

Seeing the Forest for the *Trees on Mars*: Locating the Ideology of the “Library of the Future”

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It is a singular irony that a profession so fundamentally concerned with the workings of an ancient institution of memory should be so fixated on—even obsessed with—the future. Yet for many decades now, library practitioners have been generating a vast (and still growing) literature concerned with the “library of the future.” A search for this phrase in the Library, Information Science & Technology Abstracts database yields 456 articles, while a Google Scholar search delivers in excess of 5,600. Sampling this literature reveals it to be replete with hopes for exciting, high-tech possibilities, yet also fraught with an existential fear of institutional and professional obsolescence. In the face of rapid external technological developments, including television, CD-ROMs, personal computers, the Internet, and new media, library practitioners have speculated endlessly on the impact these will have on the academy as well as on library collections, facilities, services—and the very need for librarians.

While much of this literature may be classified according to its technophobic or technophilic tendencies and stated imperatives for radical versus incremental change—including some contrary views rejecting the all-digital future, what is largely absent from these articles and books is a theoretical understanding of the underlying ideological bases of their arguments, notably a tendency to embrace technocratic and neoliberal information-society discourses. The literature is also fairly instrumental in its focus on institutional priorities to the exclusion of extrinsic or transdisciplinary perspectives. Reconsidering these prescriptions for the future of the library through the transdisciplinary lens of *futures studies*—the study of how societies may achieve preferable futures while avoiding potential threats—affords us critical perspectives on their ideological foundations. Such perspectives also compel us to interrogate totalizing discourses regarding technologically-driven futures for their colonizing potential to preclude more pluralistic alternatives.

Case in point: Hal Niedzviecki’s 2015 book *Trees on Mars: Our Obsession with the Future* locates our culture’s fixations in what he calls our *future-first* thinking, which he views as a toxic

and anxiety-generating ideology that leads to what he describes as “anxious, plaintive almost existential questions” about the future—a theme that runs through the LIS literature. While Niedzviecki’s book is not about libraries—indeed, the term “library” does not so much as appear in the index—a review of the “library of the future” literature nonetheless reveals a number of themes consistent with his critique.

In Niedzviecki’s view, our culture’s obsession with the future is no longer about pursuing visions for—much less creating—ideal societies as it is about the goal of “owning” or “seizing” the future by disrupting the present, with the concomitant belief that we must do away with anything that impedes access to the future. Most obvious of the intersections of his thesis with libraries is his observation that individuals “eagerly bring new technologies into our lives with very little consideration for how each hyped, supposed innovation is going to alter our day-to-day [experience, even though] the story of technology is littered with unintended consequences” (224). In a similar vein, LIS scholar Ajit Pyati writes that “at worst, [library] literature is plainly celebratory, often exhortative, and full of vague and dire threats of the results if we do not embrace information technology more thoroughly and enthusiastically”.

While individuals and institutions alike are acculturated to plan for their own futures, Niedzviecki points out that this planning has generally been undertaken so as to be able to continue doing what they have always done—not to disrupt and destabilize it, which is the impulse at the core of the ideology of the future. As a result, Niedzviecki writes, “we are adopting a techno-scientific notion of owning the future as a replacement for the social certainty we crave and have now irretrievably lost” (125).

A review of articles about the “library of the future” published over the past quarter-century reveals this literature to be fairly riddled with the sort of deterministic, totalizing future-first techno-enthusiasm that Niedzviecki describes. Libraries, we are repeatedly told, must undergo “radical reinvention” and engage in “disruption” so as to “become different types of organizations” (Mathews 2014, 17, 22). This requires “abandoning formerly successful approaches and technologies” (Stoffle, Renaud, and Veldof 1996, 213) and “positioning ourselves for constant change” (Mathews 2014, 21), through a “total embrace and

implementation of [the] underlying philosophy and values” of constant change (Stoffle, Renaud, and Veldof 1996, 224). In this way libraries can be better equipped to “be involved in inventing the future” to help “sweep aside the traditional campus-based, classroom-focused approaches to higher education” (Spies 2000, 127; 224).

