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Veni, Vidi, Wiki: Expertise as Knowledge and a Technocratic Generation

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Veni, Vidi, Wiki: Expertise as knowledge and a technocratic generation / Marc A. Ouellette

Abstract: This project stems from two intersecting strands. The statement, "I can always find out," neatly summarizes the intersection. Not surprisingly, it has two distinct but simultaneous meanings. The first, in which "always" means "every time," considers the ways in which the ability to find knowledge has become synonymous with expertise and examines the elements that have fostered this situation. In this regard, factors such as the range of software and hardware- from Wikipedia and FAQs to cellphones and Ipods- which anticipate or "think" for the user but also require constant updating are both rationale and outcome for their youthful consumers. When combined with the downloading and broadening of elementary and secondary curriculum at an ever-increasing rate, the range of everyday devices which involve "looking up" information the results in technocrats whose expertise is searching. Thus, the second version, in which "always" means the lexical case, "as a last resort." This produces an atmosphere in which the reaction to new material occurs in the following rapid progression: the assumption "I can always find out" becomes the conclusion "I don't need to know because I can find out if I must" and in turn, the resignation of "I don't need to know."

The over-indulgent machines were our children
There wasn't a way down on earth here
to cool them
Because they looked just humans at Kresge's or Woolworth's
But decadent brains were at work to destroy Rats
in battalions were ruling the street scene
Generation landslide, close the gap between them.

Alice Cooper, "Generation Landslide"

"And as we seek, so shall we find"

Blues Traveller, "Runaround"

<1> Studies of youths and youth culture are marked by their persistent polarities. The tendency has been to examine the outliers in the cultural spectrum as evidence of individuality and creative spirit or to suggest that young people are manipulated by advertisers and producers and turned into passive consumers. The need exists, then, for studies which make intelligent interventions in current theorizing about youth culture. Three central areas of contemporary culture are central to an examination of contemporary youths. Since the 1960s, young people have been assumed to "rebel" against the so-called "technocracy" - - the regime of experts upon whom we generally rely uncritically and who generally are credited with organizing and manipulating mass culture - - to produce sub and/or countercultures. Sadly, this rebellion never works because the new movements are invariably "incorporated" or "co-opted" into the dominant (Hebdige 122). However, I am finding that while the current generation is very aware of the contradictory messages of late-capitalism and its accompanying consumer culture they are more comfortable with the contradictions. As such, they are more willing to actively engage the contradictions rather than simply dissent. Second, and of central importance to the current discussion, the technocracy's boundaries are fading. Contemporary youth are neither duped nor manipulated. When compared to previous generations contemporary youth are experts themselves. However, while they may know more, at least in terms of the breadth of topics covered - - or more likely, available - - this knowledge comes at the cost of the scope of that knowledge on any given subject. In fact, it becomes clear that the particularized expertise obscures and even obviates the need for assimilating, synthesizing or even acquiring knowledge in the first place since that expertise overwhelmingly revolves around being able to search for it. Nowhere is this more palpable than in the creative responses of contemporary youth. These entail a complex set of negotiations with mass culture which simultaneously depend on, influence and ultimately reveal the limits of available choices as well as the individual and communal notions of creative spaces. However, the intent is not to proffer yet another Jeremiad regarding the shortcomings of contemporary youth or their education, for rather than signaling rebellion or dissatisfaction, many contemporary youths simultaneously celebrate and interrogate their immersion into mass culture through their creative responses.[1]

<2> Instead, the intent is to enumerate what it is that we are teaching our students and what that teaching accomplishes. From the perspective of someone teaching Cultural Studies, and whose stated goals are to teach critical thinking and to foster the cogent expression of that thought, the reduction of the project to the mere act of fishing for the first plausible response proves antithetical. If pressed, as many of us in the field are, my "Cultural Studies agenda" - - because all Cultural Studies profs have one and anything on the left is an agenda - - is twofold: a) be good to people and b) never let anyone think for you. While the former sounds simplistic, the contingency of the latter complicates its stability since such self-reflection is becoming increasingly difficult to manage in an age of lifestyle marketing, conspicuous consumption and the trusting assumption that an answer is never more than a quick Google search away. Indeed, the enticements and encouragements to "look it up" rather than "think it through" run counter to any exercise in Cultural Studies. In my own classes, students are given what seems a paradoxical situation. As opposed to classes in other disciplines, the Cultural Studies class may not teach them anything they do not know or, to follow the popular line of recruiters and motivational speakers, that they do not know they do

not know. The Cultural Studies class likely teaches them what they did not know about what they already know. Herein lies a challenge, for Cultural Studies, like any other discipline, can be reduced to nothing more than a series of discrete theories which can be slapped into a database and withdrawn ad nauseum. No matter how well expressed, such information is not the product of critical thinking. A second challenge is that the emphasis on critical thinking produces a conflict with the wont to look things up and to stop at that point, with little to no investment in the fruits of that search. The search is presumed to be its own rationale and its own outcome. Not only does this lends itself to something more akin to reverse-engineering than to the obverse, it produces resistance to the idea that critical thinking needs to occur in the first place. More than once my colleagues and I have been accused in the student newspaper of attempting to brainwash our students not to be brainwashed.

<3> Normally, a theory of knowledge would accompany the argument which follows. However, this is will not be offered for two simple but key reasons. First, any beginning with a "theory of knowledge" automatically ends with something that sounds too much like "the best that has been thought and said." Second, expertise is not at all the terrain of scholars in Cultural Studies. This ground has been left to psychologists, especially those practicing in Human Resources or in the so-called Management Sciences. Those practicing Cultural Studies need to understand and to appropriate these terms, concepts and practices because so much of what we do is responding to the products of those structures. Moreover, when we respond, it is a) after the fact, b) in our own language, and c) too frequently among ourselves. Renowned Human Resources professor Richard Swanson defines expertise as "the optimal level at which a person is able and/or expected to perform within a specialized realm of human activity" (125). While there is as much debate about the component parts of expertise as there is regarding knowledge, there is general agreement that "(1) Expertise is a dynamic state; (2) expertise is domain specific; and (3) the basic components of expertise are knowledge and associated skills, experience, and problem-solving heuristics" (Herling 261). Said another way, expertise is self-perpetuating. Moreover, as Richard Herling observes, "a person never stops acquiring expertise" (261). In the present case, search skills beget search skills. Additionally, the technology's ability to mask complexity facilitates and enhances the fact that expertise is not transferable. This could also be described as a de-skilling process, at least in other domains. Finally, the problem to be solved is not a problem in the sense of a puzzle, riddle, dilemma, paradox, etc. Instead, the problem to be solved is how to find the knowledge. This, too, is a self-perpetuating practice. In fact, it is also self-justifying and self-fulfilling insofar as the answer can always be found and the answer is never far away. These factors make the cycle of this particular kind of expertise, with strong roots in education and in quotidian practice, difficult to counter. Indeed, it is also difficult to identify as anything other than the way things are.

