"More Than Just a Building to Sit in For The Day": Reproducing Digital Hope and Urban Poverty in the Library

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Abstract
Where does the emancipatory, entrepreneurial hope in personal computing inherent to the digital divide framework come from? This paper provides one answer, examining the urban public library's production of that hope as a way to manage the social pressures placed on the institution. Drawing on three years of fieldwork and interviews in Washington, DC, I argue that personal computing is a site of conflict over what the library, and its digital tools are *for*: A public service space or an entrepreneurial training center? I demonstrate how the library builds the hope in personal computing into its digital technologies. The conflict between the two visions of the library space is institutionalized within librarians' professional practices. Homeless patrons adapt these technologies of hope to form spaces of play, collaboration, and rest. Ultimately the institution overwhelms these adaptations because, for, the hope in personal computing to survive, the library must necessarily regulate or eliminate other visions of the space.

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1   Introduction: The hope upstairs

In early 2015, I was at the Martin Luther King Jr. central branch (MLK) of the Washington, DC public library system with Dave, the mid-30s white man at the head of MLK's digital programming, Claire, a mid-40s black woman and upper-level administrator at MLK, and the Friends of the Library charity group. The Friends are a group of middle- and upper-class white retirees who lobby the library on policy changes and run literacy classes and book drives. Dave delivered a presentation on the library's imminent renovation. Our backs were to the glass cubicles separating the Dream Lab presentation and co-working space from the Digital Commons computer lab, whose 150 seats were full, as usual, and dominated by the city's homeless population, mostly older black patrons, more men than women, who walk over to MLK every day if they're not dropped off by the shelter shuttles that also do pick-up runs in the evening.

Dave, eyes gleaming, asked if we'd like a tour of the new Fab Lab makerspace upstairs—a reclaimed meeting room intended as a preview of the fruits the renovation would bear. So we walked past the help desk where a librarian monitored the whirring 3-D printer, through the great hall where a mural of Dr. King overlooked local internet entrepreneurs setting up hundreds of chairs for their monthly demo series, up two floors on the elevator, past one of the video visitation rooms for DC Jail, around the corner from the black studies collection, back into the cavernous stairwell that had been a gay cruising spot for much of the 1980s, through some locked double doors and into a sunny meeting room whose floor-to-ceiling windows looked out onto the Morton's steakhouse next door.

It was hard not to get caught up in Dave's hopeful gee-whizzery as he showed off the 3-D printers, the laser cutters, the CNC fabrication machine, and the scattered laptops. He pitched the 'maker' skills the Fab Lab would teach as a new literacy for a new economy, something that could help provide the creative, technical workers he said we were so desperately short on. Consumers would learn to maintain their devices and save the environment. Skilled technologists would have a new space to inspire marginalized communities. One Friend pitched it as a poetry lab to upgrade the arts for the 21st century.

There was so much hope in the Fab Lab, much of it recycled from earlier pronouncements on the three year-old Digital Commons that seemed so far away downstairs, where most patrons spent most of their time and which was itself a massive upgrade from the 14 Dells that had previously made up the main computer lab of the central library branch of the nation's capital. There was so much pressure placed on those tools, that room, and those librarians, even though, today, it is mostly used by library visitors rather than the homeless patrons there all day every day—just like the Dream Lab work spaces.

These upgrades to the library space project a reassuring vision of the future, in a city riven by crises in the supply of housing and quality jobs. Since 2011 there has been a 12% increase in total homelessness and a 29% increase in the number of homeless families (HUD 2014). The top 10 percent of income earners in DC make six times the bottom 10 percent, the highest disparity of any 'state' (Giachetti 2015). That gulf emerged with the 2008 recession and its uneven recovery: A flood of young, white-collar knowledge workers entered the city and their wages rose, while low-wage service workers' wages stagnated, and the federal government—the employer who buttressed the black middle class in

DC and its suburbs—shrank, partly by eliminating thousands of mid-level, information-processing positions dominated by black women (Khimm 2014; Rein 2014).

Where does the emancipatory, entrepreneurial hope placed in personal computing come from? In a very real way, the post-internet library, the tools and people meant to overcome the digital divide and provide digital connectivity and digital literacy to those lacking it, produces the hope that these structural challenges can be overcome with the right tools and the right skills. Indeed, the institution is literally rebuilt around this discourse of hope, this responsibility for local development. This paper explores the everyday life of the urban public library in order to demonstrate that the hope in personal computing to power social mobility (i.e., the underlying logic of the 'digital divide' framework that identifies structural poverty with stratified access to digital resources and the skills to use them, and suggests solutions accordingly) is not naturally occurring. It must be produced and maintained by specific institutions with a stake in economic transition, crafted out of the materials at hand: from boxy black Dell Optiplex 755 PC's and shiny new Makerbots, to an historic public space in the middle of the DowntownDC Business Improvement District, to a city government desperate to project an urban identity independent of the federal government, to the mass of patrons working through the day-to-day of racialized poverty in a US city. DC public libraries produce this hope as a means of legitimation in a post-internet world, and as a way to manage their role as one of the last remaining safe, public spaces for marginalized city residents. But for the library to maintain this hope in patrons "using the technology to improve their lives", as librarian Grant put it, it must necessarily regulate or eliminate other potential plans for the library space.

