



# Journal of Youth Studies

ISSN: 1367-6261 (Print) 1469-9680 (Online) Journal homepage: http://www.tandfonline.com/loi/cjys20

# Taking ownership of gaming and disability

# **David Wästerfors & Kristofer Hansson**

To cite this article: David Wästerfors & Kristofer Hansson (2017) Taking ownership of gaming and disability, Journal of Youth Studies, 20:9, 1143-1160, DOI: 10.1080/13676261.2017.1313969

To link to this article: https://doi.org/10.1080/13676261.2017.1313969

đ	1	(	1	1
				L
П				L
				L
_	-	-	-	

Published online: 10 Apr 2017.



Submit your article to this journal 🕑



Article views: 232



View Crossmark data 🗹



Check for updates

# Taking ownership of gaming and disability

# David Wästerfors<sup>a</sup> and Kristofer Hansson<sup>b</sup>

<sup>a</sup>Department of Sociology, Lund University, Lund, Sweden; <sup>b</sup>Department of Arts and Cultural Sciences, Lund University, Lund, Sweden

#### ABSTRACT

Gaming among young people with disabilities is often understood within a habilitation frame, as if video and computer games primarily should help to exercise and 'improve'. Little is known about how these games are used within a private frame, and how young people with disabilities operate their gaming as concrete persons rather than as treatment-receiving clients. Through the use of stories, descriptions, and demonstrations from Swedish youth and young adults with disabilities (muscle diseases, cerebral palsy, and Asperger's syndrome), we explore these gamers' practical maneuvers, verbal accounts, and biographical-narrative concerns in relation to digital games. As they strive to bypass or overcome digital inaccessibility, various challenges find their way into their gaming practices, not only to complicate, distract, or disturb them but also to give them extra meaning. Gamer-game identifications turn multifaceted, with disabilities serving as paths both around and into the games' 'magical circles'. We suggest partly new concepts – beyond a habilitation frame – to capture how young people struggle to take ownership of gaming and disability: engrossment maintenance, vicarious gamers and biographical as well as situational refuge.

#### **ARTICLE HISTORY**

Received 25 November 2015 Accepted 24 January 2017

#### **KEYWORDS**

Disability; youth; video and computer games; accessibility; engrossment; identity; biographical and situational refuge

Young people today typically spend a lot of their free time hanging around with friends, playing computer games or hooked up to social network sites. Indoor sedentary activities are on the rise, and their digital arenas constitute an expanding area for young people to retreat from things that bother them (Abbott-Chapman and Robinson 2009, 246). Whereas parents and social commentators often have other ideas of what is 'healthy' and 'constructive' (e.g. youth groups, sports, traditional hobbies), youth analysts point out that young people need spaces that allow them to withdraw from more expected communal life. They need privacy to develop independence, and freedom to make sense of their personal experiences without having adults hanging over them (Abbott-Chapman and Robinson 2009; Furlong 2013, 147).

But when researchers address a certain subcategory of young people – those living with disabilities – something strange happens. Now, digital arenas are defined in terms of potentialities to directly alleviate troubles linked to their disabilities, and users are defined in terms of treatment-receiving objects. Electronic games plus disability build up a striking case; research in this field tend to overlook how digital activities – also for

gamers with disabilities – belong to young people's construction of meaning and connectedness (cf. Abbott-Chapman and Robinson 2009; Smart 2007, 185–189). Researchers now tend to define gaming as a sort of instrumental 'disability-help' and show little interest in young people's gaming engagement as persons rather than clients.

In a review of such habilitation research, Sandlund, McDonough, and Häger Ross (2009) concluded that 13 out of 16 studies show positive 'results' for participants in gaming experiments, as defined by physiotherapists and other professionals. Improvements have been noted in body motions, spatial orientation, motivation, and self-confidence. The so-called virtual reality games for children with cerebral palsy, for instance, are reported to serve as a promising 'medium for training' (Akhutina et al. 2003) or as a 'tool' (Miller and Reid 2003). Processes of *gamification* seem clear (Rughinis 2013, 577-579), even if they are not openly named so. Gaming can help children forget 'the therapeutic nature of the experience' (Miller and Reid 2003, 628), which is another way of saying that the 'magic circle' of gameplay is dressed up in habilitation terms and used for certain non-game purposes (Rughinis 2013). A person with a disability can be made to temporarily disengage from his or her physical or other troubles by becoming immersed in fictive worlds and playful exercises, stretching his or her capabilities (Eliasson, Rösblad, and Häger-Ross 2003, 34; cf. Wästerfors 2011, 338–339).

We do not doubt that these and similar approaches may engage staff in habilitation programs, as well as genuinely stimulate children and youth with disabilities to achieve remarkable things (Wästerfors 2011) but, we argue, it tends to reproduce a narrow image of disability, youth and gaming. The reason is found in the theoretical and methodological angle. In a typical study design, young persons with disabilities are exposed to an intervention with games and the result is measured in comparison with a control group. The participants are predefined as in need of training, and no consideration is given to any personal interest in these games or meaning-constructing practice around them (cf. Molesworth 2009). The element of 'fun in games', as Goffman (1961) calls it (cf. Huizinga [1949] 1998, 10), is essentially disregarded or subordinated therapeutical purposes. Researchers give young people's physiological and cognitive reception of games far more attention than their embodied engagement in and interactions with them (Wästerfors 2011). Many persons with disabilities are artful game world members in their own right, but researchers adhere to a categorical picture.

Our point of departure is different. Youth and young adults with disabilities most likely employ and narrate contemporary video and computer games in a manner similar to their peers – the sometimes called 'digital natives' or 'always on' generation (Abbott-Chapman and Robinson 2009, 243, 247) – i.e. not only in terms of habilitation and medical-therapeutic discourse but also as a part of their personal lives. Gaming today can be an integral component of young people's identity work and self-expression in general (Abbott-Chapman and Robinson 2009, 243–244). For several years, we have met, observed, and listened to teenagers and young adults with disabilities who play digital games just for fun, outside of the habilitation and training contexts. Based on the narrative and ethnographic details from these encounters, we have tried to outline how young gamers with disabilities employ, enjoy, manipulate and wrestle with these games. In this article we analyze how they frame the games biographically, situationally and bodily, and how they respond to various challenges as they pursue their cultural interest. Our focus is on the social and cultural aspects of being young, living with disabilities *and* living with games, sidestepping the instrumental perspectives that often are expected in this area (cf. Apelmo 2013, 39).

