From Barbie to Mortal Kombat

Gender and Computer Games

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Chapter 12

"Complete Freedom of Movement": Video Games as Gendered Play Spaces

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A Tale of Two Childhoods

Sometimes, I feel nostalgic for the spaces of my boyhood, growing up in suburban Atlanta in the 1960s My big grassy front yard sloped sharply downward into a ditch where we could float boats on a rainy day Beyond, there was a pine forest where my brother and I could toss pine cones like grenades or snap sticks together like swords In the backyard, there was a patch of grass where we could wrestle or play kickball and a treehouse, which sometimes bore a pirate flag and at other times, the Stars and Bars of the Confederacy Out beyond our own yard, there was a bamboo forest where we could play Tarzan, and vacant lots, construction sites, sloping streets, and a neighboring farm (the last vestige of a rural area turned suburban)

Between my house and the school, there was another forest, which, for the full length of my youth, remained undeveloped A friend and I would survey this land, claiming it for our imaginary kingdoms of Jungleloca and Freedonia We felt a proprietorship over that space, even though others used it for schoolyard fisticuffs, smoking cigarettes, or playing kissing games When we were there, we rarely encountered adults, though when we did, it usually spelled trouble We would come home from these secret places, covered with Georgia red mud

Of course, we spent many afternoons at home, watching old horror movies or action-adventure series reruns, and our mothers would fuss at us to go outside Often, something we had seen on television would inspire our play, stalking through the woods like Lon Chaney Jr's Wolfman or "socking" and "powing" each other under the influence of *Batman*

Today, each time I visit my parents, I am shocked to see that most of those "sacred" places are now occupied by concrete, bricks, or asphalt They managed to get a whole subdivision out of Jungleloca and Freedonia[1]

My son, Henry, now 16, has never had a backyard

He has grown up in various apartment complexes, surrounded by asphalt parking lots with, perhaps, a small grass buffer from the street Children were prohibited by apartment policy from playing on the grass or from racing their tricycles in the basements or from doing much of anything else that might make noise, annoy the non-childbearing population, cause damage to the facilities, or put themselves at risk There was, usually, a city park some blocks away that we could go to on outings a few times a week and where we could watch him play Henry could claim no physical space as his own, except his toy-strewn room, and he rarely got outside earshot Once or twice, when I became exasperated by my son's constant presence around the house, I would forget all this and tell him he should go outside and play He would look at me with confusion and ask, "Where?"

But, he did have video games that took him across lakes of fire, through cities in the clouds, along dark and gloomy back streets, and into dazzling neon-lit Asian marketplaces Video games constitute virtual play spaces which allow home-bound children like my son to extend their reach, to explore, manipulate, and interact with a more diverse range of imaginary places than constitute the often drab, predictable, and overly-familiar spaces of their everyday lives Keith Feinstein (1997), President of the Video Game Conservatory, argues that video games preserve many aspects of traditional play spaces and culture that motivate children to

> learn about the environment that they find themselves living in Video games present the opportunity to explore and discover, as well as to combat others of comparable skill (whether they be human or electronic) and to struggle with them in a form that is similar to children wrestling, or scrambling for the same ball—they are nearly matched, they aren't going to really do much damage, yet it feels like an all-important fight for that child at that given moment "Space Invaders" gives us visceral thrill and poses mental/physical challenges similar to a schoolyard game of dodge-ball (or any of the hundred of related kids games) Video games play with us, a never tiring playmate

Feinstein's comment embraces some classical conceptions of play (such as spacial exploration and identity formation), suggesting that video game play isn't fundamentally different from backward play. To facilitate such immersive play

bodies bobbing and swaying to the on-screen action, and it's clear they are *there*—in the fantasy world, battling it out with the orcs and goblins, pushing their airplanes past the sound barrier, or splashing their way through the waves

children could claim as their own play environments Sociologists writing about the suburban America of my boyhood found that children enjoyed a play terrain of one to five blocks of spacious backyards and relatively safe subdivision streets (Hart 1979) Today, at the end of the twentieth century, many of our children have access to the one to five rooms inside their apartments Video game technologies expand the space of their imagination

Let me be clear—I am not arguing that video games are as good for kids as the physical spaces of backyard play culture As a father, I wish that my son could come home covered in mud or with scraped knees rather than carpet burns However, we sometimes blame video games for problems they do not cause—perhaps because of our own discomfort with these technologies, which were not part of our childhood When politicians like Senator Joseph Lieberman, Democrat of Connecticut, target video game violence, perhaps it is to distract attention from the material conditions that give rise to a culture of domestic violence, the economic policies that make it harder for most of us to own homes, and the development practices that pave over the old grasslands and forests Video games did not make backyard play spaces disappear, rather, they offer children some way to respond to domestic confinement

Moving Beyond "Home Base" Why Physical Spaces Matter

The psychological and social functions of playing outside are as significant as the impact of "sunshine and good exercise" upon our physical well-being Roger Hart's *Children's Experience of Place* (1979), for example, stresses the importance of children's manipulations and explorations of their physical environment to their development of self-confidence and autonomy Our physical surroundings are "relatively simple and relatively stable" compared to the "overwhelmingly complex and ever shifting" relations between people, and thus, they form core resources for identity formation The unstructured spaces, the playforts and treehouses, children create for themselves in the cracks, gullies, back alleys, and vacant lots of the adult world constitute what Robin C Moore (1986) calls "childhood's domain" or William Van Vliet (1983) has labeled as a "fourth environment," outside the adult-structured spaces of home, school, and playground These informal, often temporary play spaces are where free and unstructured play occurs Such spaces surface most often on the lists children make of "special" or "important" places in their lives M H Matthews (1992) stresses the "topophilia," the heightened sense of belonging and ownership, children develop as they map their fantasies of empowerment and escape onto their neighborhoods Frederick Donaldson (1970) proposed two different classifications of these spaces—home base, the world which is secure and familiar, and home region, an area undergoing active exploration, a space under the process of being colonized by the child Moore (1986) writes

> One of the clearest expressions of the benefits of continuity in the urban landscape was the way in which children used it as an outdoor gymnasium As I walked along a Mill Hill street with Paul, he continually went darting ahead, leapfrogging over concrete bollards, hopping between paving slabs, balancing along the curbside In each study area, certain kids seemed to dance through their surroundings on the look out for microfeatures with which to test their bodies Not only did he [David, another boy in the study], like Paul, jump over gaps between things, go "tightrope walking" along the tops of walls, leapfrogging objects on sight, but at one point he went "mountain climbing" up a roughly built, nine-foot wall that had many serendipitously placed toe and handholds (p 72)

These discoveries arise from children's active exploration of and spontaneous engagement with their physical surroundings Children in the same neighborhoods may have fundamentally different relations to the spaces they share, cutting their own paths, giving their own names to features of their environment These spaces are far more important, many researchers conclude, than playgrounds, which can only be used in sanctioned ways, since the "wild spaces" allow many more opportunities for children to modify their physical environment

Children's access to spaces are structured around gender differences Observing the use of space within 1970s suburban America, Hart (1979) found that boys enjoyed far greater mobility and range than girls of the same age and class background In the course of an afternoon's play, a typical ten-to-twelve-year-old boy might travel a distance of 2,452 yards, while the average ten-to-twelve-year-old girl might only travel 959 yards For the most part, girls expanded their geographic range only to take on responsibilities and perform chores for the family, while parents often turned a blind eye to a boy's movements into prohibited spaces The boys Hart (1979) observed were more likely to move beyond their homes in search of "rivers, forts and treehouses, woods, ballfields, hills,

lawns, sliding places, and climbing trees," while girls were more like to seek commercially developed spaces, such as stores or shopping malls Girls were less likely than boys to physically alter their play environment, to dam creeks or build forts Such gender differences in mobility, access, and control over physical space increased as children grew older As C Ward (1977) notes