2   Theory and method: Making space

In three years of fieldwork, I prioritized MLK over the local branches—though my 26 semi-structured interviews with patrons and librarians necessarily addressed those smaller libraries. MLK is the largest branch by far, with the most social activity—those daily shelter shuttles but also concerts, classes, and meeting groups—and the most computing activity: The Dream Lab start-up space, the Digital Commons PC's, tablets, and fabrication tools, and dedicated labs upstairs for classes, teens, and children. And of course the impending renovation, finalized in 2014 with a projected cost of $208 million, that would double down on the digital upgrades and, in the rhetoric of the Mayor's office, new Chief Librarian Richard Reyes-Gavilan, and the architectural firms Mecanoo Architecten and Martinez+Johnson, change the cubicles and stairways from a closed, transactional space into an open, transformational space that would offer learning and training opportunities to the whole city. In my day-to-day visits, if I was not taking a class or going to a meet-up or press conference, I would usually sit in the back row of the Dream Lab, where you can plug in your own electronics—where most patrons had at least one phone, sometimes a laptop or tablet. There I could observe the rows of PC's in front me, the street life on the other side of the floor-to-ceiling windows behind me, and chat with Mia, Ebony, Josie, and Shawn, part of a crew of homeless black youth who visited MLK almost every day and who generously invited me into their social circle. Each day's visit to MLK was recorded in fieldnotes—and commented on in a series of research memos that analyzed fieldwork and suggested emergent themes— and these fieldnotes were exported into the qualitative data analysis software Dedoose, where their text was coded into into thematic groupings (e.g., librarian-patron interactions, police-patron interactions, patron-phone interactions, patron-PC interactions). Transcripts of 22 interviews with librarians and patrons (ranging in length between one and two hours) underwent the same process.

Thus, I assumed from the beginning that the hope in personal computing inherent to the digital divide frame was not naturally occurring and was instead produced in a space of social interaction, and that that space was produced not only from structural materials of architecture, labor markets, and housing markets but of interactions between patrons, librarians and technologies of personal computing: phones, PC's, laptops, chargers, plugs, batteries, routers, etc. I approached these digital media not primarily as sites of representation (i.e., containers for transmitted cultural values) but as sites of social interaction, not just mute instruments projecting programmed feeds but spaces where personal values struggle with institutional mandates and structural constraints, with different degrees of individual success or failure depending not only on skill or luck but institutional favor.

This approach is informed by a recent turn in ethnography to spatializing culture. As Setha Low (2014) argues, just as the study of history shows that cultural formations are not timeless or permanent, and are instead the result of specific political-economic contingencies, the study of space shows that those same formations are not fixed or natural, and instead need to be built up, only to to be modified through everyday use or reinforced to buffer the status quo. Low practices these insights ethnographically, showing through her work with immigrant markets in New York that space is 1) socially produced under specific material conditions 2) then socially constructed over time through transformative interaction with 3) specific people whose specific experiences are embodied in a specific place and time and who use 4) specific discourses to tie those experiences together and manage collective life.

Ethnographers are specially equipped for spatial analysis because they are forced to engage with the contours of a field site: where to sit, who to talk to, how that seat and those people got there. And specially equipped for the spatial analysis of social stratification in particular: A deep engagement with people and place shows that something like homelessness in DC is not a product of natural 'market forces', but a phenomenon "imposed through the spatial relations of the environment and the discourse that mystifies its material effects" (Low 2014, 38). The public library is a key site for managing DC's growing stratification, and it is through the library's deployment of personal computing and stories about it that stratification is made sensible, actionable, and palatable. Or at least a concerted attempt is made.

In DC, poverty is inevitably racially coded, and so the library's helping mission inevitably manifests as mostly white, mostly middle-class state employees extending digital tools and digital literacy to mostly black, mostly poor patrons framed as 'outside' of the knowledge economy (Graham 2008). Race is thus a key material used to construct the social space of the library. It is distinct but inseparable from class (e.g., relations to the shifting labor and housing markets that produce poverty) and gender. The latter appears on-site through what informants called the 'pink collar' library profession (Garrison 1979; Fox & Olson 2013), as well as the masculinity of the normative homeless experience, as it is understood by patrons and the social services system (Gowan 2010).

Nor do race, class and gender invade the space of personal computing from the outside—though these social relations are a clear indicator of the enormous stressors placed on the library. These social relations are produced and transformed by personal computing. This is most clear in the library's queue system and the division of library space between patrons who visit the library to produce new things with new tools and the more everyday patrons who are treated by librarians as passive consumers.