Recent studies have granted some insight into how digital culture may increase 'participatory culture' among people with disabilities (Creeber and Martin 2008; Hansson 2015; Miller 2011), but few studies have addressed how digital participation is actually motivated, realized, and managed in everyday life (Galis 2011; Willis 2010). Digital arenas are a critical part of today's youth cultures, but they often fail to meet the user needs of people with disabilities (Watling 2011). This can be understood as a 'digital divide', a term that highlights how general inequalities in society are evident also when it comes to digital technology (DiMaggio and Hargittai 2001; Hacker and van Dijk 2001; Warschauer 2003a, 2003b). Our study is situated among young peoples' everyday responses to such a digital divide, understood with the help of Erving Goffman's (1961, 35) *engrossment* and Drew Leder's (1990) *the absent body*. As these young people experience and struggle with games not entirely or constantly accessible for them they invent tailored techniques to maintain engrossment and to keep their bodies in an experiential background.

# Game engrossment and the body

A game is 'a little cosmos of its own' (Kurt Riezler, cited by Goffman 1961, 25), framed or demarcated in specific ways (Huizinga [1949] 1998, 8–13). Participants must follow certain rules of irrelevance to disengage from anything that might disturb the game, and only a few external matters are allowed to enter it (Goffman 1961, 18–19, 29). In fact, engrossment must be 'steadily sustained' through people's recognizable arrangements and interactions; disturbing incidents must be handled through so-called integrative acts (Goffman 1961, 38, 41, 44). To be caught up by a game is, in other words, a quite delicate situation that does not fall from the sky just because there is a game available. Disabilities add an extra twist because they may constitute both paths around and into engrossment, as we will show. The gamers' personal, corporal, or diagnostically related circumstances, in combination with partly inaccessible digital worlds, mold their gaming engagement by constituting hindrances or friction on the one hand, and on the other hand by providing distinctive motives to go even deeper into these worlds.

Goffman argues that participants in any focused encounter can 'become caught up by it, carried away by it, engrossed in it – to be, as we say, spontaneously involved in it'. A participant in a game becomes an integral part of the gaming situation, 'lodged in it and exposed to it'. This integration constitutes the 'fun in games' and is what the gamers in our study (and in general) strive to reach, enjoy, and uphold. Engrossment does not just occur but is accompanied by a range of complications and prerequisites; it has to be 'made' or 'done', and living with disabilities may provide special circumstances. There is a risk that a digital divide is recreated in the everyday life of the youth, manifest in and through engrossment troubles. Gamers are striving to bypass or overcome such a divide, built into today's partly inaccessible entertainment technology.

In our analysis, we identify engrossment maintenance as a gamer's response to control difficulties and as a general striving for a game's 'euphoric function' – the feeling of making an encounter flow (cf. Csíkszentmihályi 1990; Goffman 1961, 40). Each game creates a world for participants to access, explore, enjoy, and defend; when played with others, it may generate relatedness, closeness, mutual respect, and solidarity (Goffman 1961, 37).<sup>1</sup>

Disability, on the other hand, is often given a characteristic 'stickiness' within the society's interactions that may be hard to make others overlook (Davis 1972, 132; cf. Goffman 1961: 42 on 'sign situations' and 'leaky words'), and this stickiness can easily challenge or get awkwardly embedded into these worlds.

Along with Goffman's vocabulary, we also use aspects of Drew Leder's (1990, 1–4) phenomenological examination of the absent body. Leder argues that our bodies generally tend to recede from direct experience because they are (basically) self-concealing. An actor's body tends to 'disappear' (become unattended to, taken for granted) when functioning unproblematically. In times of problematic or challenging function, however, the body seizes our attention. When, for instance, a tennis player suddenly feels his heart hurting (Leder 1990, 71), he drops the focus on the game and becomes trapped in corporeal pain.

The gamers in our data are no different from others in that they strive to play with their bodies placed in an experiential background – a body is a medium rather than an aim in video and computer games – but disabilities and associated inaccessibility also routinely interfere in the gaming experience. 'Absent' bodies turn present and reorient the gamers' attention. Bodies encountering inaccessibility may 'call out' for action in various ways (an 'affective call', Leder 1990, 73): to change the game, to adapt the way of gaming, to take a break more often, or to ask somebody for help.

But as we will show, the gamers' bodies need not distract gaming engrossment in sudden ways, as with Leder's tennis player with a hurting heart, but do so in more prolonged, personal and habitual ways. Because the disabilities at issue are chronic, the absent body becomes present seamlessly and mundanely, and the gamers' creative efforts to maintain gaming engrossment may very well restore a degree of corporal absenteeism. An ideal is to keep corporeality as 'an unthematized background' when playing video and computer games, but because bodies with disabilities may not be as self-concealing as many others (given the inaccessible society at issue), achieving this ideal is not always possible or may demand special work.

Goffman and Leder's concepts can be placed within a wider interactionist, narrative, and ethnomethodological frame. Both engrossment and the identities involved in it are accomplished in people's interactions and accounts. Disability is not to be seen as a fixed entity but as depending on interaction, and the gamers' stories are not to be seen as either a right or a false presentation of facts, but as in themselves constituting meanings, motives, and actions (cf. McRuer 2006). We use concepts such as Garfinkel's (1967) accounts and Davis (1972) strained interaction, and we are generally inspired by Gubrium and Holstein's (1997, 114–122) paradigm of interpretive practice. We also try to coin partly new concepts, along the lines that Swedberg (2012, 16) recommends. By observing phenomena in our data, naming them, and expanding the name to a broader perspective, we extend the vocabulary needed to theorize on disability and games.

A range of alternative concepts overlaps with ours. Goffman's social-psychological engrossment partly resembles Csíkszentmihályi's (1990) psychological flow, and Goffman's characteristic of games as interactively demarcated spheres with their own disposition clearly corresponds with Johan Huizinga's ([1949] 1998, 8–13) historical analysis. From Huizinga we also gain insight into the mesmerizing and captivating aspects of play ('play casts a spell over us', Huizinga [1949] 1998, 10), as well as its preceding position in relation to

culture. Play is a struggle *for* something but also a representation *of* something; the whole culture is 'played from the beginning' (Huizinga [1949] 1998, 46). Similarly, Schwartzman (1978, 330) sees play as an orientation or framing, as a context that players adopt toward something and that produces powerful transformations.

Huizinga's ([1949] 1998, 10) popularized term magic circle is highly relevant. It is often used to signify an attention to various playgrounds in culture – delimited spaces or temporary worlds for 'illusions' (what is 'in play') – and these can fruitfully be seen as dynamic and flexible. Juul (2008, 64) argues that a magical circle is a 'boundary that players negotiate' – not a binary distinction – and that argument is close to Goffman's emphasis on the interactional accomplishment of gaming engrossment, as well as his interest in participants' integrative acts to uphold it. What is particular in our study is the role of disabilities in such negotiations and accomplishments: the shape of circles that young gamers with disabilities may create and the characteristics of their playground negotiations.

