



Light Onwords / Light Onwards

LIVING LITERACIES TEXT OF THE
NOVEMBER 14-16, 2002 CONFERENCE AT
YORK UNIVERSITY

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Acknowledgements

from B. W. Powe

What does it mean to be literate in the twenty-first century?

How could we involve people in an exploration of the philosophy of literacy?

In the processes of learning how to read our world, how could we free the mind, lift the spirit, open perception, and forge connections? What are multiple literacies?

These were the questions that drove the creation of a unique conference dedicated to the ideals and ideas of literacy.

This book presents the print record of that event we called Living Literacies, an occasion that took place in Toronto at York University in November of 2002. The speakers who are gathered here contributed their work for free; I'm grateful to them all for their concentrated efforts in shaping their oral public presentations into the finely crafted literary expressions you will find here. These pieces represent a powerful intellectual engagement with the issues that surround that one word, "Literacy." In a sense, the event, and then this book, were both moved by a word.

Living Literacies was the result of the committed, inspired, imaginative, and tenacious actions of a small band. Special thanks must go to Professor Eric Willis, the Master of Stong College, who put together the organizational team: his patience and far-sightedness, his enthusiasm and his profound conviction that this must be done — all ensured that the conference would be a success. Lianne Vardy, Heidi Liepold, and James MacLaren at the National Literacy Secretariat and HDRC were the most ideal of supporters: they made sure we were well financed, and made sure the federal agencies that backed us were always there, present when we needed their advice. Robert Bishop; Lara Ubaldi; Colleen McLean; Ross Mayot of the Chum-City group; Lynne Payette for transcribing the proceedings; Kim Michasiw, Chair of the Department of English; Gail Vanstone; Michael Jackel of the York Bookstore; Frances Flint; the staff at Stong College and in the York English department — all these people contributed essential work; nothing would have happened without them. Special thanks to the professionals at Canadian Learning Television and BookTelevision for creating the Living Literacies television series for national broadcast. Bridges were built between people and institutions, alliances formed, structures planned, energies synchronized.

Special thanks must go to my editorial assistant, Stephanie Hart. She was able, with considerable diplomatic finesse and literary acumen, to pull together the work you now see before you. None of what is here, in this record, would have seen the light of day if not for her steady persistence and wise calm. I am indebted to her diligence, her sense of excellence.

In these pages I hope you will find inspiration, thought, provocations, new angles, stimulations for more reflection, the basis for a continuing response. From these words and thoughts may come your words and thought. The mission of the Living Literacies conference was to breathe more life into the issues, range, concerns, and depth of literacy in all its forms. The purpose of this book is to record, on the page, what was said, over those days. These words form, then, yet another part of the vitality, the passion and intelligence, the

concern and reflectiveness, that surround and move what we invoke and mean through that individual word, "literacy."

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INTRODUCTIONS

by Eric Willis

As I reflect on the Living Literacies experience and the papers from that conference reproduced in this book, I am reminded of a trip to Crete where among other things I had the opportunity to see the Phaistos Disc in Herakleion's Archaeological Museum. This small clay disc from the Minoan civilization is probably 3500 years old and inscribed on both sides with forty-five different pictures in a distinct and fascinating spiral pattern. To this day it is the only one of its kind ever discovered among all the archaeological relics of the Mediterranean and still fascinates scholars, who haven't yet been able to decipher and agree on its meaning. One is left to only imagine what the author of the disc was attempting to communicate and when or if we will ever be able to understand its message.

The tragedy of this lost literacy is a reminder of the timeliness of the Living Literacies project and conference held at York University, Toronto from November 14 to 15, 2002. Intended from the beginning to explore the how, what, and why of literacy, the conference was a huge success at stimulating discussion and debate about the potential meanings of literacy in Canada's advanced technological society of the twenty-first century. What follows here are the presentations from that conference. As captivated and excited as I was by the idea and intent of this conference during the planning stages, I am even more impressed by the range and quality of the presentations included in this book.