3   What is the library for?

The process of remaking the library as a hopeful institution where personal computing powers social mobility is a contested one. Indeed, it is at those black, boxy Dells that we see a fight, repeated over and over, between librarians and patrons over what exactly the PC, the internet, and, by extension, the library is *for.* Everyone agrees that the library is a crucial digital resource. After all, in 2012, 89% of DC libraries reported that they were the only source of free internet in their area—the highest level of any 'state' (Bertot et al 2012). But if anything, the importance of that space for public internet access only raises the stakes of the fight over how to manage and direct those resources. Is the library a refuge, one of the last remaining public spaces in the city where anyone can spend the day without purchasing anything, enjoying whatever digital resources they choose because they cannot access them elsewhere? Or is the library an entrepreneurial space in which the prized people and tools of the knowledge economy are deployed purposefully, to help those locked out of knowledge economy learn how to access it? Resolving this conflict requires regulating the space and eliminating or isolating alternative visions of it.

As April, a white librarian in her mid-20s, patrols her branch with colleagues, they give out imaginary stickers to patrons whom they think are using the space appropriately ("gold star if you manage to use the library appropriately..."), inappropriately ("special snowflake if you really think the rules don't apply to you..."), or just wrong ("paint bucket for 'you're as dumb as paint.' You're teachable, you're just dumb"). They walk the stacks and the computer lab, giving out stickers whenever they see patrons engaged in self-talk, fighting with each other, eating, watching porn, touching themselves or a partner, or bedding down for the night on a strip of cardboard in the reference section.

April has a masters degree. She is a middle-class white woman who recently moved to the city for a secure but stressful job. She can tell you how to verify Google results, do basic HTML and find your nearest polling station. She loves open access and Barack Obama. She and her peers are ideal, liberal knowledge workers and her professional identity is formed by a series of confrontations with not-that: poor or working-class patrons with only a high school diploma, if that, much younger or much older black patrons priced out of DC housing, patrons with mental illness, patrons who mistake socialsecurity.com for socialsecurity.gov. These are her patrons, or 'customers' as she and most new librarians I met say. And while she ostensibly serves them, there is of course a power relation inherent in that dynamic, not unlike that associated with teachers and students or social workers and clients, helping professions who also produce justifications for and narratives of racialized poverty in their management of it.

Like those institutions, the school and clinic, the American library pursues a very liberal mission, open and accepting of all in a mission of self-improvement, in order to help those it serves assimilate into the norms and routines of the labor market and the law-and-order regime. Most of my librarians described their profession in classed and gendered terms as a "pink-collar" one, with April calling them "mavens of knowledge." It is a long tradition. White middle-class women in the Progressive era, worked as 'readers advisors', teaching immigrant patrons to move away from entertainment materials and towards Anglo-American classics, inculcating sufficient literacy to enter formal job and housing markets (Luyt 2001).

Today, that mission manifests as a push to become a public access point for patrons to connect to the opportunities of the future. It occurs in a larger context of the privatization of urban public space. Most patrons I met come to the library because they have nowhere else to spend their day. Those present needs for public space conflict with the library's needs for a space oriented towards the hopeful future of personal computing. That conflict is institutionalized within library computing, the rules for it, and the selection and training of library personnel.

4   Institutionalizing the conflict

There are many things one can do with a PC. At the library, personal computing is largely directed towards the professional norms of white-collar knowledge work. This direction is sometimes explicit, sometimes less so. It is during moments of implicit control over personal computing, when the stakes are less clear to everyone involved, that the everyday conflict between the present needs of the library as public space and the future, hopeful orientation towards personal computing and knowledge work often erupts. But that conflict is also visible at an institutional scale, above individual librarians and patrons working at a PC, in the gap between the library's transformational mandate and the reality of serving marginalized Washingtonians.

There is a complex hierarchy of PC classes across the branches but especially at MLK. Those for beginners (e.g., introductions to email, Microsoft Word, or PC Basics) take place during the day, in a third floor classroom with about 40 PC's total, away from the bustle of the Dream Lab and Digital Commons on the ground floor. Attendees are mostly older black men and women who do not bring their own laptops and who are trying to re-enter the labor market. Classes for more advanced students range from Adobe Creative Suite, to Python, to mapping sessions with Mapbox—a start-up given free workspace in the early days of the Dream Lab's glass cubicles in exchange for occasionally volunteering to teach classes. In June 2015, Mapbox raised $52.55 million in Series B investment. They are a regular talking point of library administrators, a clear success for the Dream Lab in general and its outreach efforts with tech start-ups in particular. Intermediate and advanced classes mostly take place at night and in the Dream Lab presentation space, where students are required to bring their own laptops. Their crowd is younger, whiter, dressed in the clothes they just left the office wearing.

