editorial Board*, 2014). This lack of diversity began to become a point of discussion and investigation around the same time that GamerGate happened in 2014. In the last decade, since the publication of *Beyond Barbie and Mortal Kombat*, not only have working conditions in the gaming industry come under increased scrutiny but also the lack of diversity as to whom is participating in the design and production of games themselves. This lack of diversity in the gaming industry reflects the lack of diversity in the technology industry at large. Few women and minorities occupy leadership positions in the IT workforce. Suddenly major companies such as Google, Apple, and Facebook became concerned over the lack of women and minorities in their companies and saw it as a detriment to their creativity and economic development. For instance, across all major Silicon Valley companies, women made up less than 25 percent of all technical staff as compared to over 50 percent of the non-technical staff. Even worse in terms of racial diversity, Hispanics and African Americans combined made up less than ten percent of all the technical staff as well as the non-technical positions.¹ The pipeline into the tech industry was leaking and clearly it had been leaking for a long time.

These concerns hit another crescendo when in November 2014 comments went viral about a book titled *Barbie: I can be a Computer Engineer/I can be an Actress* (Marengo, 2013) promoting potential careers for girls. The book, part of a series about careers ranging from superstar athlete to woman president, follows Barbie as an engineer. However, rather than coding and developing the game herself, Barbie must turn to her male school buddies Steven and Brian to complete the game since, in her own words, she's "only the designer". A day after the book's release, Casey Fiesler, a PhD student in human-centered computing at Georgia Institute of Technology, created a post "Barbie, Remixed: I can be a computer engineer" to counter the many problematic assumptions propagated in the book. In the remixed version, Barbie now has a team of coders and designers (because most software is written in teams), as well as a supporting computer science teacher, Mrs. Smith, who talks about the challenges for women to be taken seriously in the tech industry. Following Fiesler's

“remixed” story version, the Feminist Hacker Barbie website sprung up, allowing all visitors to take a page of the original Barbie book and write their own text to assist Barbie in being “the competent, independent, bad-ass engineer that she wants to be.”²

These events are just the tip of the proverbial iceberg that situates the discussions about diversity in gaming. They not only concern the design of games and the working conditions of the gaming industry, but also the role of learning and formal education as serious gaming increasingly moves into schools. The question of diversity is moving front and center when it comes to serious gaming, and its prominence can be attributed to how gaming researchers have addressed the issues of inclusion, race, gender and feminism over the last three decades. While gender issues have received researchers’ attention from the beginning, the consideration of racial issues as part of the diversity discussions is relatively new and continues to take a backseat to this issue of gender disparity.

FRAMING GENDER IN RESEARCH ON GAMING

It is helpful to understand that these recent challenges to longstanding gaming and technology cultures are not isolated incidents but can be informed by the larger discussions around gender and diversity. These discussions can be framed by what Henry Jenkins and Justine Cassell termed “waves of feminism and games” (p. 6, 2008). Richard (2013a) identified three waves in this literature. The first wave tended to focus on “how most games featured narrow gender stereotypes, how few games on the commercial market were of interest to girls and women, how female players wanted different gaming experiences, and how women were not a visible part of game production” (p. xi; Kafai et al., 2008b). Digital game play had long been associated with trajectories in science, technology, engineering and math (STEM) fields, particularly computing (Cassell & Jenkins, 1998b; Kiesler, Sproull & Eccles, 1985), and the goal was to get more women and girls into these fields. In the late 1980s and 1990s, in particular, women were making up a smaller proportion of computing and technology fields than they had previously, especially as the field became more gendered. These associated gender disparities were seen even as early as elementary grades (Margolis & Fischer, 2003; Misa, 2010; Provenzo, 1991). Most of the studies done during the first wave attempted to uncover sex and gender differences in computer and video game playing, participation and experience, looking at thematic differences in game play and skill or interest differences across gender (e.g., Greenfield, 1994; Morlock, Yando, & Nigolean, 1985; Okagaki & Frensch, 1994; Subrahmanyam & Greenfield, 1994).