#### **Methods and data**

This article is primarily based on interviews and field notes from encounters with 15 Swedish teenagers and young adults living with disabilities. All except one are male; we have been working on recruiting more female participants, but our snowball sample directed us toward male networks. The interviewees were identified through contacts from previous studies (Hansson 2015; 2012; Wästerfors 2011), as well as through schools and leisure centers in Sweden devoted to persons with disabilities. Many interviewees were found via previous interviewees, and some (four boys) were interviewed together.

Our sample is theoretical and strategical (Charmaz 2002, 689). We do not intend to show any prevalence of gaming or attitudes among Swedish youth with disabilities or link particular disabilities with particular games. Rather, we try to explore recurrent qualities in practices. Muscle diseases and cerebral palsy were most common in our sample; one participant has Asperger's syndrome. The ages ranged from 16 to 27, with an average of 19 years. The interviews (conducted by the authors and a master student in sociology, Sebastian Broman) were recorded and transcribed verbatim.

Active interviewing requires expanding and improvising beyond what one would find in an interview guide (Holstein and Gubrium 1995). We developed a guide as a starting point (with themes like background, types of games, 'why play games?', online games, game events, etc.) but allowed and encouraged the interviewee to direct the conversation; the interviewer's role was to listen carefully and support further narrations. Many identified themes were not prepared directly by researchers but rather emerged during our investigation and were strengthened successively. We also engaged in a broader ethnographic approach by recording and/or taking field notes of participants who demonstrated their games. The interviewees switched on their TV or computer, showed their games, played either independently or with the researcher, and described what happened. Background data were provided from a previous study in which younger boys and girls with disabilities employed digital games within a quite informal habilitation (Wästerfors 2011). Through reviewing these previous fieldnotes, we gained an understanding of gamer–game interactions when a young gamer with disabilities is personally immersed into a game while simultaneously being supported by adults. The article is limited by the fact that we only demonstrate glimpses of gaming interactions *in situ* whereas interview excerpts and their accounts and narratives stand in the center. Nevertheless, we draw attention to the interactive work that occurs during the interview itself (Baker 2002, 777) since these gamers account for their practices in close connection to the games present, and they identify with their game figures in front of the interviewers and their demonstrated games. This approach takes into account how the interviewers and the games solicit and co-construct the analyzed descriptions and narratives.

On the one hand, the interviews refer to a 'substance' or a set of lived experiences outside the conversation (e.g. the embodied gaming practices and a biography). On the other hand, they constitute a setting in themselves in which these and other phenomena are accomplished. By continuously switching between these *whats* and *hows* (Gubrium and Holstein 1997, 118–122), we have tried to avoid a simplified interpretation of the data, what Alasuutari (1995, 47) calls a factist perspective. Rather, we look upon data as a specimen (Alasuutari 1995, 45, 63), that is to say, as a sample of talk and practices that these gamers identify with and live by.

#### Paths into and around gaming engrossment

In our data, we have found that games may constitute a biographical or situational refuge (displayed and retold), that games can be interpreted metaphorically, and that gaming bodies may turn 'present' in certain inaccessibility situations, which then are dealt with in a variety of ways.

## Biographical and situational refuge

The young gamers we have met recurrently narrate their games as a biographical and situational refuge; the games are treated as an allegorical and concrete site through which a gamer can define and interpret his or her life. These games may represent a 'bubble' for the gamers (cf. Stenros 2012, 10–14), a safe haven to manage everyday life and its challenges. Disabilities are not only a source of difficulties in these respects but also paths into gaming engrossment, imbuing digital games with extra meaning. Playing games has helped to manage difficult or depressing parts of their lives, the gamers say.

As Molesworth (2009, 382–383) notes, games can be 'significant resources for the management of everyday life' and represent ways of coping with frustrations. The game 'waits' for you in the evening when you come home from school, it fills the void of a weekend, a winter, or a summer, and engages you socially and mentally so that your disability troubles temporarily may fade away. Gamers become absorbed by the fun of the game, providing a mesmerizing break from everyday life – an 'escape from routine', being in 'another world', particularly during a specifically hard time in life (Molesworth 2009, 381). The fact that these games are loaded with time-consuming levels and stories promotes this refuge. They are not only intended to be sporadically or briefly used but they stand out as complete worlds to dive into and explore – for weeks, months, or even years. 'Games, then, are world-building activities', as Goffman (1961, 25) states. Instant identifications between gamer and game figure pave the way. Consider these excerpts where Aina, 22, and living with Asperger's syndrome, demonstrates *Diablo* for one of us:

David: Aina:	What kind of quest do you have for, for instance? What are you going to do? I'll fetch blood.
David:	Okay.
Aina:	Oh, there's a guy! Here I'll have to kill him 'cause he, eh, betrayed me! I'm so surprised
	[irony].
David:	And then you pick up things [new equipment], perhaps?
Aina:	Yeah.
David:	Yeah.
Aina:	But now I'm full. I'll have to sell some things first.

(...)

Aina:	Mm. There's so many spiders in this game.
David:	Yeah, there were a hell of a lot of spiders.
Aina:	Oh no, some spiders!
David:	'You've died!' [reading this from the screen, in English]

Aina is immediately and seamlessly identified with a figure on the screen, both by herself and the interviewer. Clumsy formulations become unnecessary, such as 'the figure that I play now shall fetch blood' or 'the figure that I steer on the screen has too much equipment for the moment'. Instead, identifications are employed constantly and at ease – 'I'll fetch blood' – and they pull the gamer into a fictive drama by playful identity transformations (Schwartzman 1978; Wästerfors 2011, 344–345). This implicit immersion lays the ground for a refuge.

Leo, 18 years old and living with a muscle disease, played intensively when he was younger, and he describes this as 'a time in my youth when I had really fun!' and 'an escape from everything else' (cf. Molesworth 2009, 381). He played through the night, enjoying himself while knowing that 'the next day, you were back in school and everything was the same'. Leo refers to problems in coming to terms with his disability during this period. He had recently started to use a wheelchair and 'needed' the games at that point, he says, as a sort of social pause while he adjusted to a new position among his peers. The game worlds that Leo visited, enjoyed, and explored added some light to a period in his life that he otherwise describes in quite dark terms. The games made it fun, doing so by temporarily distracting him from disability and inaccessibility (cf. Goffman 1961, 26, on 'rules of irrelevance').

Carl, 19, and also living with a muscle disease, narrates a similar period as the interviewer reconnects to his phrase of having 'good memories' from certain games, like *Halo*.