<4> The approach to studying this project stems from two intersecting strands. First, Engelbaert and Licklider's original conception of the network of networks that developed into the Internet was a device for the "augmentation of human intellect" (Ouellette 31). Second, when Theodore Roszak conducted his seminal study on the "counter culture" of the 1960s, among his conclusions was the centrality of technocrats and the technocracy as the pre-eminent authority in North American culture and as the target of youthful resistance. The statement, "I can always find out," neatly summarizes the intersection. Not surprisingly, it has two distinct but simultaneous meanings. The first, in which "always" means "every time," considers the ways in which the ability to find knowledge has become synonymous with expertise and examines the elements that have fostered this situation. In this regard, factors such as the range of software and hardware - - from Wikipedia and FAQs to cellphones and Ipods - - which anticipate or "think" for the user but also require constant updating are both rationale and outcome for their youthful consumers. When combined with the downloading and broadening of elementary and secondary curriculum at an ever-increasing rate, the range of everyday devices which involve "looking up" information the results in technocrats whose expertise is searching. Thus, the second version, in which "always" means the lexical case, "as a last resort." This entails a consideration of the effects of a particular kind of expertise on knowledge and on creativity. My concern is that the combination of technological but simultaneously cultural products results in a generation of youth who are technocrats themselves. This produces an atmosphere in which the reaction to new material occurs in the following rapid progression: the assumption "I can always find out" becomes the conclusion "I don't need to know because I can find out if I must" and in turn, the resignation of "I don't need to know."

<5> Although it was initially conceived as a study of contemporary youth (and their) culture, this paper does not attempt to answer questions of the "dumbing down" of contemporary culture posed against nostalgic versions of previous generations' adolescence, nor is it interested in settling disputes regarding the populist or manipulationist camps. More than enough of this ground has been covered and re-covered in popular and in academic texts. The cultural sites considered demonstrate the development of the individual as a technocrat. This is based on the ever-increasing need for scouring various kinds of information outlets that despite all other appearances amount to nothing more than databases.[2] The young people, thirteen-to-thirty, who inspired the study are neither the dupes nor the dissenters described in the available critical works. As a corollary, the familiar critiques of consumerism and sub/countercultures can be seen as limiting the kinds of analyses that are possible and too frequently ignore the negotiations involved in creative efforts. In so doing, I want to challenge (my readers') assumptions about contemporary youth in conventional settings through readings of popular texts that confront and question those assumptions. Since I teach primarily second and third-year university students, they form both my target audience and a significant portion of my research pool. Indeed, they have been terrifically generous in sharing their practices with me.

I know how to find out: Defining the Expert

<6> When Theodore Roszak adopted the now familiar yet much contested term, "counterculture," in *The Making of a Counter Culture* he also defined the opposition, which he identified as the "technocracy." According to Roszak, the technocracy has been its own rationale and its own outcome for "it is the expression of a grand cultural imperative, a veritable mystique that is deeply endorsed by the populace" (xiv). In his estimation, the complacency of the adult generation would lead to something that looks eerily like the growing tendency toward police states and garrison mentality that is occurring in Washington, DC and among its lemming-like followers who are currently in power in Ottawa. Although it would likely seem counter-

intuitive to a contemporary audience, Roszak determined that youthful rebellion was a "new" development in post-war North America. Typically, observers and scholars have decided that the easiest route towards quelling dissent was simply to make the dissent cool enough that everyone would want to join and to mass produce the cultural artifacts of the rebellion and sell them back to us. In his studies of the rise of punk subculture and its subsequent demise and reinvention, Dick Hebdige outlines a two-fold approach towards effecting this sort of containment via a process he calls "incorporation" (122ff) According to Hebdige, incorporation has two forms, the ideological and the commodity, although the result, disempowerment, is entirely the same. Hebdige's ideas, which owe a great deal to Roszak's writings more than a decade earlier, have themselves been rebranded, by Naomi Klein and countless others, as "co-optation" which has helped the basic line of critique survive for another twenty years. While I can repeat Hebdige's findings any number of ways, I can also find what amounts to a third species of incorporation.

<7> Instead of trivializing the rebellious by turning it into either a commodity or a curiosity, the possibility can be eliminated entirely by turning the young people into technocrats. Roszak describes technocrats as experts who assume authoritative influence over even the most seemingly personal aspects of life: sexual behavior, child-rearing, mental health, recreation, etc." (7). The tremendous advances in Information Technology (IT) couples with the celebrity and popularization of "experts" - - Dr. Oz, Dr. Phil, Dr. Dean, the Super Nannies, What not to Wear, etc. - - not only means that there are more outlets for and more variety of experts, it also brings them into the home more directly. This contrasts with the more institutionalized version of expert Roszak envisioned. For instance, anyone with a browser can go to DrKoop.com to find "the latest" medical information from a site named for former US Surgeon General C. Everett Koop. That is, provided one can search both for the site and for the information on that site. The second key component of a technocratic society is its operation by circular logic. By this, Roszak refers to the tendency that "those who govern justify themselves by appeal to technical experts who, in turn, justify themselves by appeal to scientific forms of knowledge. And beyond the authority of science, there is no appeal" (8). The circle is completed when one recalls that the experts define and develop the scientific knowledge to which they appeal. The circularity produces a species of technocrats who rely uncritically on their own expertise. As will be argued in the remainder of the paper the expertise lies in the ability to search for knowledge.

<8> In considering contemporary North American youth as experts, and as a species of technocrats who rely uncritically on their own expertise, I first need to define precisely what I mean by expertise and who fits that description. Most simply, expertise currently lies not in people who know anything about a given topic, but rather in those who know how to find out. In other words, the skill sets required to seek for knowledge comprise the currently most prized version of expertise. The obvious cost is that the depth of that knowledge reflects what we might refer to as the "bold print" method of learning; that is, as if one were to only read the topics listed in bold print if one were reading a textbook. Knowing (a given subject) is not necessarily as important as knowing how to find out (about a given subject). Knowing how to find out leads to currency and to flexibility. As academics (qua researchers), our goal should be nonstop knowing. This is precisely the benefit of digital resources. They are, in most cases, more accessible as well as more easily and frequently updated. A common misconception is that the Internet was created with the sole intention of surviving thermonuclear annihilation.[3] However, J.C.R. Licklider and Douglas Engelbart, the two men who first proposed such a thing were hoping to develop what we would now understand as artificial intelligence.[4] In this last regard, the possibility of change actually fosters increased use. Updates and alterations to the resource mean repeated visits to the source in order to maintain currency with the material. Ultimately, electronic resources problematize the traditional notion of the specialist. The specialist of the future will have intimate knowledge of the field of finding out.