> Whenever we discuss the part the environment plays in the lives of children, we are really talking about boys As a stereotype, the child in the city is a boy Girls are far less visible The reader can verify this by standing in a city street at any time of day and counting the children seen The majority will be boys (p 152)

One study found that parents were more likely to describe boys as being "outdoors" children and girls as "indoor" children (Newson and Newson 1976) Another 1975 study (Rheingold and Cook), which inventoried the contents of children's bedrooms, found boys more likely to possess a range of vehicles and sports equipment designed to encourage outside play, while the girls rooms were stocked with dolls, doll clothes, and other domestic objects Parents of girls were more likely to express worries about the dangers their children face on the streets and to structure girls' time for productive household activities or educational play (Matthews 1992)

Historically, girl culture formed under closer maternal supervision and girls' toys were designed to foster female-specific skills and competencies and prepare girls for their future domestic responsibilities as wives and mothers The doll's central place in girlhood reflected maternal desires to encourage daughters to sew, the doll's china heads and hands fostered delicate gestures and movements (Formanek-Brunnel 1998) However, these skills were not acquired without some resistance Nineteenth-century girls were apparently as willing as today's girls to mistreat their dolls, by cutting their hair or by driving nails into their bodies

If cultural geographers are right when they argue that children's ability to explore and modify their environments plays a large role in their growing sense of mastery, freedom, and self-confidence, then the restrictions placed on girls' play have a crippling effect Conversely, this research would suggest that children's declining access to play space would have a more dramatic impact on the culture of young boys, since girls already faced domestic confinement

Putting Boy Culture Back in the Home

> Clods were handy and the air was full of them in a twinkling They raged around Sid like a hail storm, and before Aunt Polly could collect her surprised faculties and sally to the rescue, six or seven clods had taken personal effect, and Tom was over the fence and gone He presently got safely beyond the reach of capture and punishment, and hasted toward the public square of the village, where two "military" companies of boys had met for conflict, according to previous appointment Tom was the general of one of these armies, Joe Harper (a bosom friend) general of the other Tom's army won a great victory, after a long and hard-fought battle Then the dead were counted, prisoners exchanged, the terms of the next disagreement agreed upon, and the day for the necessary battle appointed, after which the armies fell into line and marched away, and Tom turned homeward alone (pp 19–20)
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> —Mark Twain, *Adventures of Tom Sawyer* (1876)

What E Anthony Rotundo (1994) calls "boy culture" resulted from the growing separation of the male public sphere and the female private sphere in the wake of the industrial revolution Boys were cut off from the work life of their fathers and left under the care of their mothers According to Rotundo, boys escaped from the home into the outdoor play space, freeing them to participate in a semi-autonomous "boy culture" that cast itself in opposition to maternal culture

> Where women's sphere offered kindness, morality, nurture and a gentle spirit, the boys' world countered with energy, self-assertion, noise, and a frequent resort to violence The physical explosiveness and the willingness to inflict pain contrasted so sharply with the values of the home that they suggest a dialogue in actions between the values of the two spheres—as if a boy's aggressive impulses, so relentlessly opposed at home, sought extreme forms of release outside it, then, with stricken consciences, the boys came home for further lessons in self-restraint (p 37)

The boys transgressed maternal prohibitions to prove they weren't "mama's boys" Rotundo argues that this break with the mother was a necessary step

toward autonomous manhood One of the many tragedies of our gendered division of labor may be the ways that it links misogyny—an aggressive fighting back against the mother—with the process of developing self-reliance Contrary to the Freudian concept of the oedipal complex (which focuses on boys' struggles with their all-powerful fathers as the site of identity formation), becoming an adult male often means struggling with (and in many cases, actively repudiating) maternal culture Fathers, on the other hand, offered little guidance to their sons, who, Rotundo argues, acquired masculine skills and values from other boys By contrast, girls' play culture was often "interdependent" with the realm of their mother's domestic activities, insuring a smoother transition into anticipated adult roles, but allowing less autonomy

What happens when the physical spaces of nineteenth-century boy culture are displaced by the virtual spaces of contemporary video games? Cultural geographers have long argued that television is a poor substitute for backyard play, despite its potential to present children with a greater diversity of spaces than can be found in their immediate surroundings, precisely because it is a spectatorial rather than a participatory medium Moore (1986), however, leaves open the prospect that a more interactive digital medium might serve *some* of the same developmental functions as backyard play A child playing a video game, searching for the path around obstacles, or looking for an advantage over imaginary opponents, engages in many of the same "mapping" activities as children searching for affordances in their real-world environments Rotundo's core claims about nineteenth-century boy culture hold true for the "video game culture" of contemporary boyhood This congruence may help us to account for the enormous popularity of these games with young boys This fit should not be surprising when we consider that the current game genres reflect intuitive choices by men who grew up in the 1960s and 1970s, when suburban boy culture still reigned

The following are some points of comparison between traditional boy culture and contemporary game culture

1 Nineteenth-century boy culture was characterized by its independence from the realm of both mothers and fathers. It was a space where boys could develop autonomy and self-confidence

Video game culture also carves out a cultural realm for modern-day children separate from the space of their parents They often play the games in their rooms and guard their space against parental intrusion Parents often ex-

press a distaste for the games' pulpy plots and lurid images As writers like Jon Katz (1997) and Don Tapscott (1997) note, children's relative comfort with digital media is itself a generational marker, with adults often unable to comprehend the movement and colored shapes of the video screen Here, however, the loss of spacial mobility is acutely felt—the "bookworm," the boy who spent all of his time in his room reading, had a "mama's boy" reputation in the old boy culture Modern-day boys have had to accommodate their domestic confinement with their definitions of masculinity, perhaps accounting, in part, for the hypermasculine and hyperviolent content of the games themselves The game player has a fundamentally different image than the "bookworm"

2 In nineteenth-century boy culture, youngsters gained recognition from their peers for their daring, often proven through stunts (such as swinging on vines, climbing trees, or leaping from rocks as they crossed streams) or through pranks (such as stealing apples or doing mischief aimed at adults)

In video game culture, children gain recognition for their daring as demonstrated in the virtual worlds of the game, overcoming obstacles, beating bosses, and mastering levels Nineteenth-century boys' trespasses on neighbors' property or confrontations with hostile shopkeepers are mirrored by the visual vocabulary of the video games, which often pit smaller protagonists against the might and menace of much larger rivals Much as cultural geographers describe the boys' physical movements beyond their home bases into developing home territories, the video games allow boys to gradually develop their mastery over the entire digital terrain, securing their future access to spaces by passing goal posts or finding warp zones

3 The central virtues of the nineteenth-century boy culture were mastery and self-control The boys set tasks and goals for themselves that required discipline in order to complete Through this process of setting and meeting chal lenges, they acquired the virtues of manhood

The central virtues of video game culture are mastery (over the technical skills required by the games) and self-control (manual dexterity) Putting in the long hours of repetition and failure necessary to master a game also requires discipline and the ability to meet and surpass self-imposed goals Most contemporary video games are ruthlessly goal-driven Boys will often play the games, struggling to master a challenging level, well past the point of physical and emotional exhaustion. Children are not so much "addicted" to video games as

they are unwilling to quit before they have met their goals, and the games seem to always set new goal posts, inviting us to best "just one more level" One of the limitations of the contemporary video game is that it provides only prestructured forms of interactivity, and in that sense, video games are more like playgrounds and city parks rather than wild spaces For the most part, video game players can only exploit built-in affordances and preprogrammed pathways "Secret codes," "Easter Eggs," and "warp zones" function in digital space like secret paths do in physical space and are eagerly sought by gamers who want to go places and see things others can't find

4 The nineteenth-century boy culture was hierarchical, with a member's status dependent on competitive activity, direct confrontation, and physical challenges The boy fought for a place in the gang's inner circle, hoping to win admiration and respect

