Game Capture: The Machinima Archive and the History of Digital Games

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The development of machinima now over roughly a dozen years is fundamentally a story about how players have learned to master computer technology, gameplay and performance practices. While this history of mastery is really three intertwined stories, one could argue that the most important trope of this narrative is the way in which players adopted digital games as a medium for expressing their creativity. Making machinima (and watching it) was one of the ways that players learned to be creative with digital games. This rhetoric of creativity and agency has helped the history of machinima move from a peripheral to a central topic in game studies, as the creativity of players, to me at least, is the most interesting and perhaps the most significant aspect of game culture today.

The more I write about machinima, the more convinced I am that debating the status of digital games as artistic works is far less interesting than observing modes of performance associated with these games. Practices emerging from digital games constitute a form of creative expression and have defined a new space for "high performance play" as players express themselves through merged performances of technology, gameplay, and storytelling. My research on the early history of machinima—animated movies made with computer game software—convinced me that high performance play is capable of transforming artistic practice and altered my thinking about archives of game software, particularly with respect to the importance of recording and preserving gameplay. In *Perform or Else*, Jon McKenzie challenges performance studies to consider performance in a wider context: "Perform or Else initiates a challenge, one that links the performances of artists and activists with those of workers and executives, as well as computers and missile systems." And later he adds, "If performance is in our midst, our mad atmosphere, it's also capable of becoming stratified, of leaving an historical sediment of effects that we can read in both words and actions." Historians and archeologists of new artistic and performative media—whether games, machinima, remix culture, poetry slams, or hypertext literature—must learn to dig for traces of use and performance in this sediment. Archivists of these media are thus compelled to identify and preserve the cultural artifacts that will make this work possible.

To make this possible, we need to build game performance archives. This is not the same as a library of historical software and hardware, or historical records of game production, dissemination, and use, although game performance archives will certainly live alongside these collections. Rather, I am thinking of materials that document events, performances, and even moments in the spaces and worlds defined by digital games. Not a repository devoted to the history of game design, technology, or business – events that transpired outside of game worlds – but to the history of what players have done *inside* digital games. Machinima comes out of – in fact would have been impossible to imagine outside of - the context of competitive multiplayer games that emerged during the mid-1990s with id's 3-d shooters and has continued through a variety of multiplayer genres, ranging from console shooters such as *Halo* to massively multiplayer titles like *World of Warcraft*. Just as machinima is created inside game spaces, machinima is also a part of digital game culture created by players. Using digital games to make animated movies was never something game developers set out to provide. Developers and

programmers such as John Carmack stabilized game technology around the notion of the "game engine" beginning with games like *DOOM* and *Quake;* players appropriated and re-purposed the game engine as a ready-made "found technology" for making their own animated movies inside these games. An archive of machinima perforce documents player performance.

The Machinima Archive was founded in 2003. It was launched as a cooperative effort of Stanford University's How They Got Game Project, the Internet Archive, the Academy of Machinima Arts and Sciences, and Machinima.com. Nearly five years later, the Machinima Archive has secured a significant collection of game-based performance, more than 500 machinima pieces in all. Galen Davis, a Stanford graduate student, and I made the initial selections of machinima pieces, beginning with a small group of seminal works we had compiled for the Bang the Machine exhibition at the Yerba Buena Center for the Arts in San Francisco. The inaugural collection includes early works such as "Diary of a Camper," a speedrun from the Quake Done Quick project, and movies from the Ill Clan, Jake Hughes, and Strange Company, to name only a few titles and artists. It should be noted that the Machinima Archive is one of several game performance archives hosted by the Internet Archive. These include the Speed Runs collection, the Videogame Replays collection, and the C64 Game Video Archive. These collections fall under the "Video Games" rubric of the Moving Images repository within the Internet Archive http://www.archive.org, though recently the Machinima Archive has been moved to the "Animation & Cartoons" rubric, alongside other animation collections. All of these collections fit the notion of a game performance archive, as they are based on captured video of gameplay, replays, demos or machinima.

From the beginning, the Machinima Archive has established a principle of only archiving works with permission of the artists who created them, as well as accepting those uploaded directly to the collection by their creators. Nevertheless, machinima by its very nature as created *inside* game spaces and as a platform for remixing and remediating other media formats is fraught with issues with respect to intellectual property. Recent negotiations between machinima creators and game developers have led to hopeful developments on this front, such as new policies issued by Microsoft and Blizzard with regard to machinima. The How They Got Game Project at Stanford plans to work with entities such as the Center for Internet & Society over the upcoming year to bring together game developers, experts in intellectual property law, and machinima creators to develop a protocol to deal with both the creation and the archival preservation of machinima. While these "soft" legal issues are a tough nut to crack, the "hard" technical demands of a digital video collection are turning out to be softer fare. The Internet Archive's bandwidth and server space, while not unlimited, is adequate to the task of storing nearly 100 billion web pages reaching back to 1996—several petabytes of data, and adding more than 20 terabytes per month. Even with the appetite that machinima video files might have for hard disk space, the storage needs of the Machinima Archive are relatively modest. Following the lead of the Live Music Archive and the Open Source Audio collections also hosted by the Internet Archive, we hope that the Machinima Archive will establish itself not just as a curated collection, but also as a community site where machinima creators routinely deposit their movies directly into an authoritative and reliably maintained digital collection.

The history of digital games, multiplayer game worlds and virtual realities can be told with reference to a variety of documentary sources. Players find the most compelling "proof" of a

memorable event or claimed exploit in visual documentation captured from actual gameplay: screenshots or, even better, video recordings of the actual events. From this perspective, it is my hope that the Machinima Archive is only a first step towards preserving cultural artifacts that document game-based activities –performance, competitive play, events, and social interaction, to name a few salient examples. It is interesting to recall that when *Quake*, the game that provided the first solid platform for game-based moviemaking, was released in 1996, players began playing multiplayer games designed for a client-server networking architecture over the Internet; this was the same technology that made communities and clans of players possible. In other words, players discovered virtual communities just as they were learning about these competitive multiplayer games and how to make movies from them. How fitting that the Internet Archive then should serve as the host for the first archival repository dedicated to the long-term preservation of game-based performances!