<9> Admittedly, such an approach could lead to more work, but it usually does not. William Millard's term, "chrono-economic stress," summarizes the possible tensions induced by some forms of digital media. This phrase refers to "the psycho-linguistic effects of [one's] awareness of the limits to the time, bandwidth, money, attention, and any other resources that he or she can devote to any given piece of discourse" (159). Chrono-economic stress results in reduced precision at the macrocosmic level as researchers must parse greater amounts of data. Paradoxically, the search capabilities - - often at the level of words and phrases - - allow greater detail at the microcosmic level. Alleviating chrono-economic stress means knowing how to find out. There are at least two immediate, as it were, effects of chrono-economic stress. For good reason, the first is the "Get it first!" mentality. Canadian electronics retailer, Future Shop, bases many of its advertising campaigns on this model (see Figure 1). Productivity software (i.e., word processors, spreadsheets, etc.), and more notably programming software (i.e., Virtual Basic, etc.) anticipate functions, commands and words so the user is no longer required to know them; to spell, to code, etc. Google, like other search engines, provides search strings but it also has two features that exploit and placate chrono-economic stress (see Figure 2). The "lucky" feature takes the searcher to the first homepage or website found in the search while the "Associative Search Engine" provides quick shopping solutions (Skillen). Metacrawler's "metaspy" feature formerly allowed users to view others' searches in progress. Since the order of listings is a matter of secrecy and also of pricing for the search engines, this type of feature has been replaced with a link to popular searches. The effect, though, is largely the same. Even the searching becomes reduced to a predictable set of uncritically held strings.



Figure 1: Future Shop promotion for the week of 24 May 2010.

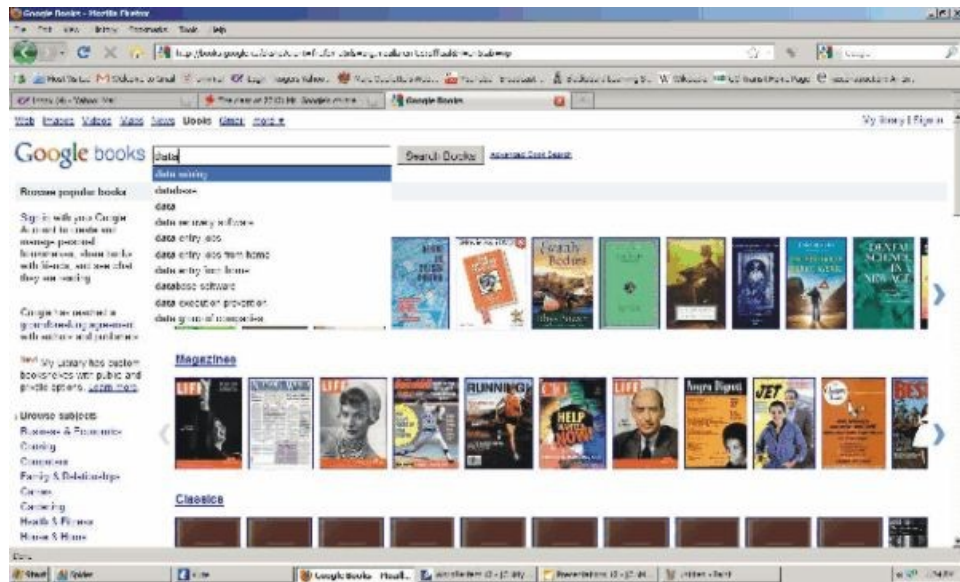


Figure 2: Google anticipating the data mining for Data Mining.

<10> A second key books consequence of chrono-economic stress is its influence on users' thought processes. As I argue elsewhere, chrono-economic stress contributes to the production of an environment that facilitates and even encourages users to "think out loud" (29ff). Users adopt this behaviour to speed up the process. In doing, they rely on shorthands, either their own, ones provided for them, or a combination of both. For Derek Foster, "selective exposure is probably the most common heuristic device, or mental shortcut, that individuals use to simplify their information processing. It is typically used to create an environment of supporting information as individuals pursue an orientation that is consistent with their currently held world view (33). Intriguingly, Foster adapts the concept to the study of Internet communication. Previously, it had been applied to the "traditional" media. However, since the Internet is primarily a visual medium, there is

no reason to believe that people would act any differently than usual when confronting information [online]. In fact, the nature of this information, often appearing as it does devoid of context, may make the process of creating cognitive balance easier. To create this balance, one typically ignores information that is contradictory to what is already known, or somehow adapts the incoming information to that body of knowledge. (Foster 33)

It is the latter that gives me pause, for the intriguing part is that traditional media have adapted Internet methods and techniques. For example, TV news channels like Toronto's CityPulse 24 (CP24) have an on-screen format that mimics the appearance of a browser or portal (see Figure 3). The Canadian sports network, Sportsnet, is so named to highlight the web presence of its owner, Rogers Communications. Further, the network regularly adds "connected" to the titles of its programs to offer another cue to its web presence and to the relationships between the two forms. The CBC, the BBC and CNN likewise offer web and TV based news that bear resemblances to each other. Here, one can see the ways in which CP24 resembles the portal of my IP (see Figure 4). The information is generally the same, with the exception of the email button. However, it should be added that the portal and the connection were originally for email alone. This parallels the development of PDAs and mobile phones which are more aptly described as miniaturized computers.



Figure 3: CityPulse 24 and its sixteen windows.



Figure 4: Rogers web portal with news, traffic, entertainment, weather and email.

<11> Admittedly, this is hardly an original observation. Bolter and Grusin's seminal study, *Remediation: Understanding New Media*, takes its title precisely from their term for the ways in which media forms, both old and new "remake themselves and each other" (4). In fact, their contribution owes a great deal to their own refashioning of McLuhan's much earlier dictum, "the medium is the message" insofar as Bolter and Grusin allow that media are "extensions of the human sensorium" while simultaneously disavowing McLuhan's "technological determinism" (76). However, the combined effects of chrono-economic stress and selective exposure provide both the point of contact and the point of departure. Regardless of the location, the data - - that is the results of the search - - need to be parsed and/or interpreted, even if that means relying on the machine to do it or on one's own supposed expertise in searching. Nick Montfort observes that J.C.R. Licklider was "prescient in that he saw a need [. . .] for quick access to computing to aid in decision-making" (73). Where McLuhan focuses on the body, and the effects of media on the body, Montfort notes the media's, and especially the Internet's, effects on the intellect and, more precisely, on decision making.[5]

<12> In fact, the latter function has already become automated, at least to an important extent. The anticipatory and associative functions are the product of "data mining." As Ian Witten and Eibe Frank explain in their textbook on the subject, data mining, an algorithmic based search function, mechanizes the searching, seemingly reducing the need even for parsing the data and for ascertaining its credibility

The unbridled growth of databases in recent years, databases on such everyday activities as customer choices, brings data mining to the forefront of new [. . .] technologies. It has been estimated that the amount of data stored in the world's databases doubles every 20 months, and although it would surely be difficult to justify this figure in any quantitative sense, we can all relate to the pace of growth qualitatively. As the flood of data swells and machines that can undertake the searching become commonplace, the opportunities for data mining increase. (5)

The key is the appearance of parsing and credibility. Like any automated process, data mining masks complexity. On its face, this makes the task more convenient. However, from a labour standpoint something different is occurring. All too frequently, the ideology underlying the implementation of such technologies is a de-skilling of the workforce and with this comes compartmentalization of the role. As mentioned earlier, expertise is domain specific and the domain of this kind of expertise lends itself to a situation Frederick Winslow Taylor might have envied. So, while it might present an opportunity, accepting data mining as an inevitability amounts to (a) tacit resignation. It means acquiescing not only to searching supplanting knowing, it means accepting what the machines and their routines find in the process. Accepting data mining also means the implicit acceptance of the data as a commodity, which can be traded, shuffled and exchanged like any other commodity. Therefore, all data

becomes equivalent. It need not be prioritized or even evaluated. Its value has been established based on the transaction that started the process. Not surprisingly, then, Witten and Frank offer data mining rather unproblematically. They see it as "our only hope for elucidating the patterns that underlie it" (5). Yet, as with the examples and patterns discussed earlier, there is a stunning circularity. Data mining becomes its own rationale and its own outcome.

