14 *Second Life* as a digitally mediated third place

Social capital in virtual world communities

Fern M. Delamere

As virtual worlds and digital games expand, so too does our cultural understanding of them. This is particularly true given the academic interest they have garnered and the calls for further research. While not meeting the definitional criteria of a game, the ludic virtual world of *Second Life* (*SL*) is akin to massively multiplayer online role playing games (MMORPGs) both in the sociality and the playful environments of each. The virtual world of *SL* and the communities of interest found in it are culturally significant places. Disability and health groups in *SL* are specifically presented in this chapter as crucial places where meaningful social engagement, support, and advocacy occur and human capital is developed.

Oldenberg's (1999) concept third place is defined as a neutral social space, different from home or work, and an open space where public gathering and social discourse occur. Drawing upon this concept this writing bolsters support for the exploration of online virtual worlds as digitally mediated third places. The concept of third place is being applied to digitally mediated online places, suggesting that these online places, like other physical third places, act as a social gathering place different from home and work where civic discourse take place. Third place is used as a framework, in conjunction with what Putnam (2000) terms social capital, to better understand the role virtual worlds play in fostering relationships and developing human potential. As used here, social capital entails structures of networks, norms and relational trust that collectively work together for some mutual benefit. This chapter presents collaborative ethnographic research and participant observation conducted with disability and health groups in *SL*. Literature and theoretical conceptualizations are discussed to frame the analytical principles used in this research. The work presented here is primarily conceptual rather than empirical in nature. Preliminary observations and descriptions of various disability and health groups are provided and linked to these concepts.

The decline of social capital in modern Western society (Putnam 2000) and the lack of public third place locations where these relationships can be forged (Oldenberg 1999) are two areas of social concern being voiced in scholarship. In addition, Oldenberg (1999) and Putnam (2000) similarly suggest that media participation fosters solitary and socially isolating leisure pursuits in private rather than public locations. These authors suggest that the media is a contributory factor

in the decline of third places (Oldenberg 1999) and to the decreased potential for the development of social capital (Putnam 2000).

Social capital: foundations, critiques and online applications

The origins of the concept of social capital are found in political science and the early nineteenth century work of Alexis de Tocqueville (Mansfield and Winthrop 2002). De Tocqueville connected social capital to associational life and the building of democracy. An expanded reading of social capital by Bourdieu (1986) highlights important theoretical linkages of social capital to issues of social class. Recent popularization of social capital within academe is most often attributed to the work of Putnam (2000). Putnam explained social capital as social networks and norms of reciprocity and trustworthiness that arise from the formation of social bonds. Social capital is also viewed as investments in social relations by individuals that, intended or not, facilitate collective actions with returns that exceed those that an individual might achieve acting independently of others (Warren 2008).

Social capital consists of two conceptual components, bonding social capital and bridging social capital (Putnam 2000). According to Putnam, bonding social capital is the social glue that binds together homogeneous groups of people in strong bonds, while bridging social capital is viewed as a social lubricant that helps diverse groups of people to form loose ties with one another. While the positive outcomes of social capital are most often cited, it is important to recognize possible antagonistic outcomes of close groups whose purposes lie outside typical social norms; such as street gangs.

Clearly Putnam's main thrust, however, is centred on the positive outcomes of social capital. His book is a statistical enumeration of the various ways that social capital has been on the decline in Western society since the mid-1950s. To bring this point home, Putnam (2000) asserts that the increasing privatization of leisure time has changed the way that we interact – to the detriment and decrease of strong social relationships and social connectedness. Creatively using this image as the title of his book, Putnam points to the progressive decrease in the number of bowling leagues as a primary example of the decline in social capital, and the resulting social vacuum. Putnam's work is well documented and supported by empirical data, although it is not without criticism.

Some of the criticism is directed toward social capital's general lack of acknowledgment of the competing interests of divergent groups, the inequity of social access to power, and the depoliticized approach resulting from this (Muntaner *et al.* 2002; Siisihainen 2000). This has clear implications for understanding how this concept applies to those with limited access to power based on race, class, sexuality, gender, and disability. I suggest that infusing a Bourdieuian perspective of social capital, one that highlights the recognition of social class as an important factor, counterbalances and addresses many of these criticisms.

