Mapping the Future: Scenario Planning for the Post-Pandemic Library

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Prelude: Tupaia's Map

A Zoom call in the early part of 2021. Gathered in the virtual meeting are staff from across Pennsylvania's Reading Public Library (RPL), plus representation from the library board, the district consultant supporting library services in the county, and this paper's own author, serving as facilitator. The group are in their fourth month of work on a new strategic plan for the library service, one adapted to the exigencies of the COVID-19 Pandemic.

Currently they are discussing a point of 18th century Pacific history.

Specifically, they are considering an item held in the collections of the British Library, and its interpretation by a group of historical researchers (Eckstein & Schwarz, 2019).

This is "Tupaia's Map", one of two copies of a document originally drawn by Tupaia, a Pacific Islander priest and navigator who accompanied and guided the British Captain James Cook on his travels through the South Pacific.

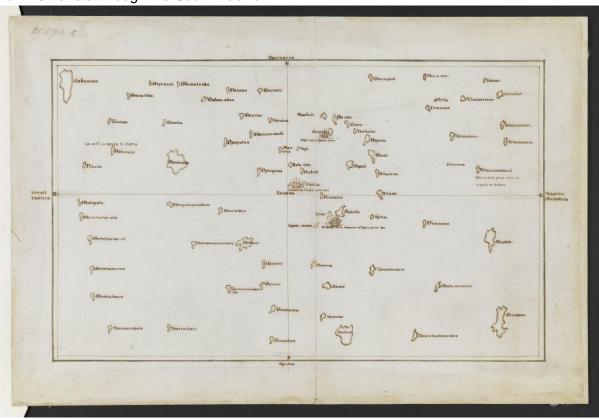


Figure 1. Copy Chart of the Society Islands, Cook & Tupaia, 1769.

The map has been something of a historical puzzle, as scholars sought to accurately identify the islands depicted and understand the methodology by which Pacific geography was represented on the page:

[E]ven those islands which could be identified are hardly where one would expect them according to the logic of a Western map. By the standards of maps in Mercator projection as Cook used and drew them, the islands seem to be all over the place: Islands thousands of kilometers apart appear right next to each other, islands which should be to the south of Tahiti appear in the northern quadrants, small islands can have very large outlines, etc.

Eckstein and Schwarz's account of Tupaia's Map argues that while the map is not accurate per se, its true purpose was to serve as "an auxiliary device for inter-epistemic translation [...] a 'cartographic translation device'" which enabled Cook's crew, navigating by compass and sextant, to reconcile their methods with Tupaia's own (Eckstein & Schwarz 2019b).

In Pacific wayfinding, Eckstein (2020) notes,

The core cognitive strategy has been to imagine the canoe as fixed in space, and to dynamise the world surrounding the traveler. Specific seasonal star, sun and wind positions provided situational and relational bearings for travel, memorized by master navigators with the help of long navigation chants. The resulting bearings on island-to-island voyages needed to be constantly reconfigured, to "the attribution of directionality to all the heterogeneous inputs from the sun, stars, winds, waves, reefs, birds, weather, landmarks, seamarks, and sealife."

The map represents the conceptual space in which European sailors, moving through waters unknown to them, were able to orient themselves through a process of translation, depending on the local knowledges of a man whose mastery of wayfinding stemmed from a constant attention to the interplay of memory, relational bearings, and emerging natural phenomena. Given the imperial enterprise of which Cook's travels were a part, the artefact is also embedded in histories of "discovery" and colonization which highlight questions of power and justice. Whose knowledge is respected, and to what ends is it deployed? Who gets to make maps, and for what purposes, with what consequences?

What does all this have to do with a public library strategising its way through COVID in 2021?

As the RPL group discusses Tupaia's Map, another chart is displayed on the shared interactive whiteboard which occupies the largest part of everyone's Zoom screen. A colourful diagram, like a spider web adorned with drops of morning dew, represents the set of relationships which RPL holds with its users, funders, partners, suppliers, and other stakeholders.

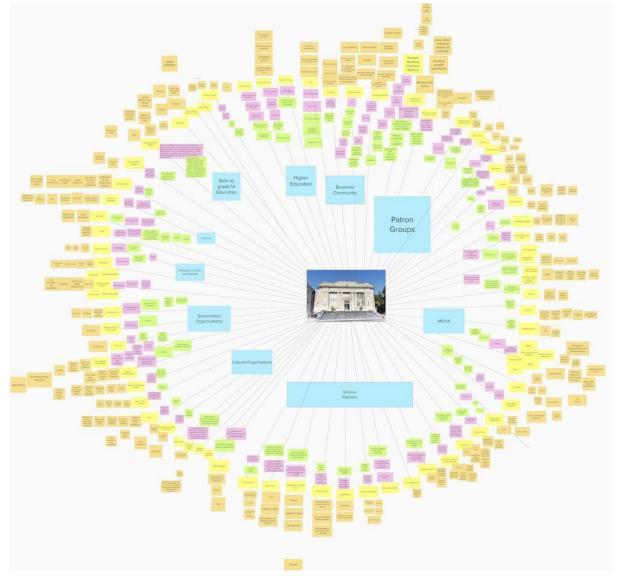


Figure 2. Strategic Map, Reading Public Library, 2021.