There are several sessions of Intro to PC Basics upstairs every week. Many are taught by Betsy, a middle-aged black woman who encourages her students to repeat these foundational lessons with her until they feel confident in them, gently ribbing them all the while: "This is for folks who have no clue and that might be you!" Her class emphasizes beginner skills like how to right and left click or create folders, but also concepts: The different names for a flash drive or hard drive, the logic of file trees or deletion, the "proper language of the industry" that prevents people from being embarrassed at a job interview. The civil service exam is a constant reference point for her—even if most students will not be applying for those mid-level bureaucratic jobs. Independent, PC-based office work is not only a story that drives and directs the classes, it is built into the exercises and instructions: Reciting the technical terms for different pieces of hardware to get students past 'whatchamacallit', the typing motions that Betsy differentiates from those used on typewriters in the old civil service exams, the tactile confidence to not request help but to close a program and reset the computer. Students might apply these skills to a variety of domains, but, for the library, the arc of personal computing bends towards professionalization.

Downstairs in the three-year-old Digital Commons, patrons have more freedom to do as they will with the available desktop PC's, let alone the tables at the back ready for phones, tablets, and laptops. There, librarians are less able to exert control over patrons' computing—both because it is a free space and because the three or four librarians on duty, and the armed library police who circle through hourly, cannot possibly keep an eye on everyone's screen(s) at once. So some of that control is necessarily delegated to the Pharos queue system which MLK installed, as well as the internet filter which the 2000 Children's Internet Protection Act requires all libraries receiving federal funding to install. Library values are inevitably built into library infrastructure (Winner 1980).

Patrons use their library card to sign up for a session at a central terminal by the printer and are then directed to a queue displayed on a pair of large, wall-mounted screens to wait to be directed to one of the Digital Commons' 74 desktop machines. Patrons cannot log into a computer to which they were not assigned. In 2012, Elena, a mid-20s white woman who supervised the three-hour waits for the 14 computers in the old Popular Services lab, told me that even triple the number of computers would not be enough to meet patron demand. Today, she is often proved correct, especially in DC's sweltering summers. Then, unlike winter, there is no legal right to shelter for the homeless, and there can be an hour wait for a PC. Each day, the queue peaked in the late afternoon but tracking seasonal differences confirmed my suspicion about the relationship between the queue and local shelter rules: Never more than ten people waiting for five or ten minutes each in the winter, regularly between twenty and thirty

people waiting for thirty of forty minutes in the summer. The queue can be stressful, especially if you're between appointments or carrying heavy bags.

The Pharos log-in system is sold as an enterprise package. It manages the queue, taking log-in credentials, placing the patron in line, and then assigning them a computer. With demand high, librarians are quite strict about keeping the queue moving. Elena has no sympathy for those who signed up but missed their alert for a cigarette break or something else: "You know how this works. You know the rules. You missed your turn. Too bad." Pharos also allows librarians to monitor every session's activity from a central terminal and choose to end or extend the seventy-minute session. Patrons watching porn repeatedly might find a pop-up screen saying "Please don't do that", a privilege librarian Rachel frequently exercised against patrons whom she felt were not using the internet, and by extension the library, correctly. Patrons chafe at this surveillance, part of a wider network that includes a dozen cameras in the Commons alone, and constant patrols by librarians and police. Mia, a homeless patron, is quick to complain about the surveillance network, especially Segway-riding police patrols, but is largely resigned to it. The library after all is only one of the government offices that those in the homelessness system regularly visit, most of which demand consent to surveillance (Eubanks 2006). Having a librarian note your internet activity is less of a big deal when you also have your diet and sleep schedule policed at the group house, and your daily purchases scrutinized when applying for food stamps or housing assistance.

On the other hand, patrons who are working on a job application or filing for unemployment insurance usually have their request for an additional session granted. Theses distinctions between correct and incorrect use do not appear in the library's posted rules for the lab, besides the boilerplate notice that inappropriate content will be filtered, but every librarian I spoke with admitted to acting on them and every patron I spoke with admitted to having the rules explained to them at one point or another.

The ground for this conflict is prepared long before anyone enters the Digital Commons. Librarians are confronted with it in their training for the Masters of Library Science (MLS)—a prerequisite credential for promotion or administrative duties—and during the local hiring process. For the library, choosing the correct librarian in turn chooses the correct way of using the internet. This is, on the one hand, a long-term issue of the librarian pipeline. In interviews, veteran librarians often regretted the transformation of Library Schools into Information Schools—a movement that began in the latter third of the twentieth century and picked up steam in the late 1990s and early 2000s (Olson & Grudin 2009).

Becca, a white woman in her late 30s who "can't imagine doing anything else" besides working at a library, was training for her MLS in 2000 at the University of Maryland when the College of Library and Information Services changed its name to the College of Information Studies. She and her peers read the shift as the tragic downfall of the profession, an embrace of technical over service values:

> Man there was a stink like you would not believe. You're going to eliminate 'libraries' first of all and then you're going from service to science. Leaving the people out, that face-to-face. Nothing wrong with theory, I love theory, but people are somehow getting kicked out...There was a big, big stink about the person-to-person service versus the cold, electronic seemingly end-all approach that looked at face-to-face as kind of antiquated. No!