Putnam's (2000) claim that isolated leisure participation with digital media contributed to the void in social capital is also a point of criticism. As a

counter-point, many suggest that the human need for sociality and connectedness is in actuality being fulfilled through technologically mediated networks (Blanchard and Horan 1998; Jones 1997; Rheingold 1994; Wellman and Haythornthwaite 2002). In fact, recent scholarship in media communications and game studies is now exploring games and virtual worlds as computer-generated third places that nurture human connectedness (Bergstrom 2009; Ducheneaut *et al.* 2007; Soukup 2006; Steinkuelher and William 2006; Wadley *et al.* 2003).

A (third) place to hang: a matter of community

Oldenberg (1999) states, 'third place is a generic designation for a great variety of public places that host regular, voluntary, informal, and happily anticipated gatherings of individuals beyond the realms of home and work' (p. 16). *SL* is being conceptualized and proposed in this study to be a computer-generated third place. From this perspective it is being viewed as a publically accessible social place and context for examining online communities of practice and communities of interest (Wenger 1991).

Third places are described as socially equal, playful, homey and congenial environments that are easily accessible with available hours for people to meet and partake in informal conversations (Oldenberg 1999). In a third place, the status of guests is levelled; it is a neutral ground, not 'my place,' not 'your place.' A third place provides an interactive setting where grassroots issues are discussed and community is built (Oldenberg 1999). English pubs, German beer gardens, corner coffee houses, French cafés, and Victorian gardens are Oldenberg's nostalgic examples of traditional third places. In this regard, third places are thought to break down barriers that exist in everyday life by offering a space in which to 'hang' and interact, a place we can all call our own, a place of community. The social concept of third place is well supported in architectural research (Alexander 1977).

Virtually . . . communities of interest

Until the advent of digital technology, definitions of community have focused on close-knit groups in a single, often local, geographic location (Hand and Moore 2006). Wenger's (1991) approach allows us to move beyond community as a fixed geographical construct and towards conceiving of community as a set of social relations. To rethink traditional notions of a community, we understand it as 'a set of relations among persons, activity, and world' (Wenger 1991: 98). We must explore the places where these interactions happen, including online spaces.

According to Wenger (1991), communities of practice are formed by people who engage in a process of collective learning in a shared domain of human endeavour. Wenger views online communities as important interactive spaces where the formation of social practice takes place, which I believe is inclusive of virtual communities such as those discussed here.

> New technologies such as the internet have extended the reach of our interactions beyond the geographical limitations of traditional communities, but the increase in flow of information does not obviate the need for community, In fact, it expands the possibilities for community and calls for new kinds of communities based on shared practice.
>
> (Wenger 2008, online)

Transference of traditional notions of community into online places and focusing on communities of interest in the virtual worlds are productive avenues for exploring the social meaning and impact of virtual communities in both online and offline realms. Virtual community has become an accepted concept in communication, media, and game studies. It is recognized for the important role it plays as a common forum where a large portion of current social interactions and human connectedness takes place (Jones 1997; Katz and Rice 2002; Preece and Maloney-Krichmar 2005; Wellman and Haythornthwaite 2002). This aligns well with Oldenberg's conceptualization and description of third place.

Rheingold (1994) suggests that, rather than contributing to the loss of informal public places, involvement with digital media through online communities has burgeoned in response to the increasing unavailability of geographic places for people to engage in convivial conversation. A recent reprint of an original 1987 essay by Rheingold provides this working definition of virtual community:

> A virtual community is a group of people who may or may not meet one another face-to-face, and who exchange words and ideas through the mediation of computer bulletin boards and networks. Like any other community, it is also a collection of people who adhere to a certain (loose) social contract, and who share certain (eclectic) interests.
>
> (Rheingold 1994: 20)

Recent works highlight how early Internet platforms – PC email, mobile phone email, real-time chat (instant messaging and IRC), mailing lists, bulletin boards – help to build social capital within and beyond these virtual communities (Katz and Rice 2002; Kobayashi *et al.* 2006; Wellman *et al.* 2003; Wellman and Haythornthwaite 2002). Virtual community research is founded on these early Internet applications, now being applied to other Internet applications such as digital games and virtual worlds. Given the connection between earlier virtual community research and the current exploration of communities formed within virtual worlds, we are reminded that what appears as new communication research, may not be new (Bell and Consalvo 2009). In comparison, however, virtual worlds as a new application add a complexity of experience due to additional aspects that early online text-based communities did not have including, visual richness, game character (avatar) embodiment, and a ludic (playful) environment.

