Why Video Game Preservation Matters

Like good cheese, you can never have enough, and it takes time.

Video Games Are an American Invention

We invented the digital game, and birthed an industry that now spans the globe.

Online Worlds that Go Offline Are Lost to History

We are the first institution to bring a dead MMO back online.

...But, first, who are we?

The Story of the Museum of Art and Digital Entertainment

- 501(c)(3) non-profit founded in 2012. One of the leading institutions for video game education and preservation in the country.
- Dedicated to the preservation of historic artistic works in digital media, the exhibition of works by artists and creators, and the education of the public in the process of digital creation.
- Founder Alex Handy is a 20 year veteran journalist and former Editor-in-Chief of Game Developer Magazine

Current State of General Game Preservation

- Strong Museum of Play, Rochester New York - Spectacular archives, playable
- Videogame History Foundation - Spectacular thorough preservation
- National Videogame Museum - Playable
- The MADE - Pioneering
- Stanford University - Library access
- University of Michigan - Library access

Worldwide: museums exist in Germany, Italy, France, Australia, Singapore, and many other countries. More are popping up every day.

Current State of Institutional MMO Preservation

- 2008 - Preserving Virtual Worlds Paper
- Today - The MADE

Why virtual worlds and online games

Without a legal exemption, these games will continue to fall into the ash-piles of history.

The virtual world is now over 30 years old. The film industry, at 30 years old, decided its silent films were no longer worthy of preserving. Few have survived to this day.

MMO's are technologically complex. They cannot just be placed in a vault. They require engineering to preserve, like a historic building or landmark.

We risk a future where all dead MMOs are just pictures in a book.

Habitat

- The first Virtual World
- Lucasfilm Games + QLink (Eventually, AOL)
- Client runs on Commodore 64
- Server runs on Stratus VOS
- Launched beta in 1986
- Sold to Fujitsu in 1990's
- Relaunched, recreated many times
- Cost $6 an hour to play in 1989
- Never met a broad audience
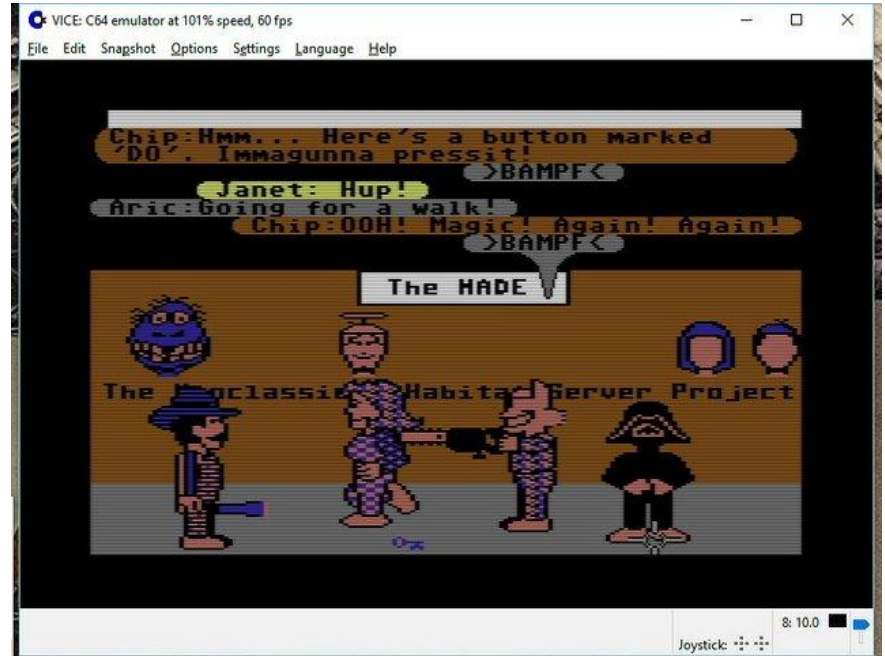
Relaunching Habitat

- Original authors
- Original source code
- 20+ volunteers
- 4 years
- Original hardware
- Rewritten in JavaScript
- Open Sourced
- neohabitat.org

Single Institutions Cannot Preserve Enough

HP had its own museum. It was moved to Santa Rosa. It burned to the ground in 2017.

