Retiring 2055: Evolution and education in a long library career

Ash E. Faulkner
The Ohio State University
faulkner.172@osu.edu

Abstract
As a librarian at the beginning of her career, the author considers possible near and far-term futures for libraries and librarianship. In this conference proceeding she will discuss her views on the evolving roles of libraries and librarians, possible gap areas in professional development, and possibilities for preparing for evolving patron needs. In exploring the possible future of libraries, the proceeding will examine the views of professional literature, colleagues, and the author’s personal viewpoint. Discussion will include the importance of understanding data and the growing need to understand statistical analysis and software; how to utilize professional organizations and personal networks to address learning gaps; and best bet resources for individual learning pursuits.

Keywords
- future libraries
- professional development
- data

Introduction
There is no industry, or career, that will remain unchanged in the twenty-first century, and libraries and librarianship are no exception. While those close to retirement may leave the profession when it is largely similar to its current state, new-career librarians should be keeping a close eye on current library trends, changes impacting our broader environment and our patrons, and even far-future possibilities. In discussing my financial future with an advisor, for example, my possible future retirement date has been estimated to be some time in the year 2055. How different will libraries be then? How different will the role of librarians be? For those librarians who may still be working, how can they best address any current gaps in knowledge or skills in order to prepare themselves for the most likely possible futures? This paper aims to explore these questions, and posit some answers gleaned from professional literature, informal discussions with early-career colleagues, and from my own observations.

Current Trends in Libraries
There are many trends discussed in the literature which may impact libraries in the near-term future, perhaps chief among them: the growing population of “digital nomads,” the explosive growth of data and its now-ubiquitous nature, experiential retail trends, growing income (and digital) inequality in our country, and the continuing maker movement (American Library Association, 2014). But perhaps the greatest consideration of all is the change currently blooming amongst our patron base: the arrival of Generation Z as newly independent adults. The youngest of Generation Z are still moving through public libraries in their youth, but the oldest are now flourishing in academic library settings and returning to public libraries once more, this time as adults.

Getting Started
How does a librarian start developing partnerships with non-academic departments? It all starts with a conversation that is similar to one between a librarian and an instructor for an academic department. Whereas a librarian may ask an instructor about the goals, challenges and tasks of a particular course, the same questions apply to the director of a non-academic department. What are the
goals of your department? What are the challenges you face? How do you achieve success? Additionally, some other questions can be instructive: How do you reach students? Are you under any university or college mandates? During the conversation, a way that the library could help or partner will likely emerge. Consider “closing” the deal with a leading question. For example, “Would the student tutors benefit from a training session by a librarian on how to effectively use the library resources? Would that help them in their work with other students’ research papers?”

**Generation Z**

“Generation Z” is the name generally settled upon for the generation born after Millennials. While defining any generation is prone to debate, demographers generally define Generation Z as those born anywhere from the mid-1990s to the early 2000s (Williams, 2015). As of 2019, this generation will compose 32% of the global population; they will have a profound impact on all industries moving forward, libraries included (Miller & Liu, 2018). Libraries will need to bear in mind ways in which this generation differs from those that have come before, and how this may impact library services.

So what do we know about Generation Z? Clearly, with the youngest of the generation still in their teens, there is much still to be learned, and the generation will continue to evolve. Marketing research firms, however, are already deep into discussions on the unique qualities of this cohort. Some of the aspects that may have the largest impact on libraries are: the entrepreneurial nature of the generation, their long and established history as online consumers, their financially cautious nature, and the fact that, while they are indeed voracious consumers of social media, they differ from Millennials in a fierce desire for authenticity, rather than curated feeds.

How do these characteristics potentially impact libraries? It would be impossible to theorize all the ways in which these characteristics may have direct and indirect impacts, but some connections seem likely. Having a large, entrepreneurial user cohort may increase the use of related services in libraries, including programming. Or we might consider that the financially cautious nature of Generation Z is leading a significant minority of them to consider foregoing a traditional 4-year college degree, the cost of which has risen 151% from 1978 to 2016, according to the Economic Policy Institute. As a result, it is estimated that Generation Z will make up 40% of e-learning customers by 2020 (Zimmerman, 2017). Perhaps this means libraries should consider how they support entrepreneurial or e-learner patrons, and whether there are opportunities to improve upon, or expand, these services.