This ain't Oprah, I deal with issues"

<13> Professor Hinchcliffe, one of the two best and most knowledgeable professors who taught me as an undergraduate, told us that Milton was the most knowledgeable man in his time. The great British poet had managed to read nearly every book in existence. Fantastic. The total was roughly 300. I have added that many titles to my own collection in a given year. That number does not include the number of TV shows, movies, commercials, songs, newspapers, magazines and pages of Internet text I read in a year. I also recall Dr. Alvin Lee waxing nostalgic about Northrop Frye's "encyclopedic memory." That may be. Dr. Lee, Frye's most faithful and accomplished student, is as intellectually intimidating as anyone I have ever met and he never claimed to be anything like a match for Frye. But that means dealing with intellect. I have the suspicion that Mr. Frye's encyclopedic memory would put him somewhere around the middle of the pack in any of my undergraduate classes.

<14> The search skills of my students are phenomenal. It is no wonder, then, that Maclean's writer John Intini calls them the "Resourceful Generation":

Those of us who've grown up in the Internet age, have - - at least in our own minds - - reinterpreted the meaning of intelligence. We've largely replaced our parents' traditional knowledge-based book smarts with resourcefulness - - the ability to navigate through reams of information quickly and effectively, and isolate what's important. Sure, we have more "formal" education than the generations that preceded us [. . .] The key to getting ahead is being able to find information - - fast. So scrap tired labels like Generation X, Y and Me. Today's under-30 set is the Resourceful Generation.

As stated previously, the uncritical reliance on expertise provides a key defining characteristic of technocracy and of technocrats. Indeed, Intini recognizes the guiding principle, "We're smart enough to realize that it's impossible to know everything." The end of the logical progression is to not bother to know anything because it can always be found through expert search skills. Some of the things they find are incredible. Obviously, developments such as Wikipedia and Google enhance the ability to find out things, but there are dozens of analogues such as archive.com and youtube.com. Indeed, these developments, along with wireless network access all over the campus, have significantly altered the way I am able to teach certain topics. I can, at any time, send (portions of) the class on an Internet search for a given topic. I could be accused of contributing to the trend via a [Frequently Asked Questions](#) (FAQ) page on my website. The total amount of information runs nearly 100 pages. Learning becomes visual, experiential, tactile and almost kinesthetic, in addition to the auditory route which the usual didactic approach relies on almost exclusively.

<15> Interestingly, many of them utilize the search capabilities of eBay and Amazon as if they were search engines, especially for finding clothes and shoes. One of the more interesting recent finds was a collection of bizarre iPod accessories. One of my students sent me the list, which includes - - and it is real - - a dual function iPod/USB powered personal vibrator option. One would think this peripheral will enhance the romance of the mp3 files. In addition to downloading music, they also know music titles in the thousands and where to get the music. As an interesting aside, top IT consultant Gartner reports that North Americans currently download ringtones to the tune of more than \$5 billion annually and that music downloaded only to phones will top \$32 billion in 2010 (gartner.com). In Hello, I'm Special, Hal Niedzviecki rightly attributes such seemingly irrational spending to the cult of the individual and resultant need to be different: "We prefer shorter sound bites. [. . .] We want more entertainment better and faster. Shorter sound-bite bursts of entertainment seem to give us more. And the more there is, the more we think there might be a place for us in that speedy world. The faster our popular culture and media are, the more we feel included and inclusive, part of the barrage, immersed in it as a participant" (110). While he recognizes the impact of chrono-economic stress, though without naming it as such or exploring its implications, Niedzviecki overlooks the result that we are creating a generation of people who have also become obsessive about knowing how to find the things that are supposedly "unique." He also never considers the exchange value of such activity, but clearly there is one for the data being mined. In contrast to Niedzviecki, Steven Johnson's *Everything Bad Is Good For You* - - as its title more than implies - - celebrates the advent of a database driven culture and its generational effects. Johnson adopts and adapts James Gee's "regime of competence" to apply to a wider range of IT than the video games for which Gee developed the concept.[6] While acknowledging few if any trade-offs or deletions, Johnson takes a deterministic stance that reads like a version of evolution:

as the new technologies started to roll out in shorter and shorter cycles, we grew more comfortable with the process of probing a new form of media, learning its idiosyncracies and its distortions, its symbolic architectures and its rules of engagement. [. . .] Eventually you get a generation that welcomes the challenge of new technologies, that embraces new genres with a flexibility that would have astonished the semi-panicked audiences that trembled through the first black-and-white films (178).

It is intriguing that Johnson borrows a theoretical cue from video game studies. First, he borrows it rather than developing his own. Second, while he rightly recognizes the embrace of new technologies and genres, he simply locates the shift in popular culture without delving into the nature of those technologies. He also manages to overlook the role the ideologies behind such technologies played in producing the angst that Betty Friedan and so many other women could not name. Whereas Ms. Friedan had the time - - indeed, the "time-saving" devices of that era were key to fingering the furthering of gender divisions - - to write and, more importantly, to locate the problem, I do not think a chrono-economic stress inducing consumerist culture that counts finding or getting the latest item among its commodities will

offer the same sort of space for contemplation or investigation.

<16> Instead, Johnson assumes audiences merely and inevitably develop competence. In the case of video games, competence involves more than just hand-eye coordination. Increasingly, games rely on vast amounts of searching through what are essentially databases. These exist both inside and outside the game world. In the latter case, this includes eBay, where characters, items for characters and more can be purchased. Grand Theft Auto IV is one of many games that has its own in-game Internet and its own version of Wikipedia, [Grand Theft Wiki](#), which boasts over 37,000 pages of information. Moreover, an entire industry of Strategy Guides and FAQs has developed around video games. Players no longer have to figure out how to accomplish routines, they merely have to search for it. With the right search skills - - aided by an anticipate function, of course - - they can even watch YouTube videos of others performing a given task. Discovery takes on new meaning. Players can give up at any time, including the instant they open the box, knowing there is always a fall-back. It is equivalent to learning by starting with the solution manual alongside the problem. Globe and Mail reporter Patrick White encounters the mind-set in surveying what he calls "Mr. Google's children," who currently attend Toronto's secondary schools. One student typifies and explains the approach that gave White his title:

His all-time favourite teacher is the one he calls Mr. Google. He doesn't need lectures or classrooms, he says, because he can ask Mr. Google and learn everything he wants to know. "I mean, I can learn to speak languages off of YouTube. I'm learning to play the guitar right now off of YouTube. I can look up anything and in a few minutes know more about any subject than my teacher does. Why should I listen to them?"

