

LANGUAGE, BIG DATA AND BIG PROBLEMS IN THE CYBERAGE

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WAGNER: You don't care much for the media, do you, Ruth.

RUTH: The media. It sounds like a convention of spiritualists.

-- Sir Tom Stoppard, *Night and Day* (1978).

Introduction

Here is the big picture of how language and society interact in terms of culture and commerce, private lives and politics, the life and death of languages worldwide, trying to *stay on message*, unlike a vast number of comments these days and here the colloquial is italicized to stress the way we speak now in the more casual word of type and SEND, unrevised, off the top of the head, writing as conversation. Despite the epigraph here media have nothing to do with spiritualism, but they are for many now a religion nonetheless, despite the fact that most of the 30 trillion—that's trillion—sites now available are for commercializing *eyeballs* or simply *bloviating* in other words for advertising products or the self. We are media mad. The average American hits on 1462 websites a year. We adore the information superhighway. The young seem to be perpetually on iPhones or sending thoughtless instagrams. Older people watch too much TV. Communications are big business and as addictive and mind-altering as drugs (Garner, p. A 5) with a character in a Tao Lin novel regarding “the backs of his eyelids as a computer screens” and the Internet “colonizing consciousness”. The media are in the hands of a few. Media spew propaganda in one-party nations and in the US' two partisan, too partisan parties. Users can hitch onto some fuzzy one-word slogan and with it beat the public senseless. They peddle hype—and hope. Frank (p. 5) calls *hope* “the empty word for the age...of false promises and no alternatives”. He continues about its use as political “campaign-speak”

ever since (think of Jesse Jackson's “Keep hope alive.” Clinton's touching faith in “a place called Hope,” John Edwards' “Hope is on the way,” and Barack Obama's *Audacity of Hope*. What “hope” came to mean in those days was: Be credulous. Don't stop thinking about tomorrow. Have faith that things might just work out, even though they never do and nobody in power has any intention of reversing the neocon tide.

Still hope (or dreams, The American Dream remains although its old promises have met with new disappointments) even as faith in the US government wanes. Only 10 percent of Americans trust what the government says. The public's trust in our political parties and our president is at the lowest ebb ever. The hope, it appears, must come from outside, either from Jesus Christ as the Messiah, bringing Armageddon—many Americans expect that very soon—or from some other imported savior. Lexington in *The Economist* took the US public pulse by looking at US popular culture in terms of summer

blockbuster movies in 2013. Those featured various zombies attacking, a pandemic that brought us martial law (*World War Z*), the 1 percent abandoning earth altogether leaving the 99 percent in chaos (*Elysium*), and Metropolis (read: Manhattan) destroyed by aliens, although Superman the Man of Steel manages a *Hollywood ending*, an unlikely *deus ex machina* result. Meanwhile, Washington is paralyzed like the old fools in charge of Superman's native planet who cannot or do not *get their act together* and in the US generally print media, like Clark Kent's employer, *The Daily Planet*, are losing out to the Internet.

The Internet

The Internet is not so much a communications marvel as a network force striving to *make a buck* out of any connection. It is dedicated to selling a bill of goods, as the media always have done, and those who know how to use the media mercilessly are triumphant at the cost of everything from our language to our liberty. In fact, the media according to Almond (p. 45) “remain mirrors that reflect a species in retreat from the burdens of modern consciousness, from boredom and isolation and helplessness”. Anodyne, addictive, much of media's good potential goes unrealized. Media babysits for parents while they distract themselves with entertainment. It pushes purchases. It provides government with *Big Data* but it complicates every announcement the powers that be may make. It threatens to reveal all secrets in ways that US *Sunshine Laws* and the Freedom of Information Act (FIA) never has done. With the FIA after a bit of *hassle* you get many pages with many details blacked out (censored) but hackers can *get the goods* completely. New communication devices have complicated both honest and dishonest politics globally. So has the fact that the language of US politics, for example, is often inexact and the left-wing and the right ring cannot agree on terminology. Simala online demonstrates how Californian and Texan terms differ. Here are 10 of Simala's examples: Californian in the left column, Texan in the right:

Arsenal of weapons	gun collection
undocumented worker	illegal alien
your fair share of taxes	coerced theft
nonviable tissue mass	unborn baby
multicultural community	high crime area
healthcare reform	socialized medicine
fair trade coffee	overpriced yuppie coffee
gun lobby	National Rifle Association
same-sex marriage	legalized perversion
mandated eco-friendly lighting	Chinese mercury-laden light bulbs

Politics will have to struggle with precision and transparency as does the world of economics now. The *world wide web* is now throwing a searchlight into the dark corners of diplomacy and back channel *horse trading*, all cronyism and corruption and embarrassing compromises. This changes the way we speak, discuss, debate and decide. Media brings us facts and enhances our ability to see reality if we can absorb and accept

reality but as a character in *Taxi*, a famous film, says we may not be able to handle reality.

