Owens, Trevor. "People, Communities and Platforms: Digital Cultural Heritage and the Web." Keynote Address presented at the National Digital Forum, Wellington, New Zealand, October 13, 2015. Video at: https://www.youtube.com/watch?v=IH5uLX8m0wg

Slide 1

PEOPLE, COMMUNITIES & PLATFORMS

DIGITAL CULTURAL HERITAGE & THE WEB

- I'm here this morning to mix together some history, with some theoretical frameworks and work through a practical example or two for how libraries, archives and museums can connect with people and communities over the web.
- This talk is about the history of community and social connection on the web and the role that libraries archives and museums can and should play in this area in the future.

LIBRARIES ARCHIVES MUSEUMS AS COMMUNITY MEMORY

- Libraries, archives and museums are sites of community memory. They are repositories of knowledge, they are places where wisdom is organized and synthesized and made available.
- I think "Community Memory" is such a great word for the social function of libraries archives and museums. It turns out it was also a great name for something else...



- Here is a picture of a computer memory terminal. This one is now on display as part of the Computer History Museum's collection in Mountain View California which is a name you may recognize as the headquarters of Google.
- Community Memory is widely credited as the first computer bulletin board system, or BBS.
- For those unfamiliar, BBSes are the ancestors of most of the functionality for social networks and for web forums before them. Computer memory ran from 1973 to 1975.
- Terminals were set up in a record store in Berkeley California next to an analog bulletin board. Another terminal was set up in the Mission Street Library in San Francisco.

"strong, free, non-hierarchical channels of communication— whether by computer and modem, pen and ink, telephone, or face-to-face—are the front line of reclaiming and revitalizing our communities."

COMMUNITY MEMORY BROCHURE

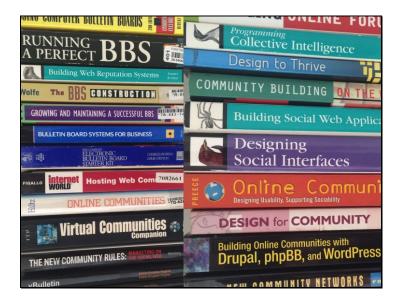
Community Memory's brochure explained that "strong, free, non-hierarchical channels of communication—whether by computer and modem, pen and ink, telephone, or face-to-face—are the front line of reclaiming and revitalizing our communities."



Here is a picture, from the Computer History Museum's collection, of the terminal at Leopold's Records, Berkeley, California from around 1975.

LONGSTANDING CONNECTION BETWEEN NETWORKS, COMMUNITY & MEMORY

- So what's significant here? Long before there was a world wide web, there was already a sense that networked computing technology could serve a potent role in facilitating community memory. A concept that resonates with libraries archives and museums missions.
- More than 40 years out from these terminals in cardboard boxes the idea of community on the web has become a massive industry. Often now in the form of "social" and social networks.



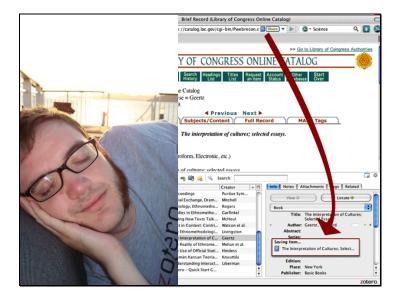
- There are shelves filled with books about how to host, manage, run, or otherwise operate an online community. Discussions, creative works, and other information created in those community serve as the basis of a global knowledge base and more and more of us carry in our pockets direct access to that global knowledge base of wisdom and information.
- With the Web growing into this community memory role, where does that leave those of us working in Libraries, Archives and Museums?
- To what extent can and should our organizations become of the web?



How should library places and spaces change and shift in the era of the web? What are the unique values that our organizations can and should bring in that process? So that is what this talk is about, and here is a bit of a roadmap for a series of chapters/movements or tracks that I'll work through to get there.

ROADMAP FOR THE TALK

- Point of View. I'll offer some backstory on my work and my research as context and stage setting for the talk.
- Conceptual frameworks for memory, cognition and the web. Considerations for the role of software and the web as global and national infrastructure for cultural heritage content and services
- Stories about the history of designing online communities.
 Focusing on values and ideology. Becoming more critical of the
 things we take for granted. Turning tools that are "Ready-to Hand" to be "Present-at-Hand."
- 4. Shifting to One Big Library Mindset: A practical turn, trying to apply lessons from 2 and 3 to how we can make LAMs part of global network of content and services that serve and enable our local users.
- 5. Curating in the Open: Focusing on an individual example, showing how some of these ideas work in one instance.
- Point of View. I'll offer some backstory on my work and my research as context and stage setting for the talk.
- Conceptual frameworks for memory, cognition and the web. Some ways of thinking about the role of software and the web as global and national infrastructure for cultural heritage content and services.
- Stories about the history of designing online communities. This is the history bit, I'll work through a story about the values and ideology that animates the design of online communities.
- Shifting to One Big Library Mindset: Taking the frameworks and the history I'll suggest a approach for libraries, archives and museums to respond to the opportunity they present. The chance to build out interconnected networks of content and services that serve and enable our local users.
- **Curating in the Open**: I'll end up by working through one individual example of what some of this might look like in practice.
- So for starters, my backstory and the backstory for the ideas I'm going to put forward.



- Ten years ago I worked as the "technology evangelist" at the Center for History and New Media on the Zotero project, a free and open source tool for organizing research. My job was really focused on supporting and encouraging a community of users and to some extent developers.
- On the right, you can see the tool in action. Running in a web browser Zotero can detect you're looking at a bibliographic record on the library of congress catalog and with one click you download the data to annotate and use.
- The picture on the left illustrates my dedication to the open source software project. Here I can clearly be seen wearing a Zotero t-shirt on the cruise my wife and I took for our honeymoon.
- I left CHNM to work for The Library of Congress.