Video game culture can also be hierarchical, with a member gaining status by being able to complete a game or log a big score Video game masters move from house to house to demonstrate their technical competency and to teach others how to "beat" particularly challenging levels The video arcade becomes a proving ground for contemporary masculinity, while many games are designed for the arcade, demanding a constant turnover of coins for play and intensifying the action into roughly two-minute increments Often, single-player games generate digital rivals who may challenge players to beat their speeds or battle them for dominance

5 Nineteenth-century boy culture was sometimes brutally violent and physically aggressive, children hurt each other or got hurt trying to prove their mastery and daring

Video game culture displaces this physical violence into a symbolic realm Rather than beating each other up behind the school, boys combat imaginary characters, finding a potentially safer outlet for their aggressive feelings We forget how violent previous boy culture was Rotundo (1994) writes

> The prevailing ethos of the boys' world not only supported the expression of impulses such as dominance and aggression (which had evident social uses), but also allowed the release of hostile, violent feelings (whose social uses were less evident) By allowing free passage to so many angry or destructive emotions, boy culture sanctioned a good deal of intentional cruelty, like the physical torture of animals

> and the emotional violence of bullying If at times boys acted like a hostile pack of wolves that preyed on its own kind as well as on other species, they behaved at other times like a litter of playful pups who enjoy romping, wrestling and testing new skills (p 45)

Even feelings of fondness and friendship were expressed through physical means, including greeting each other with showers of brickbats and offal Such a culture is as violent as the world depicted in contemporary video games, which have the virtue of allowing growing boys to express their aggression and rambunctiousness through indirect, rather than direct, means

6 Nineteenth-century boy culture expressed itself through scatological humor Such bodily images (of sweat, spit, snot, shit, and blood) reflected the boys' growing awareness of their bodies and signified their rejection of maternal constraints

Video game culture has often been criticized for its dependence upon similar kinds of scatological images, with the blood and gore of games like "Mortal Kombat" (with its "end moves" of dismemberment and decapitation), providing some of the most oft-cited evidence in campaigns to reform video game content (Kinder 1996) Arguably, these images serve the same functions for modern boys as for their nineteenth-century counterparts—allowing an exploration of what it's like to live in our bodies and an expression of distance from maternal regulations Like the earlier "boy culture," this scatological imagery sometimes assumes overtly misogynistic form, directed against women as a civilizing or controlling force, staged toward women's bodies as a site of physical difference and as the objects of desire or distaste Some early games, such as "Super Metroid," rewarded player competence by forcing female characters to strip down to their underwear if the boys beat a certain score

7 Nineteenth-century boy culture depended on various forms of role-playing, often imitating the activities of adult males Rotundo (1994) notes the popularity of games of settlers and Indians during an age when the frontier had only recently been closed, casting boys sometimes as their settler ancestors and other times as "savages" Such play mapped the competitive and combative boy-culture ethos onto the adult realm, thus exaggerating the place of warfare in adult male lives Through such play, children tested alternative social roles, examined adult ideologies, and developed a firmer sense of their own abilities and identities

Video game culture depends heavily on fantasy role-playing, with different genres of games allowing children to imagine themselves in alternative social roles or situations Most games, however, provide images of heroic action more appropriate for the rugged individualism of nineteenth-century American culture than for the contemporary information-and-service economy Boys play at being crime fighters, race-car drivers, and fighter pilots, not at holding down desk jobs This gap between the excitement of boyhood play and the alienation of adult labor may explain why video game imagery seems so hyperbolic from an adult vantage point Rotundo (1994) notes, however, that there was always some gap between boys and adult males

> Boy culture emphasized exuberant spontaneity, it allowed free rein to aggressive impulses and revealed in physical prowess and assertion Boy culture was a world of play, a social space where one evaded the duties and restrictions of adult society Men were quiet and sober, for theirs was a life of serious business They had families to support, reputations to earn, responsibilities to meet Their world was based on work, not play, and their survival in it depended on patient planning, not spontaneous impulse To prosper, then, a man had to delay gratification and restrain desire Of course, he also needed to be aggressive and competitive, and he needed an instinct for self-advancement But he had to channel those assertive impulses in ways that were suitable to the abstract battles and complex issues of middle-class men's work (p 55)

Today, the boys are using the same technologies as their fathers, even if they are using them to pursue different fantasies

8 In ninteenth-century boy culture, play activities were seen as opportunities for social interactions and bonding Boys formed strong ties that were the basis for adult affiliations, for participation in men's civic clubs and fraternities, and for business partnerships

The track record of contemporary video game culture providing a basis for similar social networking is more mixed In some cases, the games constitute both play space and playmates, reflecting the physical isolation of contemporary children from each other In other cases, the games provide the basis for social interactions at home, at school, and at the video arcades Children talk

about the games together, over the telephone or, now, over the Internet, as well as in person, on the playground, or at the school cafeteria Boys compare notes, map strategies, share tips, and show off their skills, and this exchange of video game lore provides the basis for more complex social relations Again, video games don't isolate children, but they fail, at the present time, to provide the technological basis for overcoming other social and cultural factors, such as working parents who are unable to bring children to each other's houses and enlarged school districts that make it harder to get together

Far from a "corruption" of the culture of childhood, video games show strong continuities with the boyhood play fondly remembered by previous generations There is a significant difference, however The nineteenth-century "boy culture" enjoyed such freedom and autonomy precisely because the activities were staged within a larger expanse of space, because boys could occupy an environment largely unsupervised by adults Nineteenth-century boys sought indirect means of breaking with their mothers by escaping to spaces that were outside their control and engaging in secret activities the boys knew would have met parental disapproval The mothers, on the other hand, rarely had to confront the nature of this "boy culture" and often didn't even know that it existed The video game culture, on the other hand, occurs in plain sight, in the middle of the family living room, or at best, in the children's rooms Mothers come face to face with the messy process by which western culture turns boys into men The games and their content become the focus of open antagonism and the subject of tremendous guilt and anxiety Sega's Lee McEnany (this volume) acknowledges that the overwhelming majority of complaints game companies receive come from mothers, and Ellen Seiter (1996) has noted that this statistic reflects the increased pressure placed on mothers to supervise and police children's relations to popular culture Current attempts to police video game content reflect a long history of attempts to shape and regulate children's play culture, starting with the playground movements of progressive America and the organization of social groups for boys, such as the Boy Scouts and Little League, which tempered the more rough-and-tumble qualities of boy culture and channeled them into games, sports, and other adult-approved pastimes

Many of us might wish to foster a boy culture that allowed the expression of affection or the display of empowerment through nonviolent channels, that disentangled the development of personal autonomy from the fostering of misogyny, and that encouraged boys to develop a more nurturing, less

domineering attitude to their social and natural environments These goals are worth pursuing We can't simply adopt a "boys will be boys" attitude However, one wonders about the consequences of such a policing action in a world that no longer offers "wild" outdoor spaces as a safety valve for boys to escape parental control Perhaps our sons—and daughters—need an unpoliced space for social experimentation, a space where they can vent their frustrations and imagine alternative adult roles free of inhibiting parental pressure The problem, of course, is that unlike the nineteenth-century boy culture, the video game culture is not a world children construct for themselves but rather a world made by adult companies and sold to children There is no way that we can escape adult intervention in shaping children's play environments as long as those environments are built and sold rather than discovered and appropriated As parents, we are thus implicated in our children's choice of play environments, whether we wish to be or not, and we need to be conducting a dialogue with our children about the qualities and values exhibited by these game worlds One model would be for adults and children to collaborate in the design and development of video game spaces, in the process developing a conversation about the nature and meanings of the worlds being produced Another approach (Cassell, this volume) would be to create tools to allow children to construct their own play spaces and then give them the freedom to do what they want Right now, parents are rightly apprehensive about a play space that is outside their own control and that is shaped according to adult specifications but without their direct input