The Internet does much to divert us from action though it could give us a clear view of what needs to be done. Even greater understanding of what needs to be done does not mean that we are willing to act now and effectively. We are *playing politics* and the language of politics grows even worse than Orwell long ago said it was. Cyril Connelly put down Orwell as a man who “would not blow his nose without moralising on the state of the handkerchief industry” and he was right—but Orwell’s moralizing is indeed often right. On political language he is perfect. We often now simply hate perfection and do not want to recognize unpleasant facts—this leads to self deception and evasive language—such as the fact that the disparity in wealth in the US has been accompanied by growing lack of compassion by the rich for the poor, or that the nine million words of our tax code are full of loopholes and *sweetheart deals* and our government’s desperate 3000 new regulations each year are not making things much better. The Affordable Care Act (Obamacare) runs to 900 pages. Health care reform so far has generated thousands pages of regulations and it has not even really kicked in yet; thousands of new regulations will be needed. Who can or does read all this, or the 67,000 pages of the tax code? Who can make important financial decisions?

Americans say they do not want socialism’s welfare state but our version of the welfare state recently conducted a rigorous examination of the more than \$10 billion spent on 11 selected social programs and discovered that 10 of those programs showed “weak or no positive effects”. Of money, Government programs are often something of a waste of money even more than the communications novelties, which raise obsolescence to a fine art can be when they involve inane chatter and alienating solitaire games. Watching entertainments as we relax some say have made us all passive but media is developing more and more in the direction of interactivity even if *one-on-one*. Computers are changing how we watch, speak, read, research, think and decide.

The Way We Live Now

We react to ever changing conditions in daily life. We are faced with problems in response to loud and often selfish pressures from minorities but we are usually very slow as a nation to address fundamental social problems: to fix education for a diverse population and work at the hopeless task of equality of outcome for everyone; to repair the ladder of opportunity, by which people rise; to address the break in the social contract that Edmund Burke said our generation owes to “the unborn,” because we have handed to the next generation or two huge debts that we, living *too high on the hog*, have incurred; and that is not to mention children who will come from marriages that don’t last or no marriages at all. Let me state what everyone knows but is too polite or politically-correctly browbeaten to say, which is that the next generation of Americans will be worse off than their parents’ generation was. By 2050 the population of those 65 or older will have doubled but the increase in those 17 – 64 who have to pay taxes to support the retired will have increased only 17 percent. So 80 percent of Americans right now believe that but seldom say that our nation will *is going downhill*. I won’t use

decline because that sounds terminal, and nothing but death is terminal and the religious refuse to believe even that, for religion often holds out the promise of immortality. As Sir Francis Bacon observed, we believe what we would like to be true. Nonetheless, indisputably, “there are bad times are just around the corner”. Sir Noël Coward once sang those words satirically to the British after apparent victory in World War II. Now the bad times are coming for sure for them and for us, whatever the desires and hopes of the English-speaking world. *Down the road* for that long privileged group now means down. Of course we look at the situation in terms of our personal fates, not the fact that if one civilization collapses another may well rise to take its place. We want ours to last forever. Literature and history, the memory of mankind, sometimes fail to communicate to a shortsighted generation the basic facts of human life.

The Way We Live Now

Consider what has happened to our bold 18th-century dream of the “pursuit of happiness” which was supposed to tie us all together. Both the rich and the poor in the US, like the master and the slave in *Waiting for Godot*, are on different ends of the same rope, though it is longer than it used to be. Everyone is unhappier than ever because “the schism between the rich and the poor has grown so wide, the old style anything-is-possible-in-America dreams are falling through the crack” (Robbins, pp. 41-42). Take a key word. Let us look at the much bandied about word *hope*. These days we may call it a mantra, though we are not quite sure what a mantra is, whether it is practical and political, or religious or magical, or *whatever*. It is a coin in the gaming of crowdsourcing. Mining the mob mind is all the rage. Democracies do it for representative government, tyrannies in fear. Some make money at it. In 2012 Facebook earned \$1,100,000,000, and it somehow got \$429 million back in tax refunds. Not bad for what began as a college publication with photos of students one might like to meet. Some people are OK, doing well, happy to be doing better than most. Collecting data from all for free often threatens to become selling it for profit. That’s called monetizing. Efforts like that, as in *Big Pharma* and scholarly journals *making hay* commercially today, surely will not go on unopposed. Technology is rapidly changing the media, not just enabling over 60 million hits on a video of Surprised Kitty and a whole new world of pornography and cybertheft and cyberspying and social manipulating and time wasting on usually pretty empty content. Empty content, contentedly empty, is popular pap.

The Future Cyberage

We shall never be cozily content with content as media innovates. Over content the devices may be able to exert some control. Already they give you a choice of supposedly correct American and British spelling and (less reliably) grammar and word choice but wouldn’t it be nice if they would indicate Stupid Idea and refuse to continue until changes are made? Technology redefines and dictates the appropriate in many ways. Technology is increasingly going to eliminate jobs for humans but media needs content and only humans can easily create content, using visual and spoken languages. Using digital languages, computers have drastically altered even mathematics, the language of science. Jeff Hawkins, founder of Palm, whose latest interest is Grok, which

is “software that helps companies take automated action from streaming data,” predicts (p. 41):

Many, many years from now, we’ll be able to build machines that are super-physicists and super-mathematicians, and explore the universe. The idea that we could accelerate our accretion of knowledge is very exciting.

What good will all the information be if we do not improve our ability to prioritize and order and judge it and put it to the best use by communicating content accurately among those who can use learning and intuition and imagination and reasoning to build on facts and opinions?