- I worked at the Library of Congress for 4 years on a range of things.
- Here I can be seen clearly having forgotten to shave standing outside the Jefferson building on the day the staff photograph took my picture for the staff newspaper.

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At the Library of Congress I project managed the development and launch of **Viewshare** a tool that let's people from libraries, archives and museums from around the world upload collection data and create visual interfaces.



I also helped to establish the **National Digital Stewardship Alliance**, a network of orgs focused on long-term access to digital information. I co-chaired the infrastructure working group of the alliance which did a lot of work trying to make it easier for cultural heritage organizations across the country to ensure long term access to digital content.



Oh, and at one point I was conscripted to spend half my time for a year curating an online exhibition of materials from across LC on the history of astronomy and ideas of life on other worlds to commemorate the acquisition of Carl Sagan's papers.

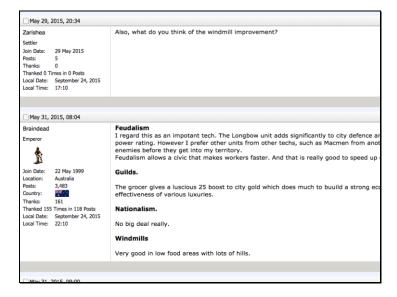
Here I can be seen, at what will undoubtedly be a high point in my career, showing drafts of Carl Sagan's books to Bill Nye the Science guy.



- In January, of this year I took a new job, as the Senior Program Officer at the Institute of Museum and Library Services responsible for a portfolio of grants focused on the idea of a "national digital platform."
- They put out a press release when I took the job. Which was neat. My mom framed it, which I think is cute.
- For those unfamiliar, the Institute of Museum and Library serves the 120k libraries and 35 k museums in the United States. Big and small, public, academic, tribal, college, school, all kinds of libraries. We do a bunch of things, but the main thing we do is give out grants.
- In the office of library services, I work most directly with a an education and training grant program and a National Leadership Grants program.
- It's my job to try and leverage the grants we can make in this area to encourage libraries
 across the country to better team up. By the nature of our legislation these programs have a
 national focus, but it is worth underscoring that the nature of the web is such that the more
 coherent and interoperable systems in the country are the better they can connect
 internationally.



- I will talk a bit more about what the national digital platform is and means later, but at this point its worth just saying it's an approach to trying to encourage libraries, archives and museums to invest in and then leverage and benefit from the work of other libraries, archives and museums in the development of shared digital services, systems and infrastructure.
- All of that is really possible because of the web, and as such is very much a part of the story I'm going to explore today.
- So that's a run through of where and what I've been working on. I started at a small digital
 humanities center which created tools for historians, libraries, archives and museums and
 because of the web was able to have an international impact, moved to what is arguably the
 largest library in the world where I worked on a tool to try and make it easier for libraries,
 archives and museums to create interfaces to digital collections and I now work for a U.S.
 government agency working to catalyze activity across all the libraries and museums in the
 United States.
- Throughout that time, I've had a distinct, but often related research trajectory.
- Back when I was at the University of Wisconsin, I was interested in what people learn from video games. It turned out that most of the learning I was most interested happened outside the games, in online discussion forums.



- Far less flashy than the graphics and interaction of video games themselves, discussion forums were the place where players went to hash out how games worked, how they could change games.
- They served as a continuously updating space where players talked about how a game like *Civilization* could better represent the history of science, or how a game like *Spore* could better model natural selection.
- Here you can see one Civ player from Australia weighing in on the importance of Windmills, nationalism and feudalism.
- I ended up writing my dissertation on the history of the software that is used to run online communities.
- Two of my committee members told me that this was way too boring. Which I considered.
 But I ended up just replacing them with different people and spent a few years working on what would become my book



- That book, is *Designing Online Communities: How Designers, Developers, Community Managers, and Software Structure Discourse and Knowledge Production on the Web*. Here is a picture of it.
- Seriously though, you don't have to buy it to read it. My university published the dissertation it's based on in their institutional repository, and I posted a copy of it up online. It's out there as part of a free global collection of scholarship that university institutional repositories increasingly are making available.

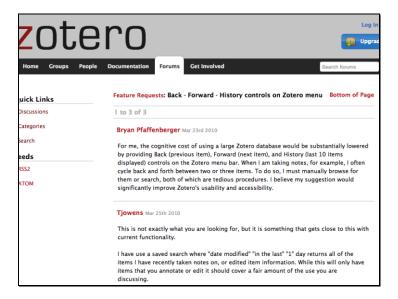


The book/dissertation is functionally study of all of these books. Books about how o set up and run BBSes, forums, social networks, and add social functionality to web sites. But they are about more than that.

They are about how we design relationships.

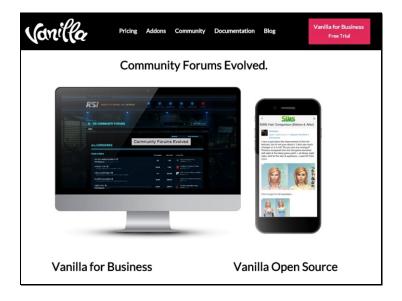
They are about how you should treat people who "visit" websites. Are you their host? Are they your members? Is "community" something you can own?

As the web browser increasingly becomes our point of entry to the town square. As the designers of web forums increasingly design our primary public and civic forums. it's *really important* to start to think critically about who controls them and how they treat people.