It is not the technology but rather the progressive de-skilling of teaching and of learning to nothing more than a Google search that presents the challenge for educators. Hewlett Packard uses a far less confrontational approach in attempting to capitalize on the trend through its ads featuring Olympic gold-medal-winning snowboarder, [Shaun White](#). White's alleged skills with his lap-top, impressive though they are, rely on precisely the same principle. Johnson eventually attributes much of his own success to "dedication and stamina" (197). This may be the case, but Google will not find these qualities in any of us, nor does it need them.

<17> We are literally bombarded with information and yet we increasingly get that information in short staccato bursts. One need not actually know anything in a particular depth. That can always be found. Too often, the result is the "touch on" approach. Whenever I read "touch on" in an essay or hear the phrase in class, I jump all over it. I do not "touch on" anything. "This ain't Oprah. I deal with issues," I tell them emphatically. But "touch on" is not just a phrase with a contemporary currency. It extends to a whole way of not treating topics. We do not get the news any more; we get sound bites. Thomas Homer-Dixon reports in *The Ingenuity Gap* that the length of a Time cover story has dropped from 4500 words to less than 2800 words in the last twenty years (321). Canada's Maclean's recently devoted slightly more than two pages to its January 1st cover story whereas the cover was worth eight pages only a decade earlier. Homer-Dixon finds that the length of a TV news soundbite has decreased from a 1965 high of forty-two seconds to its current rate of eight. As seen above, TV news stations, following the lead of Internet content providers, frequently feature multiple simultaneous "windows" of headline news: the BBC provides three on its international channel; Toronto's CityPulse has up to fifteen different segments on its screen. These update continuously, but never offer any depth. It is no surprise, then, that many of my students have few doubts that they are writing the definitive study of any topic in 2000 words or less. My teaching FAQ now includes a description of the "CNN essay": a series of headlines with no details and only occasional connections. It is not that they have been convinced that they are that special, as Niedzwiecki might say; rather, it is more likely the case that they have been led to believe that 2000 words is really all they need. The Wikipedia entry is the only entry needed. More than that, the Wikipedia entry is the only necessary entry.

Teach your children: Searches as Replacements for Solutions

<18> Here, it is well worth offering a very brief discussion of the compounding of our primary and secondary school curricula because the sort of expertise I am citing begins at an increasingly young age. One exemplary, though anecdotal, experience immediately comes to mind. The rise of so-called "baby bling" results in increasingly young people attempting to find shoes, hats, sun glasses, accessories and brand name items. Mattel's response to the Bratz dolls taking Barbie's market share was the My Scene doll. These come co-branded for Aldo and for Roots, among others. One of my students admitted that she finally fully understood her Cultural Studies education when her little sister refused to wear knock-off Ugg boots and demanded the real thing, at ten. The younger girl had looked up the difference. Every one of the examples I give is based on the ability to find out what is currently relevant in the given field, even if it is only fashion.

<19> The area with which I have the most familiarity is actually the technological sector and specifically engineering. About seven years ago my spouse began teaching a high school course in computer engineering. This course involved explorations of microprocessors, programming and eventually included a significant unit on robotics and controls. In terms of its content and evaluations, this high school course in electronics contained the essential elements of ME 262 and ME 363, courses which were on the required list for mechanical engineering students, as we had been, at the University of Waterloo, only another five years previous to the introduction of the secondary course. Indeed, when she prepared her lessons and assignments for the high school course prescribed in the Ontario curriculum, the textbooks were the ones we had used in our university engineering courses - - from the premier engineering school in Canada - - for students who were entering Gr. 10. In fact, the elements she was able to use were largely confined to fundamental skills and principles because the new curriculum gave the high school students more challenging, more complex projects. In the second-year class, we made a counter that could make it as far as eight. Contemporary high school students make robots. More telling, though, was the fact that the ultimate skill she taught the students was how to find information. The editors and assemblers have intuitive functions which anticipate inputs - - our word processors and now our Internet search engines have these as well - - and essentially do the thinking for us. We only need to know the basics of a search string in order to have Mozilla or the machine do the necessary work.