Computers can do things humans cannot take the time to do and have already changed the daily life of most people. Morozov and others look at technology and especially communications and are extremely worried *going forward*. Change always worries some people. As for language, we shall have all sorts of linguistic changes and we need new national language policies (Vaccari). Most of all we need to think and talk straight—starting right now. We may use the media for help with the future if we can tame the media.

History

Americans tend to think of history as irrelevant, over and done with, but look back. Look at what has happened since the late 1970’s. Do you recall the 70’s? If not, there may be an app for that. In the first quarter of 2013 Apple surpassed 800,000 apps and Google 700,000. This paper is about the burgeoning media. It is about the tremendous effect on communication today, not just communicating with your car or garage door or household appliances at a distance, or sending your vital signs to your doctor’s devices, but with people near and far. The subject is huge but we can make an attempt and some important points. As the world is going, our old ideals of perfection are constantly and quickly outdated. They become, as Americans say, *history*. We may economically be in trouble and to some extent are learning to be satisfied with the least dirty old shirt in the hamper, not to expect a crisp new one every time, but if we can afford it there is tremendous technological advance, nothing short of amazing, sort of. We have actually become what I call the Sorta Sort. Our speech, like our religion, grows more casual, our grammar less correct, our thinking less logical as our expectations are lowered in a world that generally does not look as bright as once we thought it did even as technology burgeons. We look to science not God to save us. Religion, from *religare* “to tie back,” seems to many individuals to stress constriction and backwardness rather than unity, community, continuity and instead of bringing all mankind together creates warring ideologies. Constantine the Great imposed Christianity to unite his empire. Now it battles other religions and no-religion. “The centre cannot hold” any more, as Yeats noted now that faith actually makes “things fall apart,” but meanwhile some areas see astounding innovation and many have adopted science rather than revelation as the guide to behavior Communications technology is a marvel but it can threaten The End

quite as much as Last Days religions do and it does not promise *pie in the sky*. Rather, it sets nations against each other just as religion sets sects against each other in modern times, risking annihilation. Even Hollywood, famous for the happy ending, has noticed that “our lives are more and more determined by forces that overwhelm the individual” (*The Candidate*, film). Can we *take a meeting* on that?

Fiction has commented on fact and authors have warned against the old feudal rule by the force or arms or the grace of God, by those “set over us” that The Bible says are put there by God and must be obeyed, being replaced by—advertising executives ruling by public relations manipulations. David Eggers’ latest book posits a group (The Circle) that combines the forces of communication sciences to monetize and tyrannize. Its tentacles he says will reach into every corner of everyone’s life. This would be, as today’s slang might put it, Big Brother on steroids, cultural control by mind control.

Personal Life

Today’s technology has tremendously widened international and national discourse. It has revolutionized social interaction. It has altered personality: many suffer from “an unhealthy lack of boundaries between the Internet and reality” (Moore, p. 23). It has transformed languages in a new world of enhanced communication devices, putting the connected world in our very hands. The world is now more networked than our forefathers (and mothers) ever knew. Now billions of people have a voice, a voice that carries farther than ever before. The CEO of e-Bay, John Donahoe, has said that the smartphone is “the central control device of our time”. It has changed shopping. In the cartoonish *Looney Tunes* film the coyote gets on his laptop and orders a missile launcher (“Gift Wrap? It’s Free”) and is given a choice of delivery options such as “overnight” or “instant”. He chooses “instant” and a huge wooden crate from Acme drops beside him. Don’t go to the grocery store. Order online and get delivery soon. If you have a doorman you do not even have to be at home to receive it. Why go out to eat? Why cook at home? You can go on the computer and order in? So many urbanites instead of washing dishes simply throw takeout containers into the trash. They are staying home more and “reaching out to touch someone” virtually, online.

The virtual world has done much more than encourage speculation (and money laundering) in virtual currency. It has encouraged a new sense of personal freedom with free music, free films, and more, but just as the polar bear hides his black nose with a paw to remain virtually invisible in the white landscape so the new technology hides much of its costs to us. You can with GPS know exactly where you are and navigate where you want to go, but Big Brother can know where you are too, and listen to what you say. The US has collected Big Data on the phone numbers and length of calls nationally and internationally so far, seeking possible conspiracy to commit terrorism, but Uncle Sam still needs a federal judge’s warrant to listen to content. The same applies to all Internet communications. You are on record for everything you purchase except with cash (available for a fee at an ATM). Crowd behavior is deeply studied. All your personal decisions are more and more dictated by the crowd whenever you seek to choose an entertainment, a restaurant, or anything else. You are in the grip of masscult. You are

on candid camera in the streets. Ever more isolated, at the same time you suffer herd mentality and its lust of the next new thing. You live more and more in the virtual world.