Kristofer: When you say 'good memories', what is then-

Carl: You know, when I started to play Nintendo 3, there was a time, it was in secondary school you know, when I was very, well how do you say, I sort of withdrew a lot, and like that, and yeah I didn't get on well in school and the only thing I wanted at that time was to come home and play Halo 3 so to speak, with the friends I had there like [in the online game]. Yeah, so when summer came, like, there aren't so many activities and stuff like that. I didn't dare to do much either. And it turned out to- then I found myself there [with the games] somehow. That was keeping

me busy the whole summer actually, and then sometimes you happen to play a little too much. But at that point I felt that I needed it.

Carl goes on to describe how his most intense gaming period coincided with the time when he started to use a wheelchair. He had 'always been delimited [physically]' and never fully been able to participate in play with classmates ('I've always been a little separate'), and 'the video games gradually turned into the obvious choice.' Here, disability is not (merely) ascribed to face-to-face interactions (Davis 1972); participation in gaming could be a part of changing an entire period in life, a period that became 'strained' because of others' views on one's disability.

Gaming as a biographical refuge is, in other words, many-sided: an attraction when other activities seem impossible, a pastime, a second-best option, a 'need' during certain times, and a sort of battery. Molesworth (2009, 381), interviewing adult gamers, observes a strong desire to 'be somewhere else' and 'taking pleasure in exploring game worlds'. A gamer may want to 'inhabit' a 'universe'. The gamers we met may similarly talk about 'a deep story' within the games, a 'mythology' that they 'love', a way to 'close off' other things, and an 'escape' or 'salvation' – this vocabulary draws on the notions of Goffman's engrossment and Huizinga's magical circle. The gamers' involvement confirms the reality of another world and, simultaneously, the unreality of a conventional world (Goffman 1961, 37; Huizinga [1949] 1998, 13) characterized by inaccessibility. The gamers sometimes suggest that they may not have been as intensively interested in games during these periods had they not been living with disabilities. When Jack, 16, required an electronic wheelchair, he felt that his friends 'didn't care' about him and that he 'hadn't got the energy to hang around with them. Then I started to play games all the time'.

In this context, games may be moralized by the gamers themselves. Although the gamers do not generally argue that they play excessively or compulsorily, some interviews suggest that, in a search for biographical refuges, this may be the case. Aina mentions that she played 'too much' *World of Warcraft* when her grandmother died (they had a very good relationship, she says, because her grandmother understood her troubles), and Leo's depiction of his period of intense gaming in secondary school is morally ambivalent. 'It was a terrible time, too [not only fun]', because when he went back to school the next day, 'you were back to everything again'. 'Everything' here stands for the world temporarily made irrelevant by the games – but that world is, nevertheless, defined as stable and unavoidable. The point the gamers make is that gaming should stay *as* a refuge, not overruling or replacing other realities (that is 'too much').

A biographical refuge has its counterpart in more situational variants. Games need not be used for pauses during whole periods of life but rather as an ongoing series of options for reality-suspensions, employed more briefly, now and then. Older gamers still move in and out of game worlds but not necessarily as intensely as when they were younger, more like what Juul (2010) calls casual gamers. The engrossment is now more situationally demarcated and combines with other activities (Carl: 'but now ... I need games in combination with other things', cf. Juul 2010, 11). Many gamers play during weekends, after school, or work (rather than a whole summer), and they associate gaming with similar interests such as watching movies, reading fantasy and science fiction, or hobby research on a special interest. Aina has a long history of role-playing and board games, and she shows the researcher an impressive collection of home-made fantasy clothes for live roleplaying.

The common denominator across interviews is praising resources for refuge; the gamers recommends something 'beyond' everyday life, a sort of 'virtual tourism' in Moles-worth's (2009) terms. Interviewee Carl describes gaming as 'more than just entertainment in my life'; it gives him 'a little more energy', and the games turn into 'an extension of himself'. Games allow you to 'drift away a little' and 'to be in another world'. At the end of an interview, Carl expands on this theme.

- Kristofer: You know, I don't have more questions directly. Is there anything from these things that interest you, that you think we've forgotten, or?
- Carl: Well, I'll have to think a little. Eh, it's more like, what's it called [[drinks some soda]], about why I play primarily. And partly it's pastime for me, and then it's also- you know the games are more than that for me. Because they are a way for me to endure everyday life. I often feel I've got a very hard everyday life. You know, many tough things to take care of. Well, it's been a period now lately, or when I started to study at high school, when I've been feeling a little low and so on. And then it's been mostly for enduring this everyday life that you know you've got a game waiting for you in the mail box or- well, you order a game like, 'cause then you've got a flow of games coming in all the time. So you never get really bored, you know. So what to say, it's mostly for keeping one's thoughts in check, too.

Carl is narrating both biographical and situational refuge. His difficult life is both occasional and constant ('I often feel ... ') as well as biographical ('it's been a period now ... '). With the games, he feels more in control of negative feelings ('keeping one's thoughts in check'). The very beginning of Carl's account indicates a vocabulary of motives (Mills 1940) for gaming ('why I play primarily'). Disability is here embedded via an implicit two-step chain: (1) a muscle disease gives you a difficult everyday life, and (2) a difficult everyday life can be more endurable with games.

# A metaphorical site

Metaphorical employments of games often overlap with the refuge theme. Interviewees liken the games to a 'salvation', a 'world', or 'universe' and describe them as 'extensions' of the gamer (cf. Molesworth 2009). Video and computer games may sometimes function as a symbolic site for gamers to specify experiences of living with disabilities in general. As a popular culture, the games form narratives that any actor can pick up in a personal narrative. George, 24 years old and living with very weak muscles, refer to the games as constantly 'reminding oneself that you need to fight to succeed, especially us with difficult diagnoses' (such as a deteriorating muscle disease). In the excerpt below, both George and the interviewer use the English word 'fight' – despite the fact that the conversation takes place in Swedish – as if to emphasize a particularly demanding experience by borrowing the globalized gaming terms.

- George: Many days are like a 'fight' in our way. Not like it's there [in the games] but you personalize a little bit more with it.
- Kristofer: Yeah. But you feel- or is there such a link, like, when you play that you can give somebody, like- like- that fight?
- George: Yeah, it gives you new experiences, new energies, new ways of looking on things.

#### 1152 👄 D. WÄSTERFORS AND K. HANSSON

Kristofer:	Yeah. So, in what way?
George:	Yeah, many problems you encounter in life, how you deal with them. What atti-
	tude you have and so on. Many games are very psychological, much more than
	you think. Games [for consoles and computers] are from the beginning based
	on role-playing games, I think. You want to identify with another role. That's
	what games are about.
Kristofer:	Yeah. So you like- you've like found- could you say that you've found strategies to
	play for use in your own—
George:	Yeah, yeah, yeah, precisely. Many games you apply straight ahead [to real life].