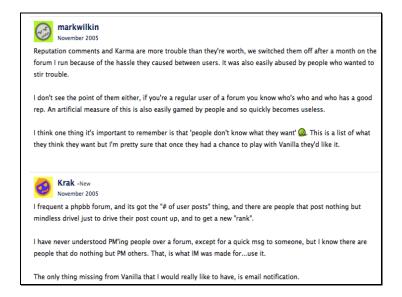


- To make that concrete, I'll jump back to where this line of inquiry started when I was working on Zotero. I generally spent a few hours a day responding to questions and comments on the project's forums
- Like many open-source projects, the web forums played a key role in how users got involved in the project. Any user could visit the forums to ask for help, and the answers to their questions served as a knowledge base so that future users with similar problems could search the forums and find the answers without having to re-ask the questions.
- The forums also served as a platform for users to suggest new features and refine their ideas about how exactly those features would work. An important part of my job was to try to help users troubleshoot issues and to encourage them to become more involved in the project.
- At one point I explored adding a plug-in (a software component that adds additional functionality) to the zotero forums. As with most projects, we did not create our own forum software.
- Zotero's website uses an open-source web forum software package called Vanilla.

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- I thought it would be useful if users of the Zotero forums could see the user's post count (the number of times the user posted) alongside each of the posts in the forums. In addition, I was interested in setting up ranks for posters based on their post counts—for example, beginner, intermediate, advanced. This sort of feature is found in many web forum systems. The idea behind showing post counts and ranks is that it is easy for new users to see the amount of experience and expertise another user has.
- In a search of technical advice on how to add this feature in the Vanilla software support forums. (That is the forums for the forum software.) I found heated exchanges on the subject of whether someone might want to add this kind of functionality to their forums.
- I couldn't find any plugins. Instead I found discussions that explained that showing post count was "pointless" and "more trouble than its worth" because it was "an artificial measure" which was "easily gamed by people and so quickly becomes useless."



- Another user explained that these kinds of features result in attracting "people that post nothing but mindless drivel just to drive their post count up, and to get a new rank."
- I thought Vanilla was just a simple software application that enabled the Zotero team to host discussions, but my ideas about features were in conflict with the "revolutionary vision." One user explained that tracking post count would be "against the Vanilla Movement."
- What I thought was a very simple idea about how to modify our online community revealed passionate philosophical disagreements among software designers.
- Something relatively simple to implement from a technical standpoint was rejected because
 this seemingly minor feature was not in line with the values of those who had worked to
 design the platform
- Responses to these relatively trivial technical requests for software features point to ideological and value-driven notions of participation and motivation embedded in different software platforms.
- These ideologies and values were not simply afterthoughts for the software designers. The individuals working on this software had rather extensive theories about human behavior and social interaction that informed their arguments about design. They had a vision of what an online community and discussion should look like and how it should work.
- It got me thinking about all the arguments that must be happening like this about all the comment buttons, like buttons, etc. that I run into everyday when using the web. What ideology was behind those similarly seemingly minor features?

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So that's the background part, a bit about the kinds of work I was doing and how that lead me to do a particular kind of research. Next up is a set of conceptual frameworks to use to start thinking through answering the question I ran into in those forums.

3 FRAMEWORKS

- SOFTWARE IS IDEOLOGICAL
- COGNITIVE EXTENSION
- COLLECTIVE INTELLIGENCE

- Here are three ways, or three frameworks to think about this kind of software. They were
 relevant for me in approaching my research, but I think they are much more broadly relevant
 for thinking about any of the work we do to create digital tools and services for libraries,
 archives and museums.
- I will work through these each in greater depth, but here is a bit about each of them.
- First, Software enacts ideology, much like other kinds of tools and infrastructure.
- Second, *Tools Extend Cognition*: We really are all cyborgs. When humans pick up new tools they become a part of our minds in ways that we often appreciate on a trivial level but that are really far more profound.
- Third is *Collective intelligence:* The web, while problematic in a variety of ways, is becoming a global knowledge base.

SOFTWARE ENACTS IDEOLOGY

Infrastructure has politics. If you build a bridge that is too low for busses to drive under and that is the only way to get to the beach you make it harder for people who want to go swimming who don't have cars to get there. Similarly, the design decisions that go into software, shape what can be done with it. Ideology is enacted in designed objects.

"each piece of **software constructs** a way of **seeing**, **knowing**, and **doing** in the world that at once contains a model of part of the world it ostensibly pertains to and that also shape it every time it is used" (Fuller p.19, 2003).

Fuller, 2003. Behind the Blip: Essays on the Culture of Software

- In the 2003 book, *Behind the Blip: Essays on the Culture of Software* Matthew Fuller explains this by suggesting that "each piece of **software constructs** a way of **seeing**, **knowing**, and **doing** in the world that at once contains a model of part of the world it ostensibly pertains to and that also shapes it every time it is used."
- That is, every time a script is *executed* or a program *runs* it acts out rules based on a way of thinking about the world. Those models inevitably come with perspectives and values.
- When we build tools and systems to organize and provide access to knowledge the both intentional and unintentional ideologies become fixed in the tools.

COGNITIVE EXTENSION

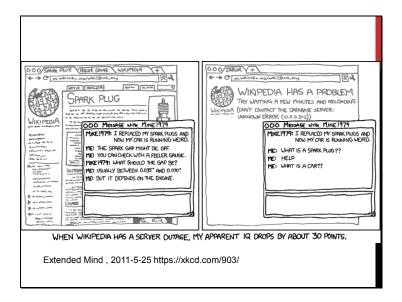
- The best Tetris players in the world do something weird. They rotate the pieces way more than they need to. That is, they rotate the pieces past where they need to be to make the right fit. The reason: It's faster to rotate a Tetris piece by taping the button and seeing it rotate than it is to attempt to rotate it in your mind. Great tetris players use the world to rotate the pieces because it's quicker than doing it in their head.
- This is increasingly understood as a generic part of human cognition: We think, know, remember and understand in and through our tools.

"A month ago, I bought an iPhone. The **iPhone** has already taken over some of the central functions of my **brain**. It replaced **part of my memory**... It is a tremendous resource in an argument, with Google ever present to help settle disputes." (ix.).

From the intro to Clark, Andy. (2008). Supersizing the mind: Embodiment, action, and cognitive extension. New York: Oxford University Press.