During the second wave, the emphasis was on understanding sociocultural context, and the experiences of women who play and participate in gaming (Jensen & de Castell, 2010; Taylor, 2006; Taylor, 2008). The research conducted between the two major volumes on gender and games, *From Barbie to Mortal Combat* (Cassell & Jenkins, 1998a) and *Beyond Barbie and Mortal Combat* (Kafai et al., 2008a), can be seen as encompassing the second wave. In particular, scholars critiqued how women and girls' preferences and motivations to play games were "unproblematically reported" as being linked to their supposed "natural" preferences for cooperation, non-violence and exploration (Jensen & de Castell, 2010: 51). Furthermore, games oriented toward girls changed from "pink" games, which typically relied on the most glaring of sex stereotypes, to "purple" games, which focused more on "real life" issues and social realities that would interest female players (Kafai et al., 2008a; Laurel, 2008). Some literature continued to try to understand differences between males and females in their gaming preferences by altering design themes in otherwise similar games (e.g., Hartmann & Klimmt, 2006) or focusing on how to expand marketing initiatives to be more gender-inclusive based on previous research (Ray, 2004).

Now in the third wave, the current research on gender and game culture is heading toward understanding intersectional concepts like sexuality, ethnicity, race and class, and the nuanced experiences across gender, which includes revisiting how we define and study masculinity. Queer game studies and studies that incorporate an intersectional perspective have emerged. The goal of this work was to make the field aware of the assumptions that we regularly make around gender, gender identity, and sexuality, and interrogate the performativity of gender (i.e., Butler, 1990).

Furthermore, many researchers, such as Kishonna Gray (2012), Gabriela Richard (2013b; 2013c), and Adrienne Shaw (2012) put forth investigations that explored gender and its intersections with race, ethnicity and sexuality when understanding the experiences and preferences of such players. First coined by Crenshaw (1989) and Collins (1990), and derived from a long line of work from black feminist writers, activists and scholars, "intersectionality" as a lens extends gender studies beyond the binary by exploring the intersection of gender with cultural constructs and contextual experiences. Though part of scholarly work since 1990, intersectionality did not gain ground in research studying video game experiences until 2012. Richard (2013a) surmised this was partially due to "the complexity involved in studying intersectionality, which brings up intricacies in methodology, epistemological stances, and disciplinary approaches" (p.278).

WHY INTERSECTIONALITY MATTERS IN RESEARCH ON GAMING

Since scholars are beginning to recognize the difficulty in constructing comprehensive understandings of experience and design without an intersectional approach, we are now beginning to see collections that address these problems and gaps in the literature. The *Intersectional Internet* (Noble and Tynes, 2016) is the first full-length volume with an explicit focus on intersectionality and the internet throughout. The book is informed by multidisciplinary perspectives and includes emerging and leading scholars from library and information science, psychology, digital media studies, and education who are all engaged in researching how power relations function in digital spaces. Central to this effort is understanding how multiple intersecting identities and oppressions might shape experience and design of the digital, as well how marginalized groups might counter and transcend these incursions. The book also begins a much needed conversation about how to intervene on social relations that are embedded in digital technology.

Other theoretical and empirical literature suggests a need for additional work in this area that explicitly focuses on games. For example, Everett and Watkins' (2008) argue that digital games are *racialized pedagogical zones* or spaces that teach and instantiate players into stereotypes about racial groups. They argue that the common framing of games as a gateway to computer literacy and optimal spaces for learning in a wide range of subjects has largely ignored the fact that games can be equally pleasurable tools for teaching racism and intolerance. This is done through the game's design, narrative structures, dialogue, and settings. For example, they have discussed how the "urban/street" game genre (*Grand Theft Auto* being the most popular) has been engineered around racial stereotypes of urban life. Moreover, the immersive feel of the game and the ways it may simulate a real life context furthers associations with stereotypes embedded in the game. Players are allowed to practice "doing race" (e.g., engage in stereotypical play by, for example, robbing or killing someone with a person of color as the avatar) through the characters.

We argue that this practice extends to gender, sexuality, socioeconomic status and other social experiences and identities, such that games are actually gendered pedagogical zones, sexuality pedagogical zones, and so on. With children, adolescents and adults getting much of their knowledge about race, gender and sexuality from games, more work is needed to document these experiences and reflect upon how they can broaden perspectives on others rather than reducing them to a single attribute advancing game play.