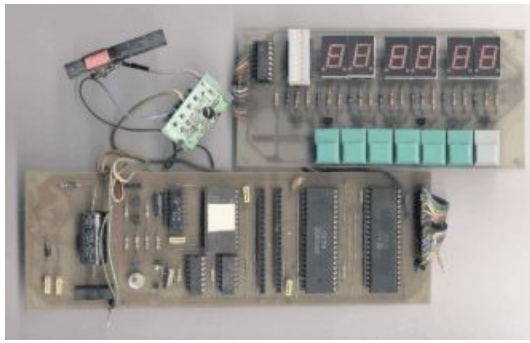


Figure 5: 6502 processor and counter

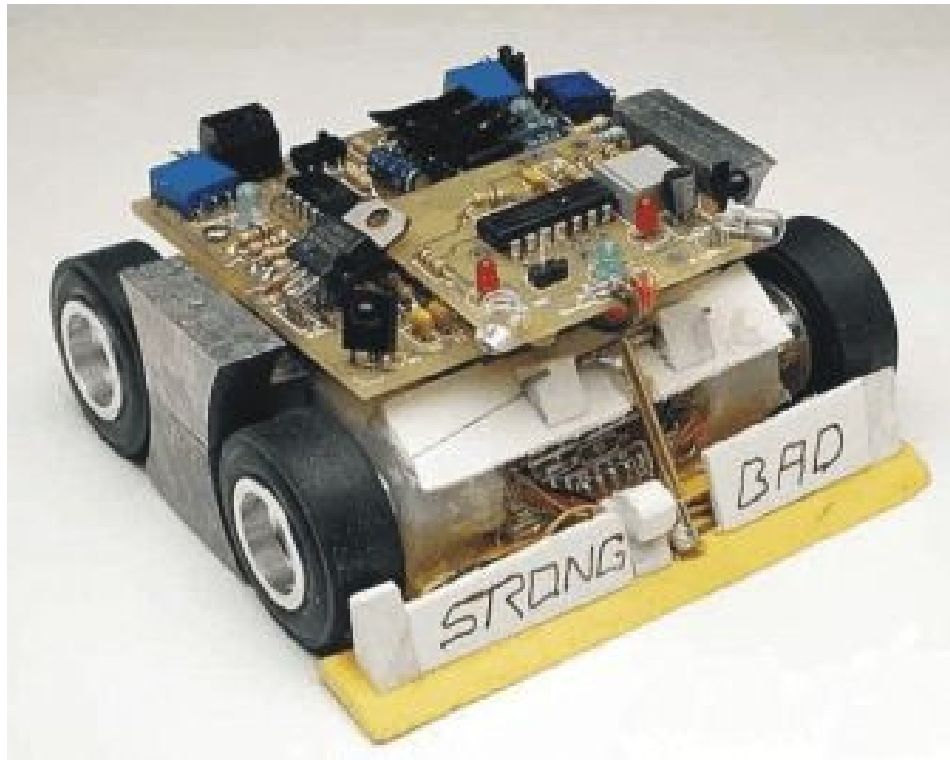


Figure 6: Sumo robot, c. 2007-08

<20> At some level, this type of shift in curriculum is entirely predictable and understandable. The viral video, [Did you know?](#), lists among its myriad facts the exponential growth of technical information and systems. The video, which is basically a database with graphics and music, claims that half of the first-year curriculum for students currently entering four-year programs will be outdated by their third year (Fisch & Macleod). Interestingly, even though the video was prepared by Karl Fisch and Scott Macleod, two American educators, it is frequently incorrectly - - that is, uncritically - - attributed to Sony, since an adapted version was shown at a board meeting in June 2008 (flicxy.com). Regardless, it is the content and focus of the curriculum that facilitates and compounds the tendency. For example, the most recent Ontario curriculum for Gr. 7 Mathematics combines elements of the previous Gr. 8 and Gr. 9 curricula (ocup).^[7] Students are given instruction on how to use calculators and other tools, but not how to do the math. For example, "compare and order decimals" becomes "represent, compare and order decimals to hundredths and fractions, using a variety of tools (ocup 3). The Ontario Curriculum Gr. 11 & Gr. 12 stresses that "understanding is achieved when mathematical concepts and procedures are introduced through an investigative approach and [are] connected to students' prior knowledge in meaningful ways" (9). It is no wonder, then, that the Association of Computer Studies Educators (ACSE) for Ontario discusses the impact during their annual meetings. At the 2008 conference, educators reported on sample questions regarding simple calculations for time, measure, money and fractions which their students could not handle without calculators or computers. In many cases, the educators could not do so either when the examples were offered to them (ASCE). Looking it up is producing de-skilling instead of being a skill. If the teachers succumb to the enticements of simply looking up the answer, then there is clearly a problem with the ways we are teaching and learning as opposed to any problem with the technology itself.

<21> As the Gr. 7 and Gr. 8 math curriculum shows, the program typically begin and end with looking it up; figuring it out is disappearing. Lest anyone imagine that the trend predominates in scientifically and/or technologically driven disciplines, the Humanities and Social Sciences have their own version. In what has become something of an annual tradition, Robert Fulford of the (neo)conservative National Post takes issue with Cultural Studies by finding an alleged item of excess or folly that suits his political purposes. In the most recent attack, Fulford hits on Arthur Asa Berger's *The Cultural Theorist's Book of Quotations*.

[8] As usual, Fulford concludes that the book provides evidence of the laziness of educators, of their narcissism and of the resultant lack of rigour in the education system. He concludes the book will find an audience among teachers, "who maybe don't know as much as they should and students who skip the boring texts recommended to them but nevertheless must cobble together an occasional essay demonstrating, at a minimum, that they have at least heard of McLuhan or Sontag." Admittedly, and as Fulford gleefully points out, the publisher did few favours in proclaiming on the cover that the collection "will give you just the right snappy quote to help prepare that lecture, write that paper, fill that Power-Point, or drop a few bon mots at a university reception" (Berger). Fulford never considers that data driven education systems, which have grown in popularity with the rise of the North American neo-conservatism he and his readers prefer, have led to the data mining's pre-eminence, nor does he consider the explosion of graduate programs, critical literature, or the downloading and the subsequent compression of curricula. Instead, he concludes that

Students reading [the book] will realize the horrible truth about the activity to which they are devoting a large part of their lives: They are not expected to become educated. They are expected to prepare themselves to make a decent stab at pretending they are educated. They now understand what older students told them when they began university: Just keep saying "Derrida" often enough and no one will give you trouble.

Fulford foresees a future of students mindlessly embracing the political correctness that allegedly forms the core of critical theory. Quite the contrary, cobbling together an essay more frequently becomes an exercise in bad faith, if there were faith in anything other than the databases being available to mine.

<22> Rather than the brainwashing Fulford sees, the trend is toward cut and paste approaches which have little investment in anything other than finishing the paper. Berger's book, like Bartlett's before it, is little more than a database. The difference is that these kinds of books are becoming more common. Simply put, many of the best readers in Cultural Studies have become catalogues of excerpts as opposed to collections of essays taken out of their contexts. Two recent articles in the New York Times are symptomatic of the trend but still circle the issue because they focus on the aspect of academic dishonesty, or, to put it bluntly, cheating. Increasingly, students simply are cutting and pasting essays and assignments. David Pritchard, a physics professor at the Massachusetts Institute of Technology, tells one of the reporters, "The big sleeping dog here is not the moral issue. The problem is that kids don't learn if they don't do the work" (qtd in Staples). In studying the cheating practices of his students, Pritchard draws an ominous conclusion: "repetitive cheating undermines learning" (Staples). He finds that students view themselves as analogous to rap artists who "sample" others' music and fashion it into "new" songs. In their efforts, students are aided by websites such as Cramster and Course Hero (Gabriel). None of this is particularly surprising. What remains underexplored is our culpability as educators in promoting the critical de-skilling of our students that results from the emphasis on instilling the singular domain of expertise in data mining.

<23> An example in my Contemporary Popular Culture class during the Fall 2007 semester was highly instructive in shaping my thoughts with regard to what precisely we teach our students and what precisely they know. The first was an assignment I gave them. They were given the choice of analyzing Ms. South Carolina's infamous "US Americans" response or the then contemporaneous display of Leon Ferrari's 1965 sculpture, *La Civilización Occidental y Cristiana*. Of the 287 students in the class, slightly more than 100 chose the latter. Of this number, forty referred to a particular blogger's review in the course of their essay. Twenty-three of that number failed to cite the blog at all. The significance of the blog and the number of citations becomes salient when one considers the blogger's remark that the work depicts "a polychromed statue of Christ crucified on an F-111," a phrase that all forty included unproblematically and never within quotations - - even among those who cited the blog. (Ugallery). But for the quirk of some incorrectly stuffed envelopes and a shadow on an x-ray, I was all signed up to go from high school to the Royal Military College of Canada so I could become an Aerospace Engineer. So, I know the difference between an F-111 and the F-105 *Thunderchief* depicted in the sculpture.^[9] The tiny reference, which could be considered irrelevant unless one recalls that the F-105 was doing the bulk of the bombing in Vietnam in 1965 while the F-111 had not flown yet, told me that (at least) twenty-three of my students were probably guilty of plagiarism. However, the incident of plagiarism is not the biggest concern; rather, it is the fact that all forty flatly repeated the blogger's error, which was also flatly repeated in an article in a respected, glossy magazine of art and design.



Figure 7: *La Civilización Occidental y Cristiana* from Design Bloom, one of the dozens of incorrect entries.

