

Finding Common Ground in New Worlds

Cory Ondrejka
Linden Lab

As games continue to displace television as a mainstream leisure activity, there has never been a better time to study games and to create solid connections between game developers and academic researchers. Building these connections will not be easy for there exists little common ground, and games are surrounded by supposition and saddled with the contradictory presumptions of harm and triviality. Despite these challenges, it is time to study games.

Keywords: *online worlds; user creation; Second Life; game development*

Games have never been more mainstream. Games are displacing television as a leisure activity (Yee, 2005), surpassing Hollywood's U.S. box office receipts (Brahe, 2005), connecting millions of people throughout the world (*Essential Facts*, n.d.), driving technology forward, generating their own economies (Castronova, 2001), and raising challenging questions about intellectual property, free speech, and law.¹ With interest increasing from academics and developers, now is the time to focus on game studies and to build strong ties between game developers and game researchers. It will not be an easy task for games are surrounded by supposition and saddled with the contradictory presumptions of harm and triviality (Bartle, 2005). Moreover, developers and academics rarely share goals and constraints. Despite these problems, as games continue to transform players and society, they must be studied both to understand their many impacts and to make better games.

Digital worlds in particular provide virtually limitless opportunities for research and study. Places like Second Life and World of Warcraft have become home to millions of people from all over the world. Residents spend significant portions of their waking lives immersed within these digital worlds (Yee, 2005). They play, form complex social networks, build businesses, master new skills, and blur the line between the real and the digital (Ondrejka, 2004). This was the inspiration and promise of early online communities and games (Barlow, 1996), but the staggering growth of digital worlds is opening the experience to everyone. No longer solely the province of the technological elite, players of all kinds frequent online worlds and are creating modern melting pots behind the veil of pseudonymity (*Pseudonymity*, 2005). Leaving bodies and real-world identities behind, they are creating new realities as they go.

How could games not be studied? No other medium provides such breadth and depth of experience, intermingling the visceral and the social while encouraging exploration and discovery. More important, games are code, so player actions and choices are easily recorded. Scenarios can be endlessly tweaked, replayed, and compared. Games are uniquely introspective.

Games require action without expertise, forcing players to hypothesize, experiment, and learn (Johnson, 2005). Because of this, games have a long history of military use, both for teaching and for simulation (*Wargaming*, 2005). Other fields and professions don't share this institutional memory, and game studies will introduce and legitimize games in new areas. Games, especially with the current politicized focus on violence (Anderson, 2003), may not succeed as their own ambassadors. They need the legitimacy and support of serious research.

This is particularly true around issues of games and violence. A deeply politicized issue, studies are only just appearing that seriously tackle the issue (Williams, 2005). Critically, these studies don't support the conventional wisdom that video game violence leads to violent behavior (Williams & Skoric, 2005). Thus, they will likely not easily gain the focus of either the mainstream media or lawmakers. It is only through more research that a clear picture of the impact—or lack of impact—of violent video games on players of all ages can emerge.

Finally, digital worlds, with their immersion and complex social interactions, are generating a significant amount of anecdotal support for therapeutic applications. With academic research in this area just beginning, many residents of these spaces have simply co-opted the spaces for use with players with various mental and physical disabilities (Au, 2004). Game studies, along with efforts like *Serious Games*,² can help to expose games to researchers who might not otherwise be aware of the explorations to date. Once aware of the potential, properly constructed research and experimentation can determine the real potential of games to heal and to help.

Aside from the research, for some game and digital world creators, game studies have a far more pragmatic function: to help make better games. Not all developers feel that they have anything to learn (Sakey, 2005), but as technology expands what games are and what they can be, missing skills and an incomplete knowledge base within the development community is becoming increasingly obvious.² While the very best game developers have always looked to academia for technical insights and solutions, today's games require knowledge in fields as diverse as economics, law, governance, communications theory, psychology, education, and cognitive science. Nowhere is this truer than digital worlds and online games.

The complex interactions among digital world residents provide a limitless source of research material. This complexity, so useful to researchers, provides an unending series of novel challenges to the world creators. Online games, whether digital worlds or multiplayer forms of more conventional games, never survive first contact with the players unchanged. Unlike traditional single-player games, these player-driven changes have profound consequences for game developers (Bartle, 2004).

