ISSN 1444-3775

2011 Issue No. 20 — Slow Media

Slow Play Strategies: Digital Games Walkthroughs and the Perpetual Upgrade Economy

By *Daniel Ashton* and *James Newman*

Introduction

Drawing on notions of obsolescence, redundancy and supersession, this paper examines the perpetual upgrade economy of digital games with reference to the archiving of gameplay in player-produced "walkthrough" texts. In concentrating on these largely overlooked documents, we draw attention to a variety of disruptive and resistant practices that exploit, explore, dissect, and above all, linger on the "old games" that videogame advertisers and marketers would perhaps rather see resigned to the bargain bucket or the back of the cupboard.

It has become something of a cliché to talk of "disruptive" fan practices yet we feel there is merit in aggrandising the production of walkthroughs in this manner. Walkthroughs present and promote unexpected and, indeed, unintended, ways of engaging with digital games that question where game expertise lies, the forms of authority and governance that exist, and above all the flexibility and mutability of games as systems open to investigation, informal customisation and reinvention through often self-consciously exploratory (re)play. Further, in pausing and focusing on specific (areas of) games in detail, even interrogating their malfunctions through glitch- and bug-hunting, walkthroughs might be seen to arrest the otherwise relentless flow of completion and discarding as they encourage the development of new ways of playing (and reasons to play) old games. It is our assertion that player-produced walkthrough texts are essentially documents that codify and archive a slow media approach to gameplay and gaming culture.

Situating Upgrade and Innovation

In his discussion of neoliberalism and "cool capitalist culture" in Cultural Analysis, Jim McGuigan, referencing Nicholas Garnham, points to the contradiction of the industrially produced cultural commodity:

> it is not typically used up in the act of consumption. The consumer can view a DVD over and over again whereas a loaf of bread cannot be eaten twice. Cultural industries, therefore, adopt strategies of artificial scarcity and perpetual novelty in order to encourage consumers to seek new products. (112)

This strategy of perpetual novelty is a crucial driving force in the ceaseless emergence of new commodities and the associated rhetoric of technological progressivism – "always already new" as Lisa Gitelman would have it. For Wendy Hui Kyong Chun, the acceptance of "new" media is located with a technological progressive that thrives on supersession – on the inevitability,

perhaps even desirability, of continual obsolescence. The notion of slow media invites a reconsideration of perpetual novelty and a closer examination of the forms of obsolescence, redundancy and supersession that are held as necessary and desirable.

Critical reconsiderations of obsolescence have challenged the discourse of necessary and desirable technological progressivism and promoted a slowing down of our engagement with emerging technologies and sustained engagement with the seemingly redundant. Gitelman observes that the rotary phone and the eight-track cartridge are now used only by antiquarians, having been obsolesced and rendered at best kitschy and chic or perhaps simply redundant and useless (4). Certainly, the act of using old media is, for some, an act of resistance that is as much a politicised rejection of the supersessionary discourse of replacement and built-in redundancy as it is a genuine desire born of satisfaction or comfort with these "antiquarian" devices or systems. In Jonathan Franzen's hymn to the stereo and rotary telephone, we perhaps see a desire to reject the unsatisfying sterility of contemporary design and function as much as a yearning for the use of materials and media of the past: "I prefer the reproachful heaviness of my rotary [telephone], just as I prefer the seventies clunkiness of my stereo components for the insult it delivers to the regiments of tasteful black boxes billeted in every house across the land" (199). The obsolete here, then, is recuperated as a marker of taste and distinction.

For Jason Wilson and Jason Jacobs:

> Professional new media evangelists, including media and cultural theorists who subscribe to what Turner describes as an entrenched 'digital orthodoxy', are nowadays wont to describing mass media – including all broadcast and print media – as 'heritage' media. This neat rhetorical trick confirms all remaining manifestations and uses of such media as remnants of the past in the present, as curiosities, even perhaps as impediments to the 'imaginary futures' (Barbrook) regularly projected onto new technologies.