Aardman Films archives burned in 2005

Wallace and Grommit are Gone.

The MPAA's History is Gone

Suggesting that preservation activities should be limited to a small group of archives is ludicrous: The MPAA's entire industry history was long ago lost in fires.

From the AVCLub:

Up until 1951 or so, the industry standard was <u>nitrate film</u>, which is flammable in its intact state, but once the nitrate breaks down, it's so flammable it can spontaneously combust in extreme heat. As a result, every movie Fox made before 1932 was lost in a 1937 <u>archive fire</u>, and a large swath of silent film history was destroyed in an <u>MGM vault fire</u> in 1967.

3/4 of all silent films are gone. Forever. 90% of films from before 1929 are gone.

Video Game Museums are Not Arcades

- If you want to get technical, we're more like a private library with an admission.
- Through our free educational programs, trained 1200 future game developers.
- Restored the first virtual world, literally the first such academic and institutional undertaking ever.

A video game museum without playable systems is like an art gallery with the lights turned off.

Technical Challenges in MMO Preservation

- Each MMO is unique and has its own codebase.
- Tech designed to bring back one MMO cannot be used to crack another game.
- Recreation is time-intensive: it took us 4 years to do this for the most rudimentary of games.

Early Video Game History is a Mess

Companies have gone bankrupt.

Assets have been lost.

Developers have died.

IP has been forgotten.

Materials have been ignored and pushed around like office equipment.

But most importantly: Technology has moved on.

More Private Institutions Are Needed

- Activision Blizzard does a GREAT job preserving Blizzard games publicly. That's it, however.
- Microsoft has done an EXEMPLARY job with the original Xbox library. If everyone behaved like Microsoft and Blizzard, our work would not be needed.
- EA and Activision donate equipment to the MADE for preservation.
- Nintendo saves its stuff internally, not externally.
- Stanford University has the world's largest curated collection of video games. Even I have not seen it, despite its controller being on our board.

This is Not About World of Warcraft!

- Blizzard has done an exemplary job preserving access to its games.
- This exemption is for games that have no direct ownership trail, or are lost in piles of IP amassed in acquisition after acquisition after acquisition.
- This is for games like Habitat: approx. 15-30 years old, offline, without any resource or preservation hopes.
- WoW is the single most well documented MMO ever created. WoW is going to be just fine.

Early MMO History is Even Worse

- We don't fully know the extent of the history of online games because much of it has been lost.
- Original online games used long defunct services like AOL and Compuserve, adding a further layer of complexity to bringing them back.
- Many used specialized hardware that is now the equivalent of a victrola, an 8-track, or Betamax: out of date, no longer made, and with no replacements.
- Every day, more is lost. AOL was acquired by Verizon, and no longer cares about this history.

People With First Hand Knowledge of These Games Are Retiring From the Industry

- Habitat Ran on Stratus VOS, a wildly archaic, obscure, and non-emulated operating system from 1980. There are a handful of people in the world capable of even using this OS, much less running a server on it.
- We enlisted Stratus' help, but this required reaching into their retired workpool for volunteers.
- If the physical server dies, that's it. There are no more.
- We were helped by folks inside AOL who were literally retiring, or about to retire, and some of their last acts were to pull out the data we needed from their archives.

The environments in which these games ran are complex

- Reviving a dead MMO is like reviving a woolly mammoth.
- It requires perfectly preserved materials from the original, a highly trained staff of scientists, a complex and difficult to maintain lab of equipment, and some people who can read the code (DNA) to figure out what it actually means.
- Even then, what you end up with is basically a ghost of the original, like Jurrasic Park: Dinosaurs with frog DNA.

The Exemption is for Assets that have been Lost

- This is for games like Habitat: approx. 15-30 years old, offline, without any resource or preservation hopes.
- This exemption is not for WoW, Everquest, or City of Heroes. Maybe in 50 years, but not today.
- We have hundreds of dead MMOs to worry about from last century, working forward from Habitat in 1986.
- Each game take years to preserve and return to working order.
- If people remember it, it's probably not a good target for us.
- We need this exemption to save the most at-risk games.

Online Games Are Communities

Like Trekkies, and other fan-groups, the IP lives far beyond the confines of the code.

Dead MMO's are dead communities, not just dead past-times. People get married in these things....

Why Do We Do This?