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MEDIA ARCHEOLOGY LAB: EXPERIMENTATION, TINKERING, PROBING Lori Emerson in conversation with Piotr Marecki

PM: I remember when I arrived at Nick Montfort's The Trope Tank for my postdoc for the first time, which similarly to yours, gathers a lot of historical hardware and software. We had a discussion about the difference between a museum and lab. I took away from that a lesson, that in the lab these instruments are used, useful for various types of operations, including writing a text, teaching students how to program in the older languages of original platforms or to take the equipment apart and to show how it works. I wanted to ask you whether the differentiation between lab and museum is important for you, and if so, what does it mean to you?

LE: While there are no firm, clear boundaries between what constitutes a museum and what constitutes a lab, I think that for most people a museum experience is defined by a collection of valuable items that are placed behind glass to prevent degradation from touching or handling and that rarely, if ever, are actively used or explored. The result of the foregoing is that an impenetrable aura is created around the mere appearance of these objects—an aura that has little to do with their functionality, their operations, and the ways in which the objects shape and are shaped by human users. A lab, by contrast, commonly carries with it connotations of active, hands-on experimentation, tinkering, probing to see how a particular (organic or inorganic) object works, and perhaps even new creations from these same objects. The latter engenders a mindset I most want to instill in students, scholars and artists who visit the lab—an attitude of open-ended curiosity toward any and all objects, all of which are valuable in some

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way, and all of which may be handled not by experts or specialists but by anyone. I strongly believe in this kind of flat, non-hierarchical access.

PM: You have a large amount of equipment in MAL [the Media Archeology Lab]. Which primary uses of it would you draw attention to?

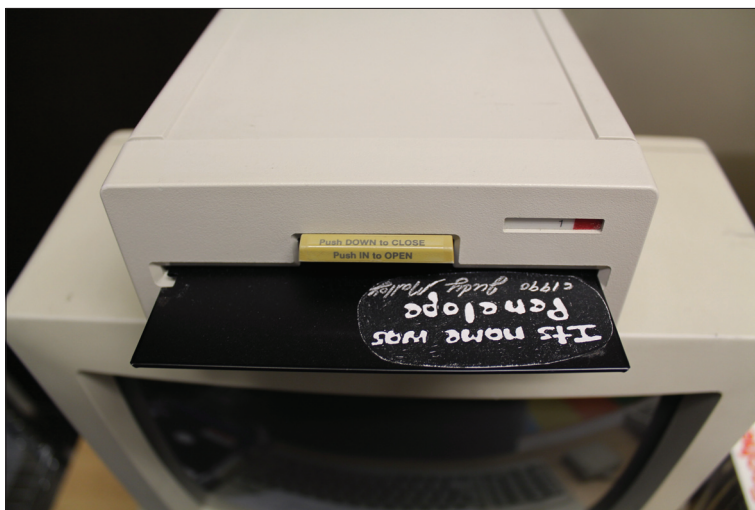


Photo 1: Judy Malloy, *Its name was Penelope*, Floppy Disk, MAL, by Piotr Marecki

LE: I have no preference for any particular kind of work that's done in the lab or work I would like visitors to undertake when they're in the lab—any and all uses of MAL equipment, from the most banal pressing of keys to simply listening to various whirs and beeps, fits with the MAL's mission. I've had visitors invent designs for lefthanded computing devices, create audio mashups of sounds of functioning machines in the lab, photograph and collage different delete keys from machines from the mid-1970s through the 1990s, create distributed digital narratives across multiple devices, while others simply experimented with the affordances of word processors and word processing software from the late 1970s to get a sense of what's been gained and what's been lost with the dominance of Microsoft Word. In other words, every user or visitor to the lab undertakes some new, unique project.

PM: I was curious about the huge collection of typewriters in the lab. Immense, if compared to other collections (such as audio or photo equipment). I'm clear on the criteria for selecting hardware and equipment, with which you probably grew up to a large extent. What, in turn, were the selection criteria connected with this exhibited collection?

LE: Thanks for asking about the typewriters—for some reason I’m particularly fond of our typewriter collection. In fact, I didn’t own my first computer until the mid-1990s, so I have a long, personal history of using typewriters. Most of the machines in our collection have been donated to the lab—by students, parents, librarians, and professors at my home institution. But a few typewriters were used to create well-known works of experimental concrete poems—the Smith-Corona Cougar typewriter, for example, is the same machine the Canadian avant-garde writer Steve McCaffery used to make “Carnival”, an immense work of visual concrete poetry he worked on from the late-1960s to mid-1970s.

PM: The name “Media Archeology Lab” in itself is a term covering many phenomena. Hidden in it is the promise of the availability of equipment from many areas. Both space and probably expertise in many areas pose limits to exhibiting certain equipment. As a manager of this project, you probably had to work a little bit as a curator. Who decides to exhibit one piece of equipment and to put away another? What were the criteria? Maybe your research interests? Educational objectives?