In *Diversifying Barbie and Mortal Kombat*, we continue the conversations started in the first two volumes but also expand them, addressing the stereotyping and lack of diversity as well as discussing wider barriers in the gaming industry that prevent more inclusive designs. The time is right to present updated perspectives on gender, race, and gaming. We are now at the crossroads of a field that has presumably achieved what it set out to do two decades ago: namely, to increase the number of women who play games. But this has clearly failed and continues to do so, as evident with the pertinent diversity issues on several fronts. Key groups were not addressed in previous volumes—male and female players of color, male players in general and diverse queer players—because research on these groups was largely absent at the time. While most of the game players have been male and continue to be so, beyond survey data we know little about their actual play behaviors and interactions. This absence of research is even more amplified in the case of African-American and Latino/a gamers, two populations that continue to be dramatically underrepresented in STEM and particularly in IT fields.

Finally, serious gaming has become a major force in K-12 educational technology over the last decade. Hundreds, if not thousands, of educational games and simulations have been designed to support learning in various domains. Accompanying these efforts were the launch of several conferences and journals, the funding of numerous research initiatives, and even the placement of a senior policy advisor on games and gaming in the White House. A report by the National Research Council (2012) has examined the learning benefits of digital games. Others have taken gaming principles to design new schools and learning environments (Corbett, 2010). What these developments indicate is that gaming for learning purposes are no longer considered a marginal activity but have gone mainstream in formal learning environments (Richard, 2013b).

PROMOTING INCLUSIVITY IN GAMING FOR PLAY, PEDAGOGY, AND POLICY

What the observations and research of the gaming landscape suggest is that if we want to broaden access and participation in gaming, we need to better understand different groups of gamers that so far have not been part of the mainstream research. But we also need to bring different theoretical lenses to inform our understanding of different gaming cultures. If we want to impact the design of games, this has to start in the design process itself as many prominent game researchers and designers have long argued that a game's inherent values (readily apparent or not) get embedded within the earliest decisions of a game's development. Furthermore, as digital games are developed for K-12 schools, new charter school designs adopt particular gaming

approaches. Participation in gaming is still seen as a springboard into becoming more technologically fluent, and these schools need to better understand the intersections between gender, race and sexuality to be inclusive and broaden participation in gaming and, in turn, learning.

We see a critical need to discuss issues around inclusive play and design because gaming has become mainstream media for Americans with over 60 percent or 145 million regularly playing video games (ESA, 2014). We know from content analyses that negative stereotypes of people of color, particularly African American and Hispanics males and females, are abundant in video games and in online games. For instance, African American leading men are often represented as violent thugs or as sports figures as opposed to games' heroes, who are almost exclusively White. African American women meanwhile are more likely to be props and bystanders, frequently the victims of violence (e.g., Burgess, Dill, Stermer, Burgess, & Brown, 2011; Children Now, 2001; Williams, Martins, Consalvo & Ivory, 2009). But it is not just player characters and content that will need to become more diverse and inclusive; game designers also need to create more "authentic" or realistic representations of urban communities. Whether they are internalized by youth is largely dependent on the cultural models players have about the world, locally situated practices and the meaning making opportunities built into the design of the game (DeVane & Squire, 2008). What we need is a better understanding of how race, ethnicity and gender identity shape play, participation and experience with digital games. Furthermore, how these experiences across gender, race/ethnicity and identity relate to trajectories and the learning outcomes with games, technology and STEM more broadly are important. We also need to understand how race and gender intersect to impact engagement in digital games and virtual worlds. Finally, we need to know how gender and culturally responsive and inclusive design can impact participation and outcomes.

A focus on inclusive pedagogies in serious gaming becomes equally important. In other words, we need to consider culturally responsive approaches (Ladson-Billings, 1995). When serious games, made or played, turn into learning environments, it becomes critical to understand how pedagogy can be inclusive of race and gender. For example, research on player experiences with *Grand Theft Auto* showed how "at risk" Caucasian and African American male youth had differential practices in their game play (DeVane & Squire, 2008). White boys spent several hours of game play on their own and valued more "encyclopedic knowledge" whereas African American boys would more often play in groups with their friends, and, as such, had fewer opportunities to advance through the plot. These findings illustrate how cultural

context in which children participate affects the learning opportunities afforded by games. In their study of black males ages 11-14, researchers noted that African Americans males play video games more often in a social setting (DiSalvo, Crowley, & Norwood, 2008). They also note that common practices such as “cheating” or modding were looked upon as either dangerous, as breaking the rules or as making the game less challenging. These differing perceptions of the game may, as the authors note, close them off to practices that serve as a gateway to STEM interest.