Later on, George says that 'I accept my diagnosis, my monster, that is the evil inside me' and refers to the games as an arena in which to learn how to deal with this because so many games revolve around good fighting evil. The games 'have to be translated into real feeling, real action', says George. The word 'use' in the above excerpt – 'many games you use straight ahead' – indicates not only an allegorical interpretation of the game's storyline but also a fundamental engrossment. To make a game reflect and sponsor one's life, the gamer has to get absorbed in it.

# A present body

We have also found that an attractive gaming refuge does not come easily; engagement is in various ways molded by these gamers' disabilities and associated accessibility troubles. An ordinarily 'absent body' (Leder 1990) may, in certain ways and under certain circumstances, place itself in the foreground of a gaming experience. Gamers respond to such situations with considerable inventiveness, restoring some corporal absenteeism. In Leder's terms, we may say that bodies turn present in our data through (1) the selection of games, (2) accessibility related troubles when controlling the games, (3) troublesome episodes within the games, and (4) disability stickiness (Davis 1972) in gaming interactions. Each of these corresponds to a variety of remedies and responses among the gamers as they strive to take ownership of gaming and disability.

# Personally based selections

First, the gamers show and report various selections of games, informed by the user's disability. Some games are 'out of the question', to quote one of the interviewees, because they are 'too physical', too fast, or too full of simultaneous and hectic impressions or demands. A gamer with a muscle disease or cerebral palsy may know from the very beginning that she or he won't be able to play certain games. An alternative solution to this problem is watching others play the game and enjoy it indirectly. 'When my pals come over they can play [those hard-to-play-games] without problems', says George. 'I'm one of those who appreciate watching others play too'.

Game selection reveals both the trouble and the solution. By identifying a set of games that are possible to play, this cultural activity is tailored to the gamer's particular disabilityand-gaming situation, avoiding troublesome gaming. It may be too difficult for users to rapidly click the mouse or to react to co-gamers' maneuvers in an acceptable time frame, and in such cases, the game is avoided, even though its type may be of interest. If the troubles are detected when trying out a new game, gamers might change to one that they know they can manage. An account of a somewhat disability-and-accessibility-based selection of games in our taped conversations can be coupled with political markers against inaccessibility. Jack, 16 years old and living with a muscle disease, says that he thinks it is a little 'mean' of Microsoft to exclude gamers in wheelchairs from their Kinect games; it is impossible to play these games when you sit down. 'We [people with disabilities like Jack's] would surely have played [these games]', he says, and 'they surely could have made some kind of adjustment but they don't do that'. He adds, 'there are games you would like to play but you can't'.

Sebastian (interviewer):	Microsoft first requested that Kinect would be included in their new console Infinity, requests that they now have dropped. How do you feel about that?
Jack:	Well, but couldn't they make more games where you can sit down and don't have to stand up and jump? Now I don't play so much Xbox, so in a way I don't give a damn about those games.
Sebastian: Jack:	But you might have played them if they were more adapted? Well, maybe. I think I don't like such games but that's because they are unable to play.

Jack indicates that he finds it problematic that no one produces games for gamers 'sitting down' (those using a wheelchair), but he also displays indifference to the issue ('I don't give a damn ...'). This indifference, however, is informed by the fact that 'those games' are excluded for him in the first place, leaving him with little investment in the development of these games. A personal selection of games seems so self-evident that the interviewer has to arouse indignation to make Jack articulate critique ('how do you feel about that?'). Jack himself seems less upset and simple identifies some games – rather than himself – as 'unable' to play.

#### Control troubles and engrossment maintenance

Chosen games may also be hard to manage due to gamers' physical limitations in combination with the game's design. A previous study (Wästerfors 2011, 342–343) on how digital games were used in a habilitation project has documented several situational adaptations (see also the work of The AbleGamers Foundation, www.ablegamers.com). Physiotherapists may use a chair or bench to keep a player steady during their spastic movements in a Wii game, or a hand unit can be fastened to a desk or big ball to create additional stability. These adaptations can be deliberately coupled with challenges (for example, a player with trouble moving his right hand may be made to play with that hand only), explicitly encouraging participants to overcome limitations while enjoying the games. Although participants in this study did use such semi-professional adaptations, they did not engage in explicit training, preferring to play only for fun and privately, beyond any habilitation regimen. But they did sometimes mention 'pain in my muscles' when playing for some time, being 'completely exhausted', being really 'breathless', or having 'an index finger that hurts'. They cannot always maintain the tempo of other gamers and may require help with practical things, such as reaching necessary objects, restarting computers, or changing the mouse batteries.

Sonny, 19 years old and living with a muscle disease, sees himself as perfectly independent when sitting in front of his computer but must call for help when some circumstances changes (for example, dropping something on the floor). Sonny: I've had batteries in the mouse that died, and then Dad's been out and I just sit there and cannot play, and my [online connected] pals just 'come on now [go on playing]', and I can't do anything. Then I'll have to call Dad so that he can come home and fix it.

In addition to asking others to help continue the gaming, the gamers sometimes also rearrange the games, both mechanically and electronically. One gamer, working in a school and leisure center for young people with disabilities, has rebuilt his gaming equipment so that he can steer the games with his feet touching a set of big buttons laid out on the floor. Because he has better control of his feet than his hands, this setup improves his accuracy and maneuverability dramatically. Another gamer obtained a more advanced mouse with 12 extra buttons on the side, and by programing this mouse to match the game, he can more easily control it using only his stronger left hand.

Felix, 24 years old and paralyzed from the neck down after an accident, has invented new soft keyboards (on-screen keyboards) tailored to his favorite games, allowing him to keep up his speed when, for instance, getting out troops in a war game. By a single click from his headmouse on these home-made soft keyboards, Felix is able to accomplish what would otherwise demand 15 clicks on the mouse.

David: So you press that [with the headmouse] and then it clicks 15 times, quickly, or?
Felix: Yes, then it clicks 15 times with perhaps 5 milliseconds between eh so it's hardly noticeable, it's like one click but the computer reads it as 15. Then you have control and shift buttons [Felix shows on his on-screen keyboard] which are the most important ones [in this game] and then, these- these buttons when I get to name buildings and armies and such things. And that is also a quite vital thing when you're about to attack (...) then you have them on a quick-button, you know (...) to make it flow actually.

Felix' work is narrated as a sort of technical engrossment maintenance – a self-made quick button to get vital things done in a war game, and a tailored on-screen keyboard with the most important buttons. To avoid being stressed by not being able to keep up with other gamers, he invents novel solutions to speed up his gaming and prevent his magical circle (Huizinga [1949] 1998, 10). So there are considerable efforts among the gamers to tighten and expand their abilities to play, allowing them to control games despite a range of accessibility challenges associated with their disabilities.