Cognitive Philosopher Andy Clark is best known for developing this line of thinking. In the forward to his book, one of Clark's collaborators notes, "A month ago, I bought an iPhone. The **iPhone** has already taken over some of the central functions of my **brain**. It replaced **part of my memory**... It is a tremendous resource in an argument, with Google ever present to help settle disputes."

Computing tools are not just things we use, they are far more intimate than that. New tools rapidly become part of our expanded mind.



XKCD can help further underscore this point.

"When Wikipedia has a server outage, my apparent IQ drops by 30 points"

On one side, we see someone quickly pulling up the Wikipedia page about spark plugs and being able to answer questions about the spark plug gap. On the other side, when Wikipedia is down, he responds "What's a spark plug?"

At this point, many of us and many of the users of libraries archives and museums carry with them a point of access to massive amounts of info, and that changes a lot of what it means to know.

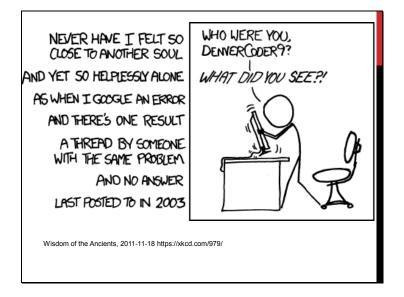
COLLECTIVE INTELLIGENCE

This connects directly to a concept of collective intelligence, that because of these devices and the web, we are more and more a part of a strange kind of digital hive mind.

"What is Collective Intelligence? It is a form of universally **distributed** intelligence, **constantly enhanced**, coordinated in real-time, and resulting in the effective **mobilization of skills**." (1997, p.13)

Levy, P. (1997). Collective intelligence: Mankind's emerging world in cyberspace. Cambridge, MA: Perseus Books.

In the late 90s Pierre Levy talked about this as a kind of collective intelligence. In his words, "What is Collective Intelligence? It is a form of universally **distributed** intelligence, **constantly enhanced**, coordinated in real-time, and resulting in the effective **mobilization of skills**." There is a lot going on in there, it's not just having access to knowledge, it is the fact that information that knowledge is based on is being refined and coordinated and enhanced by people all over the world. The system needs to *mobilize* and *coordinate* people to refine it. Web forums end up being a great example of how this plays out.



Again an XKCD, the 2011 comic titled "Wisdom of the Ancients"

"Never have I felt so close to another soul, and yet so helplessly alone, as when I Google an error and there is one result. A thread by someone with the same problem and no answer. last posted to in 2003. And the stick figure is shaking his monitor saying, "Who were you DenverCoder9? What did you see?"

When you google the right terms you can find the answer, or at lest someone else's struggle to find the answer. The trick is guessing the right terms you end up finding the threads where folks figured it out before. You access that hive mind of the work of those that came before you.



Let me google that for you, exemplifies how this has become a core part of being digitally literate.

Show of hands, have folks used Let Me Google That For You?

It's is a snarky way to respond to someone asking an obvious question. It was created "for all those people that find it more convenient to bother you with their question rather than google it for themselves."

When someone responds to your post asking how to pivot tables in excel, or how to tie a bow hitch you can post a link to lmgtfy, which plays an animated view of someone typing in the terms to a search box and shows you the results.

The question has already been answered on the Internet and with a very simple search query, as demonstrated here, you could have found that answer. At the core of the idea of Imgtfy is the notion that anyone should be able to make specific assumptions about the kind of knowledge the web puts at their fingertips. Lmgtfy is supposed to be a shaming experience, and the possibility of that shame is predicated on the existence of a literacy of collective intelligence.

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Which brings us to our third movement/chapter/act. Stories about the history of designing online communities. My focus here is on values and ideology. This is an opportunity to become more critical of the things we take for granted. Like when I pulled back the curtain and saw the ideology under the Zotero forums. Turning tools that are "Ready-to-Hand" things we use everyday to be "Present-at-Hand" things we carefully pick apart to see what values are embedded.

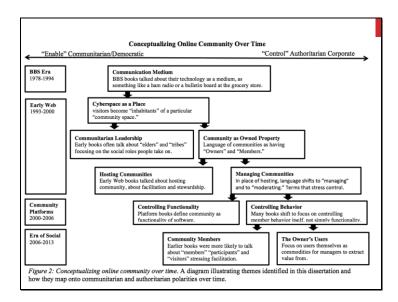


So I'm going to pull some books out of this stack and pick apart some quotes to think through where we have been and how we got here.

In general, it's useful to understand this context in how we chose to engage with these tools. Beyond that, think a good bit about how you think of the end users of the sites and online resources and applications we create in our sector.

It's essential that we understand the values in play in the design of the web as a medium of memory.

The historical view helps establish how jarring many of the ideas about discourse on the web are in contrast to what they were and could be.



- After working my way through all these books and reading them against each other, this is the big picture view of what I came up with. Don't worry if you can't make it out. It's up on my blog, and I'll share the broad strokes right now.
- You move down the diagram over time, from the BBS era, to the early web, to the creation of defined web forum platforms and then to the era of "social."
- For the most part, throughout this history there is a consistent drift away from a communitarian discourse. Online communities moved away from terms like "hosting visitors" to terms like "managing" "users". Ultimately moving to owning both users and communities.
- I'll walk through that shift by sharing some quotes from a few of the books.

BBS & ELECTRONIC DEMOCRACY, 1988

Long before the technology could deliver on the promise, there was a sense that something like a BBS could have "democratic" potential.

"bulletin boards are an encouraging example of **electronic democracy**: they provide a low-cost means for every PC owner to have his or her own **soapbox** and an audience with the nation." (1988, p. 5).

Bowen, C. (1988) The complete electronic bulletin board starter kit. The Bantam Book software library. Toronto; New York: Bantam Books.