Finally, we are equally concerned with how we can move from research into recommendations and policies. More concretely, through this volume, we want to generate ideas that can serve as guidelines for serious game designers in academia and industry to make issues about diversity more transparent. Researchers like Mary Flanagan and Helen Nissbaum (2014) have articulated the Value Design Framework helping designers realize their preconceptions and how they enter and determine design decisions. Furthermore, we want to think about initiatives that create valid indicators of diversity in games themselves. We believe that culturally inclusive design will have a larger impact if it can provide directions for future research and more concrete policies. In this book edition, we can begin the discussion on policies around gender and culturally inclusive game design, particularly with serious games.

Why is promoting inclusive play, pedagogy, and policy so important in the design of games? Research has shown that playing video games increases interest in STEM majors such as computer science by increasing individual’s curiosity about how things work, appreciation of and comfort with computing, desire to make games, knowledge and interest in programming and math problem solving (DiSalvo & Bruckman, 2009). We need to develop a better understanding in which ways digital games are racialized pedagogical zones and what kind of practices promote STEM skill development for underrepresented groups in digital games and virtual worlds. Furthermore, we need to examine the links between playing and making and the long-term STEM efficacy among marginalized groups in a world in which we are seeing increasing gender and racial diversity.

BOOK OVERVIEW

We have organized the book into two sections, with the first focusing on intersectional perspectives in gaming by situating gender, race and sexuality in public discussions around gaming, communities, and the game industry, and the second section focusing on inclusive designs by developing models for inclusivity in public venues, game design, and serious gaming.

We start out the first section of the book edition with a part devoted to different framings and understandings of the GamerGate movement/harassment campaign and related events by drawing on feminist and critical theories. In chapter 1 titled “Press F to Revolt” Katherine Cross discusses how gamification, the use of game-like logic and incentive structures to organize social behavior, became the GamerGate’s moral framework rationalizing their interactions. Using a purposive sample of tweets, forum posts, and images that evoked videogame play, the discussions illustrate how this distanced participants from the often-serious consequences of their behavior. While gamification might be successful in incentivizing certain behaviors, it cannot teach the morality and ethics needed to understand issues around diversity and equity. Chapter 2 by Lisa Nakamura continues this examination by focusing on “social justice warriors”, a term coined to describe feminist and anti-racist video game players who publicly advocate for more diverse games and gaming cultures. Her focus is on how complex feminist identity can emerge within social media platforms like Tumblr and in independent game designs like *Journey* that can exemplify the unintentional and uncoordinated growth of intersectional anti-racist and ableist feminist theory within a gaming culture. Finally, chapter 3 by Constance Steinkuehler brings a public policy perspective on how issues of diversity impact video gaming and participation. Game publishers and marketing have historically ignored the diversity of their consumers, treating the white male player as their base; their trade organizations however have not, relying on the diversity of their consumers as a salve to anti-videogame rhetoric in the U.S. It is the diversity of views games can enable and the diversity of their players that protects them against stiffer regulation.

The second part continues to examine the intersection of race, gender, and sexuality in gaming but turns its attention to players from non-dominant groups, who are often avid players but whose participation has largely remained undocumented. Chapters here provide insights into the gaming experiences of often marginalized gamers such as African-American women who play Xbox Live or Latina girls and women engaged in intergenerational game play at home. The overall findings reveal how intersections of race and gender are critical in understanding how gaming cultures and communities can be exclusionary and welcoming in play. Chapter 4 by Kishonna Gray reveals that within a community of women gamers of Xbox Live, there is much agreement on their gendered realities but very little agreement when it comes to the racialized dynamics of oppression when a cohort of African American women attempted to incorporate a discussion on #BlackLivesMatter. In chapter 5, Gabriela Richard interviewed, surveyed and observed hundreds of players and non-players, across gender, race, gender identity and sexuality, and conducted a

participant ethnography of a female-oriented gaming community as a supportive space for fostering resiliency, to understand what shaped diverse players' identification, self-efficacy and persistence in gaming. She found that taking an intersectional perspective helped to highlight intersecting and diverging privileges and marginalization across sociocultural identities. Sinem Siyahhan and Elisabeth Gee describe in chapter 6 family context and culture around video game play and participation for women and girls to develop confidence and IT competencies. A field study conducted with urban Mexican-American families, many of them first-generation immigrants, illuminates how gender dynamics and family values shape on what counts as legitimate participation for girls and women in gaming, how it is negotiated among family members. They reveal the importance of designing games that facilitate co-play between mothers and daughters as a means to support girls to become women gamers.

