Notes from the Noodle Factory: 21st-Century Librarianship in Search of New Paradigms

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Abstract

Kurt Vonnegut compared a library to a *noodle factory*, noting that in a society where a majority of people do not really enjoy reading, "Noodles are okay. Libraries are okay. They are rather neutral good news." Such indifference could be tolerated three decades ago when libraries still maintained primacy as central repositories of information. However, in this era of *existential crisis*, and as libraries scramble for "relevance," the urgent question arises: "What new paradigms must be formulated to define the mission of the 21st-century library and delineate how that mission can better support both education and culture?

I-connect, therefore I am

In his October 1, 1976 dedication of the new Shain Library at Connecticut College, Kurt Vonnegut compared a library to a noodle factory, noting that in a society where a majority of people did not particularly enjoy reading, "Noodles are okay. Libraries are okay. They are rather neutral good news." (1981, p. 162). While this indifference could be considered benign three decades ago when libraries still maintained primacy as central repositories of information, today, with information decentralized, or rather, centralized in cyberspace, libraries must now compete for attention, affection, and funding from a public grown increasingly distracted through a veritable tsunami of media that floods the public consciousness.

As libraries scramble for "relevance," seeking ever more exciting and up-to-the-minute ways to involve their communities, the question necessarily arises: Should libraries cater to the distracted imaginations of a public ever more reluctant to embrace the rigor of reading and thinking?

Today's libraries must consider if the stillness of the "noodle factory" is the stillness of contemplation or the quiet of a tomb, and conversely, if the "factory," in attempting to lure new patrons, is becoming simply a boisterous place of bells and whistles and bright shiny packaging. Even more ominous is the fact that as public and school librarians are rising to meet new digital imperatives as library media specialists, offering the expertise vital to promote digital information literacy, library positions are continually being cut to save money.

New paradigms must be formulated that help define the mission of the 21st-century library and delineate how that mission can be fulfilled. To do this, it is essential to first understand the needs of the *iGeneration* (Rosen, 2010), and how their tech-savvy, tech-saturated brains learn and grow. In examining this question it is also crucial to ask: how should we differentiate between information acquisition and deep thinking? Finally, as school librarians in "economically challenged" areas face job loss and public libraries face a future as glorified internet cafés, we must ask, where can we look for paradigms that will allow education and culture to better support each other in order to thrive?

Tune in, turn on, space out

Although the so-called digital divide continues to separate haves from have-nots, thanks to the World Wide Web, today's *iGeneration*, both enjoy and require a seemingly unlimited and unfettered world of information. For some, this wealth has already rendered print resources—mere books—superfluous

"I don't read books," proclaimed Joe O'Shea in a 2008 *Business Week* interview. Of course, O'Shea was not alone; a 2007 study by the National Endowment for the Arts revealed that adults on average spent only seven minutes per day reading. What was somewhat startling about O'Shea's statement was that he made it as a former president of the student body at Florida State University, a philosophy major and a 2008 recipient of a Rhodes Scholarship. O'Shea claimed he had abandoned books in favor of Google, which he could use to "absorb relevant information quickly." In fact, the Rhodes scholar claimed that reading books from cover to

cover was no longer "a good use of (his) time," although he didn't recommend the Google method for everyone; his success, he noted, was due to his becoming "a skilled hunter" online (Tapscott, D. 2008, Nov. $30, \P 3$).

O'Shea's hunting metaphor is telling: It is the picture of a philosophy major stalking the Google undergrowth to spear a useful fact here, bag a helpful statistic there. Why labor through Plato's *Republic* or Aristotle's *Poetics* when the thrill of the hunt is calling?

That adrenaline rush of the chase is what makes the web, particularly in its 2.0 incarnation, both addictive and debilitating, according to Dr. Gary Small, a Director at the Semel Institute for Neuroscience and Human Behavior. In his book, *iBrain: Surviving the Technological Alteration of the Modern Mind*, Small asserts that the "high-tech revolution has plunged us all into a state of *continuous partial attention*," wherein as tech users—skilled hunter, web surfer, gatherer of online facts— we "continuously…scan for an opportunity for any type of contact at every given moment," since "everything, everywhere is connected through our peripheral attention." (2009, p. 18)

This continuous partial attention puts the brain in a "heightened state of stress," Small (2009) points out, with no "time to reflect, contemplate, or make thoughtful decisions." Instead there is only a "sense of constant crisis," as the person stays "on alert for a new contact or bit of exciting news or information at any given moment." (p. 18)

Over the long term, Small believes the resulting rush of stress hormones, cortisol and adrenaline, can be debilitating; the hormones "over time...actually impair cognition, lead to depression, and alter the neural circuitry in the hippocampus, amygdale, and prefrontal cortex—the brain regions that control mood and thought" (2009, p. 19).

