LIBRARIAN AS FUTURIST
CHANGING THE WAY LIBRARIES THINK ABOUT THE FUTURE

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ABSTRACT

Are librarians preoccupied with the future? There are countless books, articles, blog posts, webinars, and conference presentations filled with speculation about what our organizations will become. This is understandable with the emergence of new roles for libraries and librarians as we determine our identity across the digital landscape. This paper offers guidance for thinking about the future. By adopting the cognitive tools and mindsets used by practitioners of strategic foresight, library leaders can position their organizations for greater impact and value. Knowing how to discover, design, assess, and address possible future scenarios is becoming increasingly critical and this skill should become part of our professional fluency.

INTRODUCTION

I have always been fascinated by the story of Rip Van Winkle. Imagine waking up one morning several decades into the future. Undoubtedly this would not only be a disorienting situation but a dazzling one as well. In Washington Irving's classic story, Rip Van Winkle sleeps through the American Revolution. He awakens to find the English colonies are now independent and that the world has become a very different place.

Imagine a librarian from the 1960s — those early days of computers and automation — awakening after the Internet revolution and stepping into our globally networked world. She would find that much has changed: online catalogs, digital indexes and journals, eBooks, metadata, demand-driven acquisitions, mobile devices, mobile apps, cloud computing, learning commons, and so forth. And let us not forget the Web itself!

The last several decades have witnessed immense technical, social, and philosophical advancement. Our time traveler would undoubtedly be bemused by what libraries and librarians have become.

Fast forward to the academic library of twenty or thirty years from now: what might you encounter? What is a collection and how is it used? How is scholarship defined? What types of activities are occurring in library buildings? In what ways has higher education evolved, and how have academic librarians and libraries aligned with these changes?

Rather than offering a prognostication, my contribution is to help augment our approach. The aim of this essay is to consider *how we think about the future*, not what it will become. Preparing for it is critical. The next several decades will demand leadership that is fluent in *change literacy* and *strategic foresight*. As guiding libraries is becoming an increasingly challenging undertaking; embracing the future rather than fearing it enables us to have a better chance at success no matter what disorienting or dazzling change awaits.

DEFINING FUTURISM

History provides us with many oracles, prophets, and soothsayers. But for the purposes of this discussion, the intention of a futurist approach is not to produce a specific prediction. Instead we want to imagine a range of possibilities. In this fundamental principle of futurism, the stated goal is to anticipate several outcomes in order to give full consideration to the opportunities and challenges they each present.[1]

Thinking about the future has become an increasingly important skill. Strategic planning, scenario planning, and long range planning are all key pieces of organizational management. One variation is *strategic foresight*, or the ability to anticipate what will be needed.[2] Influential futurist Edward Cornish emphasizes that "foresight enables us to anticipate many of the risks and opportunities that could confront us, giving us time to decide what to do before we crash into them."[3] In short, building fluency in future-thinking enables us to develop meaningful and achievable long-term goals, along with the strategies for attaining them.

Futurism cannot be reduced to gazing into crystal balls or reading tealeaves; it requires a variety of analytical and creative tools to develop diverse forecasts. But more than anything else, it requires a different mental model. Futurists do not attempt to figure out *what will transpire* but instead focus on understanding *how things could turn out*. This practice involves constructing different possible outcomes based upon several logical, and sometimes random, paths. The effort requires comfort with ambiguity; the act of planning is not about predicting future certainties but preparing for them, no matter which future situation actually unfolds.[4]

It is vital for library leaders to be conscious of their mindset as they gaze beyond the horizon. Futurism warns us to avoid tunnel vision and instead to keep an agile mind open to many alternative futures and to adapt our organizations to thrive in whatever conditions arise.

THINKING LIKE A FUTURIST

The Ancient Egyptians were some of the earliest practitioners of strategic foresight in recorded history.[5] For them, the Nile River was a vital asset, and the ability to accurately predict flood patterns was essential for their success. A bountiful harvest meant ample taxes, high morale, and the possibility of conquering new lands. A drought, however, meant scaling back current ambitions and tapping into food reserves. Today, anticipating environmental impacts, social trends, economic shifts, and technological advancements is a strategic requirement. Many large organizations, from IBM and Google to the FBI and Hallmark, employ futurists to help them imagine what lies around the corner.[6]

THINK BOLDLY. THINK BROADLY.