Even single-player game development is being forced to adapt. The proliferation of wikis, blogs, and other common forms of amateur-to-amateur communication

mean that reviews, fan fiction, hacks, cheats, and exploits spread far more completely through the community of players than ever before. Developers are only just beginning to understand the many impacts of these changes and have much to learn from research in similar areas.³ Online components are becoming a requirement for all games, so better knowledge and visibility into the results of feature changes is critical for making good trade-offs during the development process.

Multiplayer games like Quake, although lacking the persistent state that characterizes digital worlds, still have to respond to cheating in ways not required in the single-player experience. After all, while cheating at solitaire certainly occurs—and is also worthy of study—this form of cheating only changes the play for the cheater. Other players do not have to worry about losing because their neighbor is using an aimbot (*Aimbot*, 2005) or visibility hack (*History of Cheating*, 2005). However, when humans are playing against each other, suddenly these same cheats worsen the experience for everyone playing the game. Every player who loses starts accusing the winners of cheating, formally open game servers become invitation only, and play transfers to the metagame of cheating and cheat detection (*Counter-Strike*, 2005). The experiences of early online games, particularly first-person shooters, provided valuable data on basic decisions developers could adopt to make cheating more difficult (*Counter-Strike*, 2005). Unfortunately, despite the efforts of some developers to disseminate information, massively multiplayer games proceeded to launch with many of the same defects (*Too Many Bugs to Mention*, n.d.).

Beyond cheats and hacks, multiplayer games are also exploring the efficacy of new and interesting marketing techniques, online distribution, and other ways of leveraging the connected world, but no games are as complicated by real-world phenomena as digital worlds. Digital worlds and massively multiplayer online role-playing games, while varying widely in terms of how much game play and fiction they impose on their players, are more a creation of their players than any games in history. A perfect embodiment of “rip-mix-burn,” residents create their own metagames, fictions, social networks, and businesses.⁴ Players pierce the magic circle, blending the real and the digital, and leverage their real-world skills. Although much of this behavior was first demonstrated within MUD1 and other text worlds (Bartle, 2004), the scale of today’s digital worlds combined with their leverage of the Internet’s collection of amateur-to-amateur (Hunter & Lastowka, 2004) technologies creates an unprecedented level of creation, commerce, and experimentation. It is inconceivable that any game developer, no matter how capable, could have all of the knowledge, data, and experience to make games that capitalize on the new technologies while avoiding the many pitfalls. Instead, dialogue between developers and academia must be improved to fill in gaps in knowledge on both sides.

Linden Lab’s development of Second Life provides an inside look at academic collaboration because academic feedback has been critical to several important decisions during Second Life’s development cycle. The product-altering decision to allow residents to own their creations was the direct result of a Linden Lab academic round table (Lessig, 2003). In a similar vein, ethnographic research—both on Linden Lab’s corporate culture and many on the residents and world of Second Life—has led to greater

understanding of Linden Lab's development processes. There have certainly been speed bumps along the way, resulting in Linden Lab's decision to establish a formal research policy, but these are to be expected as both researchers and industry learn the best methods for working together. It is certain that academic research and input will continue to alter both Second Life and Linden Lab.

Finally, the most significant impact that game studies can have on game development is through the study of game development methodologies. Most game development is accomplished by forcing teams into perpetual "crunch mode." This approach, where teams literally live at the office, has recently been the subject of both scrutiny and lawsuits.⁵ Given the preponderance of evidence demonstrating that crunch mode is the least efficient productive development approach (Robinson, 2005), why do game developers refuse to adopt better methods? Although inertia can be partially blamed, it is also likely that games' monolithic nature, intense performance requirements, dependence on artistic content, and deep entanglement with their players present unique challenges to existing methodologies. Game studies could identify these problems and help to explore possible solutions. Academics who lament the lack of engagement with game developers would certainly find that research demonstrating more efficient and cost-effective methodologies would be of great interest to the game development community.

It is time for both academia and industry to embrace game studies. Games and gamers are impacting society in ways that are only beginning to be understood. At the same time, the increasing complexity, connectivity, and costs of all games are exacerbating challenges that researchers are well positioned to tackle. Both have knowledge and data critical to the other, so barriers to sharing must be broken down. It is only by reducing the cost of learning that the rate of innovation can be increased (North, 1993). Proper collaboration between developers and researchers can greatly reduce this cost so games can once again innovate as fast as the world around them.