The two last chapters in this part focus on player groups and identities that presumably are well known but in fact are not. Male gamers are the largest group of players, but they too have actually not been extensively studied. Gaining a better understanding of what motivates (or not motivates) such players is equally critical for diversifying participation in gaming. In chapter 7 on Caucasian American males who identify as "gamers", Betsy DiSalvo explores their digital game play practices and patterns. What she uncovers in her interviews both supports and contradicts stereotypes about male gamers and reveals the diversity of masculinities. Finally, in chapter 8, Kelly Bergstrom examines non-players through a critical feminist lens to illustrate how social forces continue to write digital gameplay as a primarily heterosexual white masculine space outside of a very narrow definition of games deemed "acceptable" for female play. She argues that there is much to be learned by asking players about what games they do not play and their reasons for quitting or never purchasing or downloading a particular game in the first place. Using *EVE Online* as case study, she collected the thoughts and experiences of current, former, and non-*EVE Online* players. She identifies several features and actions on the part of both the developer and current players which have created a community that seems welcoming to only a very particular demographic. This theme of inherent biases and barriers will be revisited in examining work contexts in the gaming industry that replicate many of the observations and findings about the lack of diversity in the gaming communities.

The third part addresses the lack of diversity and participation in the larger gaming industry. As mentioned before, this is a major issue that has garnered much attention. The production of games remains a mostly male domain. Several high profile cases of

harassment and threats against female game developers in conjunction with the ongoing GamerGate controversy have resulted in widespread popular media discussions around the roles and representations of women in the game industry. Industry leaders, scholars, and educators have become increasingly more invested in discovering how we can support women and other underrepresented populations in succeeding in the game industry. While there is extensive research exploring the gender divide in technology fields broadly, there is surprisingly little research on women in the game industry specifically. Chapter 9 by Shana Bryant, provides an insider perspective on the gaming industry where Black women are rare. Reporting from her personal perspective, she reveals what it means to work at the intersection of “woman in tech” and “black in tech” as the rarest group of “black woman in tech.” She points out that black women in tech are simultaneously *invisible* by gender and *highly visible* by race, often creating a double Impostor Syndrome. As discussions of diversity and media representation are at fever pitch within the gaming industry and other tech fields, it is critical to raise awareness of these issues. Chapter 10 by Amanda Ochsner explores a Twitter conversation from late 2012 in which female game developers sought to describe their reasons and motivations for persisting in the digital game industry. Bannering under the hashtag #1ReasonToBe, the conversation reveals many reasons why women choose to stay in games, including a passion for the medium, inspiration from the support of colleagues and players, and a desire to contribute to making game industry culture more inclusive and welcoming for the next generation of game designers. Finally, Chapter 11 moves into one of the central hubs of gaming in Asia. Florence Chee’s long-term ethnographic fieldwork in South Korea reveals some of the more subtle barriers to participation in the games industry such as the role of compulsory military service for men as well as educational policies and industry practices that implicate how labor originates from STEM (Science, Technology, Engineering, Math) disciplines.

In this second section of the book edition, we take a more interventionist stance by reporting and examining approaches that can promote inclusivity in gaming by addressing diversity and intersectionality. In the fourth part we cast a broader net by focusing not just on the games themselves but also on contexts in which they are designed and discussed. Three chapters in this part focus on designing public venues such as gaming conferences in which games and design are discussed. Chapter 12 by Sarah Schoemann and Mariam Assad reports on the rationales and design principles that undergirded the foundation of the *Different Games* conference in New York City. The now annual event serves as both an intervention in the New York indie game scene as well as a challenge to normative tech and computing culture by elevating the voices of those marginalized in gaming. Chapter 13 by Jennifer Jenson and Suzanne

deCastell describes a related effort on how the *Feminist in Games* international research program designed to re-conceive and re-mediate the “problem” of women in games. The authors and co-founders of these conferences look back at years of collectively organizing one of the first events of this kind and examine the strengths of creating community events based on shared values, paying special attention to the way that efforts to cultivate diversity and inclusivity exist as active processes involving dialogue and reflection. Finally, chapter 14 by Celia Pearce reflects back on curatorial design efforts in creating and developing the independent gaming movement through *IndieCade* and *Alternative Voices in Game Design*.