One of the most disturbing aspects of the boy culture is its gender segregation The nineteenth-century boy culture played an essential role in preparing boys for entry into their future professional roles and responsibilities, some of that same training has also become essential for girls at a time when more and more women are working outside the home The motivating force behind the "girls' game" movement is the idea that girls, no less than boys, need computers at an early age if they are going to be adequately prepared to get "good jobs for good wages" (Jenkins and Cassell, this volume) Characteristically, the girls' game movement has involved the transposition of traditional feminine play cultures into the digital realm However, in doing so, we run the risk of preserving, rather than transforming, those aspects of traditional "girl culture" which kept women restricted to the domestic sphere while denying them the spacial exploration and mastery associated with boy culture Girls, no less than boys, need to develop an exploratory mindset, a habit of seeking unknown spaces as opposed to settling placidly into the domestic sphere

Gendered Games/Gendered Books Toward a Cultural Geography of Imaginary Spaces

These debates about gendered play and commercial entertainment are not new repeating (and in a curious way, reversing) the emergence of a gender-specific set of literary genres for children in the nineteenth century As Elizabeth Segel (1986) notes, the earliest writers of children's books were mostly women, who saw the genre as "the exercise of feminine moral 'influence'" upon children's developing minds, and who created a literature that was undifferentiated according to gender but "domestic in setting, heavily didactic and morally or spiritually uplifting" (p 171) In other words, the earliest children's books were "girls' books" in everything but name, which isn't surprising at a time novel reading was still heavily associated with women The "boys' book" emerged, in the mid nineteenth century, as "men of action," industrialists and adventurers, wrote fictions intended to counter boys' restlessness and apathy towards traditional children's literature The introduction of boys' books reflected a desire to get boys to read Boy-book fantasies of action and adventure reflected the qualities of their pre existing play culture, fantasies centering around "the escape from domesticity and from the female domination of the domestic world" (Segel 1986, p 171) If the girls' game movement has involved the rethinking of video game genres (which initially emerged in a male-dominated space) in order to make digital media more attractive to girls (and thus to encourage the development of computational skills), the boys' book movement sought to remake reading (which initially emerged in a female-dominated space) to respond to male needs (and thus to encourage literacy) In both cases, the goal seems to have been to construct fantasies that reflect the gender-specific nature of children's play and thus to motivate those left out of the desirable cultural practices to get more involved In this next section, I will consider the continuity that exists between gender/genre configurations in children's literature and in the digital games marketplace

Adventure Islands Boy Space

> Alex looked around him There was no place to seek cover He was too weak to run, even if there was His gaze returned to the stallion, fascinated by a creature so wild and so near Here was the wildest of all wild animals—he had fought for everything he had ever needed, for food, for leadership, for life itself, it was his nature to kill or be

killed The horse reared again, then he snorted and plunged straight for the boy (p 27)

—Walter Farley, *The Black Stallion* (1941)

The space of the boy book is the space of adventure, risk-taking and danger, of a wild and untamed nature that must be mastered if one is to survive The space of the boy book offers "no place to seek cover," and thus encourages fight-or-flight responses In some cases, most notably in the works of Mark Twain, the boy books represented a nostalgic documentation of nineteenth-century "boy culture," its spaces, its activities, and its values In other cases, as in the succession of pulp adventure stories that form the background of the boys' game genres, the narratives offered us a larger-than-life enactment of those values, staged in exotic rather than backyard spaces, involving broader movements through space and amplifying horseplay and risk-taking into scenarios of actual combat and conquest Writers of boys' books found an easy fit between the ideologies of American "manifest destiny" and British colonialism and the adventure stories boys preferred to read, which often took the form of quests, journeys, or adventures into untamed and uncharted regions of the world—into the frontier of the American west (or in the twentieth century, the "final frontier" of Mars and beyond), into the exotic realms of Africa, Asia, and South America The protagonists were boys or boy-like adult males, who had none of the professional responsibilities and domestic commitments associated with adults The heroes sought adventure by running away from home to join the circus (*Toby Tyler*), to sign up as cabin boy on a ship (*Treasure Island*), or to seek freedom by rafting down the river (*Huckleberry Finn*) They confronted a hostile and untamed environment (as when *The Jungle Book*'s Mowgli must battle "tooth and claw" with the tiger, Sheer Khan, or as when Jack London's protagonists faced the frozen wind of the Yukon) They were shipwrecked on islands, explored caves, searched for buried treasure, plunged harpoons into slick-skinned whales, or set out alone across the desert, the bush, or the jungle They survived through their wits, their physical mastery, and their ability to use violent force Each chapter offered a sensational set piece—an ambush by wild Indians, an encounter with a coiled cobra, a landslide, a stampede, or a sea battle—that placed the protagonist at risk and tested his skills and courage The persistent images of blood-and-guts combat and cliff-hanging risks compelled boys to keep reading, making their blood race with promises of thrills and more thrills This rapid pace allowed little room for moral and emotional

introspection In turn, such stories provided fantasies that boys could enact upon their own environments Rotundo (1994) describes nineteenth-century boys playing pirates, settlers and Indians, or Roman warriors, roles drawn from boys' books

The conventions of the nineteenth- and early-twentieth-century boys' adventure story provided the basis for the current video game genres The most successful console game series, such as Capcom's "Mega Man" or Nintendo's "Super Mario Brothers," games, combine the iconography of multiple boys' book genres Their protagonists struggle across an astonishingly eclectic range of landscapes—deserts, frozen wastelands, tropical rain forests, urban undergrounds—and encounter resistance from strange hybrids (who manage to be animal, machine, and savage all rolled into one) The scroll games have built into them the constant construction of frontiers—home regions—that the boy player must struggle to master and push beyond, moving deeper and deeper into uncharted space Action is relentless The protagonist shoots fireballs, ducks and charges, slugs it out, rolls, jumps, and dashes across the treacherous terrain, never certain what lurks around the corner If you stand still, you die Everything you encounter is potentially hostile, so shoot to kill Errors in judgement result in the character's death and require starting all over again Each screen overflows with dangers, each landscape is riddled with pitfalls and booby traps One screen may require you to leap from precipice to precipice, barely missing falling into the deep chasms below Another may require you to swing by vines across the treetops, or spelunk through an underground passageway, all the while fighting it out with the alien hordes The games' levels and worlds reflect the set-piece structure of the earlier boys' books Boys get to make lots of noise on adventure island, with the soundtrack full of pulsing music, shouts, groans, zaps, and bomb blasts Everything is streamlined the plots and characters are reduced to genre archetypes, immediately familiar to the boy gamers, and defined more through their capacity for actions than anything else The "adventure island" is the archetypal space of both the boys' books and the boys' games—an isolated world far removed from domestic space or adult supervision, an untamed world for people who refuse to bow before the pressures of the civilizing process, a never-never-land where you seek your fortune The "adventure island," in short, is a world that fully embodies the boy culture and its ethos

Secret Gardens Girl Space

> If it was the key to the closed garden, and she could find out where the door was, she could perhaps open it and see what was inside the walls, and what had happened to the old rose-trees It was because it had been shut up so long that she wanted to see it It seemed as if it must be different from other places and that something strange must have happened to it during ten years Besides that, if she liked it she could go into it every day and shut the door behind her, and she could make up some play of her own and play it quite alone, because nobody would ever know where she was, but would think the door was still locked and the key buried in the earth (p 71)
>
> — Frances Hodgson Burnett, *The Secret Garden* (1911)

Girl space is a space of secrets and romance, a space of one's own in a world that offers girls far too little room to explore Ironically, "girl books" often open with fantasies of being alone and then require the female protagonist to sacrifice her private space in order to make room for others' needs Genres aimed specifically at girls were slower to evolve, often emerging through imitation of the gothics and romances preferred by adult women readers and retaining a strong aura of instruction and self-improvement As Segel (1986) writes

> The liberation of nineteenth century boys into the book world of sailors and pirates, forest and battles, left their sisters behind in the world of childhood—that is, the world of home and family When publishers and writers saw the commercial possibilities of books for girls, it is interesting that they did not provide comparable escape reading for them (that came later, with the pulp series books) but instead developed books designed to persuade the young reader to accept the confinement and self-sacrifice inherent in the doctrine of feminine influence This was accomplished by depicting the rewards of submission and the sacred joys of serving as "the angel of the house" (pp 171–172)