# Parenthetical troubles and vicarious gamers

Some specific moments within the selected games also cause difficulties, generally fairly isolated episodes within individual games. Many gamers in our data discuss the quick and repeated controller press one has to do to get through various passages in the games (in Swedish: *pumptrycka*), such as opening a grid in the *Batman Arkham* games to give the superhero access to a duct. Repeated controller pressing can sometimes be hard to accomplish with a muscle disease, making it impossible to proceed in the games. The gamers typically solve these troubles by asking a personal assistant, friend, or parent to play during the short moment. Leo explains:

#### Kristofer: I wonder what do you do when these sections pop up?

Leo: Yes, well, now I found it, now I've got an example. It was a sequence in Assassin's Creed 3 where you shall- what's it called? You should pick a lock and that was something I couldn't do because first you should like find your way to the first stick and then it should be in that direction. And the other one should be like downward, and then at the same time you should click one of the trigger buttons with your arms. You know, really fast and at that point I could not keep pace, you know I couldn't keep up with it. (...) Then Mum had to jump in or some assistant or somebody. I hold in these directions and the assistants click all the time.

Leo also demonstrates the trouble for the interviewer, saying 'I experience a little frustration there', but apart from that, the 'game is fully playable'. While Leo wishes these sections could be sidestepped for individuals with disabilities without relying on external help (to be able to 'skip this sequence'), he also recognizes that such a possibility may allow people without disabilities to cheat. So as he describes it, the existence of parenthetical troubles is more or less unavoidable; they are part of the games' inherent accessibility challenges.

Significant here are Leo's expressions. As he accounts for the parenthetical trouble (and demonstrates it), his wording suggests that the person helping him picking a lock in *Assassins' Creed* is replaceable – 'Mum had to jump in or some assistant or somebody.' Anyone without his particular disability can help him to keep pace. The game and its process are placed at the center and whoever can help Leo proceed in it is sufficient. It is not Leo as gamer that causes the trouble; the trouble emerges in the interface between game and gamer, and here the gamer's body is – during short but crucial passages in the games – 'showing' itself (Leder 1990) and challenging his engrossment. He employs any more abled body within reach to allow him to go on playing.

Engrossment is, in other words, upheld by mobilizing vicarious gamers. This practice is of course not limited to individuals with disabilities; probably most gamers have had the experience of briefly lending the controller to someone nearby, with a 'can you try?' What is unique here is the disability–game interface motive. The inability to cope with certain passages is not only associated with the trickiness of a game, or a troublesome body, but with the body in interaction with the game, as a digital divide seems to be on display.

Parenthetical troubles are not static; as a disability changes, the character and frequency of these troubles may change as well. Because Leo's muscle disease causes progressive weakness, he has discovered new passages in certain games (such as *Farenheit*) that he cannot no longer complete as before. These passages may function as biographical markers for worsened conditions. 'I didn't think about that before', Leo says. 'I wasn't so bad in my muscles before. (...) So it was like a little aha moment (...) I'm too weak'.

## Disability stickiness and identity ownership

The fourth and final way in which a troublesome body turns present in our data can be informed by Davis (1972, 132) description of 'pronounced stickiness of interactional flow'. When handling others' imputation that they are not always seen as 'normal' in society, persons with disabilities often report a sort of interactional discomfort. This

discomfort revolves around others' embarrassment, slips of the tongue, revealing gestures, or inadvertent remarks, their careful ways of 'disguising' their disability awareness, etc. (cf. Goffman 1961, 42). The simple act of using a wheelchair may motivate people to treat you in special ways (Hansson 2012). People may greet you differently, show ignorance or exaggerated politeness, avoid you, or display awkwardness in small talk, repeatedly asking questions about the disability. The disability appears to be 'there' all the time – in the room, in people's postures, talk, and gestures – making it virtually impossible to ignore. The term stickiness refers to disability as something that is socially constructed in ways that makes it difficult to disengage from (also see Hansson 2007, on stickiness and how the concept can be developed through Sartre [1943] 2005).

Aina provides an example. During a chat in a long series of sessions of *World of Warcraft*, another gamer started to act as a 'hobby psychologist', as Aina put it. She had briefly mentioned to her team-mates before that she has Asperger's syndrome, so that if she acts 'weird', people would know why (for instance: suddenly removing herself from the game), but one gamer subsequently interpreted this piece of information as an encouragement to 'help' Aina. He started to give 'advice' while they were playing with other gamers: Aina should 'exercise' and 'drink coffee' to treat her symptoms, among other things. Her disability, then, was constantly on display and explicitly drawn into the game's interaction. Aina found it disturbing and eventually withdrew from the game. 'He should get the Nobel prize in medicine', she says to the interviewer with a smirk. 'Did you know that coffee and exercise, it solves everything?'

Aina's chat conversation is narrated as a strained interaction (Davis 1972, 133), although this interaction was not face-to-face but rather an example of disability as 'sticky' online. Aina's response is firm. She denounces the 'hobby-psychological' tips, turns off the chat, and abandons her player.

Withdrawal and a quite careful selection of disability-tolerant company seem consistently employed to manage disability stickiness among our study's gamers. When they play with those who know them as persons, they are free to downplay *or* highlight their disabilities at their discretion, turning inaccessibility and disability into pragmatic troubles rather than master identities. Aina says that she prefers to disclose her problems to people she trusts. Mark, 18 years old and living with cerebral palsy, similarly prefers to mention or make explicit his disability with people he knows personally. It makes it possible for him to openly – and playfully – blame his disability during gaming sessions when things go poorly, and do so in a partly ironic, partly serious way. 'Sometimes I can blame the fact that 'what the hell, I'm CP, what should I do?' he says.

Mark elaborates what we might call a self-reflexive identity ownership in relation to gaming and disability. He advocates a sort of private easiness when it comes to his identity as disabled, as long as he himself is able to influence when, how, and by whom he is called disabled, or responded to in such terms. In a group interview with four gamers (ages 16, 17 and 18), we began the discussion of whether games make you more relaxed or not, and Mark says that it depends on the scenario. When, for example, playing *World of Warcraft* in arenas with two against two, three against three, or four against four, he usually plays with a friend. Sometimes, the friend brings his computer to Mark's place, and they sit next to each other.

Mark: This friend I've known my whole life so he can say, well, a little whatsoever and I don't care, so when a fight pops up [in the game] where we both are close to lose [as a team] well then I get 'game nervous' and then he says 'ah now you're too CP again', then you'll have to [[breathes out]] breathe out a little and like, otherwise it turns difficult to press [on the mouse] and play, it becomes too hard.