Virtual worlds of online play

'Networked social games are a wholly new form of community, social interaction, and social phenomenon that is becoming normative faster than we have been able to analyze it, theorize it, or collect data on it' (William 2006: 1). Current efforts are now being directed towards the exploration of communities founded in digital games and the virtual worlds of MMORPGs, also referred to as massively multiplayer online games (MMOGs or MMOs). *SL*, while not defined as a game, has similar playful opportunities, games within it, and ludic experiences analogous to MMOGs. For this chapter, the term massively multiplayer online virtual world (MMOVW) will be used as an inclusive term to collectively refer to all networked, online, avatar-based game and non-game virtual worlds.

Bell (2008) presents a comprehensive, albeit recognizably evolving, definition of virtual worlds. Virtual worlds are 'a synchronous, persistent network of people, represented as avatars, facilitated by networked computers' (Bell 2008). Involvement in a MMOVW is no longer considered a fringe pastime. Economic indicators act as evidence of growth in the gaming industry, but act as a substitute for the more interesting cultural feature that increasing numbers of people are using technologically mediated sociality in their everyday lives. The social side of MMOVWs – that is, what happens with and between players, friends, family, and communities – is of greatest interest here. Taylor (2006) states that virtual worlds and networks found in the MMOVW *EverQuest* are grounded in practices of technology that engage participants in their everyday lives, and in turn, their everyday social networks and communities. Online experiences are neither vacuous nor separate from the rest of life: rather, they are an interwoven and integral part of life (Rosenberg 2009).

Digitally mediated third places and social capital

Third place has recently proven to be a useful framework from which to examine digital play and online social behaviour (Boellstorff 2008; Ducheneaut *et al.* 2007; Soukup 2006; Steinkuelher and William 2006; Wadley *et al.* 2003). William (2006) ponders if games will become a modern third place and, if so, how this might affect our social understanding of human interaction and behaviour.

Recent research supports the utility of studying MMOVWs as a conceptual third place. A study of online networked games has reported the importance of sociality and the sense of community they foster in players' enjoyment of game-play (Wadley *et al.* 2003). Steinkuelher and William (2006) conclude that Oldenberg's concept of third place is also useful in understanding MMOGs' role in developing a sense of place and community. Ducheneaut *et al.* (2007) study of the MMOG *Star Wars Galaxies* as a third place discussed the importance of game design and creating places within games where the sociality needs of players can be met.

Framing social capital as an analytical tool for virtual world research has also proven useful (Fielder 2008; Kobayashi *et al.* 2006; Malaby 2006). Survey research in *SL* indicates that socializing is a major motivation for participation, and

highlights the general correlation between high levels of social capital in real-life and high levels of social capital in that world (Holmberg and Huvila 2009). The movement of human actions between the boundaries of the real and the virtual must be accounted for.

> . . . boundaries that only appeared to separate the real and the virtual are fading fast, from both sides, and it is the social actors on the ground who are making use, in every new moment, with every new challenge, of the increased scope that these new domains afford.
>
> (Malaby 2006: 160)

Malaby (2006) cautions against the common misreading of social capital in virtual world research in terms of market only, as this often creates misunderstanding of the net value of human exchanges and outcomes related to social connectedness, reciprocity and learning. Malaby (2006) defines human capital as the first resource coming from human efforts; it is through this effort and over time that human capital is thereby transformed into other capitals including material, social and cultural capital. Malaby proposes that virtual world research must examine all forms of human capital as an important step to better understand the online and offline implications of these virtual worlds.

Connections in and beyond virtual worlds: disability and social capital online

Computer-generated communications in virtual worlds do decrease barriers of time and space. However, we are reminded not to think of these technologies in purely utopian ways, doing so, we neglect important socio-political analysis inherent in disability studies (Seymour and Lupton 2004). The disability studies literature also recognizes a digital divide and constraints related to some people's with disability capacity for involvement. This divide is based on numerous factors, such as the type of disability, the associated usability of the technology, and economic access (Bush 2006; Chaudry 2005; Dobransky and Hargittai 2006). It is therefore acknowledged here, that virtual worlds have been shown to present both opportunity and challenge for people with disabilities (Carr 2009; Dobransky and Hargittai 2006; Trewin *et al.* 2008). While it is important to acknowledge these problematic issues and the difficulty of access, the focal point here is on those who do interact with technology and participate in virtual world communities.

