The Media Archaeology Lab as Platform for Undoing and Reimagining Humanities Scholarship

Associate Professor Lori Emerson, Director Department of English & Intermedia Arts, Writing, and Performance Program (CMCI)

1. Introduction

It is hard not to notice the rapid proliferation of *labs* in the arts and humanities over the last ten years or so - labs that now number in the thousands in North America alone and that are anything from physical spaces for hands-on learning and research to nothing more than a name for an idea or a group of people with similar research interests or perhaps people who share only a reading list and have no need for physical space and no interest in taking on infrastructural thinking through shared physical space. Regardless of their administrative organization, focus, funding, equipment or outputs (or lack thereof), the proliferation of these labs does reflect a sea-change in how the humanities are trying to move away from the 19th century model of academic work typified by the single scholar who works in the boundaries of a self-contained office and within the confines of their discipline to produce a single-authored book that promotes a clearly defined set of ideas.

Instead, humanities scholars seem to be rallying around the term "lab" (along with "innovation" and "interdisciplinary" and "collaborative" - terms that are all invoked whenever the topic of labs come up) likely because this particular term and structure helps scholars put into better focus their desires for a mode of knowledge production appropriate to the 21st century - what one might call "posthumanities" after Rosi Braidotti's articulation of it in The Posthuman as a humanities practice focused on human-non-human relationships, "heteronomy and multi-faceted relationality" and one that also openly admits, in Braidotti's words once more, that "things are never clear-cut when it comes to developing a consistent posthuman stance, and linear thinking may not be the best way to go about it." For me, in more concrete terms, this version of posthumanities work means pursuing modes of knowledge production that are quick on their feet; responsive; conversational or dialogical; emergent; collaborative; transparent, self-conscious, and interested in recording its knowledge production processes; and experimental about what constitutes a rigorous knowledge production and distribution process. These are perhaps by now tired clichés of the kind of work many would like to do, many believe they do, and that many administrators would like to see humanists do; but it is still worth noting that - largely because of a longstanding lack of access to both material and immaterial resources than a lack of imagination - very few are actually able do this kind of work. This trend to create labs, even if only in name, is also a response to pressures humanists are feeling to both legitimize and even "pre-legitimize" what they do as increasingly they are expected not just to "perform" but, more importantly, to prove they're performing. The proof of performance is possibly now more important than the performance itself. And where else do we get our ideas about "proof" but from some notion of how the sciences are in the business of proving the rightness or wrongness of theories about reality by way of the "discovery" of facts that takes place in a laboratory environment?

It is true that some humanities labs appropriate a traditional notion of labs from the sciences as a way to continue humanism but they do so under the auspices of innovation - the Stanford Literary Lab, when it was under the directorship of Franco Moretti, is the most well-known example of this as Moretti described the lab's main project of "distant reading" as one driven by the desire for "a more rational literary history" because "[q]uantitative research provides a type of data which is ideally independent of interpretations" (Moretti, 2003). But, these instances aside, what does a uniquely humanities lab look like - or what could such a lab look like if it did not feel compelled to respond to the aforementioned pressures to perform and "objectively" measure such performance? How could such a lab even creatively make the most of its more limited access to the kinds of resources large science labs depend on and instead embrace what I called above the posthumanities?

THE LAB BOOK: Situated Practices in Media Studies (forthcoming from the University of Minnesota Press and co-written by myself along with Jussi Parikka and Darren Wershler) investigates the history as well as the contemporary landscape of humanities-based media labs - including, of course, labs that openly identify as being engaged with the digital humanities - in terms of situated practices. Part of the book's documentation of the explosion of labs or lab-like entities around the world over the last decade or so includes a body of over sixty interviews with lab directors and denizens. The interviews not only reveal profound variability in terms of these labs' driving philosophy, funding structures, infrastructures, administration, and outputs; but they also clearly demonstrate how many of these labs do not explicitly either embody or refute scientificity so much as they pursue 21st century humanities objectives (which could include anything from research into processes of subjectivation, agency and materiality in computational culture to the production of narratives, performances, games, and/or music) in a mode that openly both acknowledges and carefully situates research process as well as research products, the role of collaboration, and the influence of physical and virtual infrastructure. While, outside of higher education, "lab" can now refer to anything from a line of men's grooming products to a department store display or even a company dedicated to psychometric tracking, across the arts and humanities "lab" still has tremendous, untapped potential to capture a remarkable array of methodically delineated and self-consciously documented entities for experimentation and collaboration that may or may not include an attention to history - though they almost always include an emphasis on "doing" or hands-on work of some kind.

I also view *THE LAB BOOK* as an opportunity to position the Media Archaeology Lab (MAL) in the contemporary landscape of these aforementioned humanities/media labs. Since 2009, when I founded the MAL, the lab has become known as one that undoes many assumptions about what labs should be or do; unlike labs that are structured hierarchically and driven by a single person with a single vision, the MAL takes many shapes: it is an archive for original works of early digital art/literature along with their original platforms; it is an apparatus

through which we come to understand a complex history of media and the consequences of that history; it is a site for artistic interventions, experiments, and projects; it is a flexible, fluid space for students and faculty from a range of disciplines to undertake practice-based research; it is a means by which graduate students come for hands-on training in fields ranging from digital humanities, literary studies, media studies and curatorial studies to community outreach and education.

In other words, the MAL is an intervention in "labness" insofar as it is a place where, depending on your approach, you will find opportunities for research and teaching in myriad configurations as well as a host of other, less clearly defined activities made possible by a collection that is both object and tool. My hope is the MAL can stand as a unique humanities lab that is not interested in scientificity but that is instead interested in experiments with temporality, with a see-saw and even disruptive relationship between past, present and future, and in experiments with lab infrastructure in general.