Life in the Virtual World

The virtual world has changed the real world. It has distorted personal relationships and the language in which they are conducted. You can hire a company called WD to “save your virtual life”. Don’t travel; watch the Travel channel. Don’t read; scroll TV. You are no longer tied to your TV set or broadcast times, because it is all available anytime on your little gizmo. Don’t go out to the movies. Go online and order films from Netflix or DirecTV. Or you can stream movies on your little phone. This is altering, for example, and in this article there is deliberate reference to many aspects of popular culture because that is essentially *the* culture of the US, the visual language of film art. It is devastating the cultural unity once produced by gathering the family to listen to radio shows together or watch a TV program you could discuss at work the next day at the water cooler, the weekly attendance at the Bijou even in the Great Depression cut jobs. Many people do not even have to go out to work any more, and not only because they can live long on unemployment insurance or the dole. They work at home, on the computer, which strangers can access. The pizza home delivery people sold your name, address, and telephone number from the Pizza List (Lescroart, p. 244.) Staying home, for pizza or anything else, is not always possible. When Yahoo said employees must come in to the office there was an outcry. At the other extreme, companies such as Apple and Microsoft give employees a loony, *cocoony* college-dorm sort of life (see the Google movie or read about the nudist on the late shift) that redefines *home* and replaces it with a company culture with its own attractions, work and recreation, relating and speaking. The workplace is a family for those estranged from their families. It is a home away from home. Read Po Bronson on the new values and vocabulary of the information revolution, the biggest cultural tectonic shift since the Industrial Revolution:

Every generation that came before us had to make a choice between pursuing a steady career and pursuing wild adventures. In Silicon Valley, that trade-off has been recycled. By injecting mind-boggling risk into the once stodgy domain of gray-suited business, young people no longer have to choose. It’s a two-for-one deal: the career path has become an adventure into the unknown.

Win-win, and lose what? The information revolution has created a new breed with new values and new vocabulary reflecting its new attitudes and ambitions. Their binary language has created a new dichotomy, Us and Them. The computer experts are the priests who command the sacred hieroglyphs. These new forces are new deities, in fact, up in the clouds. They are in charge of and changing our world.

The Times They Are a Changin'

Know what that reference is? Never mind. It's so yesterday. Now, to go back a bit, Harrison's Law is "for every action there is an equal and opposite criticism" and to Donohoe's statement—remember him? There is so much information coming at everyone these days that memory is very taxed-- I reply as I discuss the media and its technology that the real "central control device of our time" is not any smart device but language, mankind's most useful invention. Do remember that. Let us use language to think about hard facts (consumer driven technological novel products) and not deal in the fuzzy world of the soft sciences in which evasion and *pussyfooting* and dumb terminology tend to prevail. Then we can get down to brass tacks (facts). Regarding terminology there is wisdom in the narrator's comment on the first page of Martin Amis' *The Pregnant Widow* about the language of grownups:

He noticed that even the kids' stuff got special names. And he read about their supposed neuroses and phantom handicaps with the leer of an experienced and by now pretty cynical parent. I recognize that one, he would say to himself: otherwise known as Little Shit Syndrome. And I also recognize that one: otherwise known as Lazy Bastard Disorder.

Hand-held devices are replacing not only memory but a number of communication media, both those for profit and those for self-expression, from print books and newspapers and magazines to land lines and desktop computers and even tablets. Cyberbabble is an international language. Technology has radically morphed advertising, electronic games and now real-money gambling online in the UK (soon to come in the US from Zynga, impacting revenues from casinos here and government lottery proceeds), television, the cinema, all media and everyday speech and writing in ways impossible to predict a generation ago. In fact *generation* in electronic devices is now a matter of less than a decade and things are speeding up astonishingly with concomitant huge changes in the way we think and express ourselves. The cyberage has also introduced new factors into industrial espionage and political sabotage, instigated acts of undeclared warfare abroad and at home, caused crimes such as bullying and identity theft, hacking, censorship. It has moved even courting online. Klapisch's movie *Paris* has a subplot in which an infatuated history professor hits on a student by sending her anonymously not only love poetry from Baudelaire but French text which the English captions render as "UR awesome" and "I'm 2 hot 4 U". People find dates and even marriage partners online—or they substitute time at the computer for human contact. Money is safe nowhere: on 10 May 2013 two hacker heists internationally stole \$45 million from ATMs a few hours (Santora). Huge data banks are all at risk of *infotheft*. And the political world plays with euphemisms: the blockade of Cuba in 1962 President Kennedy decided would be called *quarantine* {"it sounds better," he explained). Things have grown worse in the world of invasion=incursion, *torture*= *enhanced interrogation*.

While we often do not face the facts, we can say clearly and confidently that many law-abiding people have grown leery of speaking out and going out; people have cut down on public demonstrations and also face-to-face encounters. This has been going

on in communication since the invention of the telephone. On that you could chat while multitasking, even communicate with gestures, etc. to others in the room that the person on the other end of the line did not know about. Some people live much of their lives now alone with their communication devices, their televisions, their tablets and phones. Some live a lot in the world of video games. Some have avatar girlfriends or boyfriends and watch porn instead of dating. “You deal with a better class of people.” Millions have learned to express their thoughts in 140 characters and now hail summarizing apps that will reduce any long texts to 300 or 400 words. Perhaps most of all, computer literacy or the lack of it has created something to add to the disparity between the literate and the illiterate. It has exacerbated the widening gap between the rich and the poor. As of mid-2013 there were over a billion smart phones in use, which means that most people across the world do not have one, while in the US half the population does not have one, one-third lack any broadband connection, and one-fifth never go online. Divisiveness many call unfairness. The cyberage has some bad fallout (see Bauerline’s books) for the individual, for distance learning, for personal privacy and political and economic safety, and a lot more. It has some good aspects. It has, for instance, empowered the masses and it has helped teach foreign languages besides its own codes. For instance, the teaching of languages has incredible new tools and is moving from the classroom to the Internet. Indeed the need to learn foreign languages is in the minds of most people reduced: the machines can translate for us.