The online consumption habits of the generation may lead libraries to adjust their online presence. “Gen Z,” says Marcie Merriman, “want to see the world un-Photoshopped - warts and all. This is evidenced in their affinity for Snapchat, with its spontaneous, temporary photos, over Instagram, which lends itself to self-promotion and the perfect selfie” (Merriman, 2017). So perhaps libraries consider new social media channels, or just more behind-the-scenes authenticity posts on the channels they already occupy. As for their online presence in its entirety, libraries should bear in mind that Generation Z has never known a pre-Internet world, and they are used to instant access to almost any and all content, not only via computer, but increasingly via smartphone and other mobile devices. Considering, as the Pew Research Center reported, “24% of teens go online ‘almost constantly’,” often via mobile devices, libraries need to consider their overall web presence, and especially how many of their access points are mobile-responsive (Lenhart, 2015).

**Trends**

As regards the broader context within which libraries will be operating in the coming years, the American Library Association’s Center for the Future of Libraries has identified 37 significant trends affecting our profession. These trends include demographic shifts, technological evolutions, economic trends, and social movements (American Library Association, 2014). There are likely also trends, of course, that will impact the far future of libraries, that are not yet formed enough to identify.

The growth of the digital nomad population is likely to impact libraries in that it drives a growing need for co-working and co-living spaces. Digital nomads are a population that works and lives without the need to be physically located in any given place (Snedden, 2013). Many of these individuals use this freedom to travel, but they still require working and living spaces as they go, leading to the creation of new companies that provide these nomads with co-
working and/or co-living spaces, generally for a monthly membership fee. Libraries may wish to further consider their use of physical space to cater to these patrons if the trend continues (American Library Association, 2014).

The physical space of the library must also be reconsidered in light of the growth of experiential retail. Big brand-name retailers like Apple and Nordstrom are increasingly shifting their storefronts from primarily sales points to primarily “gathering spaces,” creating greater competition in the area of “third spaces” where the public might spend their leisure time and participate in community activities. Libraries will need to bear in mind that patrons will likely carry over experiences from these for-profit gathering spaces into expectations for library spaces. Libraries may also need to consider how best to discuss with patrons the positive differences between these for-profit third spaces and libraries (American Library Association 2014).

The continuation of the maker movement and the growing income and digital inequality in the U.S. may also impact library spaces. The maker movement often ties in with digital inequality as makerspaces often include the ability for users to experience new technologies beyond the reach of their individual acquisition (American Library Association, 2014). Income inequality often impacts libraries’ programming, as libraries increasingly consider including job skills and financial literacy education in their programming, but there is also the possibility that this trend may impact physical spaces and policies for the use of space. These decisions and policies may include the designation of space as a job services center, or through policies that potentially address the use of library spaces by homeless patrons, such as those addressing offensive body odors or limiting the use of library spaces for sleeping (Mars, 2013). If income inequality continues to widen, these issues could be increasingly pressing.

The continued explosive growth of data will impact libraries in myriad ways, some of which have probably yet to be discovered. Among the impacts of the trend currently at the forefront of thought are issues related to how data is used to shape search results, the acquisition of data sets as information resources, the potential role of libraries in serving as repositories for data sets, or helping researchers to manage and preserve their data, and find other repositories, and the increasing collection and use of data by libraries themselves, particularly patron data (American Library Association, 2014). There is also the question of what sort of programming libraries might be called upon to provide in order to help their patrons navigate this increasingly data-deluged world.

Near Future

In searching for predictions on the possible near future of libraries and librarianship, I explored professional literature, a wide range of opinions available amongst colleagues, and my own ideas. The literature appears to be most preoccupied with possibilities for the changing role of librarians, particularly academic librarians. Colleagues were similarly preoccupied with the role of librarians in the future, but some also considered how libraries themselves might be impacted by near-future trends. My ideas are influenced by my role as an academic subject liaison librarian, and by my status as a frequent patron of my local public library.

What the Literature is Saying

While it also addresses the publisher and vendor landscape, data acquisition and management, and often open access resources, professional and scholarly literature related to the future of libraries often focuses particularly heavily on the future role of librarians. Much of the literature discusses rethinking the role of academic subject liaison librarians and considering if librarians will be seen more as guides to scholarly communication, as integrated instructors, or as research or data production assistants in the future. Another very common theme is the question of how much data expertise (particularly academic) librarians should have moving forward. Is it true (or will it soon be true) that “Everyone’s a data librarian now” as Genifer Snipes entitled her 2018 article in the Journal of New Librarianship?