This said, it is clear that people with disabilities do want to participate in virtual worlds, and in fact may be over-represented in them compared to their population share (20 percent of casual gamers have a disability vs. 15 percent of the general population) (Information Solutions Group 2008). Further to this, many features and universal design principles can be built in to enable access (Carr 2009; Krueger *et al.* 2010; Mancuso and Cole 2009; Smith 2009).

The social relevance of virtual worlds for people with disabilities and others involved in disability groups in *SL* is important ground for exploration (Forman

et al. 2009; Smith 2009; Trewin *et al.* 2008). As virtual worlds become a new paradigm in which to operate, many are just beginning to understand the implications and possibilities for our social understanding, including the social constructions of disability (Smith 2009). People with disabilities who are active participants in virtual worlds accrue beneficial individual and socio-cultural outcomes. Virtual participation in techno-sociality presents a personal avenue for fulfilment, as well as a platform for political action (Seymour and Lupton 2004). 'Virtual worlds have the potential to transform the way society operates' and views disability (Trewin *et al.* 2008: 177), perhaps more centred on capabilities and personhood rather than incapacities. In addition, Huang's (2005) study examining social capital and online disability communities reports the need for more research in this area to better understand their socio-cultural and political implications.

Empirical research suggests that relationships built online positively relate to common indicators of social capital (Best and Krueger 2006; Blanchard and Horan 1998; Holmberg and Huvila 2009; Huang 2005). These indicators include general trust, reciprocal support, social participation, and friendships.

People with disabilities meet and form communities in virtual worlds such as *SL* in virtual third spaces. Over 6 months of ethnographic observations, of the day-to-day culture and work of several of the most active health and disability groups in *SL*, support the theoretical arguments made in this chapter. It is argued that these communities form social capital that has value to their participants and is parlayed into their online and offline lives in meaningful ways, impacting on them and society. One clear example of this was described by the leader of the Virtual Ability community group in *SL*. She explained how one member of this group overcame some significant problems with social anxiety through her online involvement, which even led to her acquiring a job. Through the efforts of her friends in a virtual peer support community, the woman with severe social anxiety learned new coping strategies and IT-related job skills in *SL*. She used a resume highlighting these skills, and a letter of recommendation by her *SL* mentor, to obtain gainful employment offline. Related to her newly developed sociality, she later said, 'People need a reason to get together and talk. Besides, it's fun!' This example supports the theoretical foundations of how computer-generated third spaces assist to build social capital and create important networks of support for people with disabilities, beyond easier access to social interaction opportunities and leisure entertainment value.

People with disabilities have the freedom in virtual worlds to 'escape their bodies, if they so choose, or to celebrate the contradistinction of their unique gifts in the presence of peers' (Smith 2009). Such choices also act as a 'levelling ground' for them, whereby they are addressed according to the merit of their character (Bowker and Tuffin 2002), rather than disability serving as their first, only, and often stigmatized component of identity (Bedini 2000; Cahill and Eggleston 1995; Joachim and Acorn 2000; Scambler 2009).

As discussed in the previous section, Malaby (2006) emphasizes the importance of parlaying human capital – collectively social, market and cultural capital – and understanding the conversion from one to the other, allowing better understanding of how online social actions shape reality and human experience.

> By thinking in terms of the forms of capital within and beyond synthetic worlds, researchers will be able to chart how human actors move within and among different domains of all kinds, converting different forms of capital into one another.
>
> (Malaby 2006: 160)

Data from the research thus far applies to Malaby's notion of human capital and the conversion from one domain of social capital to another. First, I have observed how some individuals with disabilities who have learned functional game skills through the support of the Virtual Ability community (social capital) then leveraged those skills to learn building and scripting, creating commodities (such as, scripted vehicles or elevators, clothing and so forth) that they sell or give away for free (market capital) in *SL*. Another example form this research is Helen Keller Day, held 27 June 2009, in *SL*. Organized by the Virtual Helping Hands group, the community event's overall purpose included information acquisition, education, exploration of employment opportunities (market capital), social engagement, enjoyment of arts and entertainment (cultural capital) and the unveiling of Max the virtual guide dog, a free product developed in *SL* for use in-world by blind and visually impaired users (Linden Lab 2009).