To ensure that this future is “seized” (Kountz 1992, 40), librarians must “retool themselves” (Drabenstott 1994, 175) because, after all, “to buy the future . . . [t]here really is no other choice” (Stoffle, Renaud, and Veldof 1996, 222). Even now, when by any imaginable standard of the 1980s or 1990s the library of the future has surely arrived, it is still apparently not enough: several of these quotations have appeared in texts published since 2009. Again, Niedzviecki’s words resonate: “The more . . . old ways and patterns we hasten to destroy, the further we seem to get from any kind of meaningful end point where our anxiety abates and we learn to love our new era of endless change” (237).

All of this emphasis on *owning* and *seizing* begs the question: from whom or what? What does owning the future imply about our obligations towards it? [Barbara Adam](#) a futures studies scholar at Cardiff University observes that our ethics towards the future are fundamentally dependent on our metaphysical worldview: that if the future is “owned” and set in motion by the gods or ancestors, then we are compelled to act responsibly *towards* it. However, in the secular modern world, she writes,

we assume to own the future. The future, we say, is ours to take and shape. We treat it as a resource for our use in the present. As such we plan, forge and transform the future to our will and desire. It means we see ourselves as owners, producers and managers of an open future, which we shape to our designs and intentions (112-113).

Further, Adam and sociologist Chris Groves in their book [Future Matters](#) note that the acts of *shaping*, *making* and *owning* the future by necessity means that one is also invariably *taking* it from someone else (88); and that one is ultimately responsible for all outcomes. (Ch. 9).

What might such *taking* mean in the context of future libraries? For what outcomes are we responsible? I would argue that there are at least two potential ways in which the digital library of the future threatens to take – and has already taken – the future from others.

An uncritical embrace of unproven technologies as a pathway to dramatically reinventing libraries has already compromised collections and forever foreclosed future access to older materials. As preservation librarian Randy Silverman argues in his 2016 paper “Surely We’ll Need Backups,” the library profession in the late 20th Century, enamoured of visions for digital libraries of the future and buoyed by an extraordinary level of groupthink and a failure of LIS scholarship, convinced themselves there was a brittle books “crisis” and therefore an urgent need to microfilm and then pulp millions of books, journals and newspapers. For 20 years this federally-funded and ideologically-motivated campaign of “destroying print in order to save it” sliced, scanned and shredded *en masse* until all that remained of historic runs of great American newspapers like the *Chicago Tribune* and *New York World* were housed at the British Library -- and even these were only saved from oblivion because author Nicholson Baker (Author of *Double Fold*) founded a non-profit organization and won them at auction in part with his own retirement funds. While microform companies and advocates claim microforms will endure as long as 500 years, these estimates are based on optimal storage and use conditions which do not always obtain. In any case, microfilm should never have been considered the “object of record” – yet so many originals are now lost forever.

But what about the longevity of digital media? Our profession is greatly occupied with preventing a "digital dark age" and in archiving the fast-changing Web, but what will future generations know of all of the scholarship of our era – including journal collections largely replaced by online databases – in the event of catastrophic technological failure or collapse? Such a possibility is not confined to the realm of science fiction: in July 2012, Earth narrowly avoided being blasted by two coronal mass ejections from the Sun which, had they struck one week earlier when Earth was in a different position in its orbit, would have caused electrical grids all over the planet to collapse as transformers burst into flames, reducing "bookless libraries" such as the one at Florida Polytechnic University to little more than architectural curiosities, and sweeping into oblivion all online scholarship. It would have sent us back to the

19th Century – but a 19th Century with almost no copies of *The Chicago Tribune* and *New York World*.

The other future-foreclosing dimension of the library of the future – and the information age more generally – is that of the essentially unknowable environmental impacts of the decades-long transition to digital information delivery, and which have been thoroughly – and quietly – externalized. The rapid obsolescence of ICT in public and academic libraries has generated vast amounts of e-waste from standalone catalogues, PCs, CD-ROM drives, servers, monitors, VCRs and DVD players, etc., an enormously complex and toxic waste stream which has only in recent years come under regimes of recycling, which themselves may not be all they seem. Only half of the U.S. states have e-waste recycling laws in place, and in Canada an action plan for Extended Producer Responsibility (EPR) was adopted for provincial jurisdictions only in 2009; just this year New Brunswick finally joined the rest of the Canadian provinces in instituting e-waste legislation. Prior to these recent developments, 90% of e-waste in this country was historically sent to landfills or illegally exported to developing countries with no such regulations at all. To give some sense of the scale of the problem, a 2014 article in the *Annals of Global Health* found that

the amount of e-waste produced in 2012 is enough to fill 100 Empire State buildings ... The final destination of nearly 70% of e-waste is either unreported or unknown. Eighty percent of e-waste generated in the United States reportedly contributes to the global “hidden flow” of e-waste; it is not registered meaning it is either unofficially exported [to Asia or Africa], dumped into landfills, incinerated [or] recycled... in scrap yards and homes [often by] by children (Perkins 287-290).