After this passage in the interview, Mark elaborates and demonstrates his point. With 'game nervousness' he means that the experienced tension and excitement in the game makes his chronic spasticity worsen, so that he bends over and stretches out his body too far to comfortably control his gaming figure. His intensified spasticity overrules his gaming practice. 'It's very hard to press the buttons or do anything quickly (...) with cerebral palsy you tighten yourself very much [when you get nervous]'. On these occasions, his friend is said to respond: 'Now you're too CP, you'll have to calm down.'

In Mark's narration, the 'troublesome' body is present in a very concrete sense. Its spasticity blocks both Mark and his friend's gaming engrossment, and Mark has to resume control over his spasticity by breathing and relaxing. But in doing so, he also resumes control over his disability identity, both in the narrated situation and in his manner of retelling the story in the interview. The gamer–gamer interaction is characterized by disability and inaccessibility but not in a sticky way (cf. Davis 1972, 132). Rather, Mark's friend is allowed to jokingly comment on Mark's disability to push him to overcome the engrossment obstacle. This scenario represents the kind of disability identification that gamers in our study seem to prefer, a relaxed and cool identification, accomplished within a circle of friends who know each other quite well (cf. Wästerfors 2008, also see the Swedish biography *Grabben i kuvösen bredvid* by Helgesson 2007). Such identifications are not sticky but rather those that individuals can move in and out of, in various situations.

In these ways, there is a fluctuation between disability stickiness in gaming interactions and the gamers' ownership and resistance. The moral of the gamers' stories and practices lies in regretting (but recognizing and managing) the former and praising the latter.

#### Conclusion

In this article, we draw on qualitative data to explore gaming practices among young people with disabilities in private rather than habilitation settings (cf. Sandlund, McDonough, and Häger Ross 2009). As these gamers strive to play 'as anyone else' and to keep their sometimes-troublesome bodies in an experiential background (an absent body, in Leder's (1990) terms), they aim for the same Huizingian magical circle or Goffmanian engrossment (and disattention of the irrelevant) as others in their generation. They do not play for habilitation or training, and they do not dress their accounts and stories in terms of physiotherapeutic or medical improvement. Rather, they play for enjoyment, community and identificatory shelter, regardless of the meaning that many researchers and experts attribute to the intersection of youth, games and disability.

Nevertheless, disabilities do acquire significance because practical and symbolic troubles – related to a partly inaccessible digital culture – mold the young gamers' experiences. The magical circle turns out to be transparent; participants are forced to keep eyes open to non-game relevancies (Rughinis 2003, 580) as their bubble is challenged and their flow interrupted (cf. Csíkszentmihályi 1990; Stenros 2012, 10–14). But disabilities not only

complicate, distract, or disturb their engagement but also motivates it and gives it extra meaning. These gamers may face particular obstacles to becoming absorbed and immersed in the character or figure they steer on the screen, but they also respond with a series of inventive tactics, remedies or integrative acts (Goffman 1961, 38, 41, 44) to go further into the game worlds and make them personally meaningful.

By managing what we call biographical and situational refuge, vicarious gamers, disability stickiness and engrossment maintenance, the gamers' agency and competence help them take ownership of a mundane but artful enterprise: being a member of those screen cultures that have become a distinctive style for today's youth when accomplishing withdrawal and individuality (Abbott-Chapman and Robinson 2009, 246, 243–244). These young people, too, want to be 'digital natives' and use 'virtual tourism' to escape from everyday routine (Molesworth 2009). Their enterprise entails a set of tailored renegotiations of the magical circles of video and computer games, renegotiations that do not correspond with intervention studies among today's researchers.

The young gamers' ways of upholding and claiming a gamer identity, and restoring a degree of corporal absenteeism despite inaccessibility, are as far from the medical-physiotherapeutic discourse as their depictions of games as a refuge. Their interpretive practice (Gubrium and Holstein 1997, 114–122) accomplishes personal meaning, connectedness, and embeddedness (Smart 2007, 185–189), not habilitation, assistance, or diagnosed-based identities. In their personal lives disabilities stand for an obvious but not necessarily paramount component, and this is 'done' and on display when gaming. With Garfinkel's (1967) terms, we may say that they strive to pass as gamers, despite practical and physical troubles or challenges, and when doing so they investigate and deal with personalized accessibility troubles. These gamers struggle for access to game worlds but they also represent something wider: they play the video and computer game culture from their particular social positions (cf. Huizinga [1949] 1998, 46).

A fundamental path into magical circles or gaming engrossment, where gamers dive into a temporary 'structure of inattention' in relation to most other things in the world and engage in fictive endeavors (Goffman 1961, 19–20; Huizinga [1949] 1998, 9–10), may often be employed without any reference to disabilities. When, for instance, Aina vividly describes her recent intense game periods in which she 'fell in love' with some games, her diagnosis is firmly put in the background. She devoted whole nights to these games and just 'wanted more and more', and she 'hated' being interrupted. Her descriptions and narratives do not suggest that she would define her diagnosis as particularly relevant in this experience, but others made it relevant in chat conversations.

Young people with disabilities play games in a society in which they are often expected to act in accordance with diagnosed-based identities. The stickiness of their troubles cannot fully be avoided but downplayed, bracketed, and managed. Gaming can be made to illustrate this social condition because an everyday struggle as a person with disability can be likened to a hero fight in a game world. Game terms as 'energies', 'achievements', 'critical hits' and 'monsters' are available as acute metaphors for experiences of inaccessibility.

So in the bubble of their gaming engagement, young gamers with disabilities carry on a quest that they may find deeply meaningful (and progressively challenging), and they do so in interaction with society at large and its digital divide. What at first sight might seem merely like a withdrawal is, on closer inspection, also a cultural fight.

#### Note

 The interactive nature of today's digital games, we must note, bears little resemblance to some variants of gaming observed by Goffman in the 1960s (e.g. playing chess by ordinary mail). In today's solitary gaming, too, the gamer feels enmeshed in a very social world, filled with voices, music, vocations, and quests that function as responsive to the gamer's actions. In online versions, sociability turns even more evident since other gamers share the same world.

# **Disclosure statement**

No potential conflict of interest was reported by the authors.

# Funding

This work was supported by Research platform for disability research in Region Skåne, Sweden.

#### References

- Abbott-Chapman, J., and M. Robinson. 2009. "Leisure Activities, Place and Identity." In *Handbook of Youth and Young Adulthood*, edited by A. Furlong. Abingdon: Routledge.
- Akhutina, T., N. Foreman, A. Krichevets, L. Matikka, V. Narhi, N. Pylaeva, and J. Vahakuopus. 2003. "Improving Spatial Functioning in Children with Cerebral Palsy Using Computerized and Traditional Game Tasks." *Disability and Rehabilitation* 25 (24): 1361–1371.

