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Beyond Literacy: Are Reading and Writing Doomed?

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Introduction

Proposing that literacy is doomed is a provocative and challenging assertion particularly given that libraries and librarianship are fundamentally grounded in the acts of reading and writing. However, “visible language” is simply a technology, albeit a tremendously powerful and successful one, and technologies come and go as their value waxes or wanes.

It is difficult to escape the perspectives imposed on us by literacy. As Walter Ong notes, literacy is a “pre-emptive and imperialistic activity” since it displaces other ways of conceptualizing.¹ While we are children of literacy, we are also prisoners

of literacy. In this regard, Marshall McLuhan has observed, "We shape our tools and thereafter our tools shape us."² However, despite this, it is possible to conceive of a technology or a capacity that would replace literacy. "Post literacy" is defined here as the state in which reading and writing are no longer a dominant means of communication. The central thesis is that just as the powerful capabilities of literacy effectively displaced primary orality, so too is it not only likely but inevitable that literacy will be displaced by a more powerful tool, capability or capacity.

While the idea of a post literate world is shocking and disturbing to some, perhaps many, it is presented here not as a regression into some new Dark Age but rather as a powerful way forward which will dramatically expand our capabilities. Hence, post literacy is a positive and desirable future.

Obviously thoughts about post literacy are purely speculative. This paper is a thought experiment not an objective consideration of the facts. One can easily dismiss these speculations as mere science fiction; interesting but insubstantial and highly unlikely. Perhaps. The history of human communication suggests that literacy itself was unlikely. It is a fairly recent development and only in the past few hundred years has it become widespread (e.g. mass literacy). This is in stark contrast to spoken language which is considered to be innate and is certainly universal in humans.

Why Post Literacy?

Apparently, literacy is under siege. The supposed agents of this threat change over time but the perception remains constant. Television, movies, video games, cell phones and, more recently, the Internet have all been identified as the culprits that rot the brain, desensitize, delude and generally ruin the minds of the young. At the core of much of this concern is the perceived decline of literacy. The media and popular press point clearly to these technologies as the cause of this decline but also, ironically, as the source of the “new literacy.”

While they may be easy targets for the luddites, none of these technologies has exhibited a capacity sufficiently powerful to displace literacy or even create a substantive new literacy. In fact, most are based on a foundation of conventional literacy. The Internet is the largest, most comprehensive information resource ever assembled. It represents the triumph of literacy not its demise. These technologies are not candidates for post literacy. A replacement for literacy will require a greater level of capability and capacity than that of these relatively primitive technologies.

One of the main reasons that literacy is doomed (or is a likely candidate for replacement) is that it is very hard to master. Learning to read and write are difficult, requiring considerable time and attention. Years of schooling and practice are involved. Many of us remain functionally illiterate, while most of us struggle to build and refine our skills over a lifetime. Only a small number of us, the great writers for example, become experts. Visible language is also

notoriously ineffective. While the rich tapestry of written language does add colour, beauty and cultural depth to the human experience, it also erects barriers among people that inhibit understanding. What I struggle to write is often different in meaning and nuance from what you struggle to read. The great conversation across time is difficult, imprecise and highly prone to error and misinterpretation. Literacy is hard won, elitist, and ultimately inadequate for the challenges ahead.

A Seminar Course in Post Literacy

For the past 4 years I have taught a course at the University of Guelph on the notion of post literacy.³ It is part of a series of small seminar based courses available only to first year students. The topics of these seminars are somewhat secondary to the larger objective of assisting new students in becoming more effective learners. As a result, the course uses the topic as a scaffold to build skills in critical thinking, communications, information literacy, study habits and other capabilities important to a successful undergraduate experience.

Over these years, the course has also provided a laboratory for the exploration of post literacy. Many students are shocked by the central thesis and demonstrably concerned that the Chief Librarian is teaching the course and supporting the concept. Reactions span the full range from the incredulous to the excited.

During the course, many of the candidates for post literacy presented here were discussed and debated. The curiosity of the students and their “willing suspension of disbelief” were central to our ability to explore these ideas and to

further nurture their skills as learners . One class published an article based on their deliberations.⁴

Candidates for Post Literacy

What could post literacy be? Options include new technologies, unrealized innate human capabilities, and combinations or mutations of existing capacities. The post literate equivalent of the alphabet could emerge from a number of sources. The considerations that follow suggest a wide array of possibilities, some more plausible than others. Of course, these are the thoughts of a pre-post literate individual. The blinders imposed by literacy may dramatically limit our ability to see much beyond the alphabet.

a) Bio-Computing / Neural Prosthetics

Augmenting ourselves with technologies is very common (e.g. hammers, eyeglasses, automobiles). Embedding computers as neural prosthetics (e.g. for faster processing, larger memory, wireless access, “thought” control) is widely seen as the next stage of human enhancement. Already fMRIs are being used to “read” brain activity allowing people to control devices, initiate actions, and communicate intent. Advances in high performance computers are on track to dramatically exceed the power of the human brain. This could result in some sort of “hyper literacy.” Conversely, the emergence of artificial intelligence (AI) could view literacy as a deterrent and enable a much more effective means to share ideas and emotions that bypass conventional reading and writing.

b) Telepathy

Some of us are telepathic (or at least we can agree that some of us believe we are telepathic). What if telepathy was a capability common to all humans but has remained largely dormant (perhaps for some good evolutionary reason)? Mass telepathy, managed in some way to prevent chaos, would remove the clumsy tool of visible language as a means to understand each other. Telepathy would enable a human connection of unprecedented power and compassion. Dr. Kevin Warrick of the University of Reading, a leading researcher in the area of cyborgs, has proposed “techlepathy” as a possible future: technology enabled telepathy.⁵ As the students in the course suggested. “think MSN in your head.”

