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Oppositions to Binary: *Technopoly* and **Public Libraries**

Introduction

Published in 1992 social critic Neil Postman's *Technopoly: The Surrender of Culture to Technology* is now over thirty years old. A cursory reading of *Technopoly* warns of a society (at the time of writing - the United States) where the dominant culture "seeks its authorization in technology, finds its satisfactions in technology, and takes its orders from technology" (62). *Technopoly* also explores the impact of technology and the danger it poses when its main proponents, technophiles, instantly "accept the calculus of technological change" (10) with nary "a close examination of its own consequences" (xii). Upon publication one critic felt Postman's views on technology were "too hyperbolic, strident, even paranoid" (Kakutani). Another reviewer felt that *Technopoly* was "amusing, learned, and prickling with intelligence" (Kirkus Reviews). Still, without resorting to reviewer polemics, what the author proposed about technology's impact on literacy and culture, in addition to how it relates to the purview of public libraries, warrants further investigation considering *Technolopy's* 30th anniversary and relativistic importance in the ongoing tension between technology, autonomy, and accessibility.

Written a few years before the explosion of the Internet and decades before the era of the smartphone one could only imagine the vindication (or regret) Postman would feel since the ubiquitous insinuation of digital devices into our daily lives. Even with this mass proliferation and "deification of technology" (62), many still have limited, or no, access to information and

communication technologies due to geographic (urban vs. rural) or socio-economic influences (rich vs. poor). As such these discrepancies became even more pronounced during the Covid-19 pandemic, consequently resulting in "amplifying certain advantages to some, while exacerbating unfair disadvantages for others" (Cocchiarella). Despite all the blisteringly fast, portable, and powerful technologies at (and in) hand, some believe the solution to the digital divide is just to "throw more technology at a problem to solve it" (Cocchiarella). Although educating users in technology is a partial solution, we must also consider Postman's idea that technology alone will not solve all our problems, particularly when negotiating the digital divide. This, I would argue, is where public libraries can help.

The concluding chapter of *Technopoly* provides information, pertinent then as it is now, about how best to survive the "Ozymandias-like hubris and technological promiscuity" (153) of modernity in what Postman refers to as 'Resistance Fighters'. Essentially, Resistance Fighters are informed citizenry "who are, at least, suspicious of the idea of progress, and who do not confuse information with understanding" (152). Resistance Fighters also recognize that gifts from technology come at a terrible cost. To the Resistance Fighter "technology, in sum, is both friend and enemy" (xiii). The purpose of this paper is to not only problematize *Technopoly* from a modern perspective, which benefits from greater hindsight, but to find ways public libraries diminish the effects of the digital divide in technologically starved communities. The intention is not only to investigate the ways in which public libraries bridge the digital divide but will give thought to, at the very least, how we in the librarianship profession can actively create politically and technologically engaged citizenry in the same manner as Postman's Resistance Fighters. Public libraries through programming, education, and providing access to technology can help individuals bridge the digital divide particularly those individuals who lack not only information

and communication technologies (ICTs), but the necessary e-literacy skillsets to navigate a society that is more than happy to leave them behind. To achieve this, I would specifically like to highlight the numerous ways public libraries mitigate the digital divide through community engagements such as *access to materials* (books/e-books/downloadable audio), *community partnerships* (non-profits/local organizations) and *providing access to training and ICTs* (media literacy/career development) (Banks).