So, how do futurists do what they do? What is their secret methodology? What is the magical algorithm? For the Ancient Egyptians the color of the River's tributaries was an insightful indicator: clear water meant mild flooding, blue water meant abundant flooding, and green-brown water meant potential catastrophe. Today's futurists use a wide variety of tools. From the Delphi method and phenomenological modeling to circumstantial analogies and cyclical pattern analysis, there is no shortage of techniques. Cornish's seminal book Futuring: The Exploration of the Future offers a great starting point for those interested in a methodological review.

By and large though, the most common approach is *scenario planning*, a practice prevalent in librarianship. A search in *Library, Information Science & Technology Abstracts* reveals twenty-eight articles on the topic published in the past decade. The Association of Research Libraries (ARL) brought much attention to this method in 2010 when it published *ARL 2030 Scenarios*, a set of four visions for the future of academic research libraries.[7] While the content is compelling, the real value of the publication is that, rather than outlining clear assumptions about the future, it instead forces libraries to reflect on where they fit into a variety of information-rich worlds. For further reading on different approaches to the practice, Scenario Planning for Libraries (Giesecke), Scenario Planning: A Field Guide to the Future (Wade), and Reflecting on the Future of Academic and Public Libraries (Matthews & Hernon) are all recommended resources.

With so many approaches to developing scenarios available, planning experts note some practical pitfalls to avoid during the process.[8] One common trap is narrowness, or not thinking boldly or broadly enough about what is lurking around the corner. It is a natural assumption to believe that the future will more or less be similar to today. This focus on preserving the current way of doing things can leave us ill-prepared to act when change is necessary.

Another common problem is that we tend to speculate with only best-case and worst-case scenarios in mind, leaving very little room for thinking about more nuanced possibilities. Experts instead recommend focusing objectively on what factors will change, rather than thinking in terms of whether they will change for better or worse.

A third common pitfall is the temptation to choose one scenario over another. This is a Goldilocks situation in which we select the scenario that best fits our personal interests

and thus deem all other possibilities as irrelevant. Choosing in this way makes us vulnerable by closing off options. In fact, it might actually be better to invest time preparing for unlikely circumstance in order to avoid being caught completely off guard when things do no go according to our preferred plan.

Conversely, futurists recommend that we shift our thinking toward the idea that at any point in time there is not a single future that is certain to develop but an array of possible futures that could potentially unfold.[9] In academic libraries, this approach would force us to look broadly across the entire environment of higher education, not just at students, faculty, and administrators, but also at others who inhibit this landscape: publishers, accreditation organizations, grant funding agencies, technology companies, and so forth. Changes in one part of higher education can create a ripple effect across the sector as a whole.

The Shell Oil Company provides us with a useful case study from business. Discussed in The Art of The Long View, Shell had developed several scenarios around oil production based on social, political, and technical outcomes.[10] When the gas crisis crippled economies in the 1970s, Shell was better prepared than competitors because the company had devised a similar scenario and was well positioned to address the situation.

While the futurist's toolkit includes scenario planning, there is more to the practice than just methodology. Creativity, research, and connecting dots to form new patterns are critical components for success. Here is a sampling of frameworks that futurists use to build their forecasts.

Predetermined Elements[11]
Some insights can be anticipated. Demographic information is the futurist's bread and butter. Looking at how populations are changing in terms of quantity and composition can be a good indicator of what is to come. Just as urban planners rely on this data to address infrastructural needs and resource allocations, we can apply the same strategies to library requirements. For instance, Virginia Tech, my employer, has a stated goal to add one thousand graduate students over the next several years.[12] This demographic change will impact many campus units in different ways: courses and classrooms, graduate teaching assistantships and advising, not to mention library spaces, licensing, and materials. By tapping into what we know is coming, libraries can start making preparations to anticipate needs and problems before they arrive.