Within digital gaming, "digital orthodoxy" is well established as a dominant industry trope. Whilst past videogames are not necessarily seen as impediments, they are certainly positioned within a linear succession of new releases and emerging technologies. Certainly, the designation of a specific, perhaps canonical, suite of "old" games as "retro" classics performs precisely the rhetorical trick that Wilson and Jacobs allude to. In fact, as James Newman has noted, even the rerelease of these revered games frequently serves to reinforce the dominant discourse of supersession as they are brought "up-to-date" with new graphics and sound, taking advantage of the "advances" in technology that have shaken the medium since their original, and one infers unacceptably technologically unsophisticated, release (Playing with Videogames).

This succession does not deny or overlook the status videogames can have as "evocative objects" (Turkle) forming the centerpiece of emotional life, but it does fix them and work to establish a culture of expectation and a rapid pace of development. The very language of videogaming is steeped in the technological imaginary with talk of "next generations" and "Revolutions" (the in-development soubriquet of the Nintendo Wii).

Digital Games and Perpetual Upgrade

From the PDP-1 in the 1960s to the seventh generation consoles of the last few years, digital gaming is marked by continual development. In this paper, we treat the presentation of a perpetual upgrade economy as one of the key mechanisms by which digital gaming is organised and promoted to consumers. The term "perpetual upgrade" references the concepts of perpetual innovation (see Kline, Dyer-Witheford, and de Peuter) and "upgrade culture" (Dovey and Kennedy; Facer *et al.)* that point to the emphasis on the continual alteration and upgrading of products, the generation of new commodities with ever-shortening life spans, and the design

drive to permanently explore new capacities of each new "generation" of technologies. Key to this, of course, is the implicit, sometimes explicit, eradication of that which is replaced or superseded. According to the logic of perpetual upgrade, the old is outdated, outmoded and lacking and, thereby, is relegated to an uncomplicated position of inferiority and obsolescence.

The strategy and logic of upgrade is circulated across hardware manufacturers, software developers, games design industry practitioners, future industry workers, advertisers and marketers, and consumers. For Jon Dovey and Helen W. Kennedy, the outdating of the old is an anticipated part of design practice: "this is not a teleological dynamic, there is no end point in sight" and "designers find themselves permanently looking for and exploring new capacities, falling enthusiastically upon each new generation" (52-53). Along the same lines, Stephen Kline, Nick Dyer-Witheford and Greig de Peuter explore digital gaming through the notion of perpetual innovation (66). Their use of "perpetual innovation" derives from Arun Kundnani who argues that "the perpetual innovation economy" is "characterised by short product cycles – the time it takes from the launch of a new product to the point where it becomes obsolete" (57). In relation to videogames, Kline, Dyer-Witheford, and Peuter point to the ways in which corporations "devote a growing share of their resources to the continual alteration and upgrading of their products," and how "business seeks to maintain continual expansion by generating a ceaseless stream of new commodities with ever-shortening cycles and life spans" (66). For example, November and December 2006 saw Nintendo release the Wii console. This was its seventh generation console offering and its fifth home console release following the NES, SNES, N64, and Game Cube.

The language of the "next generation" experience and "raising the bar" captures a significant quality of digital gaming upgrade and permeates much games writing, marketing and criticism (see Valve's self-congratulatory "Raising the Bar" volume on *Half-Life 2*, for instance, or the myriad of magazines either actually named or explicitly proclaiming their insights into the "next gen"). Newman notes the tendency in the online and offline specialist gaming press to focus almost exclusively on that which is yet unavailable, unreleased and still in development (Playing with Videogames). By dedicating the majority of non-advertising pages to "previews," interviews with developers about their future work, and sneak glimpses from trade shows and non-disclosure agreement shrouded demonstration, these publications are complicit in manufacturing a sense of anticipation, desire and, importantly, an implied dissatisfaction with the present crop of hardware and software whose decline into obsolescence is rendered inevitable. Reporting on the pre-release demonstration of Microsoft's "Kinect" motion control system for Xbox 360, reporter Scott Johnson was not content for us to simply lust after that which is imminently available but encouraged us to set our sights and imaginations yet further into the future: "Of course, what's really exciting about Microsoft Kinect is what is promises for games…I can't wait for Kinect 2."