The New Machine Age

W. C. Sellers & R. J. Yeatman, authors of the classic parody of history teaching *1066 & All That*, wrote in 1930: “For each person wishing to teach there are thirty not wanting to be taught,” but that was in the old days of a course of lectures and today there are millions who do wish to learn languages and other subjects without paying the exorbitant prices for classroom instruction and so are going online to teach themselves free and at their own pace. Libraries are facing the greater convenience of googling for facts and opinions. Easy research is online, and ways to comment on facts and opinion are made available to anyone who can get to a machine. Still as Rilke, who died in 1926, said in *Die Sonette an Orpus*, “the machine threatens all achievement” however much it helps to accomplish. With all the social engineering the new devices produce we are still bound by the problem that Sir Karl Popper in 1927 in *The Poverty of Historicism*: “Piecemeal engineering resembles physical engineering in regarding the ends as beyond the province of technology”. Technology can do much for us and to us but it can never address all of humanity’s needs. Dore Schary’s original story (and screenplay, with others) for *Edison, The Man* had the great inventor conclude by stating that “science [he means technology] was trusted too much” and had “turned into a monster” but there was hope that “the dynamo of man’s ingenuity” would not “run away with his humanity”: “What man’s mind can conceive man’s character can control”. Are you sure?

It is not certain that all of us can exert control. Many of us used to escape like Tom in Tennessee Williams’ *The Glass Menagerie* to the dark cinema. Tom’s desperate mother tells him to “go to the moon, you foolish dreamer”. Many today spend much too much of their lives looking at the television screen or the movie screen, even watching

big-screen epics streamed on tiny-screen hand-held devices. Language certainly is impacted when we get out of the habit of speaking directly to other people. Machines can alienate us from society or teach us how to create valuable social strategies (see Nass & Yen). Machines can also create and command our inner lives, the way language does.

Technology cannot preserve the status quo, however, nor fight entropy: all empires decline. Ours will too, but I sincerely believe that ours is not yet speeding down the famous slippery slope. Right now we are the strongest nation militarily and our culture and our language are powerful worldwide. What is very troubling is that we seem to have lost what Auden called our “dream of safety”. If that does seriously go then we shall fall from the heights precipitously, like the character in our cartoons who walks straight off the edge of the cliff but keeps right on going—until he looks down. So far the US has run up a great record of walking perhaps far off the edge of the cliff and has not plunged into the abyss. For one thing, we have taught the world our language and with our language around the world go our patterns of thought and our ideas and ideals. We have adopted the motto of an immigrant—he came from the planet Krypton—who was a superhero defending “truth, justice, and the American way”. Other nations, most recently China, complaining about Americanization, have balked at us trying to impose “the American way” on the whole world, using our massive technology, by the way. Worst of all, perhaps, is the rule of GIGO (Garbage In, Garbage Out), for machines are in fallible human hands and cannot produce correct/happy results if people make errors in communicating to the machines. When we do not speak the other’s language confusion and worse may follow.

Cyberlanguage

As you know, programmers write code. It is like mathematics a precise language and indeed it may to a certain extent drive all users of computers to recognize the need to think more logically and operate more accurately. Moderns are too much hampered by vague or deliberately ambiguous terms (*freedom, democracy, and the like*) or the evasions of politics (*regime change* for the overthrowing of foreign governments, *revenue enhancement* for higher taxes, etc.) and the in-group speech of the professions. Norris (p. 7) quotes a statement that so puzzled JPMorganChase that the giant bank stumbled into billions in losses as it tried to follow Bruno Iskil’s directions for “trades that make sense”. Norris says of Iskil:

He proposed to “sell the forward spread and by protection in the tightening move,” “use indices and add to existing positions,” “go long risk on some belly tranches especially where defaults may realize” and “buy protection on HY and Xover in rallies and turn the position over to monetize volatility”.

Say what? If you can’t make sense of that neither could those in the international senior management of JPMC and they and those who trusted them lost a bindle. For that eventually JPMC paid a big fine when regulators caught up with them but big banks pay up. Some portion, of course, with admitting no responsibility, and no one going to jail.

Corporations simply regard fines as part of the cost of doing business, just like hiring armies of accountants, lawyers, and lobbyists to obfuscate, lie, pressure and work their way around regulations that stand in the way of possible big gains, legal or not. The big banks cannot be regulated; they discover or make the loopholes. If they have to do so in search of profits they commit crimes that will not be prosecuted because they are—here’s a phrase you can understand—frankly “too big to fail”. That does not mean “so big they cannot fail”; it means so big that if and when they fail the taxpayers will have to bail them out. In reality they are too big to manage. When they fail they will have to be propped up because if they are not saved they will bring down the entire house of cards in a system that depends upon *confidence*, the first part of which obviously is *con*.