As one author noted in 1988, "bulletin boards are an encouraging example of electronic democracy"

AN EMOTIONAL WEB, 1997

• In the 90s there is a lot of glowing talk about how you can find a personal connection, about how the web can be even a spiritual *place*. Place being an important term there, as there was a lot of excitement about *cyberspace* as a place one goes and one surfs.

"beyond the byte and the baud, past the silicon, further than the software code, on the other side of the screen, there are **humans**. And humans want to live together and **talk** and **laugh** and **cry** and **feel**" (1997, p. xxiv).

Shelton, K., & McNeeley, T. (1997). Virtual communities companion: Your passport to the bold new frontier of cyberspace. Albany, NY: Coriolis Group Books.

- As two authors explained: "beyond the byte and the baud, past the silicon, further than the software code, on the other side of the screen, there are humans. And humans want to live together and talk and laugh and cry and feel"
- What would later become much more dry technical books, were at this point still loaded with this focus on the web as a place to connect and a importance of thinking about the emotional valances of the web.

THE LOST ART OF HOSTING, 1998

In the late 90s one could have used the word "hosting" to in the way the term "managing" is now used for online communities.

Hosting is an appropriate term for inviting users into a virtual location and treating them as **guests**. It's **a service role** with a purpose, which is to make the guests feel comfortable, appreciated, and, in some cases, empowered" (1998, p. xi).

Figallo, C. (1998). Hosting web communities: Building relationships, increasing customer loyalty, and maintaining a competitive edge. New York: John Wiley & Sons.

- In this context "Hosting is an appropriate term for inviting users into a virtual location and treating them as guests. It's a service role with a purpose, which is to make the guests feel comfortable, appreciated, and, in some cases, empowered."
- This point of view rapidly shifted away from a hosting and empowering mindset to one of authority and control.

"OWNING" COMMUNITY

As software packages, like PHPbb, VBuiltain and Invision Power Board rolled out in the early 2000s the idea of community changed. It increasingly became a commodity to be owned.

"Invision Power Board...allows website **owners** to **add a community** to their existing site within minutes." (2005, p.1)

Mytton, D. (2005). Invision Power Board 2: A user guide: Configure, manage and maintain a copy of Invision Power Board 2 on your own website to power an online discussion forum. Birmingham, England: Packt Publishing.

- One author explains, "Invision Power Board...allows website **owners** to **add a community** to their existing site within minutes."
- Here, community is a feature set not the emergent property of people engaging with each other. It's something you bolt on to your website.

"A community adds extra value to almost any website. One of the main goals of website owners is to keep visitors returning for more content...All of this adds to the "stickiness" of your website." (Mytton 2005, p. 6)

Mytton, D. (2005). Invision Power Board 2: A user guide: Configure, manage and maintain a copy of Invision Power Board 2 on your own website to power an online discussion forum. Birmingham, England: Packt Publishing.

- The same author goes on to explain, "A community adds extra value to almost any website. One of the main goals of website owners is to keep visitors returning for more content...All of this adds to the "stickiness" of your website.
- There is a whole chapter in my book on this quote alone. Seriously! But for now, the key point is that communities provide value to the "owner" of the website. In this context, the owner wants to keep getting people to comeback because their visits have a value, and they are producing free content that can get more folks to visit.

CONTROL & BEHAVIOR MODIFICATION

- As this line of thought develops, it becomes increasingly important to manipulate people into behaving the way that will provide the most value.
- Over the course of the last decade the books become increasingly focused on control and behavior modification.

"focus on the communities you are fostering in your application, the values you are trying to instill in the environment, the behaviors you wish to encourage, and the types of people you wish to engage ever more deeply in your social environment. (Crumlish & Malone, 2009, p. 153)

Crumlish, C., & Malone, E. (2009). Designing social interfaces: Principles, patterns, and practices for improving the user experience. Newton, MA: O'Reilly Media.

- For example, "focus on the communities you are fostering in your application, the values you
 are trying to instill in the environment, the behaviors you wish to encourage, and the types
 of people you wish to engage ever more deeply in your social environment."
- In this case, the site is designed explicitly to get people to act the way one want's them to.
- Some have compared the design of online communities and "social" features to the design of
 casinos, with few exits, cheap entertainment, and no windows all set up to keep the people
 doing the work to producing from getting up and walking away.

USERS AS COMMODITIES

In this context, users themselves become commodities to be used.

GET THE MOST OUT OF YOUR MEMBERS

Once you've recruited the members, how can you keep them in your community? And how can you get the <u>maximum mileage</u> from your members, motivating them to participate as much as possible over the longest possible period of time?

Grab them when they're fresh

Newly registered members tend to be extremely motivated. They have gone to the trouble of filling out a registration form, and now they are eager to see the results. This is an opportunity for you to catch them and draw them into your community while their interest is at a high point.

Most registration processes include an email confirmation step, where members have to click on an activation link sent to them by email. Except in very specific cases, this email should always be sent automatically and instantly. Use the activation link to bring the member to a fun first activity on the

One author suggests ways to "get the maximum mileage from your members" as if they were a kind of fuel used to power your site further noting that you need to "grab them while they're fresh"

IN CONTRAST: ENABLE

That is the trajectory of the books, and it shows the story of where the values of "community" and "social" go in most of Silicon Valley's vision for the future. But one book, Jono Bacon's 2009 *The Art of Community: Building the New Age of Participation,* anchored in the values of open source software movement, suggests another direction and it's tied up in the word enable.

"I have tried to summarize what we community managers do in one sentence. The best I have come up with is: I help to enable a worldwide collection of volunteers to work together to do things that make a difference to them..."

Bacon, (2009). The Art of Community: Building the New Age of Participation

He explains, "I have tried to summarize what we community managers do in one sentence. The best I have come up with is: I help to enable a worldwide collection of volunteers to work together to do things that make a difference to them..."

"..Twenty of those twenty-one words are really just filler around the word that I really think describes what we do: enable. Our function as community leaders is to enable people to be the best they can be in the community that they have chosen to be a part of."