This technological yearning and drive is in evidence with the rapid turnover rate of technologies and the gaming calendar geared towards exhibitions and events such as E3. E3 and the industry articles such as "Coming in 2010 on Playstation," are indicative of the forms of ancillary materials that scaffold meaning (Barker; Caldwell; Gray). In this respect, upgrade can be understood as an industry process and strategy that is constituted both by drive for technological advancement and the related promotional and marketing surrounds. Mark Deuze's comments signal the extent to which this dynamic informs production and consumption:

> The market for technically advanced games further drives the market for advanced graphics cards and next-generation consoles as consumers must purchase the latest upgraded computers of new consoles to play games developed to meet the technological specification particular to the new technologies. (216)

Significant here is the mutual demand and investment from players, software and hardware manufacturers, and publishers. We could say that this perpetual innovation dynamic is well

entrenched within digital gaming culture. The continual promotion of the next generation entails a selective, institutionalised system of recall and forgetting that recovers the past as a suite of (often technical) benchmarks (twice as many polygons, higher resolution *et cetera*). In marching ever forward, the discourses of advertising, marketing and the journalism of previews and glimpses at unreleased titles instantly and decisively obsolete the (formerly new) products that disappear from retailers' shelves and become unsupported "legacy" systems. In short, "the best game is the next game."

Amidst this institutional flurry of rapid supersession and manufactured futuristic yearning, the walkthrough offers a disruptive pause that draws attention back to specific games – even specific moments or sequences in games. Rescuing videogames from the bargain bin, walkthroughs recuperate them not merely as objects of historical curiosity or items of "retro chic" located in a carefully mannered version of the past in the present, but as valuable cultural artifacts in their own right. The very existence of the fan-produced walkthrough for a videogame demonstrates to us that the game has yet to offer up all of its experiential and textual potential even though it may have shuffled off the retailer's shelf and off the marketer's radar. Even if officially superseded and unsupported, there are those who consider it worthy of continued scrutiny and, above all, further play.

Walkthroughs and/as Perpetually Upgraded Media

Videogame walkthroughs provide instructions on various elements of gameplay in relation to specific digital games, and exist as text-based documents and, to a lesser extent, as recorded moving image game footage. Walkthroughs present a variety of functions and a range of uses that include extended instruction manuals, virtual tour guides, and explorations of the boundaries of the logic and integrity of the game code and simulation models. Mia Consalvo's study of *Legend of Zelda: Ocarina of Time* walkthroughs describes the texts as, "detailed guides to how a player should play a game sequence to find all of the hidden bonuses and surprises, how to avoid certain death, and how to advance past difficult puzzles or trouble spots to best play and win the game" (Television and New Media 327-328). Both Consalvo (Cheating) and Newman (Playing with Videogames) have subsequently gone on to explore the ways in which walkthrough use might be considered "'heating"'within specific gaming cultures and contexts. Walkthroughs also illustrate an investment in recording playing styles and encouraging the adoption of newsstyles of engagement.

The player-produced walkthrough invites interrogation of the apparently seamless forward movement at the expense of the potential wide-ranging engagements that are possible. Reanimating apparently obsolete games and "legacy" systems that have been superseded and that languish unsupported by their creators, walkthrough producers linger on games, wringing out of them the last drops of experiential potentiality as they invent new ways of playing or discover new facets of the game's operation that may be harnessed. By encouraging pause, reflection, and sustained engagement through the revisiting and replaying of old games, we argue that walkthrough texts are important documents that promote slow media approaches in a marketplace otherwise consumed by the imminent release, perpetual upgrade and the "next generation."