If the boys' book protagonist escapes all domestic responsibilities, the girls' book heroine learned to temper her impulsiveness and to accept family and domestic obligations (*Little Women, Anne of Green Gables*) or sought to be a healing influence on a family suffering from tragedy and loss (*Rebecca of Sunnybrook Farm*) Segel (1986) finds the most striking difference between the two genre traditions in the books' settings "the domestic confinement of one book as against the extended voyage to exotic lands in the other" (p 173) Avoiding the purple prose of the boys' books, the girls' books describe naturalistic environments, similar to the realm of readers' daily experience The female protagonists take emotional, but rarely physical, risks The tone is more apt to be confessional than confrontational

Traditional girls' books, such as *The Secret Garden*, do encourage some forms of spatial exploration, an exploration of the hidden passages of unfamiliar houses or the rediscovery and cultivation of a deserted rose garden Norman N Holland and Leona F Sherman (1986) emphasize the role of spacial exploration in the gothic tradition, a "maiden-plus-habitation" formula whose influence is strongly felt in *The Secret Garden* In such stories, the exploration of space leads to the uncovering of secrets, clues, and symptoms that shed light on characters' motivations Hidden rooms often contain repressed memories and, sometimes, entombed relatives The castle, Holland and Sherman (1986) note, "can threaten, resist, love or confine, but in all these actions, it stands as a total environment" (p 220) that the female protagonist can never fully escape Holland and Sherman claim that gothic romances fulfill a fantasy of unearthing secrets about the adult world, casting the reader in a position of powerlessness and daring them to overcome their fears and confront the truth Such a fantasy space is, of course, consistent with what we have already learned about girls' domestic confinement and greater responsibilities to their families

Purple Moon's "Secret Paths in the Forest" fully embodies the juvenile gothic tradition—while significantly enlarging the space open for girls to explore Purple Moon removes the walls around the garden, turning it into woodlands Producer Brenda Laurel has emphasized girls' fascination with secrets, a fascination that readily translates into a puzzle game structure, though "Secret Paths" pushes further than existing games to give these "secrets" social and psychological resonance Based on her focus-group interviews, Laurel initially sought to design a "magic garden," a series of "romanticized natural environments" responsive to "girls' highly touted nurturing desires, their fondness for animals" She wanted to create a place "where girls could explore, meet, and take care of creatures, design and grow magical or fantastical plants" (personal correspondence, 1997) What she found was that the girls did not feel magical animals would need their nurturing, and in fact, many of the girls wanted the



Figure 12 1 Friendly fawns from "Secret Paths in the Forest " Reprinted with permission of Purple Moon *Copyright* 1997

animals to mother them The girls in Laurel's study, however, were drawn to the idea of the secret garden or hidden forest as a "girls only" place for solitude and introspection Laurel explains

> Girls' first response to the place was that they would want to go there alone, to be peaceful and perhaps read or daydream They might take a best friend, but they would never take an adult or a boy They thought that the garden/forest would be a place where they could find out things that would be important to them, and a place where they might meet a wise or magical person Altogether their fantasies were about respite and looking within as opposed to frolicsome play (Personal correspondence, 1997)

The spaces in Purple Moon's game are quiet, contemplative places, rendered in naturalistic detail but with the soft focus and warm glow of an impressionistic watercolor

The world of "Secret Paths" explodes with subtle and inviting colors—the colors of a forest on a summer afternoon, of spring flowers and autumn leaves and shifting patterns of light, of rippling water and moonlit skies, of sand and earth The soundtrack is equally dense and engaging, as the natural world whispers to us in the rustle of the undergrowth or sings to us in the sounds of the wind and the calls of birds The spaces of "Secret Paths" are full of life, as lizards slither from rock to rock, or field mice dart for cover, yet even animals which might be frightening in other contexts (coyotes, foxes, owls) seem eager to reveal their secrets to our explorers Jessie, one of the game's protagonists, expresses a fear of the "creepy" nighttime woods, but the game makes the animals seem tame and the forest safe, even in the dead of night The game's puzzles reward careful exploration and observation At one point, we must cautiously approach a timid fawn if we wish to be granted the magic jewels that are the tokens of our quest The guidebook urges us to be "unhurried and gentle" with the "easily startled" deer

Our goal is less to master nature than to understand how we might live in harmony with it We learn to mimic its patterns, to observe the notes (produced by singing cactus) that make a lizard's head bob with approval and then to copy them ourselves, to position spiders on a web so that they may harmonize rather than create discord And, in some cases, we are rewarded for feeding and caring for the animals In *The Secret Garden* (1911), Mary Lennox is led by a robin to the branches that mask the entrance to the forgotten rose garden

> Mary had stepped close to the robin, and suddenly the gusts of wind swung aside some loose ivy trails, and more suddenly still she jumped toward it and caught it in her hand This she did because she had seen something under it—a round knob which had been covered by the leaves hanging over it The robin kept singing and twittering away and tilting his head on one side, as if he were as excited as she was (p 80)

Such animal guides abound in "Secret Paths" the curser is shaped like a lady bug during our explorations and like a butterfly when we want to venture beyond the current screen Animals show us the way, if we only take the time to look and listen

Unlike twitch-and-shoot boys' games, "Secret Paths" encourages us to stroke and caress the screen with our curser, clicking only when we know where secret treasures might be hidden A magic book tells us

> As I patiently traveled along [through the paths], I found that everything was enchanted! The trees, flowers and animals, the sun, sky and stars—all had magical properties! The more closely I listened and the more carefully I explored, the more was revealed to me

Nature's rhythms are gradual and recurring, a continual process of birth, growth, and transformation Laurel explains

> We made the "game" intentionally slow—a girl can move down the paths at whatever pace, stop and play with puzzles or stones, or hang out in the tree house with or without the other characters I think that this slowness is really a kind of refuge for the girls The game is much slower than television, for example One of the issues that girls have raised with us in our most recent survey of their concerns is the problem of feeling too busy I think that "Secret Paths" provides an antidote to that feeling from the surprising source of the computer (Personal correspondence, 1997)

Frances Hodgson Burnett's secret garden is a place of healing, and the book links Mary's restoration of the forgotten rose garden with her repairing a family torn apart by tragedy, restoring a sickly boy to health, and coming to grips with her mother's death

> So long as Mistress Mary's mind was full of disagreeable thoughts about her dislikes and sour opinions of people and her determination not to be pleased by or interested in anything, she was a yellow-faced, sickly, bored and wretched child When her mind gradually filled itself with robins, and moorland cottages crowded with children with springtime and with secret gardens coming alive day by day there was no room for the disagreeable thoughts which affected her liver and her digestion and made her yellow and tired (p 294)

Purple Moon's "Secret Paths" has also been designed as a healing place, where girls are encouraged to "explore with your heart" and answer their emotional dilemmas As the magical book explains, "You will never be alone here, for this is a place where girls come to share and to seek help from one another" At the game's opening, we draw together a group of female friends in the treehouse,

where each confesses her secrets and tells of her worries and sufferings Miko speaks of the pressure to always be the best and the alienation she feels from the other children, Dana recounts her rage over losing a soccer companionship, Minn describes her humiliation because her immigrant grandmother has refused to assimilate new-world customs Some of them have lost parents, others face scary situations or emotional slights that cripple their confidence Their answers lie along the secret paths through the forest, where the adventurers can find hidden magical stones that embody social, psychological, or emotional strengths Along the way, the girls' secrets are literally embedded within the landscape, so that clicking on our environment may call forth memories or confessions If we are successful in finding all of the hidden stones, they magically form a necklace that, when given to the right girl, allows us to hear a comforting or clarifying story Such narratives teach girls how to find emotional resources within themselves and how to observe and respond to others' often unarticulated needs Solving puzzles in the physical environment helps us to address problems in our social environment "Secret Paths" is what Brenda Laurel calls a "friendship adventure," allowing young girls to rehearse their coping skills and try alternative social strategies

The Play Town Another Space for Girls?