Notes

1. Visit the Terra Nova blog at <http://terranova.blogs.com/>.
2. Full information on Serious Games at their Web site: <http://www.seriousgames.org/>.
3. For extensive discussions on the impact of new online technologies, the Many-to-Many blog (<http://www.corante.com/many/>) is the best place to start.
4. New World Notes (<http://secondlife.blogs.com/>) has numerous articles on the activities of residents in Second Life.
5. Perhaps the most famous current example is the notorious "ea_spouse" posting, available online at http://www.livejournal.com/users/ea_spouse/.

References

- Aimbot*. (2005). Retrieved July 12, 2005, from <http://en.wikipedia.org/wiki/Aimbot>
- Anderson, C. (2003). *Violent video games: Myths, facts, and unanswered questions*. Retrieved July 12, 2005, from <http://www.apa.org/science/psa/sb-anderson.html>

- Au, W. J. (2004). *The nine souls of Wilde Cunningham*. Retrieved July 12, 2005, from http://secondlife.blogs.com/nwn/2004/12/the_nine_souls_.html
- Barlow, J. P. (1996). *A declaration of the independence of cyberspace*. Retrieved July 12, 2005, from <http://homes.eff.org/barlow/Declaration-Final.html>
- Bartle, R. (2004). *Designing virtual worlds*. Indianapolis, IN: New Riders Publishing.
- Bartle, R. (2005). *Contradictions*. Retrieved July 12, 2005, from http://terranova.blogs.com/terra_nova/2005/06/contradictions_.html
- Brahe, T. (2005). *The mainstream is coming, the mainstream is coming*. Retrieved July 12, 2005, from <http://www.escapistmagazine.com/issue/1/4>
- Castronova, E. (2001). *Virtual worlds*. Retrieved July 12, 2005, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=294828
- Counter-Strike (2005). Retrieved July 12, 2005, from <http://en.wikipedia.org/wiki/Counter-Strike>
- Essential facts about the computer and video game industry*. (n.d.). Retrieved July 12, 2005, from <http://www.theesa.com/files/2005EssentialFacts.pdf>
- History of cheating in Counter-Strike*. (2005). Retrieved July 12, 2005, from http://en.wikipedia.org/wiki/History_of_cheating_in_Counter-Strike
- Hunter, D., & Lastowka, F. G. (2004). *Amateur-to-amateur*. Retrieved July 12, 2005, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=601808
- Johnson, S. (2005). *Everything bad is good for you*. New York: Penguin.
- Lessig, L. (2003). *Creators in Second Life*. Retrieved July 12, 2005, from <http://www.lessig.org/blog/archives/001577.shtml>
- North, D. C. (1993). *Prize lecture*. Retrieved July 12, 2005, from <http://nobelprize.org/economics/laureates/1993/north-lecture.html>
- Ondrejka, C. (2004). *Escaping the gilded cage*. Retrieved July 12, 2005, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=538362
- Pseudonymity*. (2005). Retrieved July 13, 2005, from <http://en.wikipedia.org/wiki/Pseudonymity>
- Robinson, E. (2005). *Why crunch mode doesn't work: 6 lessons*. Retrieved July 12, 2005, from http://www.igda.org/articles/erobinson_crunch.php
- Saakey, M. (2005). *There are no words (yet): The desperately incomplete language of gaming*. Retrieved July 12, 2005, from http://www.igda.org/articles/msaakey_language.php
- Too many bugs to mention, but "dupe" bugs can be the most damaging*. (n.d.). Retrieved July 12, 2005, from <http://www.netipedia.com/index.php/Duping>
- Wargaming*. (2005). Retrieved July 12, 2005, from <http://en.wikipedia.org/wiki/Wargaming>
- Williams, D. (2005). *Virtual violence*. Retrieved July 12, 2005, from http://terranova.blogs.com/terra_nova/2005/06/virtual_violenc.html
- Williams, D., & Skoric, M. (2005). Internet fantasy violence: A test of aggression in an online game. *Communication Monographs*, 22, 217-233.
- Yee, N. (2005). *MMORPG hours vs. TV hours*. Retrieved July 12, 2005, from <http://www.nickyee.com/daedalus/archives/000891.php>

Cory Ondrejka is vice president of product development at Linden Lab. He leads the team developing Second Life, Linden Lab's award-winning, user-created digital world. His team has created the revolutionary technologies required to enable collaborative, atomistic creation, including distributed physical simulation, 3D streaming, completely customizable avatars, and real-time, in-world editors. He also spearheaded the decision to allow users to retain the IP rights to their creations and helped craft Linden's virtual real estate policy.