(Bacon, 2009, p. 14)

Bacon, (2009). The Art of Community: Building the New Age of Participation

- "..Twenty of those twenty-one words are really just filler around the word that I really think
 describes what we do: enable. Our function as community leaders is to enable people to be
 the best they can be in the community that they have chosen to be a part of."
- This vision is the ethical one.
- This is one that we can run with.
- I think this is also why it is really important for libraries, archives and museums to get into this space in a serious way. It's telling that Bacon's open source mindset is anchored in the work of non-profits. He was the community manager for Ubuntu.
- The web that is a web of public good is the thing we need to be helping to create. It's critical that as silicon valley makes more and more plays to *own* our communities memories that we are their figuring out how to set up tools, systems and networks that are their to *enable* people. We can read these how-to books to see exactly how so many others are working to *commodify* them.

ROADMAP FOR THE TALK

- Point of View. I'll offer some backstory on my work and my research as context and stage setting for the talk.
- Conceptual frameworks for memory, cognition and the web.
 Considerations for the role of software and the web as global and national infrastructure for cultural heritage content and services
- Stories about the history of designing online communities.
 Focusing on values and ideology. Becoming more critical of the things we take for granted. Turning tools that are "Ready-to-Hand" to be "Present-at-Hand."
- 4. Shifting to One Big Library Mindset: A practical turn, trying to apply lessons from 2 and 3 to how we can make LAMs part of global network of content and services that serve and enable our local users.
- 5. Curating in the Open: Further to an individual example, showing how some of these ideas work in one instance.
- Ok, history lesson accomplished. Next up, is an attempt to make something of the results of that history lesson for going forward for libraries archives and museums. In this case, I'm going to pick up an idea that I keep running into every few years called "One big library"
- I think this concept is how we can band together to make sure Libraries, archives and museums have a seat at the table in establishing the digital infrastructure of community memory. To create the ethical *infrastructure of enable* instead of the authoritarian and manipulative *infrastructure of control*. There is work to do to make sure that community memory remains a public resource and a public good.

5 THINGS

- 1. One Big Library Mindset
- 2. Staffing one Big library
- 3. Global knowledge base as local resource
- 4. Local contributions to the global knowledge base
- 5. Curating in the open
- One Big Library Mindset
- Staffing one Big library
- Global knowledge base as local resource
- Local contributions to the global knowledge base
- Curating in the open

"As Wendy Newman says, it looks like there are many different kinds of libraries (public, academic, school, national, medical, special) but really there's just **One Big Library with branches all over the world**."

Allison-Cassin, Stacy Denton, William. One Big Library, 2009 http://hdl.handle.net/10315/2501

- Here is a blurb about One Big Library from a conference I participated in by that name from 2009. "As Wendy Newman says, it looks like there are many different kinds of libraries (public, academic, school, national, medical, special) but really there's just **One Big Library** with branches all over the world."
- The point here is that libraries, archives and museums can and should be thought as a global network and a global resource. There is really one collection documenting civilization, it is just managed and organized by different people around the world serving different communities. Similarly, this global network of institutions provides access, job training, helps people manage their personal photo collections. All kinds of collections, and all kinds of services, all of which could be better knit together.
- It's just that you have to squint to see it that way. All too often libraries, archives and museums think of their collections as what they have onsite, when all the books in the internet archive are functionally a part of their collection too.
- There is work to be done to shift our mindset, in several areas

Do you adequately staff the busiest parts of your library?

- It's still largely the case that for libraries archives and museum the web is thought of as an extra thing.
- A recent post from David Lee King of the Topeka Shawnee county public library asked, "Do you staff the busiest parts of your library"

2015 Topeka Shawnee county public library Stats

• Door count: 797,478

Meeting room use: 137,882

• Library program attendance: 76,043

Art Gallery visitors: 25,231

Website Visits 1,113,146

What's the Most Visited Part of your Library? David Lee King http://www.davidleeking.com/2015/08/04/whats-the-most-visited-part-of-your-library/

- King then provides a rundown of the stats for his library. 800 thousand people came through the doors, 76 thousand participated in programs and 1.1 million users visited their website.
- Of course, these are all apples and oranges, but I'd hazard to guess that, like most institutions, a tiny fraction of their staffing goes into what it is on the web. In general the web is thought of as an extra thing, when increasingly it should be a core part of our efforts.

GLOBAL KNOWLEDGE BASE AS LOCAL RESOURCE

The contents of the web, 1 billion creative commons licensed works, Millions of digitized objects from libraries, museums and archives, and a wealth of other knowledge is available to every library user. Can we help them use it?

- The contents of the web, 1 billion creative commons licensed works, Millions of digitized objects from libraries, museums and archives, and a wealth of other knowledge is available to every library user. Can we help them use it?
- There is a global collection available over the web, and if we shift to thinking about how to curate, steward and provide access to that content together we significantly amplify what every library provides.

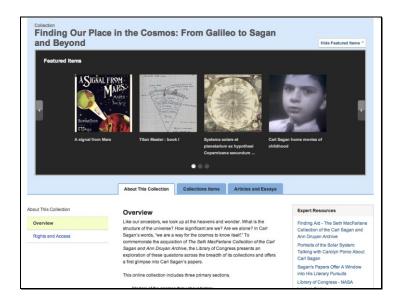
LOCAL KNOWLEDGE CONTRIBUTED TO GLOBAL KNOWLEDGE BASE

Through developments like the Digital NZ, DPLA, Europeana, Wikipedia, the Internet Archive etc. libraries around the world have the ability to share unique, local knowledge, creative works, and expertise back to the global knowledge base.