Credentialed right when the iSchool movement really gained strength, she is the most junior librarian I interviewed who consistently calls her patrons 'patrons' rather than 'customers'.

Contrary to her own description above, this is not the total loss of a librarian service culture, but a sign of a shift in that culture, forced from above by state institutions and major donors such as the Gates Foundation, from one of public service to one of entrepreneurial service. As Stevenson (2011) argues, US and Canadian libraries were a key site of welfare state investment in the 1950s and 60s, and libraries' description of their public service mission emphasized a well-credentialed workforce. In the 1990s, that began to shift as customers and information technology became the subject of library discourse, rather than librarians, partly as an attempt to justify the library mission in the face of broad cuts to welfare state services. Libraries and credentialing institutions began to describe librarianship as yet another New Economy profession whose product mainly consisted of serving customers through digital media.

There are also more proximate factors in this rebranding of librarianship. At the level of local hiring, this is not only a question of who has which skills but who best fits the discourse of entrepreneurial librarianship, the story that transforms the library space. Eugene, a mid-20s white librarian, explained to me that the Digital Commons' computers, its Adobe Creative Suites, 3-D Printer and Espresso Book Machine, the Dream Lab's glass conference rooms loaned out to local start-ups, were all incomplete without a group of librarians who were younger, hipper, whiter and more digitally literate than the branch's veterans. The administration under previous chief librarian Ginnie Cooper had fired long-tenured, black MLK veterans before they could collect their pensions—a case their union is still pursuing—and replaced them with ten, majority white, members of what Eugene called "the hipster contingent":

> It really looked like 'We're gonna hire young, hip people.' I'm the library's idea of 'hip' which is sad. And that was to staff Digital Commons. Similar things have also been happening out at branches...I think the people who really would have had a lot of problems with that, you know starting from point one and just fighting it all the way, they've been gotten rid of.

Their enthusiastic start-up aesthetic and informal service style was essential to producing the Digital Commons space: t-shirts, jeans, dyed hair, pulling up a chair to chat up regulars, organizing basement hackathons. Deliberately or not, the "hipster contingent"—cool, young, skilled, white—very much embody the hope linking personal computing with knowledge work and social mobility. Their labor was not only the technical work of formating resumes or recovering passwords, but the emotional work (Hochschild 2012) of projecting that hope, of performing the future of knowledge work and of the public library.

5   Adapting to the library

The library has a specific organizational form for personal computing. It is individualized through long rows of PCs or desks with plugs. Transparent glass cubicles and open rows surveilled to orient patrons towards the habits of office work. But, recalling Low, the institution's production of space is always, to greater or lesser degrees, reconstructed by the people whose social lives touch those materials.

The library space exerts enormous material pressure—visible in the hipster contingent and the $208 million renovation budget— in producing an entrepreneurial space that trains patrons for the future of knowledge work. But homeless patrons, the vast majority of regular library users at MLK and those with whom I spent the most time, adapt to the institution's production of space and take advantage of the conflict between competing values for that space, seemingly built into the library.

Librarians are happy to help fill out social service forms for food stamps, affordable housing, and the like. Patrons know this and so pick particular librarians with good reputations for particular tasks. Most patrons also acknowledge that something like watching pornography is 'doing the library wrong', most of it is filtered after all, but know that they can get away with it anyway with a little work: choosing the right site that the filter has yet to catch, switching between windows to bypass patrolling librarians. The days I did not spot several screens of hardcore pornography in the wide-open rows of PC's were rare. This is a tacit recognition by patrons, over years of interaction, of an unresolved ideological conflict within most librarians. As Akrich (1992) notes, for technology transfers to be institutionalized and regularized, they must produce a script for acceptable uses and users. This often positions poor people of color as irresponsible novices in need of white helping professionals to make the technology, and the development project that depends it, 'work'. At the library, porn is the most visible site of this conflict.

As Rachel, an early-30s white librarian, explained, she and her peers want to preserve the public access point's professionalism. Watching porn at the office, after all, is usually punished. But they also want to preserve the library's historically liberal orientation, where middle-class helping professionals and free-flowing information blunt the individual misery within structural poverty. Rachel couched the issue of internet porn in a series of contingencies: "If you look at a nudie picture and you do it in a way that other people don't have to see it, it doesn't bother me...If they don't have access to a computer in another spot and it's an outlet, it doesn't really bother me." This conflict between institutional professionalism and personal liberalism extends to other areas but porn was the first example of 'doing the library wrong' that everyone jumped to, just as job applications were the go-to example of 'doing the library right.'

Nor was this conflict limited to staff. Mia would often complain about patrons playing games or watching porn instead of learning a skill that would get them off the street, but she herself spent many hours clicking away at Farmville and when her friend Clarisse gestured to come over and check out some dancing nude men that had gotten past the YouTube filter, she and Ebony ambled over to laugh together.