<24> If it were isolated to my students, the blog or the magazine, the events could be dismissed. However, they can be included with attribution errors - - for lack of a better term - - which have achieved greater notoriety. For example, upon the death of Maurice Jarre, an Irish teen, Shane Fitzgerald, changed the Wikipedia entry for the composer's biography to include false information. While Wikipedia became the target of criticism, Fitzgerald found that it "was journalists eager for a quick, pithy quote that was the problem. [. . .] the Guardian was the only publication to respond to him in detail and with remorse at its own editorial failing. Others, he said, treated him as a vandal" (Pogatchnik). The source is hardly the issue. Chrono-economic stress alone cannot account fully for the journalistic failure. Indeed, the admixture of chrono-economic stress, selective exposure, thinking out loud and data mining creates a perfect environment for such uncritical reliance on sources. Like my students, none of those involved did more than search, cut and paste. These are the expert skills we are producing in our students, but the domain is incredibly narrow and results in a critical de-skilling in other areas. In this case, the searchers really are experts, and clearly perceive themselves to be so, at searching for knowledge, at least for "facts." When the assumption is "I can always find out," there is no need to check the fact because, as the circular logic proceeds, "I can always find out." The end of the sentence, "if needed," becomes omitted in theory and in practice. The examples of cheating, plagiarizing and failing to check for veracity only stand out because the offenders were caught in the act. They are exceptions that prove the rule. The issue is not the cheating, nor is it the technology. It is the underlying ideology which has turned information systems into nothing more than analogues for the ketchup dispenser at a fast-food restaurant. The dispenser releases precisely the same amount every time. It reduces work, saves time and adds convenience. It also removes responsibility and trust from the equation. Moreover, every operation is the same and has the same valuation. How different is the touch screen cash register at McDonald's from the next generation of tablet computers? The technology is wonderful. The elimination of reading and of thinking is not.

<25> I also have included two examples of projects done by my students; i. e., Humanities students. The first involves a student taking the cover of Cosmopolitan, scanning it and manipulating the cover captions to reveal the sexist and consumerist ideologies reproduced in a magazine which purports to focus on empowering women. In creating the *détournement* of the cover, she reproduced the captions to read, for example, "Manipulate your man in 9 different ways but keep him happy because that's what matters." Another reads, "Eva Longoria: 5'2" and a size 0 just like all Cosmo women should be." In addition to the course material, the student also had to teach herself how to use Photoshop - - and I think she did so quite successfully - - within a one week period by using Internet guides, FAQ and the program's own help database. A second student decided to create a *détournement* of the university homepage. She ultimately created a fairly complete mockery of the important elements of the entire website. The website was faithfully reproduced, including a president's message, matching fonts, matching colours and reworkings of university slogans. The process, which took only a couple of weeks, included figuring out how to program the website. When I asked both students about their search skills, I mentioned the then contemporaneous announcement that Russia was examining the feasibility of creating a fleet of floating nuclear reactors that could be rented by electricity-starved coastal cities. I asked directly, "Do you know anything about it?" to which they both replied, "No, but I could find it in no time."



Figure 8: Cosmopolitan cover (Andrea B., 2007)

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- > President's Message
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- > Fast Facts
- > History of McMaster
- > Governance
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- > Policies, Procedures & Guidelines
- > Refining Directions

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Dirty Comedian Dave Chapelle and Former Dictator Saddam Hussein will receive honorary degrees at MacMaster University's fall convocation. The ceremonies will be held in The Great Hall of Hamilton Place on Nov. 18. Dave Chapelle will receive an honorary Doctor of Letters degree and Saddam Hussein will receive an honorary Doctor of Science degree.

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MacMaster University doesn't care about Arts students. In fact, we wish they would all just go away.

MacMaster University is run by a bunch of stupid, old, white men.

Figure 9: "MacMaster" homepage (Amber F., 2005)

<26> These examples are merely anecdotal. To them I can add the daily number of links, images, songs and video clips sent to me by my students. As well, on a more global scale, I can cite further examples. Machinima, for one, relies on the ability to find out how to do something. This recently created form involves capturing video game play which has been manipulated according to a script and then laying a sound track over the top of it. The best known example, Red vs. Blue, utilizes the Halo games for the XBOX. It was inspired partly by a website called simply warthogjump.com. The site contained footage of a player making a vehicle in the game jump to unprecedented heights. Others tried to mimic the move and eventually began figuring out how to further manipulate the game into a movie-making machine. A similar process is involved in creating the popular Knob Hockey series on YouTube. In fact, one of the fastest growing uses of YouTube is the "how to" genre. The list includes everything from exercise to home renovation. While these are examples of repurposing existing popular culture items, the current generation of software packages and computers allows individuals at home to make their own animated shorts, as long as they can find and/or decipher the instructions or in the absence of instructions, have the skills to conduct a self-directed exploration of the software's capabilities. In many cases, the latter is the necessary course. In the words of an unknown member of ACSE, at their 2008 meeting, the latter is usually what people mean they say "You're good at computers."

Keeping it real: The issue of credibility

<27> If we take the ability to find out as the crux of the expertise then it follows that if more information can always be found if somebody asks for it. The credibility of the information gathered becomes quite hazy. Some of my students, in their frustration with classmates' - - and even some instructors' - - over-reliance on Wikipedia, created an entry for their professor. In addition to listing me as their favourite professor of Cultural Studies, they explained that I do not actually wear a jacket and tie to teach because I really am a penguin. Moreover, I have a pouch in which I carry a rock to remind my wife that I can be a good father. They were asked to remove it, eventually, but it did last a number of days. Even so, it baffles that the students who hate Wikipedia were able to figure out its system for adding content and for getting it past the initial screeners. They become the exception that proves the rule. As a form of expert knowledge, being capable of seeking knowledge becomes a self-perpetuating regime and in the process becomes self-justifying and self-fulfilling - - the

hallmarks of a technocratic society whose most important unquestioned ideology remains progress (for the sake of progress). In relenting or contributing to the situation via the online FAQ, I include a section called "Eaten by the spellchecker," which offers a warning and examples for students who unduly trust the spell checker and thesaurus functions in word processors. Usually, there is a survey of students which asks them which word processors offer a "proof read" function. Over 75% routinely respond with the names of popular programs, when none of them has such a function. Classics of the "eaten" genre include

- It's hard to be productive if your workspace is incontrovertible or if you are unconvertible.
- People assume that gender is only produced biblically and overlook the social and cultural aspects
- Don't be surprised if you see plus-size models grazing the covers of magazines

Of course, this is not an original observation. Professor Jerrold Zar of Northern Illinois University wrote "A Candidate for the Pullet Surprise," his ode to the spellchecker, in 1991. The argument could be made that somebody had to know enough to make every one of the originals cited so far, but this is not necessarily the case. In the instance of the spellchecker, the entire process began with looking up the items to be looked up and then making the means to do it automatically.

