

**The Cultural Discourses of Educational Technology:
A Canadian Perspective**

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The cultural discourses of educational technology

Educational technology is a culturally biased phenomenon. While the prevailing discourse in the field is one of technology-as-progress, that discourse is seen in this paper as not universal, but rather a unique United States oriented discourse. Other cultures valorize other discourses. These multiple voices ultimately should strengthen the real and potential philosophic underpinnings of our field and provide alternative visions as to the meaning(s) and uses of educational technology.

Nevertheless, this paper will suggest, to many readers, a radical perspective. It will be argued that educational technology is not neutral; but rather a culturally biased phenomenon. This is not to be interpreted as necessarily good or bad, but simply, in contemporary postmodern tradition, the way things are.

Canadian theoretic underpinnings

Since this paper argues for a cultural discourse, it is appropriate to ground the discussion in Canadian cultural studies. Indeed Angus (1998) provides what might be considered a startling insight in the very title of his book “Ethnicity in a technological age.” It is startling because the common perception is to see no relationship of ethnicity to a technological age. If technology represents a move to internationalism and a global village, then ethnicity is potentially a casualty. On the other hand, Canadian communications philosopher Harold Innis argues that “In using other cultures as mirrors in which we may see our own culture we are affected by the astigma of our own eyesight

and the defects of that mirror, with the result that we are apt to see nothing in other cultures but the virtues of our own.” (Quoted in Angus p. xiii). Armour (1988) likewise explores the relationship between history, community, ethnicity and “the thrust of technology” in Canada, arguing that the interrelationship is ambiguous at best.

A similar, but totally different (and non-Canadian), focus is provided by Bishop (1990) who examines western mathematics. He begins with the standard, but questionable assumption often made in the literature: “Of all the school subjects ... arguably the one which could have been considered the least culturally loaded was mathematics” (p. 71). Nevertheless, Bishop concludes “Mathematical ideas, like cultural ideas, are humanly constructed. They have a cultural history.” (p. 72). He then proceeds to identify several “value clusters” which western mathematics promotes, including rationalism, objectivism, power and control.

Marshall McLuhan (1997, p. 408) and others have explored the figure-ground phenomenon. He writes “The ground of any technology is both the situation that gives rise to it as well as the whole environment (medium) of services and disservices that the technology brings with it.” It is sometimes useful to reverse the figure-ground relationship. *Thus in this paper, following McLuhan’s dictum, the tables will be reversed: culture will be perceived to be the figure, with technology lurking in the background.*

The above scholarly activity notwithstanding, cultural theory has nevertheless been minimally applied to a study of the interface among culture, technology and education.

The effect of information technologies, and even more, of educational technologies, on a

global village mindset are only beginning to be explored. Cultural discourses of instructional technologies remain marginalized in current research and scholarship. Some of these issues will be addressed in this paper.

The value neutral argument

To many observers, the claim of technology to be neutral is a given. The argument is well known. These individuals argue that technology is value free; it is up to us how to use and shape the technology. To those in this camp, technology is seen as a tool. A tool is clearly in the service of the people who use it. The proper (or improper) use of a tool is determined by the user. The tool metaphor has become so dominant, that it is usually assumed to be true. On the other hand, its commonality is such that it can be described as a *dead metaphor*. (A “dead metaphor” is one “that has lost its metaphoric force through common usage”).

See www.m-w.com/cgi-bin/dictionary?book=Dictionary&va=metaphor)

The other side of the story

Other observers have felt an ineffable unease with the “technology is neutral” argument. This camp argues that technology brings with it powerful but subtle biases. When you buy a freezer, you also buy into an entire set of beliefs that involve storage, time saving, quality of food and so on. When you buy a television set, you also buy into an existing set of choices. True, you can opt into some of the existing choices, but on the other hand, you cannot opt into choices that are not given. For example, if you subscribe to a set of cable TV options, you can choose between a pre-selected number of traditional networks, movie channels, music video channels, news channels, family channels, religious

channels, sports channels, and a seemingly inexhaustible range of choices. Yet a closer look will belie that judgement. You can only choose from pre-selected and grouped packages as determined by some corporate entity. You cannot choose what is not offered to you. Insomniacs are familiar with the curious dilemma that there are so many channels to choose from, but somehow often nothing one wants to watch. A current changeover in the home videomarket provides yet another example. It is interesting and instructive to note how VHS movies are being replaced in the marketplace by DVD. Currently there is choice. In the very near future VHS will be no longer be a choice. One will *choose* the DVD version, because there is not a VHS option available. In short, the technology is not neutral.