LE: Over the last five years, I’ve come to realize what works best for me as a curator is to allow the lab exhibits to change and evolve according to courses I’m teaching, books I’m working on, additions to the MAL collection, and even—or especially!—changes in the space of the lab. For instance, we are just now at the end of renovating the lab and adding in wall-mounted shelves wherever we can along with work desks to try to make more room for the display of more media oddities, and with the hope that the work desks will still encourage people to take things down, turn them on, and experiment with them. The new shelving, then, has made possible the exhibit of a strange and wonderful juxtaposition of analog and digital audiovisual devices whereby a first-generation Apple iPod is displayed next to a Sony Walkman from the 1990s, a double cassette player from the 1980s, and an eight-track recorder from the 1970s.

PM: I had the opportunity to work with the equipment collected at MAL for a month. For a person who grew up with illegal programming equipment and studying grassroots creative forms of digital media, I was curious about people’s ties to corporate products. You use programs that are nearly 100% original, you use it like its creators intended it to be used. From the perspective of media archeology, are innovative approaches to the equipment interesting, like cloning or modifying? Or, perhaps, did the USA just see little of these initiatives?

LE: My sense is that, even in the U.S., cloning, modding, hacking have been at the heart of computing since the beginning but, with the now nearly overwhelming control imposed on users by corporations, many of the most interesting experiments weren’t or aren’t made public or documented consistently. Also, I’d guess that as



Photo 2: Macintosh Classic, MAL, by Piotr Marecki

time goes on there are fewer and fewer people who know how to hack or mod their machines as the sophistication of skills needed to do these things is increasing along with the ever-increasing time commitment needed to gain these skills.

PM: What were the main reasons to begin a research project on laboratories?

LE: All three of us writing *THE LAB BOOK* have longstanding involvements in labs—Darren Wershler has been working in labs (instructional labs) since the 1990s and Jussi Parikka has been engaged with all kinds of design labs and media archaeology labs for many years as well. Over a series of tweets and emails, the three of us realized that we needed a more thorough-going explanation for what our labs do and why they're important, especially in an arts/humanities context. We also have been watching the wild proliferation of labs across all disciplines and sectors of society over the last ten years or so, and we want to understand what's being invoked when department stores call their displays "design labs" and what's being put forward when colleagues call reading groups "labs".

PM: The project on labs is a work-in-progress, but are you able to already say something about the preliminary outputs of it? What is the most important thing you learned from your research and contacts with people that lead media labs around the world? At which stage of development is the tool when it studies the broadly-defined media arts?

LE: Already we're seeing that—with the exception of established centers and institutes—infrastructure, limited access to space, limited access to funds define nearly all labs in North America and Europe and that, as a result, directors and denizens of these labs are forced, willingly or not, to cater either to universities' neoliberal agendas or cater to tech/startup communities. The result of the foregoing is, of course, a rigid set of restrictions on creative expression and experimentation. By contrast, the most wild and experimental contemporary labs are ones run out of basements or the back of stores on mostly donations and volunteer labor. In my own research on labs, I've discovered that the MIT Media Lab—often held up either as a model media lab or a monstrous engine of neoliberalism in higher education—is not particularly new as its roots extend back to 18th and 19th century medical and science labs as well as the roots of higher education itself.

PM: Are there any differences that have become apparent in the approach to media labs, in work based on their practice, for example in the USA and Europe?

LE: This is a good question that unfortunately I don't have an answer for. Jussi Parikka is looking into this, I believe. So far, I've mostly been focusing on North American labs, especially those leading to and coming out of the MIT Media Lab.

PM: More and more often critical voices draw attention to the opinion that labs as strongly commercialized spaces, which de facto allow for the provision of market services by universities. Is the lab still the right platform for the work?

LE: Along the lines of what I wrote above, I believe that a lab may still be an adequate platform for interesting work but a) the entity need not be a lab—it could be a workshop or a studio or an *atelier*, as the French call it and b) it also depends on how the entity is funded or supported and to what extent it's created independent of administrative structures, restrictive funding schemes that over-determine the shape of the lab. The MAL works largely because of, not necessarily in spite of, its limited funding and resources. We are never beholden to investors or funders or five-year plans or a clear set of outcomes—even though it just so happens I do have a five-year plan and we happen to have accomplished nearly everything I set out for us four years ago.

PM: If not the lab, then what? Do new platforms for team work appear for work on digital media, other forms of engagement or tools that can replace the labs?

LE: Any entity whose foundation is cooperativism—both in terms of people working together for a common goal and in terms of the funding/support/physical infrastructure of the entity—can successfully act as a lab, or at least act as a lab in the way that I think of the MAL. Certainly, there are many science labs that are closed to the public, deeply hierarchical, rigid, and over-shaped by commercial interests so that labs are not inherently good. It's more a matter of positioning.