Information presented to me by a participant of this study also represents how social capital bridges and bonds people together with unexpected outcomes. As described by the participant, a man who was using *SL* as respite from care giving for his severely disabled adult child found additional personal support within the virtual world, and eventually brought the child into *SL* with him. This was not successful, as the child, who has autism, interacted randomly and did not respond to any communication with other players. Ready to give up on having his child successfully interact and enjoy the virtual world, the first man met another *SL* participant who had learned scripting (using computer programming language to make objects become animated). This person used his scripting skills to create a tool that helps guide his blind wife's avatar to move independently in the virtual environment, thereby allowing her fluid advancement through the metaverse and the ability to attend *SL* music concerts with him (social capital). Recognizing another application of that tool, the two men are now collaborating to design an open source parental control device that would allow a guardian to determine movements of a dependent such that they could, with the assistance of their parent, successfully interact in the virtual world (freely available market capital).

A further example that can be drawn from the research findings is how the communities of Deaf people in *SL* created bonds of friendship and a social network which they put to use when they rallied together expressing opposition to the exclusionary nature of the introduction of voice communication in *SL* . They thus parlayed social capital into the collective domain of cultural capital through social activism actions. Viewing social capital from a social action perspective and socio-political lens is important and fully takes into account issues related to access to social power (Huang 2005; Muntaner *et al.* 2002; Seymour and Lupton 2004). Using social capital in the analysis of these observations supports how making

interconnections between various forms of human capital helps to understand the blurring of boundaries between worlds.

This is also supported by previous literature which has shown that individual and collective empowerment (Fernback 1997; Hopkins *et al.* 2004; Kobayashi *et al.* 2006; Meekosha 2002; Ospina *et al.* 2009; Smith 2009) and what has been termed e-empowerment by Zielke *et al.* (2009) are benefits for those who engage in social activities of online networks and communities. A conversation I had with Simon Stevens (known in *SL* as Simon Walsh), a founder of *Wheelies* social club in *SL* that is open to all but geared towards people with disabilities, supports this point. Stevens stated, 'When I started Wheelies I had no idea the impact it would have here and in my real life. You know I was given an award in the UK for founding Wheelies, right?' In 2008, Stevens was given a UK Catalyst Award for social action and technology, sponsored by the Department for Business, Enterprise, Regulatory Reform and National Endowments for Science, Technology and the Arts.

The literature also shows learning as another substantive benefit of online disability communities in virtual worlds (Zielke *et al.* 2009). Research by Zielke *et al.* (2009) used adult learning models to show the benefits of teaching functionality and mastery of virtual-world skills to participants with disabilities in *SL*. This researcher has observed other outputs of learning in *SL* for people with or without disabilities. These include learning about disability-related topics, access and utilization of in-world and offline resources, self-efficacy and empowerment, and advocacy/self-advocacy related skills, to mention but a few. Benefits of learning have also been found in another MMOVW, *World of Warcraft* (Oliver and Carr 2009), linking learning to Wenger's (1991) ideas about communities of interest. On a collective level, 'researchers are only now beginning to appreciate the impact that virtual worlds are having in helping patients adapt to their disability and discover a sense of community' (Smith 2009).

Digital communities focused on disability support and advocacy have the potential to demystify societal conceptualizations and fragment many prevalent misconceptions of people with disabilities. In fact, dominant discourse surrounding disability can be resisted through online communities (Ospina *et al.* 2009) and may be transformed through the deconstruction of typically stigmatizing discourses (Kang 2009). Transformation through resistance is highlighted as a key element in the disabled people's movement and in the imagining of a 'politics of hope' (Peters *et al.* 2009). As Goggin and Newell (2007) note, it is important to reframe disability as a central category of power and identity, and to explore the ramifications of new information communication technologies (ICT) so as not to replicate and reproduce common and oppressive disability discourses. A central question to be asked here is; what does social capital in the computer-generated third place of *SL* contribute to the framing of disability in the virtual community and offline?

Conclusion

As spatial, temporal and social locations, virtual worlds have within them the potential to develop virtual communities filled with socio-cultural meaning for

individual members. As new technologies such as MMOVWs shrink distance and erase the limitations of geography, the creation of computer-generated third places where empowered publics emerge and communities of interest create social capital, results in intended or unintended social change. As seen here, framing *SL* as a third place opens the door for better understanding of the social functions that online communities such as disability and health groups in *SL* have. As a community the disability and health groups have organized collective networks and built social trust that has facilitated co-operation and coordinated mutually beneficial activities. Examples include shared and similar mandates, such as, information sharing, mentoring new members, offering social and recreation events, building job skills opportunities, scheduled public education seminars, care-giver support and socio-political-oriented disability advocacy.