Librarians are not the only municipal employees at the library. There is also a heavy police presence—especially at MLK, where five or six officers are on duty at a time. They roam the computer lab rows, hand on a holstered pistol, walkie-talkie the loudest thing in the room. Their control room upstairs oversees the surveillance camera network. They can touch patrons, where librarians cannot. They tend to enforce rules for sleeping, drugs, fights, phones, theft, or exposure rather than personal computing, unless a librarian calls on them to act as the conservative right hand enforcing the liberal left hand's rules.

Any day Mia and 'the crew' are not at a day program for a clinic or a visit with social services, they're at the library. But they only began their regular routine at MLK in late 2013. The crew had moved from branch to branch, fleeing police who hassled them, Shawn especially, for sleeping at computer desks or speaking too loudly on the phone. At the smaller branches, it is easier to spot patrons not 'doing the library right'. The size of MLK allows for more anonymity. A year after moving on from one branch, Shawn and his girlfriend Ebony were still unnerved when an officer they recognized visited MLK.

Patrons also develop strategies to manage the login system and the queue. Mia, before she was gifted a used laptop by her church, would email whatever she was working on to herself before her

session ended, run back and grab Josie's card, and start a new session. Completing something like a housing voucher in seventy minutes was impossible, even if the librarians granted her another 15 minutes or a whole other session (the limit is two per patron per day). Other patrons would work in pairs, hoping the police did not spot them and enforce their one-user-per-computer rule. One partner would sign up for a session where they collaborated on a task, and once the countdown timer appeared onscreen the other would run to the queue to reserve a new machine where they could continue the task.

6   Other libraries

MLK calls on a complex set of materials to produce a hopeful space where social mobility is harnessed to personal computing. Every day, that future space is built around, and sometimes over or against, the needs of the present space in downtown DC, where one of the last few public spaces in the city strives to meet the needs of marginalized city residents with few other places to go. A variety of actors—individual, institutional, and structural—bring those present needs to bear and reconstruct MLK's hopeful space in the process: The needs of specific patrons, the historical culture of public service in librarianship, the longstanding shelter shuttle drop-offs, the rising cost of housing, the absence of other options for free internet in DC, the ubiquity of online applications for jobs, social services, housing, healthcare.

While patrons vastly outnumber staff, they lack the organization and resources to truly reconstruct the space. There are hard limits to their agency, imposed by architecture, infrastructure, and the script for their use. But that conflict is always in process, never fully resolved. Other libraries circulate within this institutional machinery. Patrons do not just adapt to the library's production of space; they also produce alternatives within that space, ephemeral though they may be. Some of these alternatives must be suppressed by the institution, others can be incorporated into the library's future-oriented vision of entrepreneurial personal computing and the cultures and skills that go with it. The present space of public service survives inasmuch as it can be subsumed within that entrepreneurial vision of the future.

6.1   Places to Play

There are plenty of places to play in the Digital Commons. What my fieldnotes call 'noisy corner' is a group of tables and chairs with no desktop PC's in the front corner of the room, near the queue screens and the glass windows that look out onto the lines forming outside Catholic Charities for their free dinners. For 2013 and much of 2014 this corner was, especially after school let out, taken up by loud card games—mostly monster-battle-themed Japanese trading card games Pokémon and Yu-Gi Oh. Friends, mostly young black and Latino men, met there every day, and cheered each other on like any other sporting event. Phones and computers were left to charge under the desks or against the walls.

But that is inappropriate behavior for an office, and so it is inappropriate for the computer lab—it is not 'doing the library right'. And so Jefferey, a mid-20s white man and one of Eugene's colleagues in the "hipster contingent", invited a friend of his to drive in on weekends and organize official tournaments. The new Battle Subway Pokémon League is an official league of the Pokémon Company International. It was advertised by the library, by players on Facebook, and by flyers showing cartoon monsters fighting in a DC Metro car. Robert, the organizer and a white man in his early 30s, brings official tournament jackets and badges to the Dream Lab one Saturday each month and reorganizes the presentation space for card matches. The start-up employees mostly vacate their glass cubicles on weekends so there's no one to bother when things get heated. With the raucous play contained to a themed space and time, librarians were free to crack down on gameplay in noisy corner during the week. Problem solved.

6.2   Places to Collaborate

The Digital Commons individualizes personal computing; long rows of Dells facing the same direction often reminded me of a lecture hall. Other spaces emphasize digital collaboration if it comes with an entrepreneurial bent: The Fab Lab, the Dream Lab's workspaces, advanced classes. Collaboration is obviously encouraged in the glass cubicles at the back of the room where the start-ups work. Those largely white technologists are usually the loudest patrons in the room during the week, brainstorming on the cubicle whiteboards and Skyping with distributed work groups while the rest of the Digital Commons types and whispers and has headphones offered to them by librarians if their music is audible.

