Eulogy for the Information Age: The Future

is Impact Not Access

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Abstract: This is the text of a 2017 address to the ALIA New Librarians Symposium 8. The author takes

on the concepts and language associated with an information approach to librarianship. Particular

attention is put in examining the role of libraries as an answer to access issues instead of an agent of

impact. The Data, Information, Knowledge, Wisdom hierarchy is used to focus the role of librarians on

impact and knowledge over data and information. This shift from industrial scale provision of

materials to information to knowledge requires a new approach to the study of librarians and library

service. A knowledge focus – what has been referred to as the knowledge school of thought in

librarianship-necessitates the use theory of learning, in particular, constructivist concepts of learning.

 Keywords: *knowledge, new librarianship, learning, access*

I realize the New Librarianship in the event's title refers to new to the profession, but I'd like to think of it for my talk as a reference to a new view of the profession. I would also like to let you know that many of the ideas in this talk were strongly shaped by ongoing conversations with Darin Freeburg at the University of South Carolina. The good stuff is his, the bad stuff is my fault.

I also promise that while we are going to start and venture into some pretty abstract places, it all has direct impact on your day-to-day life as a librarian.

In his book *Sapiens* Yuval Harari (2015) talks about major historical movements in the history of humanity. One, he calls the cognitive revolution. About 70,000 years ago humans developed the ability to treat the abstract as reality. Concepts that have little to no connection to our biology such as family, tribe, government, and later nations, corporations, and money allowed Homo sapiens to organize into ever larger and more complex groupings. Where our nearest relatives the apes, can exist in groups of 10's and must create strong interpersonal bonds, mankind could relate to literally billions, as they do in the global markets, and interact with people they never met. In essence because we all believe that a dollar has a certain value, we can purchase a gadget from a woman in China, even though we have never actually met this woman before.

Think for a moment about the communities to which you belong: librarians, Australians, etc. these, in a very real sense exist only in our shared imagination. They have power because we believe they do. If you lose that common belief then currencies become worthless, governments fall, and professions disappear. Put simply, ideas matter and are reality because they shape our behavior.

Why start with our history in talking about "new" librarianship? Because these ideas and abstractions must constantly evolve to survive, but more fundamentally, these abstractions shape us. John Palfrey in his book *Bibliotech* (2015) talks about this when he addresses the dangers of nostalgia.

He warns about out of date notions held by our communities-be they community of scholars, students, townsfolk, or government. Too many hold on to an idea of libraries as quiet book palaces. These ideas are often formed early in a person's life so they may be decades out of date. Worst still, they are often based on the views of people when they were children. He calls for a new nostalgia: a new abstraction around libraries and librarians (Palfrey, 2015).

But we must be careful about the abstractions and narratives that we adopt. They can shape us in unexpected ways. Take the terms we use to refer to those that we serve. Do librarians serve patrons? Users? Customers? This is not a trivial matter. It is not simply a choice, because these words are connected to narratives that shape ourselves and how we interact with the world. We had patrons because libraries once existed as cultural heritage institutions that depended on the patronage and support of gentry. We have customers now, because we live in a commercial society where people are either sellers of services, or consumers of those services.

Is this the relationship we want with our communities? Do we really look at those that pay taxes, or tuition, or overhead as consumers of a product? Or do we want to see a community in which librarians, professor, student, or businessman work together to support the betterment of the community? Are libraries buildings to display books, or community hubs extending a equitable invitation to young and old to learn and participate?

Because here is the trick about nostalgia and abstractions; words and narratives. Not only do they shape us, but we have the opportunity, and I would argue the obligation, to shape them. That's what we are here to do today.

Because it is time for a new shared idea; a new librarianship. One that is informed by our history, but not bound by it. One that aligns ourselves to the needs of today, but in such a way that it positively influences our future. Because you see the core of the current shared abstraction that is

shaping our field is not books or materials – it is the ideas of information. And increasingly it is not even information, it is data.

The problem with this Data'ist approach, as Yuval Harari calls it in his follow up to Sapiens Homo Deus, is that it flattens our views of our communities and those we seek to serve to algorithms and processors, not people and aspirations. Information providers have users that take in data, process it, and enact behavior.

If that sounds too foreign or sterile, ask yourself how comfortable you are with the idea that libraries provide materials to enrich a love of reading? Libraries provide the essential information for citizens of a democracy to make informed votes. Businesses need access to the latest data to improve their bottom line. All of those statements are in the form of data into a process to an action. Great sounding calls to action around intellectual freedom too often talk about opportunity in the market and too little about what it means to be human and have access to knowledge.

It can be hard to see because we live inside this narrative every day in every corner of our lives. We too often have accepted the role of libraries as an answer to access instead of an agent of impact. The narrative is so powerful that we no longer see the difference. Access to information equals positive impact in people's lives.

But I need to step back. I am using terms that have yet to be defined. Oh, you may think they have been defined, words like Information, and data. In truth, however, we use these terms without a deep foundation, and it is causing confusion. I will use the definitions of data, information, and most importantly, knowledge and knowing, that will help highlight the current trends.