Alasuutari, Pertti. 1995. Researching Culture. Qualitative Method and Cultural Studies. London: SAGE.

- Apelmo, Elisabet. 2013. Som vem som helst. Kön, funktionalitet och idrottande kroppar. Göteborg: Daidalos.
- Baker, C. D. 2002. "Ethnomethodological Analyses of Interviews." In *Handbook of Interview Research: Context & Method*, edited by I. J. F. Gubrium and J. A. Holstein (red.), 777–795. Thousand Oaks, CA: Sage.
- Charmaz, K. 2002. "Qualitative Interviewing and Grounded Theory Analysis." In *Handbook of Interview Research: Context & Method*, edited by I. J. F. Gubrium and J. A. Holstein (red.), 675–693. Thousand Oaks, CA: Sage.
- Creeber, Glen, and Royston Martin. 2008. *Digital Cultures. Understanding New Media*. Berkshire: Open University Press.

Csíkszentmihályi, Mihály. 1990. Flow. The Psychology of Optimal Experience. New York: Harper & Row. Davis, Fred. 1972. Illness. Interaction and the Self. Belmont. CA: Wadsworth.

- DiMaggio, Paul, and Eszter Hargittai. 2001. From the 'Digital Divide' to 'Digital Inequality'. Studying Internet Use as Penetration Increases. Working paper #15, Center for Arts and Cultural Policy Studies. Princeton: Princeton University.
- Eliasson, A.-C., B. Rösblad, and C. Häger-Ross. 2003. "Control of Reaching Movements in 6-year-old Prematurely Born Children with Motor Problems – An Intervention Study." *Advances in Physiotherapy* 5: 33–48.

Furlong, Andy. 2013. Youth Studies. An Introduction. Abingdon: Routledge.

- Galis, Vasilis. 2011. "Enacting Disability: How Can Science and Technology Studies Inform Disability Studies?" *Disability & Society* 26 (7): 825–38.
- Garfinkel, Harold. 1967. Studies in Ethnomethodology. Cambridge: Polity Press.
- Goffman, Erving. 1961. Encounters. Two Studies in the Sociology of Interaction. Harmondsworth: Penguin Books.
- Gubrium, J. F., and J. A. Holstein. 1997. *The New Language of Qualitative Method*. New York: Oxford University Press.
- Hacker, Kenneth, and Jan van Dijk. 2001. *Digital Democracy: Issues of Theory and Practice*. London: SAGE Publications.

- Hansson, Kristofer. 2007. I ett andetag: en kulturanalys av astma som begränsning och möjlighet. Lund: Critical Ethnography Press.
- Hansson, Kristofer. 2012. "Mellan välvilja och förakt: en etnografi av kategoriseringar i staden." Lambda Nordica 17 (1–2): 102–120.
- Hansson, Kristofer. 2015. "Digital delaktighet utifrån ett funktionshinderperspektiv." In *Att arbeta med delaktighet inom habilitering*, edited by Kristofer Hansson and Eva Nordmark, 169–183. Lund: Studentlitteratur AB.

Helgesson, J. 2007. Grabben i kuvösen bredvid. Örebro: Libris förlag.

Holstein, J. A., and J. F. Gubrium. 1995. The Active Interview. Thousand Oaks, CA: Sage.

- Huizinga, Johan. (1949) 1998. Homo Ludens. A Study of the Play Element in Culture. Boston: Beacon Press.
- Juul, J. 2008. "The Magic Circle and the Puzzle Piece." In *Conference Proceedings of the Philosophy of Computer Games*, edited by S. Gunzel, M. Liebe, and D. Mersch, 56–67. Potsdam: Potsdam University Press.
- Juul, J. 2010. A Casual Revolution. Reinventing Video Games and Their Players. Cambridge, MA: MIT Press.

Leder, Drew. 1990. The Absent Body. Chicago: University of Chicago Press.

- McRuer, Robert. 2006. *Crip Theory. Cultural Signs of Queerness and Disability*. New York: New York University Press.
- Miller, Vincent. 2011. Understanding Digital Culture. London: SAGE Publications.
- Miller, S., and D. Reid. 2003. "Doing Play: Competency, Control, and Expression." CyberPsychology & Behavior 6 (6): 623–632.
- Mills, C. Wright. 1940. "Situated Actions and Vocabularies of Motive." *American Sociological Review* 5: 904–913.
- Molesworth, Mike. 2009. "Adults' Consumption of Videogames as Imaginative Escape from Routine." Advances in Consumer Research 36: 378–383.
- Rughinis, Razvan. 2013. "Work and Gameplay in the Transparent 'Magic Circle' of Gamification." In Design, User Experience, and Usability: Health, Learning, Playing, Cultural, and Cross-Cultural User Experience. Part II, LNCS 8013, edited by Aaron Marcus, 577–586.
- Sandlund, M., S. McDonough, and C. Häger Ross. 2009. "Interactive Computer Play in Rehabilitation of Children with Sensorimotor Disorders: A Systematic Review." *Developmental Medicine & Child Neurology* 51 (3): 173–179.
- Sartre, Jean-Paul. 2005 [1943]. Being and Nothingness. An Essay on Phenomenological Ontology. London: Routledge Classics.
- Schwartzman, Helen B. 1978. Transformations. The Anthropology of Children's Play. New York: Plenum Press.
- Smart, Carol. 2007. Personal Life. New Directions in Sociological Thinking. Cambridge: Polity.
- Stenros, J. 2012. "In Defence of a Magic Circle. The Social and Mental Boundaries of Play." In *DiGRA Nordic 2012 Conference*, 1–18. Tampere, Finland.
- Swedberg, R. 2012. "Theorizing in Sociology and Social Science: Turning to the Context of Discovery." *Theory and Society* 41: 1–40.
- Warschauer, Mark. 2003a. *Technology and Social Inclusion. Rethinking the Digital Divide*. Cambridge: The MIT Press.
- Warschauer, Mark. 2003b. "Dissecting the 'Digital Divide': A Case Study in Egypt." *The Information Society*, 19 (4): 297–304.
- Wästerfors, David. 2008. "Doing Normalcy. Attractive interactions for teenage boys with disabilities." International Journal of Sociological Research 1 (1): 1–21.
- Wästerfors, David. 2011. "Stretching Capabilities. Children with disabilities playing tv and computer games." *Disability & Society* 26 (3): 337–349.
- Watling, Sue. 2011. "Digital Exclusion: Coming Out from Behind Closed Doors." *Disability & Society* 26 (4): 491–495.
- Willis, Mark. 2010. "Re-Imagining Accessibility In Participatory Culture." Massachusetts Institute of Technology April 28, Media in Transition 5, Conference.