Weapons of Mass Distraction

If the online state has potentially destructive effects on the brain, what are its effects on thinking, more specifically, the art of thought? Does the *acquisitive* nature of the web experience complement or cancel out the *inquisitive* nature of contemplation?

For centuries, all thought was associated with interiority rather than exteriority, whether it was Plato famously explaining, "Thinking is the talking of the soul within its self," Descartes pronouncing, *Cogito ergo sum* ("I think therefore I am."), or Benjamin Disraeli's admonition, "Nurture your mind with great thoughts, for you will never go any higher than you think.." By the twentieth century, however, the mind/body dualism had come under attack, labeled as "category mistake" by theorists such as Gilbert Ryle (1949) whose description of Descartes mind-body dualism as "the ghost in the machine" acknowledged physical effects on mental processes.

The twentieth century also gave rise to the computer, a "thinking machine" that has now become an integral part of our lives. Gerd Gigerenzer, director for the Center for Adaptive Behavior and Cognition at the Max Planck Institute for Human Development, suggests, "We are in the process of outsourcing information storage and retrieval from the mind to the computer, just as many of us have already outsourced doing mental arithmetic to the pocket calculator" (2011, p. 148). Gigerenzer views this development positively, locating it within a historical continuum that dates all the way back to the written word's diminution of the importance of memory. For people of the twenty-first century, he asserts, "(i)t is important to realize that technology and mentality are one extended system" (p. 149).

Gigerenzer, however, is a digital non-native, and, despite his rosy predictions of a technological future, maintains technology habits that are practically Luddite by today's standards, checking his email only once per day and keeping his cell phone turned off when he's not making a call. He acknowledges, "Were messages to pop up on my screen every second, I would not be able to think straight" (2011, p. 147).

Yet that is precisely the environment of the digital native. According to a 2010 survey by the Kaiser Family Foundation, on a typical day youths ages 8 through 18 spend an average of 7 hours and 38 minutes immersed in entertainment media, and thanks to their skills at "media multitasking," these digital natives "actually manage to pack a total of 10 hours and 45 minutes worth of media content into those 7½ hours." Messages

are indeed popping up on their (multiple) screens every second; the flood of information is unending when technology and mentality are truly melded into "one extended system."

The result, according to school librarian Paige Jaeger (2007), is "the instant generation. In addition to entitlement, they believe their unalienable rights include instant service, easy assignments, copy-paste reports, and straightforward answers, void of higher level thought" (p. 18). In her examination of metacognition and learning in the library, Jaeger notes that the emphasis on testing has only exacerbated the shallowness of student understanding:

Being raised in front of a television screen and computer monitor with game controllers in their hands, the next generation will need remediation in thinking skills. A search engine has answered all their questions, and most higher-level thought assignments have been abandoned for test prep. (p. 21)

Jaeger suggests that librarians help students to use the library to "build thinking bridges," encouraging metacognition that will allow student patrons to link information to prior knowledge. Her approach echoes that of the AASL's *Standards for the 21st-Century Learner*, which emphasizes the need for students to incorporate original thinking skills as a component of the learning process and to transform information into knowledge by "webbing" or "information mapping." In inquiry-based, problem-solving learning scenarios, information mapping becomes particularly important as a critical thinking tool.

Will these strategies prove sufficient to the task of moving a media-saturated generation beyond chronic, compulsive information acquisition to genuine knowledge seeking? Indeed, will librarians be allowed the opportunity to implement these or any other learning designs? School administrator seeking to balance budgets often see the librarian's position as expendable. In a recent eSchoolNews (2011) article, Laura Devaney reported on the fact that the California school budget for 2011-2012 sent layoff notices to more than 80 school librarians. As Roberta Stevens, president of the American Library Association (ALA), and Nancy Everhart, president of the American Association of School Librarians (AASL) wrote in a letter to the Los Angeles Unified School District (LAUSD):

If the elimination moves forward," wrote. "only 32 of approximately 700 schools will have full-time school librarians and only 10 will have part-time school librarians. This means that approximately 600,000 students will be deprived of one of the most valuable educational resources needed for students to compete in today's 21st-century workforce—a school librarian," (¶5)

In the current lingering recessionary environment, civic libraries are also being eliminated or out-sourced. Public outcry over draconian cuts seems less likely with patrons absorbed in their iPads. A 2005 study found that 71% of the teens surveyed relied "mostly" on the internet for their research projects, while only 24% relied mostly on the library (Harris, 2005, p. 9).