- Through developments like the Digital NZ, DPLA, Europeana, Wikipedia/Wikimedia, the Internet Archive etc. libraries around the world have the ability to share unique, local knowledge, creative works, and expertise back to the global knowledge base.
- These efforts are still really just the tip of the iceberg. The possibilities for establishing networks and services where libraries archives and museums pool their resources to establish national and global networks and infrastructure could happen in practically every are of service. That is, shared collections are great, but one can imagine the same kind of network effects playing out in practically all areas of work in our institutions.

ROADMAP FOR THE TALK

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- Conceptual frameworks for memory, cognition and the web. Considerations for the role of software and the web as global and national infrastructure for cultural heritage content and services
- 3. Stories about the history of designing online communities. Focusing on values and ideology. Becoming more critical of the things we take for granted. Turning tools that are "Ready-to-Hand" to be "Present-at-Hand."
- 4. Shifting to One Big Library Mindset: A practical turn, trying to apply lessons from 1 and 2 to how we can make LAMs part of global network of content and services that serve and enable our local users.
- 5. Curating in the Open: Further to an individual example, showing how some of these ideas work in one instance.
- Ok, so we are doing great. Powering through. That was really the big ideas part of the talk, I'm going to switch gears a bit and share a story that I think illustrates a related idea that can illustrate one way forward in this area. If we shift more and more of our internal processes to become external ones.



In 2013 I spent 60% of my time at work, back at the Library of Congress, curating an online exhibition/collection/hypertext thing. It focused on contextualizing the Carl Sagan papers in the history of astronomy and notions of life on other worlds as one could find it from across The Library of Congress collections.

loc.gov/collections/cosmos

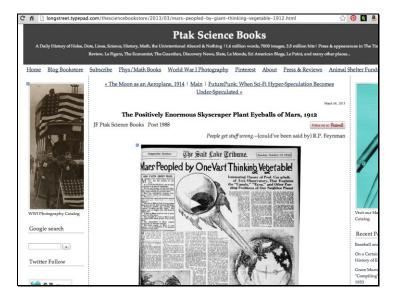
- You can check out the online collection here.
- I think what I made there suggests points about how to compose such online things. Through the process of working on the collection, I stumbled into something that has considerable potential to impact the way we should go about doing the work of creating such thematic narrative explorations of content in digital collections of libraries, archives and museums.
- The 110 items in the online collection from the Sagan Papers were things I had to steward through the internal digitization process of the organization. Aside from the peculiarities of how those workflows work in my particular organization these are not particularly interesting. What I think is far more interesting, is the 190 other items I was able to incorporate from across LC's collections. Some of these were digitized for this project, but the bulk of them were already digitized and I was able to dip into those reservoirs of material and surface some real treasures.



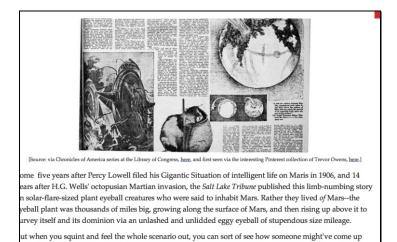
A big part of the interesting story about the idea of life on other worlds is that, for a good while, it was completely reasonable, if not expected that there would be intelligent life on the other planets in our solar system. One great episode in this story is the history of the Martian canals. Knowing how big of a topic this would be for popular press I realized I could turn to Chronicling America, the website for a partnership between the National Endowment for the Humanities, the Library of Congress and a network of libraries and archives from around the country to provide access to millions of digitized newspapers. I knew there would be a good bit of material here, and I was thrilled to find that a search for martians in the millions of digitized newspaper pages from 1836 to 1922 turned up a bunch of pieces to explore. So I noted the pieces in this search that were particularly relevant for the collection. Instead of keeping these in a document on my workstation though, I went ahead and tried to just use Pinterest to keep track of them.



- I made pinterest boards for each of the thematic sections of the collection I was working on.
 Here is an image of free and publicly available materials from across LC's digital collections
 related to ideas of life on Mars. I liked using pinterest for this as it created a visual way for me
 to track and organize these things. Since it was all public, it seemed like it would be fine to
 track these public materials using a personal pinterest account. It had an interesting side
 benefit too.
- I started using pinterest for this purpose because it was easy, but it being public had great secondary effects. As you can see here, the board I started on Mapping Mars & Life on Mars ended up with 191 followers. It's not a part of any official anything, but it turned out that many of the historians of science and folks interested in this topic who follow me on twitter were quite interested in seeing a lot of the raw material I was pulling together here. I needed to do this kind of aggregation for my own work on the essays and online collection, so it made sense to keep that up and out there for others to benefit from. So when I would tweet out links to these things they would build their own followings.
- Which brings me to the vast thinking vegetable that lives on Mars.



- One of the newspaper pages I found ended up showing up in my RSS feed.
- If you don't read John Ptak's blog and you are into cool quirky history of science stuff you are missing out. He is always sharing interesting finds. As you can see, one day he found the article I found. It wasn't just a coincidence, either.



ith this solution to the Martian canals. Or canali, as they were first described in in 1877 in Italian by the very usy and very astute G.V. Schiaparelli—it was unfortunate that the need for mistranslating the word from

- As you can see from the image, John credited both the Chronicling America site and my Pinterest board in the post.
- Seeing this show up in my RSS feed was an exciting thing. What a success. I set out to use
 pinterest to keep track and organize materials I might work with, but in the process I found
 an audience interested in the topics on pinterest and that rolled into John getting in there
 and not only sharing what I had found but digging in and interpreting and explicating what
 about that article was interesting.
- But it didn't stop there. It turned out that Alexis Madrigal also reads John's blog and that he thought this was interesting enough to take it to an even larger audience.



- From my Pinterest board, to Ptak's blog and from there to *The Atlantic*. At this point, the Atlantic article ended up generating a surge of traffic to the Chronicling America Website. So much so, that one of the project leads from Chronicling America noted the spike and went looking to see where it was coming from.
- The work I was doing to organize my notes, on at that point a project that had yet to be announced had helped to generate a spike in traffic for the online collections. The traffic was nice, but interestingly, it also had the effect of promoting discussion and exploration of the exact set of issues that the essays I was working on were focused on.