So, if technology is not a tool, what is it? Is there a metaphor that might replace the tool metaphor? Perhaps one suggestion might be an ecological or environmental metaphor (as in, for example, the common phrase *online environments*). Perhaps technology is like the water we drink and the air we breathe. Water and air are not tools. We cannot choose to breathe the air or drink the water. In fact we **MUST** breathe and drink. To abstain is **NOT** an option. If air is polluted, we need to remove the pollution. If water is poisoned, we need to treat and filter the water. Technology too, by this metaphor, is a given.

Technology is not a tool which we can choose to use or not; whether wisely or not.

Technology exists. Such an ecological/environmental metaphor allows us to examine different approaches to its use and its potential impact.

Are information technologies *cultural*?

A quick first answer would perhaps be, “they shouldn’t be...” After all, Microsoft Word is the same in any country; PCs and Macs compete universally, and offer the same interfaces, whether one is in Canada, Norway, Japan or Australia. The internet is accessed similarly around the world, and a computer virus started in the Philippines can have just as devastating an effect as one started in Texas.

But a closer look shows a uniqueness and individual richness in cultural information technologies. There *is* a cultural bias to information technologies. The United States television system is *not* a universal one. In Canada, for example, the Canadian Broadcasting Corporation operates on a totally different philosophy than CBS, NBC or ABC. The British BBC is likewise different from that of either Canada or the US. The Ethiopian broadcasting model follows yet a different path. And so it goes, with each country being essentially unique.

So is the United States model the ultimate one, a kind of transcendental signified, which will inevitably take over from other national, local and cultural models? While one cannot vouch for the *rightness* side of the debate, there are certainly signs of internationalization of cultures. As we enter the 21st century, we are becoming aware that internationalization is not necessarily and automatically a good thing. International companies bring a sameness that while some argue is the sign of progress, others believe is the beginning of the end.

Canadian shopping malls, for example used to be boxed in by two large stores, one on each end, like any American mall. But in Canada, more often than not, one was an Eatons; the other a Hudson Bay store, or perhaps a Canadian Tire store. Today, the two big stores are more often than not a Sears at one end and a Walmart at the other. And sandwiched in between are Canadian versions of MacDonald's, Burger King, Home Depot, and so on. It wasn't always like that, and one can argue that we have lost more than we have gained. Is MacDonald's the same thing in Minneapolis as it is in Nagoya, Japan? Is this internationalization or is it is Americanization?

The United States Discourse on Instructional Technology

Could it be that the United States discourse on instructional technology is not the natural scheme of things, but only another cultural discourse? (In what follows, I shall use the term United States OR US, since *American* could be mistaken to refer to a much wider designation, including all of North and South America.)

This US discourse on educational technology seems to be grounded in a particular idea of progress. Technology exists to make education faster, easier, and hopefully better. But does that mean better for everyone, or only better for the United States? For example, one major *raison d'être* of educational technology which one can find in the literature is "to make America a better country." Of course, as soon as one begins to talk internationally, the idea of technology to make America (USA) better becomes irrelevant. Such a claim is clearly a cultural claim, not an international one. Canadians, British, Germans, Russians, and the French emphatically do not use technology to make the USA a better country.

An example of the discourse of progress: Does anyone remember filmstrips?

A few weeks ago I was getting involved in a project aimed at putting web-pages on-line for teachers and students. I wasn't happy with the examples I was previewing, even when they were designated as award winners. Simultaneously, I was cleaning up an old educational technology lab and stumbled across a huge box of long-forgotten filmstrips. Some of you will remember these things. A round plastic container small enough to hold in the palm of the hand, light enough not to notice any weight, and containing a strip of 40 or so still pictures on 35mm film designed to be projected. "A headful in a handful" was a popular description. The titles I read were astoundingly wide ranging: *My Last Duchess*; *Brete Harte's Western Stories*; *Avogadro's Number*; *The Planets*; *Pygmalion*...the list goes on and on...

These filmstrips, dating from the 1960s and earlier, were always developed by a team approach. Using the best pedagogy of the day, one group was responsible for the physical design of the product; another group looked after pedagogy and content; yet another handled distribution issues. There was always at least one author who was a content expert. And the teacher could use them as part of a transmission model of teaching/learning, or in a constructivist style. Sometimes children were asked to read the captions, making the filmstrips interactive; sometimes the children made up their own narration to captionless pictures. There were many teaching/learning possibilities.

Today the filmstrip, the slide and the overhead have been replaced by PowerPoint. Convergence. But is really progress? It seems that today, we have taken a step backwards. With PowerPoint, everyone is a content expert; everyone can program dissolves, wipes and animations. The problem is that more often than not, the authors are no longer content experts, and the technical tricks are just that... tricks. And everyone uses the same ones. What used to be a team of experts in many fields has been replaced by a software program. That program makes the team redundant and replaceable by one individual. The program becomes a kind of an expert system. Nowhere is this more true than on the web. Everyone becomes a publisher; but no one is an editor. The result is that the few pedagogically sound web pages are buried in junk, “web pages that suck”, as the popular slogan puts it.