An emphasis on the role of librarians in the future may be a reflection of the ongoing paradigm shift from libraries as collections-based organizations, to libraries as providers of intellectual capital in the form of librarians’ various areas of expertise. As the Vanderbilt “Report of the Future of the Libraries Committee” emphasized in the implementation of their new strategic plan, moving forward may require “underscoring and reinforcing the shift from libraries
as collections to librarians as contributors to learning, teaching, and research across campus and the global academy” (Future of Libraries Committee, p. 4, 2015). In their 2017 issue brief, Danielle Cooper and Roger C. Schonfeld proposed three potential ways to rethink the role of subject liaisons, though they focused more on working models, than individual roles and skills. Their ideas for potential future models include: integrated macrodisciplinary teams in which subject specialists will be integrated into teams to support macrodisciplines like the humanities, etc., rather than having a single subject librarian expert for each discipline; shared subdisciplinary expertise, a model wherein subject experts would be coordinated across institutions so expertise could be more granularly focused; and shared methodological expertise teams, a model wherein librarians would be organized more on the basis of particular methodological or tools expertise rather than particular subject areas (Cooper & Schonfeld, 2017).

The growth of data services in libraries, and the anticipation that this growth will continue, is nothing new. But there has been a shift from thinking in terms of creating separate data services centers, or particular ‘data librarian’ roles, to the question of whether or not all librarians will have to have data expertise moving forward. Snipes asserted, “...all librarians should be preparing for the day when data-related services become a regular part of their job - assuming that day hasn’t already arrived” (Snipes, p. 29, 2018) and this does indeed appear, more and more, to be the case.

What My Colleagues Are Saying

Unsurprisingly, through conversation solicited by email, my library colleagues echoed many of the themes in professional literature. “I am definitely hearing about data viz and data analysis here...” one colleague asserted. Others discussed how liaison librarians were being encouraged to support open education resources, add scholarly communication duties to their existing roles, and help with data management plans, identifying data repositories, coding, etc. The physical space of the library was also discussed, especially its increasing utilization as study space and as a space for socialization. Most importantly, the theme arose of looking outside ourselves. As regards academic libraries, one colleague articulated, “Libraries are not ends in themselves. They serve the research and learning needs of their universities. The major long-term influence on libraries is how these needs change.” So in studying the future of libraries, we might begin by trying to understand what will influence the future of our environments, and our patrons.

Personal Thoughts

I have no wildly differing views of the possible near future of libraries and librarianship. Data will continue to grow as a ubiquitous presence and newer librarians will need to acquire data skills within their particular subject area(s) of expertise. As Cooper and Schonfeld discuss in their models, I also see increasing inter-campus collaboration in the future, to the point of possible integration wherein librarians across multiple campuses may be combined into a single telecommuting cohort; more granular subject expertise would be possible if librarians across multiple campuses could be called on to provide service to patrons on any campus. This may also serve a general expectation for continuing current levels of service with potentially fewer future resources. Labor costs could be lowered for libraries with fewer professional librarians shared across multiple campuses. I do not mean to assert that this would be an ideal configuration, only a possible consequence of restricted resources.

Possible Gap Areas

Considering these possible near-future scenarios for libraries naturally leads to questioning what skills librarians will need in these scenarios. What gap areas might we see, either in ourselves, or in our profession on a whole? I asked those participating in the presentation. Areas discussed included the need for deeper subject expertise, data discovery skills, data management and preservation, and knowledge of basic statistics. The inclusion of deeper subject expertise as a possible future need did not imply a lack of subject expertise in current liaisons, but rather that there might be a potential future for libraries wherein liaison librarians are able to focus on more narrow areas of expertise and thus dive deeper. Many liaisons currently serve multiple disciplines and cannot be equally well versed in all.

A greater need for data expertise and potentially even a basic grounding in statistics may reflect an
overall consensus on the idea that all librarians will be “data librarians” in the future, expected to know how to find, access, manage, produce, and preserve data within specific fields in order to assist their researchers with quantitative research needs. While coding skills were not mentioned specifically in the presentation discussion, these will likely be a necessity as well, if data acquisition and manipulation are to become an area of expertise in libraries. Some knowledge of coding in R, Python, SPSS, SAS, or other statistical analysis software in use on campus might be extremely useful for a future academic librarian.