Around this web of relationships, a further set of virtual "Post-It notes" represent uncertainties which may reshape the environment in the future.

This virtual display, created collaboratively by the group over a period of weeks, represents an attempt to reconcile diverse perceptions of the environment which RPL currently inhabits, and the uncertainties which might affect the environment in the future. It is part of a process, like Pacific wayfinding, which dynamises the world around us. As with Tupaia's Map, the Reading team seek to bring together different ways of understanding the environment to successfully reach an identified goal.

This is the story of a small US library service using tools from big government and big business to strategically navigate a COVID-affected world, and it has lessons for every library facing uncertainties in times to come.

The Shock That Woke Us Up (Again): The Strategic Needs of Libraries in a COVID-affected world

In March 2020, the *Financial Times* quoted Beatrice Weder di Mauro of the Centre for Economic Policy Research on economists' failure to anticipate COVID-19 and its global impacts. She said:

"If anybody had told you at Christmas that this year would be one [with] an enormous symmetric shock hitting all the advanced countries and that this would cost something like 50 per cent of GDP for a few months or maybe longer . . . the kind of thing that happens in a war, everybody would have said you are crazy [...] There was no imagination to see where something like this could come from." (Sandbu 2021).

The novel coronavirus has reminded us once more that we can never be entirely certain of what the future might hold. Even after the shocks of the global financial crisis, the expectation-confounding upsets of the 2016 US presidential election and the Brexit referendum, we are still so easily surprised. Despite our best efforts to anticipate, forecast, foretell, and reckon with events which are yet to happen, there is simply no way to gather data or evidence from the future until it arrives. Even when we perceive that change is on a particular trajectory we do well to recall that, in the words of Ged Davis, a trend is a trend until it bends...or breaks.

From 2020 onwards, many libraries have found themselves operating in a context which they simply had not imagined, let alone prepared for. What's more, this context has not yet stabilised - assuming it ever will - and in the meantime libraries experience what Ramírez and Wilkinson (2016) have called "TUNA conditions", characterised by turbulence, uncertainty, novelty and ambiguity.

Libraries have faced particular operational and strategic challenges as a result of the pandemic. These have included an urgent focus on digital services as buildings were forced to close and patrons encouraged or mandated to stay home; debates over questions of staff safety between library workers and management; and a desire to demonstrate the usefulness and relevance of library services even when standard ways of operating were stymied - for example, by assigning library workers the task of phoning older and more vulnerable users during COVID lockdowns (Convery 2020).

Libraries' response to the pandemic is further affected by the extent to which the situation is exacerbated or complicated by the policies, procedures, and actions of various bodies in response to COVID-19. Hybrid or remote working policies, for example, may create new complex sociotechnical uncertainties for the institution as it seeks to manage its staff, resources, and services successfully.

These situations can be understood as "feral futures", following Ramírez and Ravetz (2011). Under feral conditions, apparently tame and manageable circumstances can become wild, unpredictable, and irreversibly difficult to manage as a result of our own interventions: wicked problems wrought of our own hand.

Libraries have faced shocks and upsets before, and risen to even the gravest challenges; dramatic recent examples include the much-lauded response of Missouri's Ferguson Libraries to civil unrest in 2015 and of libraries in Christchurch, Aotearoa New Zealand, to the earthquakes which ravaged that city (Finch & Moody, 2020). Still, the global crisis of COVID-19 was almost unprecedented in putting virtually every library on the planet into TUNA conditions which, at the time of writing, are far from over.

One goal of this paper is to provide an example of an approach by which libraries can navigate TUNA conditions, even when the uncertainties around them exist at every level from the local to the global. This approach draws on the well-established practice of scenario planning and the insight, well expressed by Scoblic (2020), that when useful historical analogies do not exist to support our strategic decisions, we can instead "learn from the future by simulating experiences—a process that reduces bias and renders us more perceptive, flexible, and adaptable to environmental change".

The second aim of this paper is to help libraries engage afresh with questions of the value that they create for the bodies that fund them and the communities they serve. At the same time as it plunged the world into uncertainty, COVID has also challenged our understanding of value in many settings and at many levels.

From the county level to the national, governments have sought to make tradeoffs, at times controversial, balancing the health and stability of the economy with the need to take measures that minimise contagion and preserve life. The pandemic response has also raised pointed questions about *who* gets valued: migrant workers living in Singaporean dormitories experienced significantly harsher restrictions than other residents ("Singapore's migrant workers have endured interminable lockdowns", 2021); in Melbourne, Australia, public housing blocks with high immigrant populations suffered strict lockdown measures which led some to suspect discrimination (Rodell and Simons, 2020). Other, less dramatic but more pervasive inequalities also manifested around who was able to work remotely and who was obliged to continue with face-to-face contact even at the height of the pandemic.