Thus far, we have perhaps unfairly characterized player-produced walkthroughs as being part of an endlessly reflective, potentially ponderous process that is diametrically opposed to the principles of innovation and upgrade we see elsewhere in the games marketplace. In fact, these walkthrough texts exist within a parallel world of perpetual upgrade. Each text is an ongoing work-in-progress whose status is communicated by an ever-increasing version or revision number that is proudly and prominently displayed at repository sites such as GameFAQs. However, where we are used to reading the steadily increasing numerical suffix of the sequel or next generation console as evidence of rapid supersession and the obsolescence of the earlier title

or system as PlayStation 3 replaces 2 and 1 and FIFA 11 resigns 10 to the preowned bin, in the world of walkthroughs, the rising revision number tells an altogether different story. Each increase in the revision number of a player-produced walkthrough text speaks of a continued scrutiny and investigation of a single title. As new material comes to light, new ways of playing are invented, and new glitches, bugs and inconsistencies are uncovered and exploited, so the document is updated and the revision number increased. Whilst some authors eventually designate their walkthroughs as having reached "Final" status, most exist as continually updated works. Even when the periods between updates are lengthy, the revision number is charged with potential and is a constant reminder of the commitment to update which remains a cornerstone of walkthrough production. Where the sequel's number gleams with the promise of the new, the walkthrough revision number promises a new way to engage with the old. As such, there is something of an irony in the manner in which walkthroughs are made available online via sites like GameFAQs. The somewhat breathless GameFAQs homepage that announces the latest walkthroughs uploaded and the steadily increasing revision number of the individual walkthrough texts speak, to some extent, in the same tongue as the marketer promoting the next generation upgrade. However, as we have seen, upgrades to walkthroughs are the products of sustained engagement that potentially reject or at least operate in parallel with the discourses of supersession and obsolescence. If there can be such a thing as a perpetual upgrade economy of slow media, then the walkthrough is perhaps its currency.

Walkthrough authors demonstrate a lingering engagement with games that ensures their circulation and continued relevance beyond the anticipated commercial release schedule and shelf life. Prolonged and sustained engagement with videogames may be anticipated, as the design of much gameplay encourages repeat play by rewarding the acquisition of skill and prowess, the provision of multiple endings contingent on gameplay choices or performance, or by designing in "easter eggs," trophies or achievements that are revealed or earned only after many hours of gameplay or exploration. Even the simplest of reward mechanisms, the high score table, demands players return to better their performance or that of others judged either on or offline. However, and of more interest to us here, is that the scrutiny and engagement with games apparently beyond their best before date also arises in wholly unanticipated ways that speak of a critical approach to gameplay as a form of digital dissection. At stake here is a mastery and knowledge of the game that cannot develop without sustained commitment and which is evidenced by a range of indicators that go considerably beyond the inbuilt reward mechanisms of high scores, ranks or achievements.

What is most important to note in relation to the player-produced walkthroughs that are the focus of our study here, is that they do not simply seek to document gameplay in order to aid others to completion or the acquisition of prizes or points. While, as Mia Consalvo notes, they do present "…detailed guides to how a player should play a game sequence to find all of the hidden bonuses and surprises, how to avoid certain death, and how to advance past difficult puzzles or trouble spots to best play and win the game" (Television and New Media 327-28), this is only part of their content and one of their functions. In this way, we argue that player-produced walkthroughs differ from their commercial counterparts published by companies such as Prima and Brady Games. These glossy publications, often carrying the "Official Game Guide" designation that speaks of close collaboration between walkthrough author and game development team, might appear similar to the player-produced texts typically made available online and most definitely unofficial in their status. However, we argue here that the commercial strategy books are best understood as part and parcel of the same disposable culture of upgrade we note above. As Newman has noted, the official strategy guide, often sold alongside the game at retail and frequently available in a discounted bundle if purchased with the game, is part of the mechanism by which the value (in gameplay and monetary senses) of a game is communicated to consumers (Playing with Videogames). The size of the publication implicitly correlates with the gameplay opportunity contained within the game while the very presence of the strategy at all tells of the

challenges within. Most importantly, however, the content of the commercial strategy guide more closely follows Consalvo's outline above in centring on the completion of the game thereby moving the player on to the next challenge/purchase once the current game is exhausted.