Yet, this is called progress. We allow technology to provide each of us with minimalist competencies, which in turn takes over from pedagogic common sense. Technology makes it easier, but not better. And not only do we expect education to be faster, easier, and painless, we also expect it to be fun. How many educators dabbling in technology, exhort their audience to “Enjoy!” or “Have Fun!” Such trite phrases need to be relegated out of our vocabulary. Scholars seldom exhort audiences to “have fun”. Who says that learning always has to be fun? Often, it is simply hard work.

So, what is the relevance of the above example? I wonder if this story is a part of an implicit US discourse of technology: progress; better than last year; faster; greater. We have moved from low tech (filmstrips) to high tech (PowerPoint). Of course, no one

advocates going back to filmstrips. But yet, while something is gained, something is also lost. (one of Marshall McLuhan's laws of media).

To me, the US discourse on instructional technology seems to fall into not one but three categories. The *first* sees technology as inevitable progress. A *second* view sees technology as computers. More and more, contemporary literature equates technology with computers, which means that other technologies become marginalized and ignored. Of course the argument advanced is that *convergence* places all technologies on the computer, an argument that is open to question. A *third* category of the US discourse sees technology as “instructional design”, whereby you define what you want to do, develop the product, test to see if it did what it was supposed to, and revise, then implement. Many instructional technologists see themselves primarily as instructional designers.

But these are not the only discourses on technology. I believe that each country has its own unique cultural discourse that is coloured and biased by its politics, its geography and its history. It is *not* inevitable that each nation's technology should be a mirror-image of the USA model. I cannot speak for countries other than my own, but it would be fascinating to hear others speak of the built-in biases and cultures that inform their own country's unique discourses. Some of these other discourses, tied with cultural traditions, are biased towards structuralism, towards reader-response models, towards postmodernism, towards semiotics, towards feminist models and towards post-colonial thinking.

The Canadian Discourse on Educational Technology.

It is abundantly clear that there *is* a unique Canadian discourse on educational technology. The over-arching metaphor is provided by Marshall McLuhan: “The medium is the message”. McLuhan’s view is uniquely Canadian. He put into words what every Canadian intuitively knows: The medium of communication matters. And leading Canadian thinkers before and since have said only variations of the same thing. Harold Innis called one of his books *The Bias of Communications* in which he argued that societies are either space-biased or time-biased. The nature of that bias determines the nature of the society. In *Empire and Communications*, Innis (1950) discussed how empires throughout time – Egypt, Babylonia, Greece, Rome, and Medieval Europe – were all shaped by the dominant media of communications of the time. George Grant continued the theme, and explored how democracy, Canadian style, influenced and in turn was influenced by technology. Popular Canadian writer Pierre Berton (1970) traced the history of the Canadian Pacific Railway as a historical uniting force in Canadian history, arguing that without the railway, there would have been no country called Canada, and indeed he gave the railway the ultimate compliment in calling it Canada’s “national dream.”

1939 saw the beginning of a different Canadian discourse, that of the documentary film tradition, under the tutelage of John Grierson. Grierson coined the term *documentary* as

the “creative treatment of actuality”, then went on to build the National Film Board of Canada, one of the finest documentary organizations in the world. *There has never been any significant US counterpart to the NFB.* Most important, Grierson’s model was not that of the US systematic model. Grierson’s approach was aesthetic and cinematic.

Grierson did not see educational technology as defining, developing and evaluating a product. His vision saw educational technology as a kind of propaganda, an art form that helped people to see, to understand, and thereby to empathise. Documentary to Grierson was that *creative* treatment of reality. It is the adjective *creative* in the previous sentence that defines technology in Canada as different from the traditional US discourse. Grierson would have agreed wholeheartedly with Joseph Conrad’s 1897 famous comment about literature: “My task which I am trying to achieve is, by the power of the written word, to make you hear, to make you feel; it is, before all, to make you see.” That is the role Grierson had in mind for the documentary film. Perhaps, we in turn need to adapt the same statement as a new manifesto for educational technology. But if we do, we need to remember its origins are grounded in a cultural discourse.