Remarkably, considering this transition has been underway for decades, very little empirical research has been done or data gathered in the LIS literature on the environmental sustainability of the digital library. University of Toronto Communications scholar Sabine Lebel, in her analysis of environmental impacts in the ICT field, finds them “radically under-theorized” despite ICTs constituting the fastest growing waste stream in the world. She considers our technological ideology according to what David Nye refers to as the *technological sublime* – in which ICT is exalted as inherently green, positive and future-oriented away from a dirty industrial past – as well as Rob Nixon’s notions of *slow violence* against poorer populations in

the global south who suffer as-yet unknown health impacts and environmental degradation from the economics of e-waste.

In short, the digital library of the future is now, and has always been, unsustainable ecologically and socially, yet is a vision that has been for decades now pursued with barely-recognized ideological fervour. Adam & Groves would add that “the modern drive towards innovation... has produced fundamentally different correlations of action knowledge and responsibility... contextuality and embeddedness have been displaced by decontextualized, disembodied relations in order to produce a world of pure potential where anything is possible, thus subject to our design” p. 164-5

This is why we instead need to map out future pathways characterized by stability and our present enduring principles rather than constant change. Futurist Ziudden Sardar reminds us that that actual location of futures studies’ discourses is in the present: that our conversations about the future – in this case about libraries -- have a very real impact on their contemporary existences. This is why the ALA’s Center for the Future of Libraries stresses that futuristic technologies and service models must be weighed against the *existing* core values of librarianship <http://www.ala.org/advocacy/intfreedom/corevalues> . Sardar also recognizes the colonizing potential in much of the futures studies discourse, which he sees as inherently Eurocentric, masculine and technologically deterministic. “The future is defined in the image of the West” he writes. “There is an [sic] built-in western momentum that is taking us towards a single, determined future” (182). Diverse knowledge systems, he argues, have the potential to temper and decolonize technocratic impulses.

Through the future-library literature, practitioners have been negotiating the tension between the ideology of chasing the future on the one hand and cherishing the security of tradition on the other. The danger this discourse holds for libraries—in light of Niedzviecki’s analysis—is its pressure to “jettison the past, eradicate stability [and] adopt perpetual change as the only possible meaning. The era of permanently chasing future is the age of perpetual anxiety” (Niedzviecki 2015, 230). Our institutional and professional anxiety is based on “future failure . . . We fear being left behind,” and so we “approach the future with, at best, a kind of compulsory, corporate enthusiasm that occasionally gives way to fatalistic existential dread” (236).

Most troublingly for our purposes as professionals attached to institutions with deep and ancient historical roots, Niedzviecki stresses that this “permanent future” discourse is one that valorizes billionaires such as Amazon’s Jeffrey Bezos or Elon Musk of Space X who are seen as the ones “owning the future,” as opposed to governments or institutions of higher education, which in previous decades led such high-tech achievements as the Apollo program and the development of the Internet. Yet, the more these institutions orient themselves to the values of constant disruption, reinvention, and entrepreneurial individuality, the more they are actually undermining themselves, for they are unwittingly contributing to a discourse in which they are seen to have no place: “the best institutions are the ones laying the groundwork for their own obsolescence” (Niedzviecki 2015, 234).

What we have failed to recognize is that these contradictions, born of imposing future-first instability and disorder on an ancient institution predicated on order and stability, can be self-perpetuating. In imprinting the neoliberal values of disruption and constant change on libraries, they will themselves then tend towards disruption and volatility—ironically making their futures ever more unforeseeable.

Trees on Mars aids us in identifying these potential risks in our future-library discourses, while pointing to the need for transdisciplinary perspectives—such as those of futures studies—regarding alternative pathways to enriched, more humanistic, pluralistic and sustainable discourses about the future of libraries.

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