At a global level, COVID raised questions of the extent to which international cooperation was valued versus protectionism, as wealthy nations contemplated third booster shots for their vulnerable residents even while parts of the developing world remained entirely unvaccinated. It also called into question the supply chains established in an era of peak globalisation (Ramírez, Churchhouse, & McGinley 2020): was a global economy, designed to value efficient provision of goods, resilient enough to cope with a pandemic, where the prevailing principle moved from "just-in-time" to "just-in-case"?

This global debate speaks to an ongoing challenge for the library sector: defining the value they provide to a community in terms which are communicable and relevant to funders and other stakeholders.

This paper uses a case study of COVID-19 scenario planning from Reading Public Library in Pennsylvania to argue that a hybrid model, drawing on the Oxford Scenario Planning Approach and Value-Creating Systems, is well-suited to the meeting the strategic needs of libraries in a COVID-affected world.

From DEFCON 1 to Dreaming Spires: Scenario Planning in the Oxford Tradition

Like the various technologies, media, and practices of the information age described by R. David Lankes (2021), scenario planning is a strategic process "forged in war" - specifically by the existential threats which nuclear conflict presented in the mid-20th century. Faced with the unprecedented and unparalleled uncertainties of the Cold War, American planners sought new ways to strategise. Herman Kahn pioneered an approach of devising imagined futures, called scenarios, to enrich conversations with leaders.

These "strange aids to thought" provided "ersatz experience" and "artificial 'case histories" when little or no empirical evidence could be gathered to inform decisions about the future (Scoblic 2020). Subsequently, Royal Dutch Shell's Pierre Wack was among the pioneering executives who brought scenarios into the corporate sector, adapting the approach to focus on "oblig[ing decision makers…] to question their assumptions about how their business world works, and lead[ing] them to change and reorganize their inner models of reality" (Wack 1985).

Today, "scenario" is, as Spaniol and Rowland (2019) have noted, a term which is widely-used, yet ill-defined. Their review of scenario literature suggests understanding scenarios as a systematized set of comparatively different narrative descriptions about their users' external context, future oriented and plausibly possible.

Scenario planning is far from unknown within the library sector (see, for example, O'Connor et al. 1997, Hannabuss 2001, O'Connor & Sidorko 2008, Manžuch 2016, O'Connor 2021), and the sector is also far from immune to the more widespread confusion about precisely what scenarios are and the purpose that they serve. Some approaches used with libraries elicit preferred or normative future visions, others generate exploratory scenarios validated by varying criteria of possibility or plausibility. Even simple ad-hoc scenario processes were reported as providing some value to library leaders during the pandemic, despite the lack of formal methodology underpinning them (Cowell 2021).

The method presented in this article derives from the Oxford Scenario Planning Approach developed by Ramírez and Wilkinson. In this approach, scenarios represent alternative assessments of the future context for a particular issue or enterprise, developed for a specific purpose and designed to contrast with the way that the future context is currently being framed.

Unlike some other approaches, this scenario method is careful not to confuse scenarios (the imagined future contexts) with strategy (the actions which a client or scenario user might take in each imagined future context). Ramírez and Wilkinson delineate the immediate "transactional environment [...] which one can influence by interacting with the other actors that comprise it" (p.222) from the broader "contextual environment [...] that is beyond the direct and indirect influence of a strategist [...], an actor (or set of actors)" (p.217).

Contextual factors are used to construct future scenarios through a combination of systems mapping and storytelling, enabling a cycle of reframing and reperception by which the

scenarios stretch users' sense of what is going on around them and what is yet to transpire. The imagined future becomes a vantage point from which to understand the present context afresh, highlighting blindspots, opportunities, and alternative interpretations which may be otherwise unavailable to the here-and-now. For Burt and Nair (2020), the benefit of scenarios may lie as much in the potential for unlearning old frames as developing new ones: "letting go or relaxing the rigidities of previously held assumptions and beliefs, rather than forgetting them."

The Oxford approach has been applied to information institutions before; two of Ramírez and Wilkinson's original case studies feature the European Patent Office, one of the world's largest civilian databases. The potential application of the method to public libraries has also been considered (Finch and Ramírez, 2018), but the RPL case study offered here represents one of the earliest, if not the very first, applications of the method to a public library setting.

Strategy for a Networked World: Integrating Scenarios with Value-Creating Systems

The Oxford method, with its focus on relationships and the "transactional environment", encourages an ecosystemic view of strategy. It draws on Van der Heijden's (1996) notion of scenarios as "the art of strategic conversation"; some benefits of this relational, discursive approach are set out by Kahane (2017), whose experiences mediating political conflicts in South Africa, Colombia, and Thailand exemplify how even near-irreconcilable parties can find common ground in the space of an imagined future.