c) Hive Mind / Collective Unconscious

The power of integrated intelligence is the promise of the hive mind. It could be thought of as a more benign version of the Borg from Star Trek. What is known to a part is known to the whole. Like telepathy, it provides an intellectual intimacy of unimaginable proportions. Of course, the price of this capacity is significant: it is the end of the individual, the end of our concept of the self. Will our allegiance to our own individuality (arguably an artifact of literacy) be so strong that we will deny ourselves the superior understanding and knowledge accessible by succumbing to the Borg? Presumably a hive mind could be susceptible propaganda from a more powerful entity since it might lack the resilience characteristic of individual minds and independent thought. This raises the specter of “neural hacking” or “mind spam” in a post literate world.

d) Drugs / Cosmetic Neurology

Humans have used drugs to alter themselves for thousands of years. Smart drugs are emerging that enhance learning capacity (e.g. concentration, receptivity) and others are in development that go much further. As Tim Caulfield of the University of Alberta notes, “all learning is pharmacological.”⁶ Since at some level, information (facts) and understanding (knowledge) are physically encoded in our brains (i.e. within a massive network of neurons, synapses, proteins, neurotransmitters, etc.) then it is possible that drugs or nanomachines could artificially create those same conditions. As Joseph LeDoux indicates in *The Synaptic Self*, “You are your synapses. They are who you are.”⁷ Want to understand French? Pop a pill. This is the end of learning but not the end of knowledge and understanding.

e) Post Humans

Perhaps one of the preconditions for post literacy is to be post human. The limitations of carbon based life may require us to seek alternative in silicon or other materials. Interest in post humans or transhumans has grown substantially in recent years as researcher try to dramatically extend the human lifespan. In *The Singularity is Near*, Raymond Kurzweil describes “the merger of our biological thinking and existence with our technology” in such a way that we are human in essence but physically enabled through machines.⁸ This future is epitomized in the idea of downloading consciousness into a robotic host or presence. Already South Korea is working towards a Bill of Rights for robots. The

assumption here is that post humans would essentially be immortal and therefore more capable of creating a post literate capacity.

The Transition to Post Literacy

Assuming that one or more of these candidates succeeds, the transition to post literacy is not likely to be simple or easy. Our understanding of the evolution from oral to literate cultures gives us some perspective on how the shift from literacy to post literacy will occur. Literacy was not immediately accepted as a universal good and nor was it widely adopted. Socrates and Plato opposed the rise of literacy because they thought it would undermine the basis of knowledge in Greek society and would forever change the human condition. They were correct on both counts. Literacy displaced memory (the core capacity of oral cultures) and it slowly eroded the social and political structures upon which Greek society was based.

New capabilities or capacities of the extent necessary for post literacy to exist will undoubtedly upset the status quo and cause disruption. Power will shift from literates to post literates; there will be winners and losers. Suspicion and distrust will arise, and social unrest can be expected as society wrestles with the implications and affects of a post literate world. For many, our identities are intimately linked to our selves as literate beings. It is very hard to imagine a life without reading and writing. In spite of the profound advantages offered by post literacy, a sense of loss will also exist. This nostalgia could slow or mute the dissemination of post literate abilities.

Literacy took centuries to evolve from limited and crude representations to the tools of mass literacy now widely available. Just as writing took time and experimentation to fully develop, so too will it be likely with post literacy. Early uses can be expected to be unsophisticated and crude to the extent that many will dismiss it as ineffective, insufficiently powerful, and not worthy of serious consideration. It may be that the real power of post literacy will not be unrecognized as it evolves and matures.

There will, however, be early adopters willing to experiment and push the boundaries of human communication. For this small, select group there will be the power and the elitism of possessing a capacity far greater than others. Just as literacy was a tool to enable social control, so too could it be with post literacy during its early stages. If post literacy is accessed only by the economically advantaged (similar to literacy through most of its history) then the digital divide or the literacy divide will have a new expression: the post literate and the non-post literate. The former will be in substantial control of the latter.

Eventually, like mass literacy, post literacy would become widespread if not universal. While other, darker, futures are possible, it may be that post literacy disseminates much faster than visible language did and that the profound benefits would be available sooner and in a more egalitarian manner. We may welcome post literacy for its promise of a better world even as we mourn the loss of a trusted friend.

One group of students in the seminar course struggled significantly with how post literacy would evolve and who would bring it about. They had substantial concerns about power, control, and the misuse these new capabilities. How would post literacy occur? Who would “invent” it? Where are the safeguards? These issues lead them to conclude that post literacy would be brought to us not through human evolution or invention but through alien visitors. Yes, aliens. Whether this is a prescient cosmological insight or abdication of the role of human innovation remains to be seen. However, in this respect one is reminded that William Burroughs noted that “language is a virus from outer space.”

Conclusion

The post literate world will not likely occur in our lifetime, but it does seem inevitable given the human predisposition for tool building and advancement. The thought experiment conducted in this paper has served a number of purposes. Not least among them is to reinforce once again the profound nature of literacy and the extraordinary requirements necessary to displace it. Literacy will not be easily pushed aside and as a result post literacy will have to exhibit astonishing characteristics to succeed. However, if these speculations are at all accurate, post literacy may not be a good thing for libraries and librarianship as we know them but it certainly could be a good thing for the future of humans (or perhaps that of post humans).

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