Fernback (1997) noted that social bonding and the communal spirit developed online may be purely instrumental and remain there, but it may also extend outward in a manner whereby communities manifest themselves in actions having very real effects on socio-political issues. It is suggested that civic engagement and the accumulation of social capital in online communities will only be strengthened as that social capital becomes linked to other offline applications and spaces (Blanchard and Horan 1998). Preliminary observations indicate that *SL* disability and health groups are instrumental in creating strong social relations, and the action of these groups does create social capital both within and outside of virtual worlds.

Chairman Emeritus Nicholas Negroponte of Massachusetts Institute of Technology's Media Lab forecast that the interactive, entertainment and information worlds would eventually merge (Negroponte 1995). In the case of virtual worlds, these domains have now merged, and we are only beginning to understand the limitless social implications and the blurring of the boundaries between online and offline effects.

References

Alexander, C. (1977) *A Pattern Language*, New York, Oxford University Press.

Bedini, L. A. (2000) 'Just sit down so we can talk': Perceived stigma and community recreation pursuits of people with disabilities'. *Therapeutic Recreation Journal*, 34(3): 55–68.

Bell, M. (2008) Toward a definition of 'virtual worlds'. *Journal of Virtual Worlds Research*, 1(1). Retrieved from http: //journals.tdl.org/jvwr/article/view/283/237.

Bell, M. and M. Consalvo (2009) Culture and virtual worlds: The not-quite-new experiences we study. *Journal of Virtual Worlds Research*, 1(3). Retrieved from http: //www.jvwresearch.org/index.php?_cms=default,2,2.

Bergstrom, K. (2009) *Adverturing Together Exploring Romantic Couples of MMOS as Part of Their Shared Leisure Time*, Calgary, University of Calgary.

Best, S. J. and B. S. Krueger (2006) Online interactions and social capital: distinguishing between new and existing ties. *Social Science Computer Review*, 24(4): 395–410.

Blanchard, A. and T. Horan (1998) Virtual communities and social capital. *Social Science Computer Review*, 16(3): 293–307.

Boellstorff, T. (2008) *Coming of Age in Second Life*, New Jersey, Princeton University Press.

Bourdieu, P. (1986) The forms of capital. In J. Richardson. (ed.) *Handbook of Theory and Research for the Sociology of Education*. New York, Greenwood Press: 241–58.

Bowker, N. and K. Tuffin (2002) Disability discourses for online identities. *Disability and Society*, 17: 327–44.

Bush, M. L. (2006) *Beyond Web-Accessibility: Barriers to ICT for Disabled People*, London, Aidis Trust.

Cahill, S. E. and R. Eggleston (1995) Reconsidering the stigma of physical disability. *Sociological Quarterly*, 36(4): 681–98.

Carr, D. (2009) Virtually accessible (second life and disability). *Access: The Inclusive Design Journal*: 23–5.

Chaudry, V. (2005) Rethinking the digital divide in relation to visual disability in India and the United States: towards a paradigm of "information inequity". *Disability Studies Quarterly*, 25(2). Retrieved from http: //www.dsq-sds.org/article/view/553/730.

Dobransky, K. and E. Hargittai (2006) The disability divide in internet access and use. *Information, Communication and Society*, 9(3): 313–34.

Ducheneaut, N., R. J. Moore and E. Nickell (2007) Virtual 'third places': a case study of sociability in massively multiplayer games. *Computer Supported Cooperative Work*, 16(1–2): 129–66.

Fernback, J. (1997) The individual within the collective: virtual ideology and the realization of collective principles. In S. Jones. (ed.) *Virtual Culture: Identity and Communication in Cybersociety*. London, Sage: 36–54.

Fielder, J. D. (2008) Synthetic Democracy: Associations of Social Capital in Virtual Worlds. *Proceedings of International Society of Political Psychology Annual Meeting*, Paris, France.

Forman, A. E., P. Baker, J. Pater and K. Smith (2009) Beautiful to Be Me: Identity, Disability and Gender in Virtual Environments. *International Communication Association (ICA) Conference on Women in a Digital World: Conceptual Models of Inclusion*, Chicago, USA.