Strategic attentiveness to relationships can be deepened by integrating Oxford-style scenarios with Ramírez and Mannervik's (2016) value-creating systems (VCS), an approach to networked strategy which builds on the "value constellations" explored by Ramírez and the late Richard Normann (2005).

VCS explores how value of different kinds is co-created by multiple actors in systems of use. These systems may have arisen intentionally or otherwise, and each system sits within larger ecologies or ecosystems. In this framing, strategy becomes a matter of intentionally designing offerings which link actors together to co-create value; collaboration becomes as important as competition, and waste is reduced as the focus is on the well-being of the system. Instead of fighting for "a bigger slice of the pie", VCS strategists work to make the pie bigger for all.

Oxford-style scenarios integrate with the VCS methodology by offering a way to explore and assess the future contexts which a given VCS might inhabit. Future contexts, with different ecosystems, may present new challenges or opportunities for a current or proposed system: will the same value be created by the same actors in times to come?

The collaborative aspect of VCS encourages users to reflect on the distinction in scenario planning between the transactional and contextual environments. Through the VCS process, contextual factors, which are defined as being beyond the control of the user, might prove to

be amenable to influence through collaboration with other actors - and contextualuncertainties thus be transformed into manageable transactions.

Ramírez and Mannervik offer the example of the financial services corporations VISA and Mastercard. These businesses brought together banks, retailers, consumers, providers of telecommunications, and the manufacturers of credit card terminals to create global networks which tamed the uncertainties brought on by new developments in technology, trade, security, and payment standards. The corporations' payment cards were offerings which enrolled many and diverse actors into a system which created value for all, while reducing turbulence, uncertainty, novelty and ambiguity.

As libraries are often very manifestly embedded in larger institutions- local government, universities, corporations, or government agencies, for example - and provide value to their funders, users, and other stakeholders in diverse and sometimes hard-to-quantify ways, VCS provides a useful way of framing strategy in terms of collaboration and thoughtfully designed offers to co-create value.

Additionally, VCS resonates with Lankes' notion of the library as a movement (2019). Lankes argues that libraries have moved through a succession of eras: the book palace, the information centre, the third space, and the community hub (though he notes that "all of these phases of our evolution still co-exist together").

Lankes now proposes that the library reimagine its identity once again, as a movement: "The focus isn't on collections, or access, or places, it is on mobilizing a community for social action. Instead of calling folks patrons or users, or even my personal favorite members, we don't have a name at all – because the walls between "them" and "us" begin to break down."

Lankes offers the example of a literacy initiative in which "the community – the schools, the libraries, the businesses, the parents – came together to create change, to create a movement"

He notes that "[...] the library was part of that movement and could never have done it on its own. And here is the most important part. What worked in Columbia South Carolina will not work in your community. No matter how well we document it, or call it a best practice, or try and turn it into a downloadable toolkit, it won't work. It is meant to guide, instruct, and inspire you. You, the librarian, your job is to see what will work in your community. That's the difference from the era of the book palace. Rather than trying to connect similar to similar – to make a suite of unified and undifferentiated services for all, the networks of today have to train librarians to adapt, not adopt. The network supports and inspires."

VCS, in combination with scenario planning, offers a fresh set of tools to transform this rhetoric into reality, offering a means of visualising, analysing, developing, and intervening in such networks. Like Tupaia's Map, it does not seek to provide a single definitive framework, Lankes' "downloadable toolkit" that "won't work". Instead, it suggests a valuable method of strategic orientation to network-focussed and collaborative goals. The 2021 project to implement a hybrid planning methodology at Reading Public Library, combining scenarios with an attention to value co-creation, explores how these tools can provide a flexible approach to Lankes' challenge of "see[ing] what will work in your community" in a way that "supports and inspires."

Times of COVID-19

The city of Reading, on the Schuylkill River, is the seat of Berks County, Pennsylvania. Notorious in recent years for a 2011 U.S. Census report which identified it as the poorest small city in the nation (Tavernise 2011), it has since moved down the poverty rankings, slowly shaking off past stigma.

The Reading Public Library, serving the city and county, was founded by eminent locals in the 1760s as a subscription-only service (Thomas 2013). The library was shuttered and reborn in several incarnations over its 250-year history, facing numerous financial challenges; a 1971 history of the service bore the title *The Library That Would Not Die: The Turbulent History of the Reading Public Library* (Heizmann 1971).

In 1899, the library became an official department of the City of Reading and in 1910 received financial support from the philanthropist Andrew Carnegie. In the 1960s, its footprint expanded to include the wider district around the city, and new buildings were developed in the 1970s, but budgetary woes continued intermittently. A cut of \$100,000 at the dawn of the 1980s led to the first long-term strategic plan for RPL in 1984, and the Berks County Library System, centred on RPL, was established in 1986.