At its simplest, the player-produced walkthrough text is a comprehensive record of investigative play. It is not the product of idle or casual engagement with a game, but the result of a systematic attempt to interrogate and document the extent of the game's potential. This might lead players to the exploration of every available space within the gameworld or the transcription of every branch in a dialogue tree even if these hold the key to no intrinsic reward in terms of high score, trophy or ranking. What is paramount is the complete mastery of the game and the acquisition of the most complete knowledge of its systems and operation.

In addition, it is very often the case that the walkthrough text becomes a site for re-imagining gameplay that provides new context and casts the game's challenges in a new light. The imposition of new gameplay imperatives or newly designated rulesets, typically deemed more complex or restrictive than those offered in the game-as-designed, and that perhaps eschew certain weapons or demand the completion of sequences in apparently impossible time limits, are just some of the ways that players both demonstrate their own expertise and seek to manage and govern that of others. The walkthrough creator is engaged in the exploration of the boundaries of the game and the policing of those self-same boundaries as they mark themselves as expert players.

However much their work may be considered to be regulatory as well as creative and exploratory (see also Ashton and Newman), we should not give the impression that the walkthrough creator is a lone figure handing down their ludic wisdom. Scrutiny of any walkthrough text will reveal an often extensive list of contributor notes that speak to the collaborative nature of the investigative endeavour in play here. While walkthroughs typically name a single author on the title pages, these individuals are careful to acknowledge and recognise the assistance and contributions of the wider community of players who submit additional fragments of information or notate their own gameplay strategies. No matter how minor these contributions might be, each is meticulously listed in the text.

Glitches and Reverse Engineering

To consider the walkthrough author as merely engaged in the documentation and description of gameplay or production of hints, tips and solution guides is to misunderstand the depth of analysis and investigation that characterises the process. As Newman has noted, walkthrough production is an inherently investigative rather than descriptive practice that involves a rigorous and detailed scrutiny of the potentialities of a given game that perhaps most closely resembles the practice of reverse engineering (Playing with Videogames). The walkthrough is not simply the codification of a successful approach to play but rather is a virtual design document that seeks to lay bare every aspect of the game's systems, narrative structures and sequences. By exploring the consequences of every combination of answer-response, every action or inaction, the complex set of chain reactions, contingencies and interdependencies in the game's model are revealed. Importantly, these revelations are not the products of idle curiosity or happenstance but rather arise from a deliberately investigative approach to play that seeks to understand the game at its most fundamental, systemic level.

The act of glitch hunting demonstrates the configurative nature of play and how the open, mutable nature of certain games allows players to redefine, remake or even reduce them into a set of resources for playing with. Newman states:

> Players explore and probe the boundaries of what the game will do to destruction, exposing and exploiting the glitches that slip through the quality control systems and

> that, in extremis, may crash the game outright. More interestingly, many of these glitches or limitations in the simulation, allow access to new, perhaps unpredictable, techniques and capabilities or to unravel the sequence of the game-making levels or abilities available out of order. (Playing with Videogames 15)

Glitch-hunters practice an exemplary form of slow media engagement, as they embark on a deliberate and rigorous journey with the goal to uncover and master not only what the game appears to offer in terms of gameplay and available selections, but also those potentialities that even the code's creators and developers were unaware of. Perhaps the most famous of videogame glitches is the *Super Mario Bros.* "Minus World." As Newman notes, "the value of the Minus World is complex and ambiguous in that it has no intrinsic gameplay merit…it is a cul-de-sac, an endlessly scrolling level that offers little or no variety for the gamer and certainly nothing novel as it is made up of elements present in other sequences" (Playing with Videogames 116). Why then should this (non)level be so thoroughly documented? Why, given that the Mario series is customarily lauded for the inventiveness and imagination of its level design, should a level that offers no original gameplay features – indeed, no gameplay features at all and no way out – be in any way desirable?