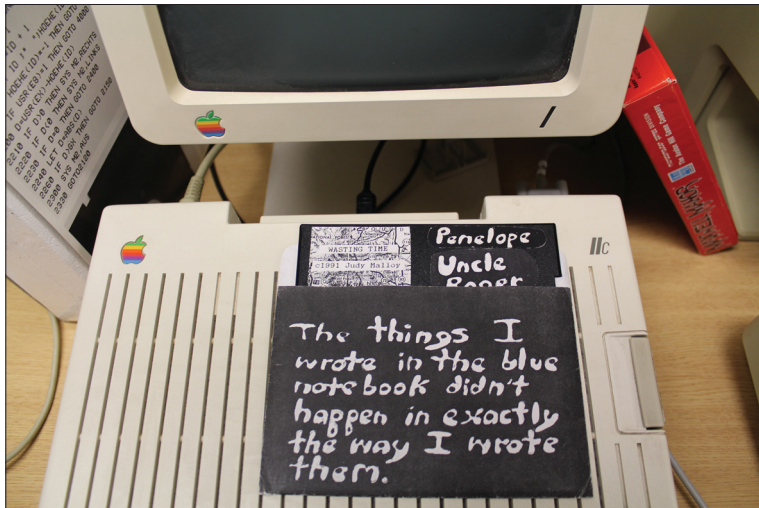


Photo 3: Apple IIc, MAL, by Piotr Marecki

PM: From your experience, what are the biggest advantages of using the lab for didactic work? What do your students value most about lab work?

LE: My two main goals for students visiting the lab is a) to try to work against the computing industry's obsession with planned obsolescence and its attempts to convince you that you MUST throw away your computer and your phone after only 2-3 years; by contrast, there are machines in the lab that work perfectly fine and they're 30 years old. And b) to try to work against the computing industry's other obsession with convincing you the only criteria for technological progress is SPEED and WEIGHT—and that the ONLY way to have a computer that's light and fast is to make it a completely closed device that you cannot open up and you cannot understand. By contrast, a lot of the machines in the lab may not be fast, but many of them have capabilities that our contemporary devices do not have and many of them can be opened up, tinkered with, played with, taken apart. As it turns out, undergraduate students are often much smarter and more aware of these two tendencies in computing than we give them credit for; they nearly always wholeheartedly agree with these two premises and often return to the lab time and again to play with the machines and to imagine the past to reimagine the future.

PM: How does the lab help your research on interfaces, their history and development? Can you imagine working on this aspect of digital media without using the lab as a tool?

LE: I could manage without the lab, but I just don't think the research I'd produce would be as interesting! I do know that I never would have come to above realizations about media poetics in *Reading Writing Interfaces* without having the chance to tinker in the MAL and have hands-on access to different computing interfaces from the 70s through the 80s. If you just spend an hour or two in the lab, you cannot help but see how easy it is—and necessary—to open up any one of the lab's Apple II computers and actively intervene in the machine's capabilities, rather than have it determined for me, as you experience when you interact with almost any Apple computer released after the Macintosh in 1984. In other words, thinking of bp Nichol's kinetic digital poem "First Screening" from 1983-1984, the lab makes it perfectly clear not only that this piece is so much more than the text that moves across the screen (contrary to what you might believe if you only have access to the Quicktime movie emulation) and it is so precisely because of the piece's native platform.

I should also say that media poetics has become a powerful argument for the value of literature—not as something that expresses "who we are", whoever that is, and not as something that necessarily tells stories about who we are (though it could, and sometimes does so powerfully and better than any other medium) but as something that registers media effects through inscriptions we recognize as linguistic. More than just everyday use of media—whether they are made with pen and paper, typewriter, personal computer, or on a network—these works of media poetics are limit cases of the capabilities of specific media, expressions of machines themselves just as much as they are expressions of human authors. Media poetics therefore also opens up the possibility of reading literature less for *what* it says and more for *how* it says and *how* it reads its own writing process. Bearing this in mind, a study of media poetics really does require having hands-on access to the works' original media, platforms, interfaces, etc.

PM: You point to experimentation as an important part of lab work. Calculated into the experiment is error, the fact that the desired effect may not be achievable. In your research work related to the lab, have you experienced such cases, unsuccessful research approaches, that you, or the team with which working, had to withdraw from? What were the specific cases or approaches? Are these errors communicated outside the lab? I am thinking about the field of science, where information about unsuccessful experiments is communicated so that others do not commit the same mistakes.

LE: I wish we had a better system for communicating errors to the public! Right now, nearly every time an artist or researcher comes to do work in the lab, we have them produce a technical report; now I think about it, this would be the ideal platform to talk about our failures. Just a few examples come to mind: we had a couple of artists come visit us from the Netherlands last year with the goal in mind of trying

to experiment with the X.25 protocol—a protocol that was, for a time, a competitor to TCP/IP which is the protocol that has been driving the Internet for about thirty years now. We knew that there are limitations to TCP/IP that result in a less-than-ideally-functional Internet, so what we wanted to figure out is a) whether it's possible to get X.25 working and b) whether there are any perceptible differences from the experience of the user. The short story is that the experiment was a failure and that anyone we might be able to obtain help or advice from was bound by confidentiality agreements in order to ensure that their company's machines were still secure. Any time our projects have turned to experiments with networks, we have had to learn hard lessons about how to reverse engineer systems whose functioning seems inherently mysterious and ephemeral.