Extremes Inform the Middle[13]
Ideas deemed initially too extreme eventually become absorbed by the middle. Take environmentalism. Originally dismissed as a radical fringe movement, sustainability and conversation concepts are core values today for many Fortune 500 companies and non-profit organizations. Book formats are a good example for librarianship. While one vocal extreme clings to print, another pushes for bookless libraries. The futurist must let go of personal bias and see the valuable aspects offered by both sides, knowing that elements from each will persist in the mainstream.

CONNECT DOTS TO FORM NEW PATTERNS.

Think Local, Think Large[14]

Locating good ideas requires us to zoom in and zoom out accordingly. We need to consider our local situation but also remain mindful that much larger issues could be impacting the situation. Futurists strike a delicate balance between looking at particular industries, trends, or situations to see how they might evolve, and contemplating how the various elements interacting with them could cause disruptive change. Decision-making at Shell Oil moved constantly between narrow questions (*Should we invest in a new offshore platform?*) and broad ones related to the world at large (*What's happening in the Middle East?*). Losing sight of important issues is easy if we just focus on the day-to-day and fail to be expansive in our thinking.

Radar[15]

Futurists often talk about using cognitive radar. When something unusual shows up, they pay more attention to it. This noteworthy occurrence could be in the form of a scientific or technological advancement or a social or political movement. Important breakthroughs, however, are not always readily apparent. For example, the first transistor developed at Bell Labs barely generated any press, though this invention would go on to spur a revolution in portable electronics.

Along with scanning for outlying phenomena, futurists look at ideas from different perspectives. How does a teenager view something differently than a politician or a retiree? Librarians can adapt this perspective-shifting as well. Imagine a change in the curriculum that doubles the amount of writing-intensive courses on a campus. Increased demands on students would likely impact a library's instructional efforts and also the work of the campus-writing center. This change would also likely impact the registrar's classroom assignment efforts, as well as instructional design and learning management system demands. Being able to shift our viewpoint and see the situation from various perspectives, improves our capability to act, as well as our empathy and ability to collaborate with others.

While there are numerous techniques for discovering insights around future scenarios, the most critical part is actually doing something with the data. Ebenezer Scrooge, the miserly grouch in Charles Dickens' A Christmas Carol, is perhaps an aspirational role model in this regard. After reviewing his past and present situation and seeing his future, Scrooge realizes that he needs to make some behavioral changes in order to create a more positive outcome. His outlook, and hence his actions, are altered based upon the apprehension of a future scenario that he wants to avoid. Future-thinking can afford librarians the same ability.

FUTURISTS LOOK AT IDEAS FROM DIFFERENT PERSPECTIVES.

SHIFT YOUR VIEWPOINT.

CHANGE LITERACY

Librarians have long been invested in literacy. Historically this involved advocating for reading, and several decades ago information literacy emerged as a focal point for academic libraries. Today new literacies such as data, visual, digital, health, and financial are taking shape. But with these changes, libraries' motivating force remains consistent: a desire to help prepare people to be active and effective participants in a rapidly evolving society.

In Alvin Toffler's groundbreaking book, Future Shock, he claims, "the illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn."[16] When projecting our educational objectives going forward, perhaps we should consider another form of fluency: change literacy.[17]

Futurists posit that strategic foresight is a skill that can be developed. In fact, they argue that it may provide more important benefits than almost any other skill we can acquire.[18] This practice enables us to anticipate looming risks and potential opportunities. Knowing how to discover, design, assess, and address possible scenarios is becoming increasingly important. In order to make wise decisions, personally and professionally, librarians need to know what they might expect from the future and put plans in motion to optimize outcomes and reduce uncertainty.

While change literacy offers students a competitive advantage as they enter the workforce — the aptitude to monitor information, mine data for strategic insights,

and apply and adapt ideas accordingly — it could also assist in expanding the reach of the library. If the library's legacy identity is as *keepers* of information and their emerging role is as *collaborators* in knowledge production, perhaps another new variant could be as *facilitators* of change.