Books and Bytes

As well as offering all the latest technological accourrements, to this day, public libraries continue to function as foundational storehouses of knowledge and information. They sustain this by giving patrons access to one of society's oldest technocratic and typographic information technologies – books. Until the invention of the telegraph in the mid-19th century, books were the most significant portable technology that altered the form, volume, and speed of information (Postman 65). Since then, global literacy rates continued to increase significantly. The global literacy rate currently stands at 87%, up from 12% in 1820 with most developed countries achieving a 99% literacy rate (Buccholz). Access to print material, including e-books and audiobooks, whether for distraction, entertainment, or educational purposes, is just one of the easiest and cheapest means for public libraries to confront the digital divide within their community. After all, many believe access to reading materials helps to establish politicized communities since "reading is, by its very nature, a political act" (Neace). Readership values books whether they take the form of the ancient, illuminated manuscript crafted by artisan or the modern, illuminated glow from the LED display of an e-reader. With cheaper printing options available and the slower rates adoption of e-books, printed books will likely be around for quite some time (Wang). Even if users never become entirely comfortable with their latest handheld

digital e-reader, its older handheld analog, the book, will always be available and will not require recharging. Instead, the inverse is true. Books have been known to recharge its readers through Bibliotherapy (Le Beau Lucchesi). Fortunately, one's local library has many books, both printed and digital, readily available to promote healthy reading habits.

Pew Research Center's summary of findings in Library Services in the Digital Age suggests that 95% of responders felt that access to books was both very, and somewhat, important to their community members ("What People Want from Their Library"). comparison, 77% of users felt that free internet and computer usage was very, and somewhat, important to their library experience ("Technology Use at Libraries"). The study took place in 2013. The literature and statistics about the significance of books and technology in libraries has likely shifted. One could only imagine now that users might be favouring technology over books, or both are held in equal esteem. Still, the importance of having access to books is an essential part of the modern public library experience despite the inclusion of modern technologies. Books and technology are not mutually exclusive instead they complement each. Rather, books represent the foundational literacy (and numeracy, to a lesser extent) necessary to challenge the digital divide, whether in the form of children's literacy programs or simply through the circulation of books. Postman argues that communities who support the printed page, and by extension its digital progeny, often espouse a "belief in privacy, individuality, intellectual freedom, open criticism, and community action" (66). Conveniently one does have to look far to find that many of these ideas are representative of the American Library Association's (ALA) core values as well.

A Lack of ICTs, ISPs, and IBMs

As the cost of internet service providers and electricity continues to rise, more people are finding themselves with limited or no access to ICTs. For many, though, having access to ICTs is often the difference between surviving and thriving in this digital age. Access to ICTs for students is particularly important as this "population is made up of 'digital natives' who have grown up under the ubiquitous influence of digital technologies, and for whom the use of ICT is common and whose daily activities are structured around media use" (Ben Youssef et al. 1). In our technologically driven society, the greatest predictor of academic success is through a student's ability to use, and have access to, up-to-date ICTs. Students with unfettered access to, as opposed to those who cannot afford ICTs will always benefit from the "work/leisure balance enabled by ICTs and mobile Internet" which according to Ben Youssef et al. results in markedly higher exam scores over those who do not have access to ICTs (16). Ben Youssef et al.'s research reinforces Postman's warning that those "who have control over the workings of a particular technology accumulate power and inevitably form a kind of conspiracy against those who have no access to the specialized knowledge made available by the technology" (9).

Providing access to ICTs, through technological lending programs, is one of the ways libraries seek to reduce the effect of the digital divide. However, the problem is more than just inaccessibility to ICTs. In fact, the digital divide represents a combination of deficiencies such as a lack of ICTs, internet, and training (Poon). Even with device lending privileges public libraries must still work to inspire patrons who suffer from motivational access. Motivational access is a lesser-known form of digital divide where factors of emotion and anxiety determine whether a customer will buy, use, or access ICTs (Goedhart et al. 2350). Public libraries can alleviate user apprehension, and subsequent motivational access, through the creation of

community programs ranging from basic computer training sessions to more complicated forms of media literacy such as Makerspaces, Digital Innovation Hubs, and Coding. Other than the obvious cost savings on the part of the patron, there is a virtue to having technophobes learn at their local library branch rather than at an educational facility. Hesitant patrons who may have had negative encounters with teachers from their past, or those who are uncomfortable in academic settings, would certainly be more receptive to participate in a community library-led program which can most assuredly promise a non-judgmental, safe, and unbiased experience.