2. From Archaeological Media Lab to Media Archaeology Lab

The MAL is now a place for hands-on, experimental teaching, research, artistic practice, and training using one of the largest collections in North America of still functioning media spanning roughly a 130 year period - from a camera from 1880, a collection of early 20th century magic lanterns and an Edison diamond disc phonograph player to hardware, software, game consoles from the mid-1970s through the early 2000s. However, the MAL initially came to life in 2008-2009 as the Archaeological Media Lab. At that time, the field of media archaeology had not yet become well known in North America and the lab was nothing more than a small room on the campus of the University of Colorado at Boulder containing fifteen Apple Ile computers, floppy drives, and copies on 5.25" floppy disks of a work I had come to admire very much: *First Screening*, one of the first (if not the first) digital kinetic poems created by the Canadian experimental poet bpNichol.

I began the lab, then, partly because I wanted to start experimenting with stockpiling hardware and software as a complimentary preservationist strategy to creating emulations such as the one of *First Screening* that had recently been made available. Without being aware of the very nascent debates in archivist communities that were then pitting emulation against original hardware/software, I wanted to augment students' and scholars' access to early works of digital literature and art while also collecting other works and their original platforms in order to eventually make available emulations of these works.

However, I also created the lab because I wanted to bring in small undergraduate and graduate classes to work directly on the machines, with the original work by bpNichol, rather than only study the emulated version. In other words, the lab allowed me to think through with my students the difference the original material, tactile environment makes to our understanding of *First Screening*. It was a straightforward enough experiment, but even now in 2017, the implications of this kind of literary/historical work are far reaching and unsettling to the discipline. The foregoing first involves turning away from close reading and from

studying literary products (as surface effects), to studying instead the literary production process - looking at how a literary work was made and how the author pushed up against the limits and possibilities of particular writing media. From there, the ramifications of such an approach start to become more obvious as soon as one realizes that learning and teaching "the how" of literary production cannot take place without access to the tools themselves in a hands-on lab environment. That said, while using hands-on work not just as an added feature but as the driving force behind teaching and research is quite new to the humanities, the production-oriented approach to interpreting literature has been around in one form or another since the early twentieth century. As many are fond of pointing out, nearly all foundational media studies scholars (from Walter Benjamin to Marshall McLuhan and Friedrich Kittler) were first literary scholars; moreover, one can read the long history of experimental writers, especially poets, as one that is inherently about experimenting with writing media - whether pens, pencils, paper or typerwiters and personal computers.

Since my academic background is in twentieth century experimental poetry and poetics, the move to exploring the materiality of early digital poetry was a logical next step. Furthermore, once my attention turned to the intertwinement of *First Screening* with the Apple IIe, it likewise made sense to add to the lab's collection other, comparable personal computers from the early 1980s such as the Commodore 64 - at least partly to get a sense of why bpNichol might have chosen to spend \$1395 on the IIe rather than \$595 on the C64. (The answer likely lies in the fact that the IIe was one of the first affordable computers to include uppercase and lowercase along with an 80-column screen, rather than the C64's 40-column display for uppercase letters only.)

In these early years, I tried to sell the lab to the larger public by saying that it was an entity for supporting a locavore approach to sustaining digital literature - a pitch I also hoped justified our very modest online presence while also underscoring the necessity of working directly with the machines in the lab rather than accessing, say, an Apple IIe or Commodore 64 emulator online. Thus, from 2009 until 2012, the "Archaeological Media Lab" maintained its modest collection of early digital literature and hardware/software from the early 80s and gradually increased its network of supporters - from ebay sellers who had become ardent supporters of the lab, to students and faculty from disciplines ranging from Computer Science, Art, Film Studies, and English literature, to digital archivists. However, 2012 was a turning point for the lab for a number of reasons: first, and most importantly, the lab was given a 1000 square foot space in the basement of an older home on the edge of campus, making it possible for the lab to become the open-ended, experimental space it is today with the largest collections of still-functioning media in North America; second, I renamed the lab the "Media Archaeology Lab" to better align it with the field of media archaeology I was then immersed in; and third, the MAL became a community enterprise no longer synonymous just with me - now the lab has an international advisory board of scholars, archivists, and entrepreneurs which I consult every six months, faculty fellows from CU Boulder, a regularly rotating cohort of undergraduate interns, graduate research assistants, post-graduate affiliates, and volunteers from the general public.

The lab, called the Media Archaeology Lab since 2012, is also now a kind of anti-museum museum in that all of its hundreds of devices, analog and digital, are meant to be turned on and actively played with, opened up, tinkered with, experimented with, created with, and moved around and juxtaposed next to any other device. Again, everything that is on display is functional though we also have a decent stockpile of spare parts and extra devices. The MAL is particularly strong in its collection of personal computers and gaming devices from the 1970s through the 1990s ranging from the Altair 8800b (1976), the complete line of Apple desktop computers from an Apple I replica (1976/2012) to models from the early 2000s, desktops from Sweden (1981) and East Germany (1986), a Canon Cat computer (1987 - I discuss this machine in detail in the following section), and game consoles such as Magnavox Odyssey (1972), Video Sports (1977), Intellivision (1979), Atari 2600 (1982), Vectrex (1982), NES (1983) and other Nintendo devices. These are just a handful of examples of hundreds of machines in the MAL collection in addition to thousands of pieces of software, magazines, books and manuals on computing from the 1950s to the present as well as the aforementioned analog media we house from the nineteenth and 20th centuries.