The dawn of the 21st century saw fresh financial troubles, met through a range of strategies and interventions. Black bunting was draped on empty shelves to highlight the impact of proposed funding cuts in 2009; in 2011, RPL's children's collection was augmented by a donation from the singer Taylor Swift, a native of the county.

The Trump era brought fresh challenges to RPL's operating environment, with Pennsylvania hotly contested at the 2016 and 2020 US presidential elections; in the run-up to the latter, the *Philadelphia Inquirer* presented Berks County as a "microcosm" of Pennsylvania (Brennan 2020), its conservative suburbs and rural areas contrasting with the liberal-leaning urban centre.

As with many public libraries, COVID-19 impacted RPL's services significantly. Branches were closed and online or curbside services were developed at different stages of the pandemic in accordance with guidance from Pennsylvania's Office of Commonwealth Libraries.

The pandemic also caused a major deferral in RPL's strategic planning cycle, which normally would have seen the crafting of a new plan in 2019-2020. RPL's leadership team had noticed the Oxford scenario planning approach after a training course run by the Commonwealth of Pennsylvania's Bureau of Library Development and asked the author of this paper to facilitate a planning process in the early months of 2021. With some adaptations for timescale and budget, the process was implemented between January and July 2021.

Building The Reading Scenario Set

A team of eleven library staff members, board members, and the library service district consultant came together to develop the scenarios and strategy via regular Zoom meetings.

The group began by mapping the transactional or business environment of RPL: every relationship held by the organisation, including client and user groups, suppliers, partners, funders, and other entities. Each relationship was then labelled with the value generated for the library and to the other entity in each relationship. These included not just financial or quantifiable values but opportunities for learning, recognition, recruitment, publicity, and simple pleasure which are generated through the library's relationships with its funders, partners, users, and other stakeholders.

Given the pressures of time and budget, the process did not seek to map or design a true and complete value-creating system on Ramírez and Mannervik's model, but rather develop a diagram which indicated the value exchanges between the library and other entities. This would encourage a closer attention to value and could serve as a precursor to any mature map of the library's value-creating system at a future date.

This map was then taken by the team to various partners and stakeholders within the county, to explore their understanding of the situation and check it against the team's perceptions: did they agree with the value exchanges as depicted? What value did they see being created by the relationships? The metaphor which opened this paper, of Tupaia's Map reconciling different systems of navigation, allowed the team to see the diagram as a tool to frame discussions about the library in terms of relationships and diverse notions of value.

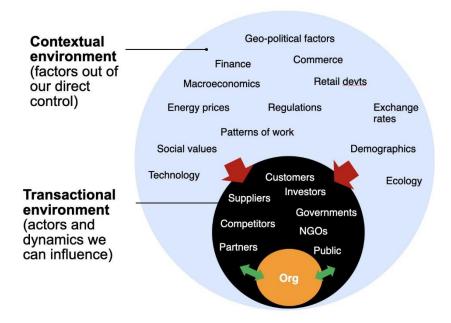
The metaphor of Tupaia's travels, with its discomforting colonial resonances, also enabled the RPL team to reflect on questions of power and privilege as they considered what this map of values revealed and concealed, and whose agenda was being pursued. There was particularly strong representation from some team members around library workers' rights and conditions, and the demographic mismatch between Reading's community and its predominantly white, anglophone staff.

Ramírez and Wilkinson note that scenario planning must be alive to the dynamics between stakeholders in a given issue: "[i]n helping people in groups and organizations to develop their own sense of future it is important to pay attention to power and governances" and that attention to social processes can help avoid "what might be considered the 'colonization of the future' by dominant powers or vested interests [...] when 'the strategic agenda' is imposed from the outside or unilaterally by the powerful" (p.47).

Following this stage, the team of planners returned to the interactive whiteboard to develop the map further (Figure 2). Around the "island" of the transactional environment populated by RPL and other entities, the team added a "sea" of uncertainties: all those factors which surrounded the various actors in RPL's ecosystem, focussing on the forces which drove the decisions of actors other than RPL itself and which were beyond RPL's influence. These included a wide range of upstream issues such as demographics, climate changes, challenges around online disinformation, plus other technological and social changes. This

sea represented the Oxford Scenario Planning Approach's "contextual environment" (Figure 3).





Source: Oxford Scenarios Programme

Figure 3. Example contextual and transactional environments - the Oxford Scenarios Programme.

From the contextual factors which the team had mapped out, they selected two key uncertainties which they felt would transform RPL's business environment in the most challenging and unpredictable ways. These two uncertainties, which would structure the scenario set, were the degree of cooperation or fragmentation in society, and the degree to which civic life was conducted digitally or via physical presence.

These uncertainties served as the X and Y axis of a grid on which scenarios were then located, with participants discussing which points on these axes would generate scenarios that were both challenging and useful. After several iterations, the group decided to explore three potential future contexts for RPL (Figure 4), which were subsequently named "Life in the Clouds", "The Wild Frontier", and "Paris on the Schuylkill".