Goggin, G. and C. Newell (2007) The business of digital disability. *The Information Society*, 23(3): 159–68.

Hand, M. and K. Moore (2006) Community, identity and digital games. In J. Rutter and J. Bryce. (eds) *Understanding Digital Games*. London, Sage: 241–66.

Holmberg, K. and I. Huvila (2009) Social Capital in Second Life. *Proceedings of AOIR 9.0*, Copenhagen, Denmark.

Hopkins, L., J. Thomas, D. Meredyth and S. Ewing (2004) Social capital and community building through an electronic network. *The Australian Journal of Social Issues*, 39(4): 369–79.

Huang, J. (2005) Building social capital: a study of the online disability community. *Disability Studies Quarterly*, 25(2). Retrieved from http: //www.dsq-sds.org/article/view/554/731.

Information Solutions Group. (2008) Disabled Gamers Comprise 20% of Casual Video Game Audience. *PR Newswire* (September 25, 2009) Retrieved from http: //www.infosolutionsgroup.com/press_release_E.htm.

Joachim, G. and S. Acorn (2000) Stigma of visible and invisible chronic conditions. *Journal of Advanced Nursing*, 32(1): 243–48.

Jones, S. (ed.) (1997) *Virtual Culture: Identity and Communication in Cybersociety*. London, Sage.

Kang, J. G. (2009) A teacher's deconstruction of disability: a discourse analysis. *Disability Studies Quarterly*, 29(1). Retrieved from http: //www.dsq-sds.org/article/view/173/173.

Katz, J. E. and R. E. Rice (2002) *Social Consequences of Internet Use: Access, Involvement and Interaction*, Cambridge, MIT Press.

Kobayashi, T., K. I. Ikeda and K. Miyata (2006) Social capital online: collective use of the

internet and reciprocity as lubricants of democracy. *Information, Communication and Society*, 9(5): 582–611.

Krueger, A., A. Ludwig and D. Ludwig (2010) Universal design for virtual worlds. *Journal of Virtual Worlds Research*, 2(3). Retrieved from http: //journals.tdl.org/jvwr/article/view/674.

Linden Lab. (2009) 'Helen Keller Day.' (June 27, 2009) Retrieved from http: //wiki.secondlife.com/wiki/Helen_Keller_Day.

Malaby, T. (2006) Parlaying value. *Games and Culture*, 1(2): 141–62.

Mancuso, K. and J. Cole (2009) Gimpgirl Community's Best Practices for Facilitating an Accessible Community in a Virtual World. *Proceedings of IEEE Accessing the Future Conference*, Boston, USA.

Mansfield, H. C. and D. Winthrop. (eds) (2002) *Democracy in America (Trans. H.C. Mansfield and D. Winthrop)*. Chicago, University of Chicago Press.

Meekosha, H. (2002) Virtual activists? women and the making of identities of disability. *Hypatia*, 17(3): 67–88.

Muntaner, C., J. W. Lynch, M. Hillemeier, J. H. Lee, R. David, J. Benach and C. Borrell (2002) Economic inequality, working-class power, social capital, and cause-specific mortality in wealthy countries. *International Journal of Health Services*, 32(4): 629–56.

Negroponte, N. (1995) *Being Digital*, Toronto, Random House.

Oldenberg, R. (1999) *The Great Good Places: Coffee Shops, Community Centers, Beauty Parlors, General Stores, Bars, Hangouts, and How They Get You through Your Day*, New York, Marlowe and Company.

Oliver, M. and D. Carr (2009) Learning in virtual worlds: using communities of practice to explain how people learn from play. *British Journal of Educational Technology*, 40(3): 444–57.

Ospina, A., J. Cole and J. Nolan (2009) 'Gimpgirl Grows Up: Women with Disabilities Rethinking, Redefining, and Reclaiming Community'. *Proceedings of AOIR 9.0*, Copenhagen, Denmark.

Peters, S., S. Gabel and S. Symeonidou (2009) Resistance, transformation and the politics of hope: imagining a way forward for the disabled people's movement. *Disability and Society*, 24(5): 543–56.

Preece, J. and D. Maloney-Krichmar (2005) Online communities: design, theory, and practice. *Journal of Computer-Mediated Communication*, 10(4). Retrieved from http: //dx.doi.org/10.1111/j.1083-6101.2005.tb00264.x.