Artificial Intelligence and Vocational Obsolescence

With the threat of Artificial Intelligence (AI) and robotic automation making the jobs of many redundant, those affected will need to find ways to reinvent themselves to make their new careers more future proof. Al/automation taking the jobs of workers is a disruption presently happening across all professions. Still, one must also consider the new jobs that will surface due to the mass proliferation of robotic automation and AI. While automation and AI resulted in the loss of 1.7 million positions in the manufacturing industry since 2000, it is "predicted that AI will create 97 million new jobs" (Thomas) before 2025. This is small consolation for the loyal blue-collar employee pushed out of the workforce only to be humiliatingly forced to apply for EI because of AI. Jobs such as teaching, social workers, or positions that require complex strategic planning and empathy will always be in high demand and essential to society (Thomas). How can libraries support those "accountants, factory workers, truckers, paralegals, and radiologists" (Thomas) severely impacted by the implementation of AI? More importantly, how can libraries help to develop essential skills to not only confront the digital divide but to also give workers "a sense of coherence, a sense of purpose, meaning, and interconnectedness in what they learn" (Postman 186).

Due to lack of funding, time, and staffing issues, libraries cannot, realistically, assure future proofing for their patrons. Libraries must also find ways to make their institutions future proof, too. Libraries can at the very least encourage career development and everyday skills through on-site and virtual programming. The type and variety of skills a public library might offer can never replace specialized training found in often cost prohibitive colleges and universities. Though, a public library could provide "critical gaps" by teaching patrons general skills such as "how to format a resume, how to set up an email account or how to use social media safely" (Banks). Further to this, the Dorothy I. Height/Benning Library (Washington, D.C.) with the support of Byte Back, a local non-profit "which prepares adults for a career in technology" (Poon) launched several community training sessions about how to repair one's broken computer. The same library also offered one-on-one training for seniors (Poon). For seniors, a demographic often overlooked in society, public libraries can provide technological supports through community partners such as the Cyber Seniors program, which provides intergenerational support through digital mentors ("Cyber-Seniors").

Conclusion

This paper speaks to the many ways in which public libraries approach the problem of the digital divide. Nevertheless, the scope of this paper does not seek to produce an exhaustive list of ways that libraries challenge the digital divide. Rather, this paper focuses on how libraries mitigate the digital divide by providing access to materials, building partnerships in the community, and offering training to those most in need. And it engages the topic of the digital divide through the lens of Neil Postman's *Technopoly*, now thirty years old. In hindsight there are many ways where Postman missed his mark about technology. For example, in his preface Postman discusses the advantages and disadvantages of adopting emerging technologies but by

forgetting "to consider the positive impact that technological innovations can have on society, Postman's arguments represent an unbalanced viewpoint, with much left to be considered" (Bourdon). Criticisms aside, Postman's concept of the Resistance Fighter is still valid especially to those caught in the wake of technology's pull. Essentially, the Resistance Fighter answers the call to political action. However, one could easily imagine that our most effective Resistance Fighters manifest through inherent practices of progressive librarianship and through our community librarians, who are:

at least, suspicious of the idea of progress, and who do not confuse information with understanding; who do not regard the aged as irrelevant; and, who admire technological ingenuity but do not think it represents the highest possible form of human achievement (Postman 184).

Similarly, Mark Hudson suggests that as librarians we should "reject technopolistic librarianship, a kind of "gizmology" that places more value on technology and gadgets than it does on books" (5). Although Postman and Hudson's arguments are both valid, the answer is likely somewhere in between. Postman is first to admit that technology is a friend who "makes life easier, cleaner, and longer" (xii). But this friend has a dark side as "its gifts are not without heavy cost" (xii). As librarians, we must carefully weigh these gifts, and the dualistic nature of this friendship, to leverage support in favour of our patronage, all the while protecting them from technology's harms.

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