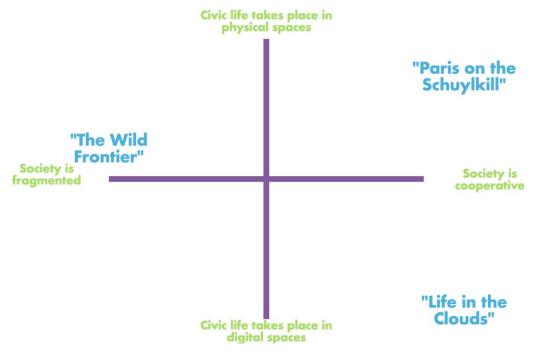


Figure 4. The Reading scenarios grid. Reading Public Library, 2021.

After exploring a range of time horizons, the planning group chose to set their scenarios in the year 2040. By venturing two decades hence, they sought to move beyond the immediate operational considerations surrounding COVID, to find perspectives highly distinct from those available to them in the present, and to better understand how key uncertainties might play out over time. Once the time horizon was established, the team set to work elaborating each of the three scenarios, using their understanding of the contextual and transactional environments to envisage future environments for RPL.

Life in the Clouds

In the first scenario, characterised by a strong sense of trust and cooperation in society, civic, social, and economic life have almost entirely migrated to digital space.

Over 20 years, telepresence and remote working technologies develop, and almost all aspects of daily life now take place on advanced digital platforms. Access to high quality Internet is established as a right, and quality of connectivity has become a significant political issue. Business, politics, education, work, and leisure are all conducted digitally across the county, state, national, and international borders of an increasingly globalised world. The competitiveness and prosperity of Berks County depends on its ability to match the digital access offered in other parts of the world.

This connected society is heavily surveilled, and privacy as we know it has largely disappeared, but people accept this trade-off for the benefits of comfort and convenience provided by "the system that knows what you want before you do."

That is not to say that the system goes without scrutiny. There has been a renaissance of local democracy, brought on by the ease of participation in online

community and civic meetings. Barriers to inclusion have dropped and more people than ever have a voice in how their community is run.

Increasing automation and digitalization mean that it is possible for people to live fulfilling lives without setting foot outside of the doors. The generation who lived through a COVID childhood have adapted well to this. They enjoy "life in the clouds" and are adept at navigating information-rich digital environments from infancy. However, older members of a society - "the generation that misses hugs" - have not coped as well, and a new generational divide has emerged.

The Wild Frontier

The second scenario was characterised by the almost complete fragmentation of civil society, taking place in a mix of digital and physical spaces twenty years hence.

In the wake of the political turbulence of the late 2010s and early 2020s, politics became increasingly polarised and fragmented until the basis for trust and common ground had almost entirely disintegrated. As a result, communities have retreated into "homesteads" or "stockades", both physical and virtual, defined by shared common values and the exclusion of those with whom they disagree.

American social and economic life is characterised by extreme deregulation and a "bunker mentality" whereby people "look out for their own". Berks County has been described as a "Second Amendment playground" and social interactions outside of the "stockade" are informed by caution around the potential for violence. Local government has waned almost entirely, and a weakened Federal government intermittently attempts peace and reconciliation activities in this patchwork America.

To ease this tension, many people have retreated into "walled gardens" created by large corporate employers. These gardens are connected with sister communities around the world: residents of "Amazon-Reading" or "Google-Reading" may have more in common with their remote co-workers in other corporate communities overseas than they do with neighbouring towns and villages. Not just their healthcare but their housing, security, education, and public amenities may be provided by employers as part of a "bundle", and their wages may be paid in electronic "scrip" which can only be redeemed in company stores.

For those within the walled garden, life is safe, comfortable, and there are opportunities for advancement - but only within their specific corporate ecosystem. Outside of the garden, deregulation means opportunities for entrepreneurship and independence - but also increased risk.

Paris on the Schuylkill

In this vision of 2040, people had avidly returned to physical spaces in the wake of COVID-19 and its lockdowns, and there had also been a return to cooperation in civic and social life.

After a period of upsets in the 2020s, people come to believe that "do unto others as you'd have others do unto you" is the only principle that will get them through a time of turbulent economic, social, and ecological change, and they pull together for the sake of the county and their children's futures.

The city and county governments have merged as part of local government consolidation in the 2030s. Universal Basic Income has been introduced and by 2040 has become an accepted norm. This has encouraged arts and creative workers to move to the area surrounding what has become one of the most appealing college towns of the north-east. The wealth gap has narrowed and new economic opportunities have created a new "golden age" for Berks County.

Local colleges, universities, and higher education institutions are amongst the most popular and prestigious seats of learning in the region; they carry significant weight in local politics. Regional industry includes a clean energy gigafactory, largely automated, but with world-class local expertise in next-generation battery technology. Genetically modified crops mean that there has been a resurgence in agriculture, and the region is famed as "Pennsylvania's greengrocer", providing premium fresh produce along the Philadelphia-Camden corridor and beyond.