Educational technologists often wonder whether there are alternative discourses to the instructional design discourse. Grierson’s documentary model provides precisely one such alternative. In Canadian schools throughout the forties, fifties and sixties, the National Film Board was the major provider of films for schools. These were not systematically produced products, but rather aesthetically-produced films in the documentary style promulgated by John Grierson. “We can widen the horizons of the schoolroom and give to every individual, each in his place and work, a living conception

of the community which he has a privilege to serve.” (Grierson, Quoted in Knight, P. 211)

Paranetically, John Belland (1991) has suggested that we need to know the “classics” of our field. The instructional design tradition has produced few or no classics. (Can you name some that deserve the designation “classic”?) The documentary tradition on the other hand, whether grounded in Canada, the US or elsewhere, is full of works that are now considered “classic”: *Drifters* (UK), *Night Mail* (UK), *North Sea* (UK), *Opening Speech* (Canada); *Paul Tomkowicz: Street Railway Switchman* (Canada), *Ted Baryluk’s Grocery* (Canada), *How to Build an Igloo* (Canada), *Man with a Movie Camera* (former USSR), *Victory at Sea* (USA); *The Plow that Broke the Plains* (USA); *Why We Fight* (USA) ... the list goes on and on. Indeed, the Academy of Motion Pictures of Arts and Sciences offers annually not one but two annual “academy awards” for “Best documentary” (short and feature length).

Another example of the strength of the Canadian discourse, is on-line at http://www.coolcanuckaward.ca/joe_canadian.htm . Try download the Quicktime version of this commercial which has been seen all over Canada. In the meantime, (while you wait for the site to download), here is what happens: A young man mounts a stage, and begins to complain softly, timidly, and bashfully. His voice gets more strident as he continues, and by the end he is yelling passionately. The music underneath gets louder, and is the patriotic “Land of hope and glory.” Here is what he says:

Hey.

I'm not a lumberjack or a fur trader. I don't live in an igloo, eat blubber, or own a dogsled. I don't know Jimmy, Suzie, or Sally from Canada, although I'm pretty certain they're very nice. I have a prime minister, not a president. I speak English and French, not American. And I pronounce it *about* not *aboot*. I can proudly sew my country's flag on my backpack. I believe in peacekeeping, not policing; diversity, not assimilation. And that the beaver is a proud and noble animal. A tuque is a hat, a chesterfield is a couch. And it's pronounced Zed, okay, not Zee. Zed. Canada is the second-largest land mass, the first nation of hockey, and the best part of North America. My name is Joe and I am Canadian.

(Molson Canadian Beer Commercial)

Instructional design as a culture

The theme proposed in this paper is not unique. In the November/December issue of Educational Technology Rose discusses the apparently impenetrable boundary between instructional design and education. She demonstrates that instructional designers are puzzled that while they are so right, education seems so stubborn. Rose is convinced that she understands the reason for this: The key ... is quite simply that instructional design is not a finite process or set of skills, but a culture. I mean that -- far from being value free, it is composed of the practices, values, discourses and idealologies of a particular group of people and that *it excludes by definition, other cultures with different practices, values, discourses, and ideologies*. Although she uses the word culture generically and broadly, it is nevertheless interesting to note, whether a coincidence or not, that she is in fact a

Canadian. It is my contention that this is not a co-incidence and that she indeed reflects a Canadian mode of discourse.

Conclusion

Some will worry about my perspectives. The argument runs like this: Cultural discourses can encourage nationalism. Nationalism, they say, causes wars. We need to wipe out nationalism, because, underneath, we are all the same.

We are *not* all the same. We do not share the same philosophies, nor should we be forced to do so. There are multiple discourses, but at the same time it must be made clear that every discourse is not equal. Some discourses are, simply, wrong. But we live in a world in which we must recognize multiple conflicting discourses as a reality. And every country is informed by its own unique culture, history and language. There is no right language; there is no correct view of history, there is no right international culture.

Technology is clearly a component of human culture. Human culture in turn is grounded in practical wisdom. What is important is that practical wisdom is not universal, but local. Practical wisdom is culture specific. What is practical for my culture may not be practical for your culture. It is for this reason that ...at least initially ... technology *must* be cultural. Having said that, what needs to be studied very carefully is the real impact of the *global village* concept on twenty-first century societies. What happens when the wisdom of local cultures and local technologies are applied universally? The answers will have significant implication for future directions of educational technologies.

Educational technology must celebrate the richness of cultural discourses within its own domain. You don't have to live other cultures, but you need to acknowledge them.

Technology as computers; technology as progress and technology as instructional design represent only three discourses (Or perhaps only one!). There is also technology as art; technology as communication; technology as documentary...and the list goes on. Perhaps our experiences of educational technology are unique because cultures are unique. We can all learn from each other. And it begins with a recognition of the powerful and significant cultural discourses of instructional technology.

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Biography

Dr. Hlynka is a professor of instructional technology at the University of Manitoba, Winnipeg, Canada. He is the co-editor of a book of readings, *Paradigms Regained: The Uses of Illuminative, Semiotic and Post-Modern Criticism as Modes of Inquiry in Educational Technology*. He is past president of AECT’s Research and Theory Division. Currently, along with his academic work, Dr. Hlynka is the acting director of the Centre for Ukrainian Canadian Studies at the University of Manitoba.