If we focus only on the rapid completion of Super Mario Bros. so that we might sit in compliant readiness waiting for Nintendo and Shigeru Miyamoto's next offering, then it is obvious that the Minus World has no value. It moves us no closer to completion and is a manifest example of the imperfection of the game. If it performs any function it is to fix our sights on the sequel that might iron out such technological blemishes. If, on the other hand, we take an archetypally slow media approach to the game, then the Minus World is of inestimable value. The following walkthrough excerpt shows an in-depth analysis of gameplay exploration for Minus World and how this is documented in precise detail:

> OK, for those of you who aren't familiar with the 'Minus World', here is how you reach World 36: In World 1-2, get to the end of the level and find the pipe that takes you to the exit. Mario must be big for this to work. Instead of exiting through the pipe, jump on top of it and stand on the leftmost portion of the pipe. Break some of the bricks above, but DO NOT break the rightmost brick. Now here's the tricky part. You will need to jump up and lean your jump to the right, so that Mario's head goes through the rightmost brick. This may take several attempts before you get it right. If everything goes well, Mario will then go through the rest of the bricks! Now you will appear where the three warp pipes are that ordinarily take you to Worlds 2, 3, and 4. As long as you don't scroll the screen too far, this trick will work. Go down the 1st (or 3rd) pipe and you're off to the 'Minus World'! It's really World 36-1, but the programmers didn't make enough room for more than one digit in the level, which shows up as a space. The level is virtually identical to World 2-2 with one critical difference: THERE IS NO WAY OUT! The trick isn't very useful unless you plan on brushing up on your swimming skills :) (Wonn)

Evident with Minus World are player investments and commitments to lengthy exploratory work. In his discussion of "virtual world naturalism" as gameplay that seeks out "the rougher edges of the game world, where physics models break down, textures become incongruous, and the pieces don't quite fit together," Daniel Reynolds discusses how the "Minus World offers a host of subversions to a player who seeks it out." Minus World extends the gameplay and the scope of the game beyond even that which was designed. Indeed, it ensures quite literally that the gameplay does not, cannot, end. Above all, it reassures us that there is more to the game than initially meets the eye. It is a validation of exploratory play, a vindication of thorough, meticulous replay.

Mario's Minus World glitches are far from unique in game culture and series such as

Nintendo/GameFreak's Pokémon provide equally rich pickings for investigative players keen to explore the limits of gameplay. The following passage is excerpted from KeyBlade999's guide on Glitch Pokémon FAQ in Pokémon Diamond, Pearl, Platinum, HeartGold, SoulSilver [section 2. Obtaining MissingNo (Gen. IV)].

> It will appear in a player's party if they attempt to enter a double battle with two fainted Pokémon, an egg, and a healthy Pokémon in that order in their party. The glitch does not work when using a Vs. Seeker to enter the double battle. When sent out, it will have Bulbasaur's cry and will sparkle as if it were a shiny Pokémon. In the Japanese version, it is also obtainable in the wild by using a Japanese Action Replay.
>
> It can also appear when one 'recruits' a partner Trainer (such as Riley) and leaves the area the partner is 'supposed' to be in using a Walk Through Walls cheat; from there, the player must trigger a wild battle (a common method is to walk on water). This results in the partner (who was replaced by a placeholder partner when the player left the 'recruitment area') sending out DPBox as a placeholder Pokémon. In double battles, DPBox copies the speed of its partner and changes all Pokémon's cries to Bulbasaur's cry. After every attack animation, its HP bar disappears. It has no usable attacks (although it may have glitch attacks) and it doesn't show up on the Pokémon screen.
>
> To get rid of this glitch, place a Pokémon where it appears to be, that Pokémon will be deleted and DPBox will become selectable (if another Pokémon is selected or even pointed DPBox will become unselectable again), after that it can be released or placed in a box. If placed in the box, it will disappear when the PC is closed. Be cautious because if it isn't in the last slot when the party is full, the Pokémon that's placed where DPBox is will be deleted and DPBox will not be selectable. Also, if it is in the first slot, the game will freeze whenever the party is displayed.