Tourists from Philadelphia, Harrisburg, and farther afield regularly make the day trip out to "Paris on the Schuylkill" to enjoy its restaurants, cafes, its entirely pedestrianised city centre, and its vibrant cultural life.

The county's planners now face the problems of success: managing real estate prices, addressing gentrification, balancing newly resurgent suburbs with the needs of the city, managing tourism surges, and working with adjacent jurisdictions to address social and economic pressures.

Putting the scenarios to work

Each of these scenarios, as imagined future contexts for RPL designed to challenge assumptions, raised questions about the library's role and identity.

Would RPL even exist as a physical space in "Life in the Clouds"? The team reflected on whether the library would become a "Public Informatics Commission", a civic entity serving as a provider of digital resources and a regulator of digital equity. In such a future, librarians might serve as "community digital navigators", helping people to find their way in a brave new world.

"The Wild Frontier" implied to some of the team that a single library service for Berks County would no longer exist: might each "walled garden" and "stockade" have its own libraries, reflecting their own values and own truths?

The notion of library neutrality is already highly questioned in 2021 (see, for example, Scott and Saunders), and the American Library Association has proposed moving from a rhetoric of neutrality to one of radical empathy (ALA Intellectual Freedom Committee 2021), but

among the RPL planning team, the debate around "neutrality" was still very much live. In this scenario, any prospect of RPL serving as a common ground for politically riven communities seemed impossible.

Reflecting on a future in which funds from tax revenue and the Institute of Museum and Library Service were no longer available, the team contemplated a reversion to the community-organised, independent RPL which had existed before its 1899 incorporation into city government. Would the future look more like the 1760s than anything RPL had experienced in the 20th century?

Finally, "Paris in the Schuylkill" was an appealing future for many, but it presented its own challenges. Did RPL exist as an independent entity in this future, or had it been incorporated into a wider cultural institution blending theatre, cinema, and other arts spaces? Might the library focus more on supporting creative artists and producers rather than collections? Would the library enter into a symbiotic relationship with the city's thriving institutions of higher education? What would a renaissance in urban Reading imply for the wider county?

The RPL planning team reflected on these questions but also took them to the external stakeholders who had responded to the earlier value map, and to the library's board. This, in turn, encouraged responses as to the part that other entities would play in each scenario, and their own sense of what the future might hold. It also enabled the library to reframe their strategy in terms of the role they played within a wider civic ecosystem: as one board member put it, "we need to keep Berks County on the right hand side of that scenario grid, and we can't do it alone."

All Aboard: The RPL Strategic "Railroad Tracks"

Once the scenarios had been workshopped for plausibility with the board and external stakeholders, the RPL planning group met several times to devise a strategy informed by their foresight work. They reflected on present-day signals of change which might indicate that elements of the scenarios were already emerging; considered how inhabitants of each imagined future would reflect on the choices RPL was making today; and made strategic proposals which were tested or "wind tunnelled" against the circumstances presented by each scenario.

Strategic discussions drew not only on the three imagined futures, but also on RPL's history. The group noted that the organisation had weathered deeply difficult times in the past, and had only become a city department 136 years into its quarter-millennium of history. Might it be possible, in futures such as the Wild Frontier, that it would once again separate from public management and funding? Could the initiative and public spiritedness which had seen community members found RPL see it through in the future too? Were there philanthropic heirs to Carnegie?

Additional input came from outside of RPL's operating context, looking to examples from library services around the world. One particularly significant contribution came from "How to be an antiracist librarian", an article by Zoey Dixon (2020), a librarian at Lambeth Libraries in London, England. Dixon's piece emphasised the measures taken in Lambeth to develop a workforce that reflected their community, to the point that over fifty per cent of staff are Black

or Asian. To achieve this, the library service had to find alternative methods to recruit and train library staff, such as foregoing the requirement of a degree-level library qualification, and offering workplace-supported routes to higher education. This fed into a strategic intent at RPL about developing a staff which closely reflected the community they serve.

RPL's planning process led to four key strategic initiatives. These were initially labelled as "pillars" but subsequently renamed "tracks". This honoured Reading's tradition as a railroad town, but also was a significant metaphor: a track, as it was being laid, might have to veer to accommodate features of the landscape on the way to its destination; it might be expected to bear different loads and different kinds of rolling stock over the generations; it might also carry people and goods in both directions. "A pillar," one of the planning team said wryly, "just stands there and keeps the old structure from falling down."

The resulting tracks were:

- Co-Designed Programs, shifting community members from users, borrowers, and attendees to actors who create, co-create, and provide programming via the library;
- Intentional Partnerships, moving from a responsive model which developed partnerships based on inquiries from external actors to one which targeted education, business, cultural, and funding relationships based on desired changes to the mapped ecosystem;
- Staff Reflects the Community recognising that dramatic social and political as well as demographic changes might lie ahead for Berks County and that in any future, RPL should strive not merely to be inclusive but for its workforce to be fully representative of the community it serves;
- Create Digital Opportunities, drawing on the learning from the scenarios to frame RPL's digital offer in terms of support and access to media and devices.