Granted, many will find this concept of *change advocacy* seemingly out of place coming from librarians, whose reputation is often more associated with collecting the past, rather than pondering the future. But therein lies the potential. Futurism, more than anything else, is about change. It reveals how we think, feel, act and adapt to uncertainty. Through transformations already underway (learning spaces, collection migration, software development, new literacies, new liaison roles, and so on) many libraries are primed to serve as role models for organizational change. Successfully embracing and enacting a future-oriented program will position libraries not only to demonstrate a capacity and comfort with change, but the ability and expertise to help others shape their futures as well.

As higher education faces disruption in the arriving decades, there is a need on every campus for institutional change. While administrators and faculty stakeholders will obviously be deeply concerned and involved with this process, there is a niche that the library could fill. With our roots in and proficiency with information gathering,

LEARN.
UNLEARN.
RELEARN.

organizing, and synthesis, we could serve our colleges and universities by scoping insights, packaging possibilities, and devising future roadmaps. In short, librarians could serve as futurists by providing strategic foresight support to aid success for our parent institutions.

Change literacy offers intriguing potential, from preparing students and faculty to be more competitive to playing a vital new role in assisting with institutional change. While libraries may appear to be veering in a drastically different direction, I believe change literacy heralds a natural progression of the library profession. Librarians would maintain their foundation as stewards of knowledge and merge that expertise with a new role as practitioners of futurist knowledge creation. This transformation adds a new chapter to the library narrative—from places that collected information, to spaces where people used information, to partners that help users imagine future possibilities and design pathways to get there.

FUTURISM, MORE THAN ANYTHING ELSE, IS ABOUT CHANGE.

CONCLUSION
PRACTICE CURIOSITY

In "The Rip Van Winkle Caper," a *Twilight Zone* episode from 1961, a band of bank robbers cryogenically freezes themselves in a cave and wake up a hundred years later.[19] They believe their crime will be forgotten and that they will emerge as wealthy men. The future, however, throws them a curveball. They find that gold is now produced synthetically and their loot is worthless.

A key takeaway from the episode is that values change over time. Things that are important today may not be so in a decade or two. Obviously we cannot know what will emerge or what might fade away, but we, in libraries, can choose to be conscious of the ongoing societal shift ushered in by the Internet and other emergent technologies. Libraries' core services, values, and identities will likely morph in the coming years. In

fact, it has already begun. Ideas such as bookless libraries, merged service desks, and abandoning OPACs would have been decried as heretical not too long ago, yet today they are common professional discussions. Even the act of allowing food and drink in library facilities and providing café service onsite is a radical development over the last twenty years.

The most crucial characteristic of thinking like a futurist is not the ability to predict the future, but rather, it is the ability to be curious. Future thinkers are not tethered to tradition but can gaze openly and engage all possibilities. Librarians tend to get bogged down in professional debates about the future of books, public spaces, cataloging, instruction, and so on, but the futurist would advise librarians to welcome the evolution of

these components rather than feel a need to protect or sustain them. Melvil Dewey himself provides this quintessential articulation of futurist thinking:

> "Most librarians are inclined to make a book something sacred. But we ought to recognize and employ it as a tool to be used not a fetish to be worshipped. Perhaps the library of fifty years from now will have outgrown the present book and relegated it to the museum with the older inscriptions on clay. Our great function is to inform or to inspire, or to please; to give to the public in the quickest and cheapest way information, inspiration, and recreation on the highest plane. If a better way than the books is found we should use it."[20]

Librarians could discuss *ad infinitum* the predictions, proclamations, worries, fears, hopes, and dreams about what libraries are becoming. In fact, as a profession librarians are obsessed with talking about our future. Books, articles, blog posts, conference sessions, and webinars offer a steady stream of speculation. But honestly, all of this speculation does not matter. *We should not concern ourselves with the future of libraries.* Instead, we should focus on the factors driving change within the communities we serve and partner with. What is the future of scholarly communication? What is the future of faculty promotion and tenure? What is the future of undergraduate and graduate

curricula? Of learning engagement? Of research? Of copyright? These are questions that we should be asking, exploring, and building upon. Technologies and social change will impact these areas, causing ripple effects across higher educations and beyond. This is where libraries can apply strategic foresight to deliver new value. What will libraries be in the future? They will become whatever their users need.