> Harriet was trying to explain to Sport how to play Town "See, first you make up the name of the town Then you write down the names of all the people who live in it Then when you know who lives there, you make up what they do For instance, Mr Charles Hanley runs the filling station on the corner " Harriet got very businesslike She stood up, then got on her knees in the soft September mud so she could lean over the little valley made between the two big roots of the tree She referred to her notebook every now and then, but for the most part she stared intently at the mossy lowlands which made her town (pp 3–5)
>
> — Louise Fitzhugh, *Harriet, the Spy* (1964)

Harriet the Spy opens with a description of another form of spatial play for girls—Harriet's "town," a "microworld" she maps onto the familiar contours of her own backyard and uses to think through the complex social relations she observes in her community Harriet controls the inhabitants of this town, shap-

ing their actions to her desires "In this town, everybody goes to bed at nine-thirty" (p 4) Not unlike a soap opera, her stories depend on juxtapositions of radically different forms of human experience "Now, this night, as Mr Hanley is just about to close up, a long, big old black car drives up and in it there are all these men with guns At this same minute Mrs Harrison's baby is born" (p 6) Her fascination with mapping and controlling the physical space of the town makes her game a pre-digital prototype for "Sim City" and other simulation games However, compared to Harriet's vivid interest in the distinct personalities and particular experiences of her townspeople, "Sim City" seems alienated and abstract "Sim City"'s classifications of land use into residential, commercial, and industrial push us well beyond the scale of everyday life and in so doing, strips the landscape of its potential as a stage for children's fantasies "Sim City" offers us another form of power—the power to "play God," to design our physical environment, to sculp the landscape or call down natural disasters (Friedman 1995), but not the power to imaginatively transform our social environment "Sim City" embraces stock themes from boys' play, such as building forts, shaping earth with toy trucks, or damming creeks, playing them out on a much larger scale For Harriet, the mapping of the space was only the first step in preparing the ground for a rich saga of life and death, joy and sorrow, and those are the elements that are totally lacking in most simulation games

As Fitzhugh's novel continues, Harriet's interests shift from the imaginary events of her simulated town and into real-world spaces She "spies" on people's private social interactions, staging more and more "daring" investigations, trying to understand what motivates adult behavior, and writing in her notebook her interpretations of adult lives Harriet's adventures take her well beyond the constricted space of her own home She breaks and enters houses and takes rides on dumbwaiters, sneaks through back alleys and peeps into windows She barely avoids getting caught Harriet's adventures occur in public space (not the private space of the secret garden), a populated environment (not the natural worlds visited in "Secret Paths") Yet, her adventures are not so much direct struggles with opposing forces (as might be found in a boys' book adventure) as covert operations to ferret out knowledge of social relations

The games of Theresa Duncan ("Chop Suey," "Smarty," "Zero Zero") offer a digital version of Harriet's "Town" Players can explore suburban and urban spaces and pry into bedroom closets in search of the extraordinary dimensions of ordinary life Duncan (this volume) cites *Harriet the Spy* as an influence, hoping that her games will grant young girls "a sense of inquisitiveness and wonder" "Chop Suey" and "Smarty" take place in small Midwestern towns, a working-class world of diners, hardware stores, and beauty parlors "Zero Zero" draws us further from home—into fin de siecle Paris, a world of bakeries, wax museums, and catacombs These spaces are rendered in a distinctive style somewhere between the primitiveness of Grandma Moses and the colorful postmodernism of *Pee-Wee's Playhouse* Far removed from the romantic imagery of "Secret Paths," these worlds overflow with city sounds—the clopping of horse hooves on cobblestones, barking dogs, clanging church bells in "Zero Zero"—and the narrator seems fascinated with the smokestacks and signs which clutter this man-made environment As the narrator in "Zero Zero" rhapsodizes, "smoke curled black and feathery like a horse's tail from a thousand chimney pots" in this world "before popsicles and paperbacks" While the social order has been tamed, posing few dangers, Duncan has not rid these worlds of their more disreputable elements The guy in the candy shop in "Chop Suey" has covered his body with tattoos The Frenchmen in "Zero Zero" are suitably bored, ill-tempered, and insulting, even flowers hurl abuse at us The man in the antlered hat sings rowdy songs about "bones" and "guts" when we visit the catacombs, and the women puff on cigarettes, wear too much make-up, flash their cleavage, and hint about illicit rendezvous Duncan (this volume) suggests

> There's a sense of bittersweet experience in "Chop Suey," where not everyone has had a perfect life but they're all happy people Vera has three ex-husbands all named Bob Vera has problems, but she's also filled with love And she's just a very vibrant, alive person, and that's why she fascinates the little girls

Duncan rejects our tendency to "project this fantasy of purity and innocence onto children," suggesting that all this "niceness" deprives children of "the richness of their lives" and does not help them come to grips with their "complicated feelings" towards the people in their lives

Duncan's protagonists, June Bug ("Chop Suey") and Pinkee LeBrun ("Zero Zero"), are smart, curious girls, who want to know more than they have been told Daring Pinkee scampers along the roofs of Paris and pops down chimneys or steps boldly through the doors of shops, questioning adults about their visions for the new century Yet she is also interested in smaller, more intimate questions, such as the identity of the secret admirer who writes love poems to Bon Bon, the singer at the Follies Clues unearthed in one location may shed light on mysteries posed elsewhere, allowing Duncan to suggest something of



Figure 12.2 Bon-Bon's Boudoir in 'Zero Zero.' Copyright Theresa Duncan 1997. Used with permission.

the "interconnectedness" of life within a close community. Often, as in *Harriet*, the goal is less to evaluate these people than to understand what makes them tick. In that sense, the game fosters the character-centered reading practices which Segel (1986) associates with the girls' book genres, reading practices that thrive on gossip and speculation.

Duncan's games have no great plot to propel them. Duncan (this volume) said, "'Chop Suey' works the way that real life does: all these things happen to you, but there's no magical event, like there is sometimes in books, that transforms you." Lazy curiosity invites us to explore the contents of each shop, to flip through the fashion magazines in Bon Bon's dressing room, to view the early trick films playing at Cinema Egypt, or to watch the cheeses in the window of Quel Fromage that are, for reasons of their own, staging the major turning points of the French Revolution. (She also cites inspiration from the more surreal adventures of *Alice in Wonderland*.) The interfaces are flexible, allowing us to visit any location when we want without having to fight our way through levels or work past puzzling obstacles. "Zero Zero" and Duncan's other games

take particular pleasure in anarchistic imagery, in ways we can disrupt and destabilize the environment, showering the baker's angry faces with white clouds of flour, ripping off the table cloths, or shaking up soda bottles so they will spurt their corks. Often, there is something vaguely naughty about the game activities, as when a visit to Poire the fashion designer has us matching different pairs of underwear. In that sense, Duncan's stories preserve the mischievous and sometimes antisocial character of Harriet's antics and the transformative humor of Lewis Carroll, encouraging the young gamers to take more risks and to try things that might not ordinarily meet their parents' approval. Pinkee's first act as a baby is to rip the pink ribbons from her hair! Duncan likes her characters free and "unladylike."

In keeping with the pedagogic legacy of the girls' book tradition, "Zero Zero" promises us an introduction to French history, culture, and language, and "Smarty" a mixture of "spelling and spells, math and Martians, grammar and glamour," but Duncan's approach is sassy and irreverent. The waxwork of Louis XIV sticks out its tongue at us, while Joan D'Arc is rendered in marshmallow, altogether better suited for toasting. The breads and cakes in the bakery are shaped like the faces of French philosophers and spout incomprehensible arguments. Pinkee's quest for knowledge about the coming century cannot be reduced to an approved curriculum, but rather expresses an unrestrained fascination with the stories, good, bad, happy or sad, that people tell each other about their lives.