With more and more educational venues migrating online, and with schools placing an ever greater emphasis on test scores amidst continually shrinking budgets, it is clear libraries and librarians face an existential crisis.

Aspire to Inspire

The debate between "information" and "knowledge" is hardly a new one. In his 1979 remarks before the White House Conference on Library and Information Services, historian and Librarian of Congress Daniel Boorstin (1979) made an eloquent stand, warning of the dangers in failing to distinguish between the two:

While knowledge is orderly and cumulative, information is random and miscellaneous. We are flooded by messages from the instant-everywhere in excruciating profusion. In our ironic twentieth-century version of Gresham's law, information tends to drive knowledge out of circulation. The oldest, the established, the cumulative, is displaced by the most recent, the most problematic. The latest information on anything and everything is collected, diffused, received, stored, and retrieved before anyone can discover whether the facts have meaning. (1979, p. 46)

Several years later, John Naisbitt, in *Megatrends* (1982), made the same point in pithier fashion. "We are drowning in information," he said, "but starved for knowledge" (p.24). Since those warnings, media have only proliferated, including the truly "disruptive" technology of the web. However, that proliferation and that disruption are only partially responsible for both the challenges and the opportunities that confront today's libraries. In American libraries, at least, the picture is more complex; finding a workable paradigm for the future may require a look at the past.

Historically, the American library has been both an information centre and a knowledge centre, the first serving a practical function, the second a more inspirational and aspirational one. The aspirational aspect of the American library's mission was made clear from the first, when in 1731 Benjamin Franklin incorporated the Library Company of Philadelphia, the country's first circulating library, and gave the institution its motto, "To pour forth benefits for the common good is divine" (Isaacson, 2003, p. 103).

A century later, with the founding of the New York Mercantile Library and its subsequent rise thanks to its embrace of the novel, and then throughout the nineteenth century as lending libraries proliferated, the practical and aspirational aims of the library were joined: better readers were better citizens and, just as importantly, better workers. Moreover, as Augst (2001) notes, "The laissez-faire philosophy of liberal capitalism had equated the free traffic of goods with the spread of knowledge and the diffusion of cosmopolitan manners and refined customs that marked a people as 'civilized'" (p. 10).

During this time, the status and popularity of the novel, particularly the American novel, continued to grow, and as a staple of American libraries, served as an enhancement to their status. By the end of the nineteenth century, when the 1600 new libraries created as a result of Andrew Carnegie's massive endowment opened their doors across the nation, they cemented the profile and prestige of what by now had become an established cultural agency. More significantly, the influx tightened and strengthened the web of relationships underpinning that agency—that is, the merging of capitalistic and civic aims, and the blending of pragmatic goals with aspirational desires—through the newly energized force of corporate philanthropy.

As libraries became integral to the civic landscape, they also become prominent elements in the visible landscape as well, at a time when civic architecture was coming into its own. As Ryan (2000) noted in her examination of early public architecture, "publicly accessible spaces can have and should have a civic orientation that is direct, palpable, and there for the purposes of reminding us both of who we are and who we might become" (p. 1132-33).

Consequently, as civic structures (in some small cities one of a total of only two or three) libraries took on added status as a symbol reflecting both pride and aspiration. The American library had become a civic temple of knowledge, and that is how it entered the second half of the twentieth century, enjoying a near total monopoly as an information centre, with no real counterpart in its role as a sanctuary of wisdom.

Today, that information monopoly is broken, while the library's status as knowledge center has been weakened by a variety of factors. The novel has lost currency as a cultural signifier as well as a popular entertainment and pastime. Corporations still engage in philanthropy; however, CEOs employing low-wage overseas workers have little vested interest in general literacy here in America. A populace eager for low taxes and small government finds less reason to support civic ventures.