In this essay, I attempted to characterize how futurists think. By incorporating some of their tools and techniques, library leaders can better prepare their organizations for programmatic change. The next generation of leaders will inherit many great challenges. By embracing change literacy, they can ensure that they are offering the necessary services and serving as partners and advisers in the scholarly enterprise.

The first step in this process is changing our perspective. Our default reaction to new ideas, problems, proposals, or changes should not be positive or negative, but rather one of curiosity. The librarian-as-futurist embraces an attitude of openness. By investing time in projecting both possible and impossible scenarios, we are not blinded by surprise but instead follow the signals and signposts that we have anticipated. The future-oriented librarian is driven by performance not status. She feels less anxiety about what's waiting around the corner because no matter what it is, she will adapt accordingly. And lastly, the librarian-as-futurist does not sit, wait, and watch for the future to unfold; he is an active participant in shaping whatever it becomes and constantly queries how he can make it better.

BE DRIVEN BY PERFORMANCE.

EPILOGUE
IGNITING THE IMAGINATION

There is a story about a tribesman who is transported from a remote mountain wilderness into a large city.[21] He tours around, and when he returns home tells his peers about a man he saw carrying more bananas than he had ever seen in his life. What is interesting is that the leader does not mention seeing automobiles, skyscrapers, or other features of the modern city. His omission of these items suggests that our experience, as humans, may be limited by what we do not understand or by what we feel is unnecessary. Even while being surrounded by apparent change or advancement, we might not notice or comprehend it. Or stated more bluntly: we see what we want to see.

This observation leads to a very important question: how can we analyze the future when most likely we are unable to comprehend it? Our own biology might be working against us. According to brain-imaging research, the same neural networks we use to envision the future are also used to recall memories.[22] Therefore, the human capacity for prediction is limited by what we already know. The solution is to expand our knowledge and learn about more things. With a richer and deeper experience, we are better able to imagine a vast range of possibilities, understand their nuances, and make more of the associative links that produce the best predictions about the future.

Another element holding us back could be our education. Future-thinking and building scenarios have a lot to do with our cognitive approaches. Research suggests that social scientists, accountants, and engineers have a very hard time thinking about the future because they are trained to avoid "what if" and instead focus on "what is" and "what was."[23] Consequently, cultural ethnographers are often excellent at future-thinking because they are more attuned to uncertainty and understanding multiple points of view.

We are witnessing an interesting shift in the library profession toward more anthropological assessment measures —perhaps this will help us inject new thinking beyond the dominant quantitative mindset?[24] When libraries served more as warehouse utilities, data-driven decision-making was crucial, but now as more of our work increasingly revolves around forming complex relationships and ongoing interactions, a more humanistic approach is required for growth and improvement.

We cannot fully imagine what the future holds in store for us. Personally, I believe we are at the initial cusp of a technological and biological renaissance, but that does not mean we can completely comprehend what that looks like. Early adopters of the telegraph could never have envisioned Skype. Likewise we cannot foresee all the possible uses of the products and services available to us today. Consider that when automobiles emerged, they were considered to be of limited application since there were very few roads outside of cities. Similarly, people underestimated the social impact of Gutenberg's press because few people could read in the 1400s.[25]

While advances such as nanotechnology and the Internet of Things could be early indicators of what is to come, true breakthroughs are often the result of side effects or unexpected jumps in new directions.[26] Automobiles changed more than just how we traveled; they changed where we lived and the type of lifestyles we lead. Previously unimaginable things were now suddenly possible. Similarly, libraries are in the early stages of building new infrastructures. While formats, content, facilities, expertise, and technologies have changed, and will continue to change, our goal remains as consistent as ever: *spread the application of knowledge*. Regardless of what age or era we find ourselves, this is the past, present, and future mission of libraries.

NOTES

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