- Data are discrete objective facts; or raw measurements and observations, which are unorganized, unprocessed, and do not convey any specific meaning

- Information is the organization and/or processing of data into meaningful patterns

- Knowledge consists of the beliefs, attitudes, experiences, and structures that exist in the mind (subconscious and conscious) and influence behavior

- Knowing is the conscious application of knowledge

There is probably nothing in here that surprises you, though perhaps you are less aware of the term knowing as a verb. It initially appears to be a form of the Data, Information, Knowledge, Wisdom Hierarchy you may have heard about in class. However, the one thing, before we go any further, that we must acknowledge is that all of these terms are defined from the perspective of the individual. That is, what is data, knowledge and so on is ultimately defined by a person in a given context. What I see as data, you may not. What I see as knowledge, you may not.

Why is that important? Because for too long librarians have been focused on the wrong thing. Either we have confused things like books, documents, images, articles, and so on with knowledge, or we have seen information as somehow objective and universal.

Picking up on my earlier point that we confuse access for impact, that is really a confusion with information with knowledge. In the information narrative that pervades our profession we see providing someone with access to information as our job – because we assume that information is power. If we want greater literacy in the outback, we build a library, or even better, lay some fiber, and that community has access to information. Now they can learn and get better…a term we never seem to define beyond: "have better access."

So what if the materials in that library don't reflect the experiences, cultures, or values of that distant community – information is information. Let's ship boats full of books to sub-Saharan Africa when what they need is access to biomedical research trapped behind pay walls. Or let's ship books to the tribal lands instead of providing a platform for their stories to reach the rest of the world.

The author Chimanmanda Adichie (2009) talks about the power of fiction. She talks about how so often the stories of African nations are reduced to war, poverty, and need that soon that is all those in the west see. She argues, what is needed, are stories. Stories of girls coming of age in Uganda, or fathers raising children in Rwanda – we need stories of real life and images of the ordinary so we can connect to Africans as people. So that we can know the peoples of Africa, not simply "be informed."

Because at the end of the day as new librarians, your job is not to inform a community. It is not to provide access to a community. It is to improve a community. A community of scholars, or a city, or a school should be better because of the work you do.

But what is better? Isn't more informed or more connected better? Isn't the ability to access and analyze more data faster better? That's what a data and information narrative would tell us. Yet, what happens if instead of taking those things for granted, we push a bit.

For example, take the concept of information literacy. In an information/data narrative information literacy is the ability to better process information. By gaining greater sophistication in how we evaluate information sources we can make better decisions goes the logic. Except that it doesn't work. Humans keep getting in the way.

Study after study show that if you ask a group how good are they at seeking out information, then run them through expert instruction of information seeking and selection, at the end that group will tell you they are now better…but analysis of their actual performance is unchanged. That's right, for a lot of information literacy work, we are making people feel more confident about poor skills.

But it gets worse. Psychology study after psychology study show us that if someone holds an erroneous idea, presenting that person evidence of the error only leads them to have a stronger belief in the error! Yup, showing someone they are wrong, leads to them being more confident in their error. Unless, and here's the important part, you can get them to acknowledge their ignorance first.

The irony of information literacy, indeed all of education, is that to make someone smarter, you must first get them to accept how ignorant they are. The amazing thing is that this is true of not just individuals, but groups, communities, and societies. No one in the dark ages thought of themselves as ignorant. No one in 12th century Europe walked around saying "if only I knew more, my life would be better," because they thought all that was to be known, was known.

Either it had been discovered in the glories of Rome or it was encoded in the Bible. How to live a good life, how to grow trees, why people die – it was known. It was not until a society first acknowledged that knowing more about botany, physics, chemistry, and anatomy could lead to discovery and a better life that they could extend our life spans, build new machines, and eventually fly to the moon. In order to advance in the possibilities of knowledge, they first had to admit there was much they didn't know – they had to embrace their ignorance.

Think about how this changed the work you do today. Instead of seeing a library as a container of all the knowledge there is – a library became a place to discover new knowledge. Monastic and academic libraries that once held the truth, became college and public libraries that helped scholars and students and citizens invent and grow.

And this wasn't just in the sciences. Humanities blossomed to explore the very nature of our relation to the universe and each other. Rather than referring to a holy book for how we should understand a text, we now stocked journals that fostered conversation among scholars. Education was no longer initiation, it was enlightenment. To be sure, this came at a cost, and not everything about the enlightenment was that enlightened. But it changed the narrative and the world.

It is tempting to see the emerging data'ism and information as an extension of this movement. After all we can now mine data for discovery. Information and information technology seem like new liberators that link people in discovery. However, this is where as a new librarian you must keep a

critical eye, because the danger we must avoid, and I think the one of the central purposes of the field

of information and library science, is to not look to data stores and algorithms as the new holy texts

that hold all the answers.

To be sure, massive scale computing and the explosion in data generating devices have

brought fantastic benefits to our lives. Google allows us to search across trillions of webpages in

milliseconds. Wikipedia allows us as a global society to build an open repository of ideas, histories, and

concepts. Embedded medical devices can allow patients and doctors to monitor and maintain health

anywhere in the world. I am not asking you to dismiss these advances.