Harriet, the Spy is ambivalent about its protagonist's escapades: her misadventures clearly excite the book's female readers, but the character herself is socially ostracized and disciplined, forced to more appropriately channel her creativity and curiosity. Pinkee suffers no such punishment, ending up the game watching the fireworks that mark the change of the centuries and taking pleasure in the knowledge that she will be a central part of the changes that are coming: "tonight belongs to Bon Bon but the future belongs to Pinkee."

Conclusion: Toward a Gender-Neutral Play Space?

Brenda Laurel and Theresa Duncan offer two very different conceptions of a digital play space for girls—one pastoral, the other urban, one based on the ideal of living in harmony with nature, the other based on an anarchistic pleasure in disrupting the order of everyday life and making the familiar "strange." Yet, in many ways, the two games embrace remarkably similar ideals—play spaces for girls that adopt a slower pace, are less filled with dangers, invite

gradual investigation and discovery, foster an awareness of social relations and a search for secrets, and center around emotional relations between characters Both allow the exploration of physical environments but are really about the interior worlds of feelings and fears Laurel and Duncan make an important contribution when they propose new and different models for how digital media may be used The current capabilities of our video and computer game technologies reflect the priorities of an earlier generation of game makers and their conception of the boys' market Their assumptions about what kinds of digital play spaces were desirable defined how the bytes would be allocated, valuing rapid response time over the memory necessary to construct more complex and compelling characters Laurel and Duncan shift the focus—giving priority to character relations and "friendship adventures" In doing so, they are expanding what computers can do and what roles they can play in our lives

On the other hand, in our desire to open digital technologies as an alternative play space for girls, we must guard against simply duplicating in the new medium the gender-specific genres of children's literature The segregation of children's reading into boy- and girl-book genres, Segel (1986) argues, encouraged the development of gender-specific reading strategies—with boys reading for plot and girls reading for character relationship Such differences, Segel suggests, taught children to replicate the separation between a male public sphere of risk-taking and a female domestic sphere of care-taking As Segel (1986) notes, the classification of children's literature into boys books and girls' books "extracted a heavy cost in feminine self-esteem," restricting girl's imaginative experience to what adults perceived as its "proper place" Boys developed a sense of autonomy and mastery both from their reading and from their play Girls learned to fetter their imaginations, just as they restricted their movements into real-world spaces At the same time, this genre division also limited boys' psychological and emotional development, insuring a focus on goal-oriented, utilitarian, and violent plots Too much interest in social and emotional life was a vulnerability in a world where competition left little room to be "led by your heart" We need to design digital play spaces that allow girls to do more than stitch doll clothes, mother nature, or heal their friends' hurts, and boys to do more than battle barbarian hordes

Segel's analysis of "gender and childhood reading" suggests two ways of moving beyond the gender-segregation of our virtual landscape First, as Segel (1986) suggests, the designation of books for boys and girls did not preclude (though certainly discouraged) reading across gender lines "Though girls when they reached 'that certain age' could be prevented from joining boys' games and

lively exploits, it was harder to keep them from accompanying their brothers on vicarious adventures through the reading of boys' books" (p 175) Reading boys' books gave girls (admittedly limited) access to the boy culture and its values Segel finds evidence of such gender-crossing in the nineteenth century, though girls were actively discouraged from reading boys' books because their contents were thought too lurid and unwholesome At other times, educational authorities encouraged the assignment of boys' books in public schools, since girls could read and enjoy them, while there was much greater stigma attached to boys reading girls' books The growing visibility of the "quake girls," female gamers who compete in traditional male fighting and action/adventure games (Jenkins and Cassell, this volume), suggests that there has always been a healthy degree of "crossover" interest in the games market and that many girls enjoy "playing with power" Girls may compete more directly and aggressively with boys in the video game arena than would ever have been possible in the real world of backyard play, since differences in physical size, strength, and agility are irrelevant And they can return from combat without the ripped clothes or black eyes that told parents they had done something "unladylike" Unfortunately, much as girls who read boys' books were likely to encounter the misogynistic themes that mark boys' fantasies of separation from their mothers, girls who play boys' games find the games' constructions of female sexuality and power are designed to gratify preadolescent males, not to empower girls Girl gamers are aggressively campaigning to have their tastes and interests factored into the development of action games

We need to open up more space for girls to join—or play alongside—the traditional boy culture down by the river, in the old vacant lot, within the bamboo forest Girls need to learn how to explore "unsafe" and "unfriendly" spaces, and to experience the "complete freedom of movement" promised by the boys' games, if not all the time, then at least some of the time, to help them develop the self-confidence and competitiveness demanded of professional women They also need to learn how, in the words of a contemporary bestseller, to "run with the wolves" and not just follow the butterflies Girls need to be able to play games where Barbie gets to kick some butt

However, this focus on creating action games for girls still represents only part of the answer, for as Segel (1986) notes, the gender segregation of children's literature was almost as damaging for boys as it was for girls "In a society where many men and women are alienated from members of the other sex, one wonders whether males might be more comfortable with and understanding of women's needs and perspectives if they had imaginatively shared female

experiences through books, beginning in childhood" (p 183) Boys may need to play in secret gardens or toy towns just as much as girls need to explore adventure islands In the literary realm, Segel points to books such as *Little House on the Prairie* and *A Wrinkle in Time* that fuse the boy and girl genres, rewarding both a traditionally masculine interest in plot action and a traditionally feminine interest in character relations

Sega Saturn's "Nights into Dreams" represents a similar fusion of the boys' and girls' game genres Much as in "Secret Paths," our movement through the game space is framed as an attempt to resolve the characters' emotional problems In the frame stories that open the game, we enter the mindscape of the two protagonists as they toss and turn in their sleep Claris, the female protagonist, hopes to gain recognition on the stage as a singer, but has nightmares of being rejected and ridiculed Elliot, the male character, has fantasies of scoring big on the basketball court, yet fears being bullied by bigger and more aggressive players They run away from their problems, only to find themselves in Nightopia, where they must save the dream world from the evil schemes of Wileman the Wicked and his monstrous minions In the dreamworld, both Claris and Elliot may assume the identity of Nights, an androgynous harlequin figure who can fly through the air, transcending all the problems below The game requires players to gather glowing orbs that represent different forms of energy needed to confront Claris's and Elliot's problems—purity (white), wisdom (green), hope (yellow), intelligence (blue), and bravery (red)—a structure that recalls the magic stones in "Secret Paths in the Forest"

The tone of this game is aptly captured by one Internet game critic, Big Mitch "The whole experience of "Nights" is in soaring, tumbling, and freewheeling through colorful landscapes, swooping here and there, and just losing yourself in the moment This is not a game you set out to win, the fun is in the journey rather than the destination" Big Mitch's response suggests a recognition of the fundamentally different qualities of this game—its focus on psychological issues as much as on action and conflict, its fascination with aimless exploration rather than goal-driven narrative, its movement between a realistic world of everyday problems and a fantasy realm of great adventure, and its mixture of the speed and mobility associated with the boys' platform games with the lush natural landscapes and the sculpted soundtracks associated with the girls' games Spring Valley is a sparkling world of rainbows and waterfalls and Emerald Green forests Other levels allow us to splash through cascading fountains or sail past icy mountains and frozen wonderlands, or bounce on pillows and off the walls of the surreal Soft Museum, or swim through aquatic

tunnels The game's 3D design allows an exhilarating freedom of movement, enhanced by design features, such as wind resistance, that give players a stronger than average sense of embodiment "Nights into Dreams" retains some dangerous and risky elements that are associated with the boys games There are spooky places, including nightmare worlds full of day-glo serpents and winged beasties, and enemies we must battle, yet there is also a sense of unconstrained adventure and the experience of floating through the clouds Our primary enemy is time, the alarm clock that will awaken us from our dreams Even when we confront monsters, they don't fire on us, we must simply avoid flying directly into their sharp teeth When we lose "Nights'" magical, gender-bending garb, we turn back into boys and girls and must hoof it as pedestrians across the rugged terrain below, a situation that makes it far less likely we will achieve our goals To be gendered is to be constrained, to escape gender is to escape gravity and to fly above it all