Putnam, R. D. (2000) *Bowling Alone*, New York, Simon and Schuster Paperbacks.

Rheingold, H. (1994) *The Virtual Community*, London Secker and Warburg.

Rosenberg, A. (2009) A Cultural Sociological Approach to Second Life. *Proceedings of AOIR 9.0*, Copenhagen, Denmark.

Scambler, G. (2009) Health-related stigma. *Sociology of Health and Illness*, 31(3): 441–55.

Seymour, W. and D. Lupton (2004) Holding the line online: Exploring wired relationships for people with disabilities. *Disability and Society*, 19(4): 291–305.

Siisihainen, M. (2000) Two Concepts of Social Capital: Bourdieu vs. Putnam. *Proceedings of ISTR 4th International Conference*, Dublin, Ireland.

Smith, K. (2009) The Use of Virtual Worlds among People with Disabilities. *Proceedings of the 24th Annual International Technology and Persons with Disabilities Conference*, Los Angeles, USA.

Soukup, C. (2006) Computer-mediated communication as a virtual third place: Building Oldenburg's great good places on the world wide web. *New Media and Society*, 8(3): 421–40.

Steinkuehler, C. and D. Williams (2006) Where everybody knows your name: online games as 'third places'. *Journal of Computer Mediated Communication,* 11(4): 885–909.

Taylor, T. L. (2006) *Play between Worlds: Exploring Online Game Culture*, Cambridge, MIT Press.

Trewin, S., V. L. Hanson, M. R. Laff and A. Cavender (2008) Powerup: An Accessible Virtual World. *Proceedings of the 10th International ACM SIGACCESS Conference on Computers and Accessibility*, Halifax, Nova Scotia, Canada.

Trewin, S. M., M. R. Laff, A. Cavender and V. L. Hanson (2008) Accessibility in Virtual Worlds. *CHI '08 Extended Abstracts on Human Factors in Computing Systems*, Florence, Italy.

Wadley, G., M. Gibbs, K. Hew and C. Graham (2003) Computer Supported Cooperative Play, Third Places and Online Videogames. *Proceedings of the 13th Australian Conference on Computer Human Interaction*, Brisbane, Australia.

Warren, M. E. (2008) 'The nature and logic of bad social capital', in D. Castigilione, J. W. V. Deth and G. Wolleb (eds) *The Handbook of Social Capital*, New York: Oxford University Press.

Wellman, B. and C. Haythornthwaite (2002) *The Internet and Everyday Life*, Malden, Blackwell Publishers.

Wellman, B., A. Quan-Haase, J. Boase, W. Chen, K. Hampton, I. Díaz and K. Miyata (2003) The social affordances of the internet for networked individualism. *Journal of Computer-Mediated Communication,* 8(3). Retrieved from http: //dx.doi.org/10.1111/j.1083–6101.2003.tb00216.x.

Wenger, E. (1991) *Communities of Practice: Learning, Meaning and Identity*, Cambridge, Cambridge University Press.

Wenger, E. (2008) 'Communities of practice.' (July 11, 2008) Retrieved from http: //www.ewenger.com/theory/.

William, D. (2006) Why game studies now? Gamers don't bowl alone. *Games and Culture,* 1(1): 13–6.

Zielke, A., C. Roome and A. B. Krueger (2009) A composite adult learning model for virtual world residents with disabilities: a case study of the virtual ability Second Life® Island'. *Journal of Virtual Worlds Research,* 2(1). Retrieved from https: //journals.tdl.org/jvwr/article/view/417/461.

First published 2011 by Routledge
2 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN

Simultaneously published in the USA and Canada
by Routledge
711 Third Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloguing in Publication Data
Crawford, Garry.
Online gaming in context : the social and cultural significance of online games/ edited by Garry Crawford, Victoria K. Gosling and Ben Light.
p. cm.—(Routledge advances in sociology)
ISBN 978–0–415–55619–4 (hardback)
1. Internet games—Social aspects. I. Gosling, Victoria K. II. Light, Ben. III. Title.
GV1469.15.C73 2011
306.4'87—dc22
2010050590

ISBN 13: 978–0–415–55619–4 hbk
ISBN 13: 978–0–203–86959–8 ebook

Typeset in Baskerville by Swales & Willis Ltd, Exeter, Devon

Printed and bound in Great Britain by
CPI Antony Rowe, Chippenham, Wiltshire