The question comes instead when we believe that these advances are always positive (or at

least neutral) and that they are sufficient. Let me take these in turn.

Many of you have smart phones – iPhones or Android phones that allow you to run apps

alongside texting and maybe, if you have to, making a phone call. How much time in a day do you

spend on the Internet using the phone? I normally ask an audience to raise their hands if they use it for

an hour, however given our situation, I'll tell you what I find in group after group. I ask how many are on

the net for an hour and just about every hand goes up: Facebook, Twitter, surfing the web, getting

directions and such. 2 hours, 80% of the hands stay up. 3 hours down to 40%. By the time I hit 5 hours

most hands are down. The real answer is, however, 24 hours a day.

Right now, someone in California knows where you are, probably what you are doing, and most

likely, who you are with. If your phone is on, it is on the net. When there was an earthquake on the west

coast of the US, scientists found that phones and fitness monitors had sufficient fidelity to record the

quake. Scientists at Harvard found that they could determine who had the flu by the movement

patterns of people's phones.

Is this a good thing? Did you realize that? Are you OK with that? Are those you serve OK with that? Every day data collected from phones, and bank transactions, and credit cards determine who will get into college or own a home or get social benefits. These determinations come from algorithms written by people who seek to make money, or save money, or only determine the "right" people for some action. That is not neutral.

Take your home Internet connection. In the US home connections to the internet are overwhelmingly asynchronous – meaning they allow you to download data at a much higher rate than upload. Why? Why is because the assumption is that you will consume more traffic in the form of media, than you will produce. You will watch more YouTube than you upload. Is it a coincidence that the major internet providers also make money on your consumption of media? Not neutral.

And then there is the question of sufficient. Is information and or data sufficient for knowledge? The answer there is clearly no. We've already talked about the annoying ability of human beings to ignore evidence that they disagree with, but we can go farther. Take the 2016 US Presidential election. All of the major media polling data showed one result, that was wrong. Was it wrong because the pollsters didn't know how to do statistics? No, in fact the statistics were extremely complex and had proven successful for over a decade. Was it because there was too little data? Absolutely not. There was enormous time and money spent to get "representative" samples. Was it because the polls weren't believed? Absolutely not, in fact the reporting and media narratives seemed to corroborate the finding of the polls. Then why was it wrong? Simple answer – people. The people who ran the polls started with assumptions of who to talk to, who tells the truth, and how people vote based on demographic information. The data ultimately reflected more about the people who made the polls, than the people they polled.

We have come to assume that more data brings us closer to reality, and that data are neutral. The truth is that data are collected at the direction of people who are biased and working on a shared worldview. Moreover, just as too little data can provide a skewed view of the world, too much data can lose nuance and distinction in a complex reality.

So…if I am asking you to critically look at the data'ist approach, what's the alternative, or at least what modification am I proposing? What is the new nostalgia? The short answer is knowledge.

That is not a squishy concept, feel good concept. We know a lot about knowledge, and the process of knowledge construction – we call it learning. This is also not a Luddite call to go back to the days of Katherine Hepburn reciting Curfew shall not fall tonight in the 1950s.

Instead I am talking about building an engaged relationship with our communities and facilitate a conversation around the hopes and aspirations of that community. Too often we focus on deficiencies – who can't read, who needs economic development, who is college ready? Our data is great at showing us what we are not. We need to know what is the narrative of the community. Do we – the community and the librarian together- want to be an outstanding research university? Do we want to be a literate town, or an engine of economic development, or simply the place with the best quality of life? And no algorithm can define with nuance and passion, ideas like "quality of life."

And this is where we link the abstract with the immensely concrete. To do this is not a simple matter of staffing a building waiting for questions and community. Knowledge is all about learning and that is participatory. It requires us to be in the community, proactively seeking conversations. Reference librarians must be in the classroom, and the lab, and the halls of commerce. Not there to advertise libraries, but to listen to the conversation, participate when we can, but always look to link conversations and communities together.

Cataloging and acquisition needs to be more about knowing what people are trying to learn, than what materials are available. Yes, we can use data such as circulation statistics and holds to do that, but more powerful is sitting with community members and asking them what they are passionate about, and to tell their stories. Every library should have production facilities to capture oral histories, publish the work of the community, and stream out podcasts of community voices. Remember, knowledge is not about consumption, it is about making meaning, and that comes from conversation. Can I go to your library and hear the voices of your people?

Ultimately, we do not have users or customers or patrons. We have people seeking to make meaning in their lives. They do that by reading AND writing. They do that by watching AND sharing. As new librarians, and I hope new librarians who adopt a new librarianship, you are now a corps of community engagement activists. Your job is not about materials or buildings…those are tools. Your job is about people, with your community being your true collection. You are not gatekeepers, but rather weavers of community narratives and understandings. You must be brave in bringing together the discordant voices of our members, bold in reaching out of your comfort zone to make those around you comfortable in sharing and learning. This is our time, we are the right profession, and our communities need us. Let's get started.

<div align="center">References</div>

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