But outside of these approved spaces, non-digital collaboration abounds, often with an entrepreneurial bent—though not the sort of white-collar entrepreneurship the library or the city government advertises. Ricky, a white male patron in his mid 20s, often roams the rows selling single cigarettes, stopping at the back row to chat up Mia and her mother Ruth as they play The Sims. Sales of harder drugs, usually synthetic marijuana or crack cocaine, occasionally crystal meth, are quite frequent and more or less surreptitious depending on the client and seller. The library police crack down on this quite hard, taking a special interest whenever two people are too close together—even apparent couples.

The library changed its own layout to crack down on this particular entrepreneurial use of the space. The sidewalk out front used to former a cozy corner with an alley separating MLK from a church, a secluded spot for drug sales or a nap along a busy block that gets more crowded as lines form for shelter shuttle pick-ups. That space was a point of conflict for a neighborhood that was increasingly becoming a dining and residential destination during my fieldwork years. Residents of the ten-story Mather Studios condominium building across the street, next to Catholic Charities, renovated in 2004 as part of the neighborhood's redevelopment push, called a public meeting with the library, the police, and their city council member in May 2014 to address what the RSVP called "the degrading situation in front of the Library." A follow-up email provided residents guidance on what was (public urination, blocking private entryways) and was not (loitering) illegal on DC sidewalks and provided instructions on how to provide a description of a suspect to police. That summer, the library began leasing the cozy corner space to a bicycle rental company. Their bikes and storage units took over the space and invited more tourists into it.

There are other forms of entrepreneurial collaboration in the library that do not fit the Digital Commons' knowledge-work mold, but draw less ire from police and property owners. A pair of middle-aged black men spent a month on a pyramid scheme posted on Craigslist in the fall of 2013, one partner scrolling through contact details on the library PC while the other worked the phone. And just like on the subway system's Green Line, oil men are a constant presence at MLK: Black Muslim men, with tiny vials of fragrant oils stored either in belts on their chest, jutting up against long beards, or light wooden racks carried under one arm. Two or three at a time meet up in a back row between shifts. Together they pore over maps on their phones, working out sales routes. Police mostly leave them alone.

There is also a vibrant culture of digital repairs and exchanges. This reflects a trend described by Gonzales (2015), that even when access to internet-connected devices becomes nearly ubiquitous in a given geography, a strong digital divide persists in terms of upkeep and the marginalized populations who must manage the "dependable instability" of their devices. Sleeping on a park bench is harder on a phone than a charger-dock on the nightstand, a tablet purchased second-hand from a friend is likely out of warranty. In the back rows of MLK, patrons people trade peripherals or give each other tips for speeding up that used laptop or where to download free anti-virus software—or movies, music, and cartoons.

Frederick, a homeless white man in his late 30s, spent many afternoons, jeweler's screwdrivers in hand, repairing the motherboard of the laptop he had unearthed from a dumpster, eventually getting it to working order. On some days, wrapped up in self-talk, he would lash out against anyone nearby, but on most days he happily dispenses technical advice to other patrons—or sits down with the occasional think tank employee who admires his blog on African politics. But it is Mia who, more so than anyone else in MLK, acts an anchor for social life in the Digital Commons from her favored spot in the back row. Decked out in homemade jewelery, she usually camps out for the day, watching videos, gaming, drawing her graphic novel, handling calls with service providers as she tries to get herself and Ruth into transitional housing. Friends take up seats around her and she shares new anime or games with them, along with plenty of analog collaboration, like the best clerks to see at particular municipal offices.

6.3   Places to Rest

But the most important alternative use of the library space, especially for homeless patrons, is as a place to rest. This visible lack of productivity violates the entrepreneurial script of the library, and so is constantly policed. But the Digital Commons is not only a place to learn apply to jobs or learn Excel but a place to check email between dishwasher shifts. Or a place to stop after a day program because most shelters kick residents out during the day. Or a place to sleep during DC's 100 °F summers, because neither shelter beds nor the sewer grates above the subway stop next to MLK are comfortable spaces at night and because many psychiatric medications are strong sedatives. While, similar to porn, librarians are conflicted, you cannot sleep at your PC at the office, so you should not sleep in the computer lab. And so sleeping patrons are the most visible site of librarian discipline. Librarians patrol, knocking on the desks of people dozing off with a loud "sir" or "ma'am", calling the police if patrons do not respond. Elena explained that the conflict went to the core of the library's mission of self-improvement:

> We're not allowed to sleep at the library. A library, whatever else it is, is a place for lifelong learning...We want people who want to come in and use our collections to come in and use our collections. And if all the tables are full of people with their head down asleep it's not inviting for people who are there to use our services as more than just a building to sit in for the day.

