Emulation at the Residual Media Depot

An emulator is hardware or software that enables one computer system to behave like another. Where a simulation might model some or all of some process, an emulation functions in the place of another system. Emulators also frequently have features that exceed the capacities of the systems they emulate. In our case, the software we install on our emulators allow them to imitate earlier consoles, so much older games can be played on them.

At the Depot, we're interested in emulation for a variety of reasons.

Collection and Preservation

A huge part of our collection consists of modified video game consoles, including consoles modified for emulation, so having some Raspberry Pis, modded Wiis, Analog NTs and other such devices on hand helps us to fulfil our core mandate.

Research

One of our major research projects concerns "the cultural life of signal processing" – how and why people modify historic game consoles to obtain a better quality signal than the hardware would have produced on its own. So we need examples of popular emulation platforms to study in concert with the original hardware.

Research Support

The RMD supports the research needs of other units on campus, like The Centre for Technoculture, Art and Games (TAG), the Media History Research Centre (MHRC), MilieuxMake, and Computational Art and Design (CART), none of which have historic consoles in its holdings (and yes, "historic"

includes something as recent as a Wii). Further, many of the faculty and students in these units do a lot of research on game development. Many of them also design and program their own games. So we need to have devices that allow them to play and study “homebrew” and indie games on a range of platforms.

Teaching Support

We also support the teaching needs of various video game studies classes on campus in several different departments by making such devices available for classroom demonstration.

Training

The hands-on study of media technology (what Concordia calls “Getting your hands dirty”) is an increasingly important part of training students at all levels to be effective researchers. For more on this topic, see a recent op-ed by my colleague and frequent collaborator, Dr. Ann-Louise Davidson, and Concordia President Alan Shepard, in the Montreal Gazette.

Sustainability

The word “residual” is in our name for a reason. We’ve never found an old computer that we didn’t want to keep using. Why continue to add to the scrap heap that is now dooming the planet when we’re surrounded by perfectly useful “obsolete” devices on all sides?