Cyberlanguage is not all con; it is arcane but it is not gibberish. It can and will, however, be hacked. It can make and break all other codes. It can assist linguists as never before (searching vast corpora and machine translating, for instance) but it is just binary programs which can be manipulated or even destroyed. No one is safe, not the individual, not large commercial and cultural institutions, not the government’s Pentagon, CIA, FBI, or any other organization that depends upon digitized data. The various cyberlanguage’s “speakers” are the most powerful elite since the priests who cornered Egyptian hieroglyphics and to whom even the allegedly omnipotent pharaoh was subject. It is part of modern life and the development of technology which replaced the horse with the iron horse and involved the genocide of the Amerindians and the horseless carriage which accounts for tens of thousands of traffic deaths each year in the US. We all know of unintended consequences and that everything costs something (Alexander). The cyberworld has altered the way we think, speak, and write as well as making many other revisions in our daily lives, some good and some bad. The UK’s Literary Consultancy in 2013 held a conference which attracted 30 experts from journalism, publishing, and the digital world. They surveyed the current cyberworld. The American Society of Geolinguistics in 2014 will look at language and all the media and the new cyberliteracy but geolinguists may be linguists but not cyberlinguistically adequate.

If young people are ready to learn extra languages they might be well advised not to go to college for that—which usually means taking on huge debts, and student loans as of early 2013 reached \$85 billion in default—but to acquire computer languages. Those in most cases will get them jobs better than college degrees will. The hacker who revealed the US secrets in 2013 did not finish high school but held an important computer job. College computer graduates start at \$100,000. That is not like a contract for nearly \$300,000,000 for a third baseman’s deal but it is a lot and some computer experts build fortunes in the billions when language majors can hardly get any job except in retail. The jobs for those with middling abilities but with generous salaries have disappeared. With that went a lot of the middle class, except for technicians such as doctors and dentists and veterinarians and plumbers and electricians and such who charge high prices for their *skill sets*. Some have fancied up their work: counter people now called baristas serving the 70 million who troop into a Starbucks for cappuccinos may get a fern design on top of their drink but the salaries for these minor artists are small although the prices are high. Profits these days go chiefly to owners, not to the workers. Their salaries in real money have not gone up for years. Technology has brought more to the haves than the havenots.

The really ambitious may have to invent their jobs. The Finns teach that, and Finnish students are better at language and mathematics and innovative skills than Americans are, despite their difficult Finno-Ugric language. Finns would never, as the City University of New York has had to do, reduce per capita spending by 40 percent or, as New York high schools do produce so-called graduates 80 percent of whom have to take remedial courses in the community colleges, from which only 25 percent graduate. It is true that algebra is what is most fatal to those students but language inadequacy is likewise a reason they fail. The City University of New York, with 480,000 students, is the fourth largest educational institution in America. Its four senior colleges (which once were free and now are expensive, having had a 40 percent budget cut over the last 20 years) and more than a dozen community colleges is according to Kamenetz a disaster. The senior colleges nearly wrecked the system with Open Admission, taking in students unprepared for college especially in English and mathematics. Today they no longer offer remedial high-school subjects at college rates and the community colleges spend most of their time and effort on remediation but a student in one of them has only a 25 percent of gaining the two-year Associate degree in six years. Students lack not only adequate instruction and honest grading but also motivation and support at home where parents have neither time nor educational background to help them. Research has shown that if parents did not complete high school children start preschool at a disadvantage that all education up to age 18 cannot remedy, so fixing US education looks like it will take two generations if indeed it ever starts. With all the technology and all the money—CUNY’s budget is 2.8 billion a year—the results in training for good jobs or college and better jobs are often deplorable. *Social promotion*, which is moving them along when they fail to make any progress, still happens so that in the “languages” of technology and English they simply cannot cope. That is where all this about education connects to language. Education, and educated language, are naturally closely related, so are the old cultural codes and the new languages of the cyberspace. The old may know the former, the young may know the latter, and there is what we like to call a *disconnect*.

Codes are the languages now most in demand. Of course one can also learn natural languages online, and faster and better than in colleges. Even majoring in English in college does not seem like a good idea these days unless you are independently wealthy. **Q:** What is the difference between an English major and a park bench? **A:** A park bench can support a family of three. A degree in English will likely enrich your personal life but it will not help much in the marketplace. One deal that may pay off is learning a language or languages of the Islamic world, provided you are not a Muslim (we distrust even American Muslims). Of course what the US government considers “critical languages” changes as politics change. Our government at the moment is leery of hiring anyone, even native-born Americans, of Muslim background. The US fears security risks. The so-called War on Terror has made us all a bit paranoid when it comes to national security. In the 19th century we feared that Roman Catholics, most of whom spoke English, might have more fealty to Rome than to Washington. In the 20th century the government feared homosexuals might be blackmailed. In the 21st century we question the patriotism of all American Islamicists. Where once the brainiest were considered brain surgeons or rocket scientists, today Americans believe Chinese is too

difficult for English speakers to master. Some computer codes are really harder to learn. If one makes any error in them then the result can be unsatisfactory, even dangerous. Communication depends as much on the receiver as the sender, good instructions and accuracy. The human factor has to be taken into account no matter what science can do.

Are You on the Same Page or Off the Page Altogether?