The fifth part is concerned with how we can design games that are critical of stereotypes, promote gendered expressions, and allow for different forms of romance. In chapter 15, Mary Flanagan and Geoff Kaufman tackle the task of translating established theories and decades of empirical work in social psychology on implicit bias into practical game design techniques. They focus on how not only the design of characters and patterns of player interaction, but also how the “framing” or marketing of games impacts the perpetuation of stereotypes and biases. Using examples from their own design work, they illustrate techniques for game designers to overcome the often-unrecognized influence of unconscious biases on their design choices *and* to create more diversified games that effectively combat biases through play. In chapter 16 on gender as play, Emma Westecott considers how a continuum that runs from an absence of gender markers to the more typical hyper-exaggeration on display in many contemporary games could radically expand design practices in games. This framework is discussed and developed in this chapter via application of germane feminist and queer theory with the intention to offer a range of approaches for a more diverse game design and is, importantly, an act of play. Chapter 17 by Heidi McDonald uses findings from the second *Romance in Games* survey that asked over 1,700 gamers, designers, and industry and design about their experiences and expectations with romance in games. The chapter reveals that straight audiences are ready, and queer audiences crave more LGBT romance content in single-player role-playing games as can be already found in *BioWare* games. While each chapter takes a different approach, the overall findings present information and design ideas that will allow game designers to broaden their approaches and perspectives.

The sixth and final part of this book focuses on diversity issues in serious gaming, those efforts that use game design and play for educational purposes. Chapter 18 in this section examines the rationales and successes of using game making activities for broadening participation in computing. Numerous studies have engaged students in game design activities leveraging interest and widespread usage of games to broaden

participation in computing. Yet what happens when interests and values are no longer tied solely to gender? Yasmin Kafai examines the practices of youth who engage in what she terms constructionist gaming. She documents the historical experiences of girls who are underrepresented in computing and gaming, and expands how a connected gaming approach, which combines playing and making, can extend learning opportunities for different constituents. A second paper examines how gaming activities can be used for broadening participation by designing serious games to help low-income and first generation high school students to learn about college applications. In chapter 19, Zoe Corbin and Robert Danielson present findings from interviews with 120 high school students who play-tested the *Mission: Admission* game. Students' perspectives offered insight into how college-related online resources interface with support from peers, institutional agents and family members as students develop college-going efficacy and build understanding of the college application process. The final chapter, 20, uses games for learning about sexuality, a topic that has received primarily negative attention, in particular because many of the most popular games are known for their limited and harmful representations of female sexuality and lack of inclusivity of non-heterosexual romantic or sexual relationships. Gina Lepore and Jill Denner, in their chapter, review representations of sexuality in popular video games in the U.S. and the U.K., including those with a sex-negative approach, as well as the recent shift to include more positive depictions of sexual content and relationships. Within the framework of sex-positive education, they review the current state of sexuality education and conclude with recommendations on how a new generation of games can incorporate a sex-positive and content critical approach that promotes diversity in terms of gender roles, sexual scripts and sexual identity.

Overall, this collection of chapters begins to map out directions for intersectional research and inclusive design in gaming for diversifying *Barbie* and *Mortal Kombat*. What started out twenty years ago as a venture into understanding the unique phenomenon of video games, has now become a global platform through which we play, socialize, and learn. This volume extends discussions around diversity to further understand this medium in light of its proliferation in our social, cultural and participatory experiences.

References

Blackmon, S. (2015). *Invisibility Blues: Exploring race in video games*. Kickstarter Campaign. Available at <https://www.kickstarter.com/projects/113093954/invisibility-blues-exploring-race-in-video-games>