7   Conclusion: Partitioning digital hope

We have seen that the hope in the entrepreneurial value of personal computing, the future orientation of the library towards knowledge work, is not naturally occurring. It has to be produced, and the production of that space and that story requires the regulation of emergent spaces that diverge from the institution's

plans. This is never an all-or-nothing process. The public service orientation of public institutions like the library, a free space in that options are wide open and no purchases are necessary, is subsumed to a forward-looking, hopeful entrepreneurial vision centered around digital tools and survival in the information economy. But because of librarians' liberalism and the serious needs of the city and its marginalized residents, that public service orientation is never erased. The library is the public institution in which this conflict is most highly visible because it is literally being rebuilt to become, as Chief Librarian Richard Reyes-Gavilan often says, a new "transformative" space rather than the old "transactional" one.

This re-production of the space is a three-year $208 million renovation project. It will require, in the short term, separating out the different functions of the library into different temporary locations downtown, beginning in the fall of 2016, since there is no temporary location large enough to hold them all. Looking forward to the renovation has also required staff to admit that the contemporary computer labs have failed in their hopeful mission and so need to be taken apart and put back together again.

Grant, a late-30s black man, has held a hole host of jobs in public service, from firefighting in Atlanta to libraries in the Bronx. When he and his wife moved to DC for her job, he threw himself back into librarianship. He wears a suit to work, in contrast to the hipster contingent, and patrols the Digital Commons with authority. Grant is willing to be more confrontational than his colleagues, and so they mark his brand of emotional labor as more masculine and disciplinary, just outside the profession's 'pink-collar' norms: de-escalating conflicts, calming a patron down as he kicks them out. Lauren, a proudly confrontational branch librarian, also imagines herself slightly outside those norms because she feels the demands placed on the library make "hand-holding" a luxury. They are both off-script, as far as their labor and their technologies are concerned, and this grants them a keen insight into how that script is set.

Grant is resigned to the renovation, maintaining that MLK's namesake is disgraced by the building, that it should have been torn down and rethought a long time ago. He believes its patrons are not being served by the library, or any of DC's social services agencies: "Those patrons need help but we're not in a position to help them at all...I feel like a lot of our staff here feel we need to entertain them."

Speaking with me one spring afternoon in 2015 in the Dream Lab, he walks me a through a game he often plays with himself—estimating that only four or five of the seventy-five users he walked past to get here were working on job applications or resumes, the rest on video games or social media. "That's what they were doing yesterday, that's what they're gonna be doing tomorrow." He sighs and nods towards Shawn, watching cartoons on YouTube, telling me that he had gotten to know the younger man during his first months here, giving him some spare clothes and money, helping him map out a sequence of classes he could take to build on his artistic skills. Shawn did not take him up on it, Grant chalks it up to dealing with depression. He admires Ebony choosing to get her GED, but he is not angry at Shawn for not following his girlfriend's example. He does not blame him for not using the technology at hand to pull himself up by his own bootstraps. Grant knows that DC's labor market would not welcome a homeless black man with no college experience and scant work history even if he did master Adobe InDesign.

Instead, Grant tells me he is disappointed that his institution cannot better meet the structural challenges it is faced with, and provide more meaningful support to people like Shawn. He recognizes the conflict that has been built into the library, between the present needs for public service and the hope invested in technology for the future. It has bothered him for a long time, teaching classes with the 3-D printers or the Espresso Book machine and feeling that "there is innovation happening" in that classroom or the offices next door, but knowing that, because of the "stigma associated with this building" that whiter, younger, wealthier crowd "make[s] a beeline straight for what they have to do and they don't hang out." The present space is not for them, but the future one might be. This is true even for the Friends of the Library. Even though their mission is a charitable one, they are not regular members of the space. Grant resents that when the Friends visit, "We're told to tidy up and keep everyone quiet so they don't scare the good white folks. And I think that's absolutely disgusting. And I resent it."

That social partition is a symptom of the conflict between potential library spaces that Grant believes the renovation will resolve. That resolution will further cement the library as a space built on the entrepreneurial promise of personal computing, but it will only come about through further partition:

> Certainly, moving forward with the renovation, everyone seems to be pretty clear that this did not work. The crowd they want to have—this crowd, our everyday patrons are not using the services we hoped they would use. So if they want to use the computer all day, mess around, that's fine, it's just gonna be in a different space. And those that want to get serious with technology and support technology, there will be a dedicated space for that.

He confirmed my suspicions of the plans for temporary spaces and the final renovation, due in 2019. Preserving the hope in personal computing for the future eventually requires partitioning it from the messy needs of the present. The homeless patrons watching YouTube or dozing off in the back of the Digital Commons do not fit the hope of the Dream Lab or the Fab Lab. During the renovation, and likely in the

new MLK, the crowded computer lab and its largely black, largely homeless patrons will be separated from the more entrepreneurial, experimental spaces and their largely white, professional patrons. And so those rest places, collaboration places, and play places will be physically segregated from the start-up workspaces, the seminar spaces, and the transformative technologies at the heart of the new library.

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