Yet, despite those challenges, the library's status as a knowledge centre remains its best opportunity not only to survive but thrive in the future. Some of the same economic forces that have negatively impacted the library's security have proven equally disruptive to the American economic infrastructure. Old jobs are gone and will not come back. To restore and preserve American prosperity, real thought will be required; civic leaders, faced with intractable employment and economic figures, will begin to look for it. Furthermore, although it has been somewhat diminished by cultural change, the library's "brand" as a knowledge centre remains unparalleled in American life. It has suffered, perhaps, from benign neglect or even complacency, but today's trials can open the way both for the institution and the profession.

To assert the primacy of this valuable brand, it is not enough for librarians to be gatekeepers; managing, marshalling, and mapping information. They must also move to occupy a higher ground, to reassert and reclaim the *aspirational* goals that have been the library's hallmark since its beginning

Yes, libraries must connect with their stakeholders, but they must connect on more than merely a digital level, they must connect intellectually and socially to both the school community and the community-at-large. Just as vitally, they must also be unafraid to dis-connect, to champion eternal values and to create physical, mental and emotional spaces that continue to encourage true thought, deep thought, thought free from modern society's overwhelming tide of distractions. The answer to the library's modern dilemma is not to merely supplant print with technology, for as Rosen (2011) noted regarding the use of technology in instruction, "The point is not to 'teach with technology' but to use technology to convey content more powerfully and efficiently. (p. 14).

In Brockman's (2011) work *Is the Internet Changing the Way You Think?* Richard Foreman stated, "Whereas the internet swamps us in 'connectedness' and 'facts,' it is only in the withdrawal from those I claim a space for thinking" (p. 29). Though the Internet, he postulates, may be clearly 'life-changing,' it is in no way 'soul changing'" (p. 29).

Librarians must continue to insist, unapologetically, that information is not the "be-all, end-all," but rather a means to an end. As Boorstin (1979) noted, "Information, like entertainment, is something someone else provides us. It really is a 'service'....We expect to be entertained, and also to be informed....But we cannot be knowledged" (p. 49).

The "noodle factory" is a place for the "old noodle," a place where a rich life of the mind is encouraged not only through information but through deep wide-ranging thought. Today's hunter-gatherers, on constant alert for a non-stop stream of minutia, are already showing signs of burnout and boredom; some will welcome the library as an oasis. School librarians, as they continue to provide the best support possible for schools caught up in the testing arms race, must also stand for knowledge acquisition as apart from data delivery, and in this, they are likely to find the support of teachers who believe in the same.

School librarians must make a paradigm shift from viewing the library as an information-center (technology driven) to a knowledge-center (knowledge driven), and their role as librarians to be the "knowledge brokers" (Rosen, 2011, p. 14)., aiding constituents in not only identifying and retrieving information, but analysing, synthesizing and assimilating that information into knowledge.

Also, if, as the Hypothesis of Embedded Cognition (HEMC) suggests that "cognitive processes depend very heavily, in hitherto unexpected ways, on organismically external props and devices and on structure of the external environment in which cognition takes place" (Clark, 2008, p. 112; Rupert, 2004, p.393), or as the Hypothesis of Extended Cognition (HEC) postulates, that "human cognitive processing literally extends into the environment surrounding the organism, and human cognitive states literally comprise—as wholes do their parts—elements in that environment" (Rupert, 2004, p. 393), then the environment of the school library itself may be instrumental to a student's cognitive processes.

Regardless, American manufacturing may be in decline, but the "noodle factory" cannot be completely outsourced and should not allow itself to be outmoded. Paradigms aside, from an economic, historic and cultural point of view, there is no group better suited to lead the way in the *new age*, digital or otherwise, than librarians. They simply have to do so.

It is again Kurt Vonnegut who reminds us, ultimately, of the form and function of libraries throughout time:

Meditation is holy to me, for I believe that all the secrets of existence and nonexistence are somewhere in our heads. And I believe that reading and writing are the most nourishing forms of meditation anyone has so far found. By reading the writings of the most interesting minds in history, we meditate with our own minds and theirs as well. This to me is a miracle. The motto of this noble library is the motto of all meditators throughout all time: 'Quiet, please.' (1982, p. 164-165)

Three key learnings:

- There is a need for new paradigms for the 21st-century library.
- Technology must be a handmaiden to information access, not the end-all be all.
- Libraries must be viewed knowledge-centres not merely information centres.

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