Professional Development Possibilities

If we are going to consider possible skill gaps between librarians today and librarians of the future, we should also consider how we might address these gaps. Likely sources for ongoing education include learning through the mentorship and assistance of those in one's personal network; in-person learning opportunities such as workshops, institutes and conferences; and online learning opportunities such as webinars, Massive Open Online Courses (MOOCs) and code academies. In-person opportunities relevant to discussed gap areas might include:

- the North Carolina State University’s Data Science and Visualization Institute for Librarians,
- American Library Association (ALA) – Reference and User Services Association (RUSA) – Business Reference And Services Section (BRASS) programs,
- the Inter-university Consortium for Political and Social Research (ICPSR) Summer Program Workshops,
- or The International Association for Social Science Information Services and Technology (IASSIST) conferences.

Online learning opportunities could include ALA Online Learning offerings (individual webinars and online courses); EdX, Coursera or Udacity MOOCs; courses available via the Library Juice Academy; or code academies including Codeacademy.com. Lastly, we cannot forget books as learning tools. Particular titles mentioned in conversation at the conference included, *The Data Game* by Mark Maier and Jennifer Imazeki, *The Data Librarian’s Handbook* by Robin Rice and John Southall and *Databrarianship* by Lynda Kellam and Kristi Thompson.

Libraries' Distant Future

The distant future is, of course, far more difficult to predict. It could include technology innovations we cannot even conceive of as yet, massive economic or demographic shifts, or even environmental changes. One possibility that is currently much-discussed is the potential impact of artificial intelligence (AI) on virtually all industries, including libraries. In one experiment in 2017, a theological librarian pitted herself against Amazon Alexa for efficiency in answering reference queries. The librarian won, for now, but AI applications are improving all the time, and the possibility that librarians may be replaced by an AI tool, at least for basic reference queries, is entirely within the realm of reason (Sheppard, 2017).

Another technology that may have a particular impact on libraries is virtual reality. It is possible to imagine a future wherein patrons can check out virtual reality immersive experiences, just as they check out audiovisual materials today. Sadly, libraries will not be able to address the digital and technological divide in our society by providing broad access to new technologies through makerspaces and similar programs, if technology moves into the realm of implantable tech. In this scenario, only those able to afford these technological advances on an individual basis will have access. The digital divide would widen.

For Further Reading

For those interested in general futurism exploration, we may conclude with a few resources that explore a wide range of possibilities for both the near and far future. Libraries do not exist in a vacuum and so we can assume that as society evolves, libraries will evolve in tandem. It is worthwhile, then, to consider not only specific library evolutions, but how our world as a whole might be evolving. Some particularly good resources include:

- Google AI blog - [https://ai.googleblog.com](https://ai.googleblog.com)
- Wiley Network Discovery blog - [https://hub.wiley.com/community/exchanges/discover/blog](https://hub.wiley.com/community/exchanges/discover/blog)
Conclusion

As the twenty-first century continues, there is no reason to believe innovation will slow; if anything we must posit that our professional (and often personal) environments will change ever faster, to the point where some argue the rate of change itself is growing exponentially (Kotter, 2011). Libraries cannot afford to be left behind in such a world; either we evolve at the same rate as our environment, or we risk being unable to serve our patrons. Those currently in positions of leadership in libraries should consider where to steer the ship, so to speak, while early career librarians may want to consider how they fit into the possible libraries of the future, and how best to prepare themselves for these altered roles.

Amidst all the uncertainty of trying to predict the future, we can at least be sure of one thing: The libraries of 2055 will not be identical to the libraries of today. As the best way to predict the future is to create it, so they say, the likely best course of action is to keep our eyes to the future, and build those libraries today.

References
2018; Shapiro, 2016). At the University of Tennessee-Knoxville, each and every department is committed to promoting diversity and inclusion in one way or another. The Libraries can serve the campus community by partnering with individual departments to offer and support programs and initiatives in line with these efforts, thus easing the burden to many. The program ideas presented in these proceedings are only a few ways librarians can reach out to the campus community to support international/ intercultural ideas. However, the most crucial point is that it is up to librarians to reach out to departments and offer them what they need rather than asking them what they want. From these experiences, UT librarians have learned to research what colleagues in other academic departments are doing and learn where they are coming from before making offers of help and collaboration.

References