Here is one of the most important points to be made about cyberliteracy: it is one of the major factors splitting society, the young and the old. Amis, again, in *The Pregnant Widow*, a novel which in its title and much of its content reflect Alexander Herzen's belief about the persistence of heritage in a world of change. That is a thing that creates, Herzen said, "a long night of chaos and desolation," which may well be the struggle between convention and futurity as the old exercising "benefits" (for instance, dementia in the aging is predicted as doubling soon and costing immense amounts, more than cancer or heart disease, etc.) that will cripple the young and cause serious disruptions in finance and politics. But here is Amis' character talking frankly (p. 183):

There used to be the class system, and the race system, and the sex system. The three systems are gone or going [actually slowly going]. And now we have the age system.

The young and the old not only have different goals and experiences and expectations but also they speak quite different languages. This is largely due to the deterioration of the educational establishment and the rise of the cybergage and the technologies of entertainment and business. Those shape quite different mindsets. They can lead to cross purposes, miscomprehensions, divergent ideas regarding responsibility and respectability, the good, the true, the beautiful, and the personally tolerable. The Under 30s who are the soul of Silicon Valley and similar places globally are a subset of youth culture, the new Masters of the Universe, miles beyond the Man in the Gray Flannel Suit, the Organization Man of yesteryear, anything ever known before. They are not all successful, of course. Bronson's first book on the information whiz kids was titled *The First \$20 Million Are the Hardest*, but some kids have made it and, fabulously wealthy, they are America's and the world's new aristocracy. They have a new language to boot, as they boot up. The cyberworld is very much divided, the geeks and hacks and geniuses and entrepreneurs and trigger-happy start-up and buy-out investors in Nerdistans and the rest of us while at the same time the experts have also made the lucky minority LinkedIn, more or less. 0 or 1, on or off, you're in or you're out.

Personal Lives in the LinkedIn World

Knowledge is power. Information about consumers can be sold to business. Technology has done far more than put you on surveillance cameras or search you at the airport; it has tracked your credit card purchases and Internet connections, it has read your posts and blogs, it has identified your networks including your Facebook "friends". Facebook is used by one-sixth of the world's population and is a very major shaper of US youth and it has accumulated and analyzed other sources of saleable information. It

becomes ever more an advertising business. It makes about a dollar every time you visit the site or start a search, etc. It does this with the argument not that it is making a buck off collecting data but with the announcement that it is alerting you to things you might need and telling you where you can get them. You are 24/7 customers, not only of Craig and Angie with their lists of supposedly useful information about businesses, commercializing the collection of free and maybe unreliable recommendations from the public, in the Zagat mode. This is crowdsourcing rather than expert reporting. Authority has moved from the maven to the mob. Supposed leaders are poll driven, pandering rather than inspiring, with their wet fingers in the winds, try to discover where votes are.

Any individual or group of persons can *move the needle*. Any customer on Amazon who wants to comment on a book becomes a literary critic. Forget the *Times's* expert reviewer. We are all subjected to personal prejudice and we all are potential customers for those who offer any kind of product or service for which we can be thought to be a likely buyer. Google and lots of other businesses know more about us than we realize (Sengupta, p. 1). Political parties craft their message for us in the light of their information on what brand of toilet paper we buy. (That is a fact, not a joke.) We are categorized (*niched* is not yet a verb) by any persons who can survey our purchases, read our e-mails, etc. The government whatever it admits has indeed listened in on our international telephone calls and maybe, legally or not, our US calls and opened our mail. Hey, “there’s a war on,” and the US has been on a wartime economy for all the lifetime of almost all Americans. Terrorism is a new kind of war, more dangerous, maybe just as expensive, and it makes military intelligence all the more crucial.

Being on this new war footing has changed us forever. Those who brought down the Twin Towers cost us more than two rather ugly buildings: they cost us trillions of dollars in a new conflicts abroad and a seemingly permanent loss in a lot of our comfort and “inalienable” freedoms at home. We lost such personal privacy as we enjoyed. Freedom is always costly. Think of what uprisings today cost in lives and repression worldwide. Some countries are less threatened than others and have laxer surveillance and less censorship but all countries need some and are spying on citizens as well as potential enemies. *Entrepreneurds* are helping them and sometimes resisting them. Now US officialdom would like to know what books we borrow from the public library, with whom we connect, what we are thinking. So authority says it is on a *need-to-know basis*. Terrorists threaten abroad and at home and the government has to be strong every single day, the terrorists only now and then successful. The gigantic Internet companies know even more about us, because there is money to be made in that. In the new world of the information community and crowdsourcing each of us is a member not only of a larger group than ever before in history but also of a number of clearly identifiable groups of people whose habits from food to sex, thoughts from politics to where they would like to vacation, indications of what they might buy and what they will not, is “golden”.

Watch Your Mouth

That was the title of a speech I gave at a convention of the Modern Language Association years ago when the thought police first came up with Political Correctness.