<28> That said, too frequently the onus for establishing credibility is not placed on the person mining the data, but rather on those hosting the site. The Fitzgerald instance stands as a strong reminder. Stanford University's "Persuasive Technology Lab" has an ongoing project for web credibility; that is, a checklist and guidelines for those producing websites. Cornell University's Olin Library has a similar document for those doing research. Although its aim is to help users, its checklist format is equally an unstated guideline. Indeed, this duality was the intent of the Society of College, National and University Libraries (SCONUL) in the UK when developing its "Seven Headline Skills" (Webber). This last checklist has two so-called "pillars" whose implications are especially revealing. One is "the ability to compare and [to] evaluate," and the other is the "ability to synthesize and [to] build upon existing information, contributing to the creation of new knowledge" (Webber). As John explains above, the data is overwhelming and freely accessible. The ability to compare and to evaluate is not being cultivated in a culture based on data mining, information seeking or simple searches; not when these are their own reward and their own rescue. In the latter case, creativity takes a backseat and stands to rely increasingly on refashioning others' earlier efforts, nor is it an exercise in bricolage or collage. It is not even analogous to "scrapbooking." Moreover, it likely means a shift in the status of the signifier to something beyond simulacrum or empty signifier. In his seminal semiotics textbook, Daniel Chandler explains that the empty signifier is distinguished by an "implicit acceptance of its status as a signifier" even if the signified is not known (74). The catch is that here, a notion that a signified - - a concept, a meaning, a significance, a value - - for the sign still exists. However, nobody is really interested or willing to find out what exactly it might be. In short, a sign now only means that it means. It is simply data that has been mined and can be dumped, load by load into some vessel. The question is whether it matters if the commodity is coal or information.

<29> As I mentioned earlier, one of the more common cultural theories surrounding the rise of consumerism and its impact on young people is the "manipulationist" point-of-view. This critical perspective derives from Horkheimer and Adorno's "culture industry thesis," which was among the very first academic studies to consider mass and popular culture in a serious light. Horkheimer and Adorno's piece, along with something from Dick Hebdige's previously cited work on subcultural style and one or two others fill an awful lot of first and second year syllabi in Cultural Studies. The basic premise is that the conditions of capitalism run counter to the principles of democracy. The former's emphasis on standardization, efficiency, mass production - - sameness - - impede the individual. Moreover, the economic system is more sinister because it presents its limitless homogeneity as limitless choice. Worst of all, we fail to notice and we agree to it. University of Toronto philosophers Joseph Heath and Andrew Potter, in *The Rebel Sell*, do a fairly thorough dismantling of the tautological basis of the "culture industry thesis" and the industry of counterculture critiques which have followed it. In *The Dumbest Generation*, Emory University's Mark Bauerlein disparages the current crop of undergraduates: "I've seen a great decay among students over the last eight years or so [. . .] I do see a decay in verbal skills. Their vocabulary is less descriptive and stylized. There is great amount of homogeneity in writing" (212). Bauerlein arrives at one shared conclusion - - a weakened democracy - - but generally stresses a future of illiteracy and its outcomes.

<30> Critiques disparaging dumb, illiterate, lazy and narcissistic kids have become an industry staple in the last ten years. A work ethic is not the issue. As Richard Swanson says, expertise begets further expertise. Surfing the web usually begets more surfing. Illiteracy is not the issue; rather, it is the kind of literacy and its outcomes that need further study. It is neither a case of being easily led nor easily being fooled. These rely on the reductive assumption that young people do not know enough and lack experience. We need to stop criticizing the technology or the young people but instead look in a mirror and look at the impetus behind our institutional emphases. In fact, I would argue that just the opposite: their expertise is such that knowledge cannot be processed quickly enough, nor does it need to be given the ways in which the education system trains them, especially when that system is increasingly bending to corporate dictates to produce docile workers as opposed to thinkers. Everything becomes a shorthand so that everything depends on selective exposure; that is, on the heuristic we use to assimilate knowledge into our existing cultural template. This process applies to more than just the Internet or electronic resources. In response, David Pritchard and others are giving more tests and assignments which must be done in-class (Staples). However, this is still in response to cheating, not to the instruction they are receiving earlier in their academic careers. Clearly, we need to pay more attention not just to what students are learning in elementary and secondary schools, but also to how they are learning it. More often than not, when they do not know a subject they know how to find out, but they do not know what to do next. They often carry too much knowledge to use any of it particularly effectively and the expertise in being able to find out can result in a laissez faire approach or a lack of any other kind of expertise. The circularity is not necessarily the circuit Hebdige, et al, envision; rather, it is one in which the ability to research any topic provides no impetus to research any topic. The assumption, "I can find out if I have to" leads

to the conclusion, "I don't need to find out because I can . . ."

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Notes

[1] Here, I can think of no better example than Thomas Frank's nostalgic writings, especially those gathered in *The Conquest of Cool* and *Commodify Your Dissent*. [^]

[2] Given more space and time I can foresee the study expanding to include analyses of mainstream, yet typically overlooked, productions - - especially creative forms based on repurposing existing popular productions - - and the responses elicited by them. In this regard, *machinima* and *boutweaking*, among others, come to mind immediately. The former is the practice of creating animated shorts by combining a soundtrack with video game animation. The latter involves purchasing designer clothes at thrift shops and updating/altering the garments into different articles. These kinds of responses have not been addressed in any significant way. [^]

[3] For example, in its first edition the widely used textbook, *Popular Culture: A User's Guide*, repeats this popular misconception unproblematically (63). It was corrected in the second edition (75). While it could be passed off as the kind of oversight that occurs in a large volume, it also speaks to the increasing difficulty in assessing the credibility of sources and deciding when to do so. [^]

[4] Engelbart's first paper was called "Augmenting Human Intellect," while Licklider proposed "Man-Computer Symbiosis." [^]

[5] For a terrific discussion of McLuhan's strengths and limitations in these regards, see Dovey, et al, *New Media: A Critical Introduction*. They note McLuhan's focus on the body, which is "precisely what humanism in cultural and media studies has been unable to address" (94). [^]

[6] See, for example, Gee's *What Video Games Have to Teach Us about Literacy and Learning* (Palgrave-MacMillan, 2004). [^]

[7] Admittedly, the curricula to which the paper refers are drawn from the province of Ontario and as such might be dismissed as one small sample. However, since the mid-1990s, Ontario's succession of conservative governments has revamped provincial curricula and testing to match the most data driven, as opposed to student-centred, American models. In the process, the duration of high school was reduced to four years from five. This is significant given the lack of any state-accredited bridging programs such as two-year schools found elsewhere or Québec's CEGEP system. Further, Ontario's current regime has ambitiously set a target of 50% of high school graduates going to college or university. This would make the province the North American leader in that regard. [^]

[8] Fulford has previously attacked gay and lesbian studies, feminist studies and the study of popular culture, in general. Coincidentally, his columns tend to precede announcements that the federal (Conservative, as well as conservative) government plans to cut research grants in the Humanities and Social Sciences or restructure them so only those with a business focus can proceed. This is not to suggest that Fulford is anything like Canada's Judith Miller. [^]

[9] On the *Design Bloom* site, at least one reader (not the current author) has offered the correction. The story, however, remains uncorrected. [^]

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