Sociologist Barrie Thorne (1993) has discussed the forms of "borderwork," which occurs when boys and girls occupy the same play spaces "The spatial separation of boys and girls [on the same playground] constitutes a kind of boundary, perhaps felt most strongly by individuals who want to join an activity controlled by the other gender" (pp 64–65) Boys and girls are brought together in the same space, but they repeatedly enact the separation and opposition between the two play cultures In real-world play, this "borderwork" takes the form of chases and contests on the one hand and "cooties" or other pollution taboos on the other When "borderwork" occurs, gender distinctions become extremely rigid and nothing passes between the two spheres Something similar occurs in many of the books Segel identifies as gender neutral—male and female reading interests coexist, side by side, like children sharing a playground, and yet they remain resolutely separate, and the writers, if anything, exaggerate gender differences in order to proclaim their dual address Wendy and the "lost boys" both travel to Never-Never-Land, but Wendy plays house and the "lost boys" play Indians or pirates The "little house" and the "prairie" exist side by side in Laura Wilder's novels, but the mother remains trapped inside the house, while Pa ventures into the frontier The moments when the line between the little house and the prairie are crossed, such as a scene in which a native American penetrates into Ma Wilder's parlor, become moments of intense anxiety Only Laura can follow her pa across the threshold of the little house and onto the prairie, and her adventurous spirit is often presented as an unfeminine trait she is likely to outgrow as she gets older

As we develop digital play spaces for boys and girls, we need to make sure this same pattern isn't repeated, that we do not create blue and pink ghettos On the one hand, the opening sequences of "Nights into Dreams," which frame Elliot and Claris as possessing fundamentally different dreams (sports for boys and musical performance for girls, graffiti-laden inner-city basketball courts for boys and pastoral gardens for girls), perform this kind of borderwork, defining the proper place for each gender On the other hand, the androgynous "Nights" embodies a fantasy of transcending gender and thus achieving the freedom and mobility to fly above it all To win the game, the player must become both the male and the female protagonists, and they must join forces for the final level The penalty for failure in this world is to be trapped on the ground and fixed into a single gender

Thorne finds that aggressive "borderwork" is more likely to occur when children are forced together by adults than when they find themselves interacting more spontaneously, more likely to occur in prestructured institutional settings like the schoolyard than in the informal settings of the subdivisions and apartment complexes All of this suggests that our fantasy of designing games that will provide common play spaces for girls and boys may be illusive and as full of its own complications and challenges as creating a "girls only" space or encouraging girls to venture into traditional male turf We are not yet sure what such a gender-neutral space will look like Creating such a space would mean redesigning not only the nature of computer games but also the nature of society The danger may be that in such a space, gender differences are going to be more acutely felt, as boys and girls will be repelled from each other rather than drawn together There are reasons why this is a place where neither the feminist entrepreneurs nor the makers of boys' games are ready to go, yet as the girls' market is secured, the challenge must be to find a way to move beyond our existing categories and to once again invent new kinds of virtual play spaces

References

Booth, A and Johnson, D 1975 "The Effect of Crowding on Child Health and Development" *American Behavioural Scientist* 18 736–749

Burnett, F H 1911 *The Secret Garden* New York Harper Collins

Cavallo, D 1981 *Muscles and Morals Organized Playgrounds and Urban Reform, 1880–1920* Philadelphia University of Pennsylvania Press

"Critical Depth" 1998 Advertisement, *Next Generation*, January

"Die by the Sword" 1998 Advertisement, *Next Generation*, January

Donaldson, F 1970 "The Child in the City" University of Washington, mimeograph, cited in M H Matthews 1992, *Making Sense of Place Children's Understanding of Large Scale Environments* Hertfordshire Barnes and Noble

Farley, W 1941 *The Black Stallion* New York Random House

Feinstein, K and Kent, S 1997 "Towards a Definition of 'Videogames'" http www videotopia com/errata1 htm

Fitzhugh, L 1964 *Harriet, the Spy* New York Harper & Row

Formanek-Brunnel, M 1996 "The Politics of Dollhood in Nineteenth Century America" In H Jenkins, ed , *The Children's Culture Reader* New York New York University Press

Friedman, T 1995 "Making Sense of Software Computer Games and Interactive Textuality" In S G Jones, ed , *Cybersociety Computer Mediated Communication and Community* Thousand Oaks, Calif Sage Publications

Fuller, M and Jenkins, H 1995 "Nintendo and New World Travel Writing A Dialogue" In S G Jones, ed , *Cybersociety Computer-Mediated Communication and Community* Thousand Oaks, Calif Sage Publications

Hart, R 1979 *Children's Experience of Place* New York John Wiley and Sons

Holland, N N and Sherman, L F 1986 "Gothic Possibilities" In E A Flynn and P P Schweickart, eds , *Gender and Reading Essays on Readers, Texts and Contexts* Baltimore Johns Hopkins University Press

Jenkins, H and Cassell, J (this volume) "Chess for Girls? The Gender Politics of the Girls Game Movement"

Katz, J 1997 *Virtuous Reality* New York Random House

Kinchloe, J L 1997 "*Home Alone* and 'Bad to the Bone' The Advent of a Postmodern Childhood" In S R Steinberg and J L Kincheloe, eds , *Kinder-Culture The Corporate Construction of Childhood* New York Westview

Kinder, M 1996 "Contextualizing Video Game Violence From 'Teenage Mutant Ninja Turtles 1' to 'Mortal Kombat 2'" In P M Greenfield and R R Cocking, eds , *Interacting with Video* Norwood Ablex Publishing

Matthews, M H 1992 *Making Sense of Place Children's Understanding of Large-Scale Environments* Hertfordshire Barnes and Noble

Moore, R C 1986 *Childhood's Domain Play and Place in Child Development* London Croom Helm

Newson, J and Newson, E 1976 *Seven Years Old in the Home Environment* London Allen and Unwin

Rheingold, H L and Cook, K V 1975 "The Content of Boys' and Girls' Rooms as an Index of Parents' Behavior" *Child Development* 46 459–463

Rotundo, E A 1994 *American Manhood Transformations in Masculinity from the Revolution to the Modern Era* New York Basic

Searles, H 1959 *The Non-Human Development in Normal Development and Schizophrenia* New York International Universities Press

Segel, E 1986 "'As the Twig Is Bent ' Gender and Childhood Reading" In E A Flynn and P P Schweickart, eds , *Gender and Reading Essays on Readers, Texts and Contexts* Baltimore Johns Hopkins University Press

Seitzer, E 1996 Transcript of Expert Panel Meeting, Sega of America Gatekeeper Program Los Angeles, June 21

"Sonic R" 1998 Advertisement, *Next Generation*, January

Tapscott, D 1997 *Growing Up Digital The Rise of the Net Generation* New York Mc Graw Hill

Thorne, B 1993 *Gender Play Girls and Boys in School* New Brunswick Rutgers University Press

van Staden, J F 1984 "Urban Early Adolescents, Crowding and the Neighbourhood Experience A Preliminary Investigation" *Journal of Environmental Psychology* 4 97–118

Van Vliet, W 1983 "Exploring the Fourth Environment An Examination of the Home Range of City and Suburban Teenagers" *Environment and Behavior* 15 567–88

"VR Sports" 1998 Advertisement, *Next Generation*, January

Ward, C 1977 *The Child in the City* London Architectural Press

West, E 1992 "Children on the Plains Frontier" In E West and P Petrik, eds , *Small Worlds Children and Adolescents in America, 1850–1950* Lawrence The University Press of Kansas p 26–41