At the end of the talk, half the audience rose for an ovation and the other half remained seated, scowled, and would have booed if they dared. Now there is another Big Brother. So watch what you do and say, because Big Data is watching and listening. What does Axiom (founded 1969 to help get Democrats elected, now with *the goods* on 20 billion consumers for advertisers) know about you? Increasingly you are a Customer, for whom outreach can be customized. Some people are getting more and more uneasy—the Average Joe knee-jerks “paranoid”—about all communication. If they use the Internet or credit cards, etc., they expose themselves. But Americans are big-time Internet fans and credit-card debtors even though the US does not rank in the Top 10 countries providing Internet usage and not everyone has a credit, or even a debit, card. In World War II posters warned “Loose Lips Sink Ships”; the enemy was listening. Now both Their Side and Our Side are listening to us, so we have become wary, afraid to speak out.

We do *gab* a lot. Technology is available to us if we can afford it, but scary: cell phones can be stolen and computers searched. New Yorkers lost tens of thousands of cell phones in 2013. Technology affects us even if we do not use it, and definitely is *on our case*. People aware of that may take steps to protect their communications as never before. That is radically altering human interactions as well as producing a phone that plays music and TV and films and replaces your wristwatch that replaced the pocket watch and most clocks in public places. The computer is moving off the desk to the laptop, the iPhone and the rim of your eyeglasses. Wearable gadgets are here and there are little computers in pills that you can swallow that will monitor your physical health; implants will come later. Every day seems to bring new marvels, at a price.

The Machine Age

You can run computers now not by typing (on a keyboard designed to sell typewriters: the letters for TYPEWRITER all in the top row, not the best arrangement but we have got used to it, as I keep telling the young who have never used a typewriter—or carbon paper, or—you name it) but by touching icons on the screen, by gestures, and eventually just by talking to the machine. That will be a boon to the illiterate or those who can never learn to spell. God help you if you can read but not speak the language or if your pronunciation is too far from standard. Maybe technology will learn to cope with Americans who don't pronounce *d*, *t*, *r*, etc., drop the ends of words, drawl, honk, whine, and so on, the mumblers, the mushmouthed, *et al*. Machines cannot make all allowances. Maybe they will not recognize all languages or dialects. Already machines cope with people with various dialects of English asking for telephone listings on the 800 information number but you know the effects are not wholly to be trusted. Glitches occur; stuff happens; science can go wrong, and you see this even with the mad scientists of horror movies. How much improvement is necessary or possible it is impossible to predict, like the future of individual languages, like the fate of the technological media. As a famous US master of malapropism once observed, predictions are always hard to do, especially about the future.

Works Cited

- Alexander, Jeffrey C. *The Dark Side of Modernity*. Hoboken (NJ): John C. Wiley, 2013.
- Almond, "The iPads Are Coming!" *New York Times Magazine* 23 June 2013, 44 – 45.
- Amis, Martin. *The Pregnant Widow*. New York: Alfred A. Knopf, 2010.
- Bauerlein, Mark. *The Digital Divide*. New York: Penguin, 2013
- _____. *The Dumbest Generation*. New York: Penguin, 2013.
- Bronson, Po. *The Nudist on the Late Shift*. New York: Random House, 1999.
- Eggers, David. *The Circle*. New York: Farrar, Straus & Giroux, 2013.
- Frank, Thomas. "Easy Chair: Trio Grande," *Harper's* July 2013, 4 – 7.
- French, Nicci. *The Red Room*. New York: Warner Vision Books, 2001.
- Garner, Dwight. "A Literary Mind, Under the Spell of Drugs and a MacBook," *New York Times* 5 June 2013, A 1, 5.
- Hawkins, Jeff [interviewed by Alexis Madrigal]. "The Intuition Machine," *Atlantic* July/august 2013, 40 – 41.
- Kamenetz, Anya. "System Failure: The Collapse of Public Education," *Village Voice* 3 – 9 April 2013, 8, 11 -12, 14, - 15.
- Kapisch, Cédric. *Paris*. Film, 2009.
- Lescroart, John. *Damage*. New York: Signet, 2012. [Originally published by Dutton.]
- Lexington. "Cape of Good Hope," *The Economist* 22 June 2013, 38.
- Literary Consultancy, The. "Literary Values in a Digital Age," London 7 - 8 June 2013.
- Moore, Christopher. *A Dirty Job*. New York: Murrow/HarperCollins, 2006.
- Morozov, Evgeny. *To Save Everything Click Here: The Folly of Technological Solutionism*. London: Allen Lane, 2013.
- Nass, Clifford & Corina Yen. *The Man who Lied to His Laptop*. New York: Current, 2013.
- Norris, Frank. "Masked by Gibberish, The Risks Run Amok," *New York Times* 22 March 2013, B 1, 8.
- Robbins, Tom. *Half Asleep in Frog Pajamas*. New York &c.: Bantam, reissued 2003.
- Santora, Marc. "In Hours, Thieves Took \$45 Million in ATM Scheme: Hacking of Debit Cards: Computer Experts and Street Criminals Hit 2 Dozen Nations," *New York Times* 10 May 2013, 1, 26.
- Schary, Dore. *et al. Edison, The Man*. Film, 1940.

Sellars, W. C. & R. J. Yeatman, *1066 & All That*. London: Methuen, 2008. [75th Anniversary Edition.]

Sengupta, Somini. "What You Didn't Post, Facebook Might Still Know," *New York Times* 26 March 2013, B 1, 9.

Simala, Florian. www.floriancjr@gmail.com

Vaccari, Christian. *Digital Policies in Western Democracies*. Baltimore: Johns Hopkins University Press, 2013.