- Butler, J. (1990). *Gender Trouble: Feminism and the Subversion of Identity*. New York, NY: Routledge.
- Burgess, M. C. R., Dill, K. E., Stermer, S. P., Burgess, S. R. & Brown, B. P. (2011). Playing with prejudice. The prevalence and consequences of racial stereotypes in video games. *Media Psychology*, 14(3), 289-311.
- Cassell, J. & Jenkins, H. (1998b). Chess for girls? Feminism and computer games. In J. Cassell & H. Jenkins (Eds.), *From Barbie to Mortal Kombat: Gender and Computer Games* (pp. 2-45). Cambridge, MA: MIT Press.
- Children Now (2001). *Fair Play? Violence, Gender and Race in Video Games*. Santa Monica, CA: Children Now.
- Collins, P. H. (1998). It's all in the family: Intersections of gender, race and nation. *Hypatia*, 13(3), 62-82.
- Corbett, S. (2010, September 19). Learning by playing: Video games in the classroom. *The New York Times*. Retrieved from http://www.nytimes.com/2010/09/19/magazine/19video-t.html?_r=0
- Crenshaw, K. (1989). Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory, and Antiracist Politics. *University of Chicago Legal Forum*, 139-67.
- Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43(6), 1241-99.
- Dickey, M. D. (2006). Girl gamers: the controversy of girl games and the relevance of female-oriented game design for instructional design. *British Journal of Educational Technology*, 37(5), 785-793.
- DiSalvo, B. J., & Bruckman, A. (2009, April). Questioning video games' influence on CS interest. In *Proceedings of the 4th International Conference on Foundations of Digital Games* (pp. 272-278). ACM.
- Everett, A. & Watkins, C. (2008). The power of play: The portrayal and performance of race in video games. *The Ecology of Games: Connecting Youth, Games, and Learning*, (pp. 141-164), Cambridge, MA: MIT Press.
- Fiesler, C. (2014, November 18). *Barbie Remixed: I really can be a computer engineer*.

Blog post. Available at: <http://caseyfilesler.com/2014/11/18/barbie-remixed-i-really-can-be-a-computer-engineer/>

Flanagan, M. & Nissbaum, N. (2014). *Values at Play in Digital Games*. Cambridge, MA: MIT Press.

Greenfield, P. M. (1994). Video games as cultural artifacts. *Journal of Applied Developmental Psychology, 15*(1), 3-12.

Gray, K. L. (2012). Intersecting oppressions and online communities: Examining the experiences of women of color in Xbox Live. *Information, Communication & Society, 15*(3), 411-428.

Hartmann, T., and Klimmt, C. (2006). Gender and computer games: Exploring females' dislikes. *Journal of Computer-Mediated Communication, 11*(4).

Hayes, E. (2008). Girls, gaming and trajectories of IT use. In Y. B. Kafai, C. Heeter, J. Denner & J.Y. Sun (Eds.), *Beyond Barbie and Mortal Kombat: Perspectives on Gender and Gaming* (pp. 217-229). Cambridge, MA: MIT Press.

Jensen, J. & de Castell, S. (2010). Gender, simulation and gaming: Research review and redirections. *Simulation & Gaming, 41*(1), 51-71.

Kafai, Y. B. (1995). *Minds in play: Computer game design as a context for children's learning*. Hillsdale, NJ: Erlbaum.

Kafai, Y. B., Heeter, C., Denner, J. & Sun, J. Y. (Eds.). (2008a). *Beyond Barbie and Mortal Kombat: Perspectives on Gender and Gaming*. Cambridge, MA: MIT Press.

Kafai, Y. B., Heeter, C., Denner, J. & Sun, J. Y. (2008b). Pink, Purple, Casual, or Mainstream Games: Moving Beyond the Gender Divide. In Y. B. Kafai, C. Heeter, J. Denner & J.Y. Sun (Eds.), *Beyond Barbie and Mortal Kombat: Perspectives on Gender and Gaming* (pp. xi-xxv). Cambridge, MA: MIT Press.

Kiesler, S., Sproull, L., & Eccles, J. S. (1985). Pool halls, chips, and war games: Women in the culture of computing. *Psychology of women quarterly, 9*(4), 451-462.

Knudsen, S. V. (2006). Intersectionality: A theoretical inspiration in the analysis of minority cultures and identities in textbooks. In *Proceedings of The Eighth International Conference on Learning and Educational Media*. Retrieved August 20, 2012 from http://www.iartem.no/documents/caught_in_the_web.pdf

- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465-491.
- Laurel, B. (2008). Notes from the utopian pioneer. In Y. B. Kafai, C. Heeter, J. Denner & J.Y. Sun (Eds.) *Beyond Barbie and Mortal Kombat: Perspectives on Gender and Gaming* (pp. 21-31). Cambridge, MA: MIT Press.
- Margolis, J., & Fisher, A. (2003). *Unlocking the Clubhouse: Women in Computing*. Cambridge, MA: MIT Press.
- Marenco, S. (2013). *Barbie: I can be a Computer Engineer/I can be an Actress*. New York, NY: Random House.
- McCall, L. (2005). The complexity of intersectionality, *Signs*, 30(3), 1771-1800.
- Misa, T. J. (2010). Gender codes: Defining the problem. In T. J. Misa (Ed.), *Gender Codes: Why Women are Leaving Computing* (pp. 3-24). New York, NY: Wiley & Sons.
- Morlock, H., Yando, T., & Nigolean, K. (1985). Motivation of video game players. *Psychological Reports*, 57, 247-250.
- Noble, S. & Tynes, B. (2016) (Eds.). *The Intersectional Internet: Race, Sex, Class, and Culture Online*. New York, NY: Peter Lang.
- Okagaki, L., & Frensch, P.A. (1994). Effects of video game playing on measures of spatial performance: Gender effects in late adolescence. *Journal of Applied Developmental Psychology*, 15, 33-58.
- Provenzo, E. F. (1991). *Video kids: Making sense of Nintendo*. Cambridge, MA: Harvard University Press.
- Ray, S. G. (2004). *Gender Inclusive Game Design: Expanding the Market*. Hingham, MA: Charles River Media.
- Richard (2013a). Gender and gameplay: Research and future directions. In B. Bigl & S. Stoppe (Eds.) *Playing with Virtuality: Theories and Methods of Computer Game Studies* (pp. 269-284). New York, NY: Peter Lang.
- Richard, G. T. (2013b). *Understanding gender, context and video game culture for the development of equitable digital games and learning environments*. Unpublished Doctoral Dissertation. New York, NY: New York University.

- Richard, G. T. (2013c). Designing games that foster equity and inclusion: Encouraging equitable social experiences across gender and ethnicity in online games. In *Proceedings of the CHI'2013 Workshop: Designing and Evaluating Sociability in Online Video Games*. ACM.
- Sarkesian, A. (2012). *Tropes vs. Women in Video Games*. Kickstarter Campaign Available at: <https://www.kickstarter.com/projects/566429325/tropes-vs-women-in-video-games>
- Shaw, A. (2012). Do you identify as a gamer? Gender, race, sexuality, and gamer identity. *New Media & Society*, 14(1), 28-44.
- Subrahmanyam, K., & Greenfield, P.M. (1994). Effect of video game practice on spatial skills in girls and boys. *Journal of Applied Developmental Psychology*, 15, 13-32.
- Sun-Higginson, S. (2015). *GTFO: A Film about Women in Gaming*. Kickstarter Campaign. Available at: <https://www.kickstarter.com/projects/shannonsun/gtfo>
- Sunden, J. & Sveningsson, M. (2012). *Gender and Sexuality in Online Game Cultures*. New York, NY: Routledge.
- Taylor, T. L. (2006). *Play between Worlds: Exploring Online Game Culture*. Cambridge, MA: MIT Press.
- Taylor, T. L. (2008). Becoming a Player: Networks, Structure and Imagined Futures. In Y. B. Kafai, C. Heeter, J. Denner & J.Y. Sun (Eds.) *Beyond Barbie and Mortal Kombat: Perspectives on Gender and Gaming* (pp. 51-66). Cambridge, MA: MIT Press.
- The Editorial Board (2014, October 5). Silicon Valley's Diversity Problem. *The New York Times*, SR10. Available at: <http://www.nytimes.com/2014/10/05/opinion/sunday/silicon-valleys-diversity-problem.html>
- Williams, D., Martins, N. Consalvo, M. & Ivory, J. D. (2009). The virtual census: representations of gender, race and age in video games. *New Media & Society*, 11(5), 815-834.
- Wingfield, N. (2014, October 24). Feminist Critics of Video Games Facing Threats in 'GamerGate' Campaign. *The New York Times*, A29. Available at: <http://www.nytimes.com/2014/10/16/technology/gamergate-women-video-game-threats-anita-sarkeesian.html>

Notes

1. For most recent data on diversity of employees in prominent Silicon Valley companies, see <https://docs.google.com/spreadsheets/d/1PcrhcisG6G3QpOC1gdRSGWdhjmplNwiynyQhpMi6JM/edit#gid=0>
2. See <https://caseyfilesler.com/2014/11/18/barbie-remixed-i-really-can-be-a-computer-engineer/> Accessed May 15, 2016.