Both Ptak's blog post and Alexis Madrigal's piece on The Atlantic are substantive. They contextualize and explore the issues of what it was and wasn't reasonable to think about the existence of life on mars in the early 20th century. To this end, before I had even gotten close to publishing my essays, simply sharing the way I was organizing my resources and tweeting about them had prompted public scholarship exploring the same issues in the same resources.

Take Aways

- 1. Defaulting to Open on the Web Served the Mission
- 2. There is great material on the cutting room floor
- 3. Sharing during the research process encouraged *deeper* use

So, before anyone had even formally announced this project, I was already meeting many of my objectives to spark conversations about the history of ideas of life on other worlds and generating significant use of the Library of Congress collections. I see a few different implications of this process

DEFAULTING TO SHARING SERVED THE MISSION

The research that goes into preparing an exhibition is itself something that can be made into a public project that contributes to the objects of exhibiting materials. Using Pinterest to organize my research made that research into it's own resource.

Sharing the research process publicly served to support the objectives of this online exhibition. Using pinterest to organize my research made that research into it's own resource.

THERE IS GREAT MATERIAL ON THE CUTTING ROOM FLOOR

It ended up that I didn't even use that giant vegetable eye story for the exhibition. It wasn't the right fit in the end. The pinterest boards I made are loaded with items that didn't make the final cut but they still found their own audiences. This is to say, If I hadn't shared the process there is little reason to believe this story would have gotten much attention.

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SHARING OBJECTS IN THE RESEARCH PROCESS ENCOURAGED DEEPER USE

In the thematic essays, I work out what the objects mean and people scroll through and read that. However, just sharing the items I was working with in progress ended up inviting others to take those materials and interpret and explicate them on their own. Intriguingly, less became more there. It helped encourage others to explicate and contextualize.

- In the thematic essays, I work out what the objects mean and people scroll through and read that. However, just sharing the items I was working with in progress ended up inviting others to take those materials and interpret and explicate them on their own. Intriguingly, less became more there. It helped encourage others to explicate and contextualize.
- So I think that underscores how turning inside out some of the ways I worked on something locally made it into a resource that could be used globally.
- Now think about how much better what I did would be if curators around the world did that.
 If the seams came undone for every exhibit on the planet and people could follow along.
 Even better, what if the tool we used to do that wasn't Pinterest, which is here today but likely gone tomorrow, but was instead built from first premises to meet the needs of a use case like that.
- When you start to think like that, I think you are starting to shift into a mindset of one big library. This is just one example, I think the same sort of thinking could work in just about any part of library, archive and museum services.

CONNECTING BACK TO WHAT I'M DOING AT IMLS IN THE NATIONAL DIGITAL PLATFORM

- I mentioned upfront that I'm now cultivating, managing, monitoring and promoting a portfolio of grants at the United States Institute of Museum and Library Services called the national digital platform.
- In my mind, this work is a way of trying to encourage a shifting in thinking and practice that I've tried to make the case for in this talk.
- So I'll leave with a walk through of a few points on the National Digital Platform that I think illustrate how we are trying to make this happen with the hope that you might join in. My institutions mission is national in focus, but the work we support is having a global impact and there are huge opportunities for every part of the globe to both make use of and in many cases contribute to the development of this infrastructure.

The platform isn't an individual thing. It isn't a piece of software, or a website. The platform is what all those things add up to.

First off, the platform isn't an individual thing. It isn't a piece of software or a website. The national digital platform is a way of thinking about and approaching the digital capability and capacity of libraries across the US.

the national digital platform is the combination of **software**, social and technical **infrastructure** & **staff expertise** that provide library content and services to all users ; in the United States.

In this sense, it is the combination of software applications, social and technical infrastructure, and staff expertise that provide library content and services to all users in the US. That is, the national digital platform is a way of thinking about how all of the components and the knowledge required to use and contribute to them interact with other existing platforms (commercial and open) and meet the needs of the library and museum users across the US.

It is possible for every library in to leverage and benefit from the work of other libraries in shared digital services, systems and infrastructure.

As libraries increasingly use digital infrastructure to provide access to digital content and resources, there are more and more opportunities for collaboration around the tools and services that they use to meet their users' needs. It is possible for all libraries to leverage and benefit from the work of other libraries in shared digital services, systems, and infrastructure.



- From this perspective, the foundations of a national digital platform for libraries and
 museums already exist in a range of open source software projects and shared services
 provided by local, regional, and national organizations and institutions. However, because an
 enormous amount of digital library research and development over the past 20 years has
 occurred locally or in small collaborations but not on a national scale, and international
 scales, this platform currently exists as a diffuse set of largely disconnected components.
- Last year we funded 14 projects through the National Leadership Grants for Libraries
 Program. In each of these cases we are seeing members of the library community step up to
 the plate to say they are willing and able to take the lead on developing, coordinating, and
 promoting some aspect of this open source infrastructure and we just received the next
 batch of proposals which will connect to and enhance their work as well.

LIBRARIES ARCHIVES MUSEUMS AS COMMUNITY MEMORY INFRASTRUCTURE

- Our institutions, and their presence on the web, is part of a global infrastructure for community memory.
- Much of the development of online communities and social networks presents a bleak future. A casino driven design that tries to grab users while they are fresh and manipulate them. We have an opportunity to help create the public good infrastructure of enable.
- If we can increasingly see every library, archive and museum as a critical node in national and international networks of cultural memory we can better deploy our resources to work together on shared digital collections, services, and infrastructure.
- If we look at our workflows, like I did when doing my exhibit research, we can find a million small opportunities to turn our work inside out, to invite participation and to share.



- The promise of computer networking technology is and has long been to support an infrastructure of community memory. It's an opportunity that is ours to seize.
- I'm so honored for this invitation, and thank you for your time.