What is abundantly clear from this (deliberately lengthy) citation is the complexity of the performances involved in activating these glitches. Moreover, the riskiness of these strategies is brought into sharp relief. As is often the case with invocations of Glitch Pokémon throughout the franchise's many titles, incorrect implementation of the performance may well lead to an inoperable game thereby wiping out the player's progress and necessitating restart. However, equally as significant for our purposes here is the depth and extent of the exploratory, investigative play that has been self-evidently undertaken in order to reveal these glitches in the first instance. The exploitation of repeatable quirks in the game's code that reveal rare creatures to add to one's collection, thereby subverting the serialising logic of the game, are coded as intrinsically "worthwhile" and they serve to both reward the "slow" player and breathe continued life into the game. However, in terms of slow play, the Minus World is perhaps the purest reward in that it offers nothing but the pleasure of its own revelation. Revelations about specific titles and series continue to surface as new facets of gameplay are discovered long after the release of sequels and "technologically superior" successors. This ongoing process of continued and revelatory play speaks of a sustained engagement with these titles that flies in the face of the "perpetual upgrade economy" of digital gaming.

Summary

Ultimately, it is our assertion that what is most interesting about player-produced walkthroughs is not to be found in the detail of their documentation or the inventiveness of the gameplay they codify. Instead, what is fascinating to us is the very fact that they exist at all and, most importantly, that so many are actively updated years after the software they describe, and even the hardware upon which it runs, is unsupported by those that created it. As such, player-produced walkthroughs are inherently subversive documents. We say this not merely because

some of the practices that they encourage involve pushing at the boundaries of the game's rules and systems sometimes to the point of breaking and sometimes, in the case of glitches, beyond that point. Rather, we consider walkthroughs subversive in the way that they resist the dominant discourses of upgrade, renewal and replacement that informs contemporary videogames retail and marketing practice. Walkthroughs are the products of continued play and they present instruction, guidance and encouragement to engage in continued play.

Dr **Daniel Ashton** is a senior lecturer and member of the Media Futures Research Centre at Bath Spa University, and teaches on the Media Communications and Creative Media Practice degree programmes. His research on digital games culture has been published in *Participations*, *M/C*, and *Fibreculture*, and his research on media work and the digital games industry has been published in *Convergence*, *Information Technology and People*, *Games and Culture*, *Journal of Education and Work*, and *Journal of Media Practice*.

James Newman is Professor of Digital Media, Course Leader in Creative Media Practice and Director of the Media Futures Research Centre at Bath Spa University. He researches, writes and teaches on digital media, videogames and the cultures of play and has written five books on videogames and gaming cultures for publishers including Routledge and the BFI. James is a co-founder of the National Videogame Archive www.nationalvideogamearchive.org which is a partnership with the National Media Museum and the UK's official collection of videogames and the ephemera of games culture, and is a co-producer on the GameCity international games festival www.gamecity.org. James is currently writing books on gaming history and digital preservation for Routledge and BFI Publishing.