Time precluded development of a complete value-creation system on Ramírez and Mannervik's model, and an impending change of executive director at RPL encouraged a "loose fit" strategy to accommodate the incoming leader's assessments and choices - but the "tracks' were oriented towards future partnership, demographics, and recruitment. The new strategy was framed primarily in terms of relationships, the value they co-create, and the invitations or offerings RPL would make to the other inhabitants of its ecosystem in the future.

Conclusion

Scenario planning for the "post-pandemic" library is not merely a matter of investigating COVID contingencies or short to medium term strategic questions about emergence from the most severe pandemic conditions. Libraries of all kinds may well expect to face ongoing TUNA conditions in the post-COVID, or COVID-affected, world. The declaration of the pandemic's end is itself subject to many uncertainties; as Charters and Heitman (2021) point out, "epidemics are as much social, political, & economic events as they are biological; the

"end," therefore, is as much a process of social & political negotiation as it is biomedical". Even if the pandemic were to be declared definitively over, its legacy would continue to shape the context within which libraries operate.

In the US public library context which RPL inhabits, a wide range of uncertainties exist at the time of writing, including not just budgets and priorities for city, county, and state, but also the future of the federal Institute of Museum and Library Services, the status of the Public Libraries Association, the national political environment, the bundle of informational issues popularly labeled as "fake news", climate change, and many more. Nor are US public libraries unique in facing such uncertainties; almost every information institution will find itself surrounded by such challenging issues on some level.

In such times, it may be unwise either to presume that past experience offers an easy precedent from which to model the future, or to overestimate our ability to shape our environment to our liking.

That is not to say that the future environment is beyond our understanding, or entirely beyond our control. Contextual factors, in Oxford terminology, can be brought within the transactional sphere of influence through collaborative strategy. A farmer might not be able to choose whether it rains or shines tomorrow, and on any given day the weather forecast may prove inaccurate, but, working over the long term in concert with others, that farmer may be able to affect the future climate of the land they and their successors will farm, and adapt the way they farm to mitigate environmental impacts. That way, the land will thrive for generations to come.

In the same way, through an attentiveness to value creation and to the uncertainties which affect their operating environment, libraries need not fall prey to either an anxious embrace of the past or a hubristic belief that they can perfectly tailor the future they wish to inhabit. Rather, they may learn from the Pacific navigators described by Eckstein and Schwarz, attending to the stars, the currents, movements of sea life, memories of the past and anticipations of what is yet to arise, moving in a manner which respects the dynamism of the world around us but remains capable of delivering us to our destination.

The case study at the heart of this paper has been presented in some depth in order to address Lankes' concern about the reproducibility of any given approach to "the library as movement". It is not a "textbook example" of marrying Oxford scenarios with VCS, except insofar as it reflects the quality of *bricolage* described by Ramírez and Wilkinson, "pragmatically making use of tools and techniques [...] developed in other fields" (p.164). In place of "cookie cutter" strategy, it sets out the principles of scenario planning and VCS at a high level, but also details how they were instantiated in the messy reality of hurried, COVID-pressurised planning across Zoom calls in the midst of the pandemic.

Nor does this paper seek to present a triumphal account of strategy moving to operational impact; two months after the conclusion of the scenario process, with Berks County experiencing a surge in COVID's Delta variant, the plan has not yet fully developed purchase on RPL's day-to-day activities. However, the case study indicates how effective and inclusive strategic planning may be conducted even under remote-work conditions, and how strategy can be reoriented towards a collaborative, networked approach. Such an approach is

sensitive to alternate conceptions of value. It frames strategy and future operations in terms of invitations to collaborate and co-create value within a wider ecosystem, resonant with Lankes' "library as movement".

Like Tupaia's Map, any "atlas" of new librarianship for the COVID-affected world must be provisional, practical, locally devised, flexible, and able to cope with the demands of translation between diverse or conflicting perspectives and ways of knowing. It must also be attentive to the questions of inequality and power relations among the map-makers themselves. In creating such strategic artefacts, metaphors and visual aesthetics matter - "Is this strategy composed of pillars or train tracks? How should we draw this map?" - as they shape our perceptions, our analysis, our judgments, and our actions.

The combination of scenario planning with a value-creating systems approach offers a tool to manage the particular challenges facing libraries in a COVID-affected world, and to complete the shift proposed for libraries by Lankes (2019), where the "focus isn't on collections, or access, or places, it is on mobilizing a community for social action [...and] the walls between "them" and "us" begin to break down." Indeed, it may be possible in times to come for libraries to facilitate scenario processes not just for themselves but for the communities they serve (Finch 2019).

By practicing the art of strategic conversation, building relationships and convening new discussions about what is truly of value and what lies ahead, libraries may yet find ways to thrive in even the most challenging circumstances.

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