Works Cited

Ashton, Daniel and Newman, James. "Relations of Control: Walkthroughs and the Structuring of Player Agency." *Fibreculture* 16 (2010). 3 Oct. 2010 < sixteen.fibreculturejournal.org/relations-of-control-walkthroughs-and-the-structuring-of-player-agency/>

Barker, Martin. "News, Reviews, Clues, Interviews and Other Ancillary Materials – A Critique and Research Proposal." *21st Century Film Studies: A Scope Reader*. Ed. James Burton. Nottingham University (2004). 3 Oct. 2010 < http://www.scope.nottingham.ac.uk/reader/chapter.php?id=2>.

Caldwell, John Thornton. *Production Culture*. London: Duke University Press, 2008.

Consalvo, Mia. "Zelda 64 and Video Game Fans: A Walkthrough of Games, Intertextuality, and Narrative." *Television and New Media*, 4.3(2003): 321-334.

Consalvo, Mia. *Cheating*. Cambridge, MA: The MIT Press, 2007.

Chun, Wendy Hui Kyong. "Did Somebody Say New Media?" *New Media Old Media*. Eds. Wendy Hui Kyong Chun and Thomas. New York and London: Routledge, 2006. 1-10.

Deuze, Mark. *Media Work*. Cambridge: Polity, 2007.

Dovey, Jon and Helen W. Kennedy. *Game Cultures*. Maidenhead: Open University Press, 2006.

Facer, Keri, John Furlong, Ruth Furlong, and Rosamund Sutherland. *ScreenPlay: Children and Computing in the Home*. London: Routledge Falmer, 2003.

Franzen, Jonathan. "Scavenging." *How to be Alone: Essays*. Ed. Jonathan Franzen. New York: Picador, 2003. 195-206.

Garnham, Nicholas. *Capitalism and Communication: Global Culture and the Economics of Information*. London: SAGE. 1990.

Gitelman, Lisa. *Always Already New: Media, History, and the Data of Culture*. Cambridge, Mass: MIT Press. 2008.

Gray, Jonathan. *Show Sold Separately*. New York: New York University Press. 2010.

Johnson, Scott. "E3 Report on Microsoft Kinect." *Tech News Today* (This Week in Tech netcast). (2010). 14 June 2010.

KeyBlade999. "Pokémon Diamond, Pearl, Platinum, HeartGold, SoulSilver: Glitch Pokémon FAQ." *GameFAQs*. 3/20/2011 [Final Version] 14 April 2011 <www.gamefaqs.com/ds/946308-pokemon-platinum-version/faqs/59448>.

Kline, Stephen, Nick Dyer-Witheford, Greig De Peuter. *Digital Play*. London: McGill-Queen's University Press. 2003.

Kundnani, Arun. "Where Do You Want to go Today? The Rise of Informational Capital." *Race & Class* 40.2/3 (1998/99): 49-71.

McGuigan, Jim. *Cultural Analysis*. London: SAGE. 2010.

Newman, James. *Playing with Videogames*. London: Routledge. 2008.

Newman, James. "Save the Videogame! The National Videogame Archive: Preservation, Supersession and Obsolescence." *M/C Journal* 12.3 (2009). 3 Oct. 2010 <journal.mediaculture.org.au/index.php/mcjournal/article/viewArticle/167>.

Reynolds, Daniel. "Virtual-World Naturalism." *Fibreculture* 16 (2010). 3 Oct. 2010 < sixteen.fibreculturejournal.org/virtual-world-naturalism/>.

Turkle. Sherry. *Evocative Objects*. Cambridge, MA: MIT Press. 2007.

Valve. *Raising the Bar*. Roseville, CA: Prima Games. 2004.

Wilson, Jason Anthony and Jacobs, Jason. "Obsolete." *M/C Journal* 12.3 (2009). 3 Oct. 2010 <http://journal.mediaculture.org.au/index.php/mcjournal/article/viewArticle/170>.

Wonn, David. "'Minus World'. Nintendo 8 bit Glitches." *David Wonn's Unique Video Game Glitches!* (n.d.). 3 Oct. 2010 <davidwonn.kontek.net/nes.html#S>.