As the Master of Stong College here at York, I take pride in telling you that this conference and book are products of a committee of Fellows of the college that include Rob Bishop, Lara Ubaldi, B. W. Powe, and myself. As the prime mover for both, however, a special thanks goes out to B. W. Powe for the genesis and genius of the idea, the conviction to stay the course through the inevitable bumps and bruises that accompany an undertaking of this magnitude, and for the foresight to promote the significance of this issue.

As intriguing and mysterious as the Phaistos Disc might well be to scholars, its story also informs us of the importance of seeking to understand and illuminate literacy in its many forms. It is our hope that this publication will help in this process for the reader.

Light Between Words

by **B. W. Powe**

Living Literacies began with words, in words – with an idea – in a conversation. Three years ago, John O’Leary and I were talking over lunch. We’d had many conversations before – indeed, it has become almost a ritual for us to do so. But this conversation went in a new direction. We talked about the literacy movement; then suddenly, as if from nowhere, we found ourselves talking about the philosophy of literacy. What we meant by this was: how does literacy move us; what does it mean to have grown up within an alphabetic culture; to what degree has our civilization in the west been shaped by the idea, or ideal, of literacy itself? We thought out loud, to one another: to read and write, speak and interpret, could be part of our legacy of human rights, part of the “civil” in civilization. Then, of course, we recognized that there are many forms of literacy – oral, visual, mathematical, print, cyber. We acknowledged the vigorous, often acrimonious debate that can erupt between furious proponents of the Book and relentless advocates of the E-screen, “being digital.”

John and I were confronted by a plethora of ideas. It was more than an abundance; it was more like a torrent. We felt as if we had tapped some source, a surge through which that one word: “literacy” flowed. Hence we said, and agreed, let’s step into the open; let’s create an event that would let loose those ideas in the public sphere. Let’s see what we could do to summon many powerful minds on this subject. Let’s see what we could do to make the words spring forward, to make our minds flow over that idea, what literacy means.

Thus this conference. I don’t remember who came up with the name, Living Literacies. But from the start we liked its ambiguity: to live through literacy, to recognize still vital legacies, to acknowledge multiform traditions, to attend to the echoing letters in our lives, to be alive in our traditions and our dreams and intimations, our printed and spoken words, our images and our screens, the human energy radiant in our creations. The Latin *littera* means character – a message. The title implied: We are bearing messages.

But our intentions were, and are, to go beyond the traditional literacy community, and the great activism of bringing literacy to those to can't read and write. Our idea was to indeed move beyond – and bring out the implications and contexts, the reverberations and overtones, the ideas and debates in the philosophy of literacy. Another stage in the movement, a fresh phase of discussion.

Yet let us ask, why literacy itself? People have asked me this over the past months. Why are we stressing its essential relation to selfhood, and our civilization? Why such big, even grand themes organized around, in fact stemming from, such an overused word? Why integrate, involve, such disparate – I almost said desperate – sources and energies for this conference, this search for cohesion, for soulspark, for connection and coherence?

Alphabetic literacy is inextricably joined to the making of the private sphere. This is our inward originality: our personhood, or individual soul. Literacy is connected to the concept of privacy, of solitary space. With literacy comes the articulate private dialogues of the mind. If the inward domain – John Stuart Mill's stirring phrase – is still a value, then literacy must be pivotal, crucial. Consider the imperatives in the word “crucial” – those of choice, of being at the crux. Our comprehension of the uniqueness of each mind, of the possibilities of consciousness, surely springs from *litterata*, the letter. When we try to destroy or inhabit

the mind, we snuff out one more possibility of consciousness and its radical articulations, speculations, reflections, recognitions.

But here is the contradiction: Literacy is also connected to the creation of public space. The intimacies of solitude, of private writing and reading, lead to conversation and controversy, dialectic and probe. The inner need to articulate becomes the outer expression, forums and symposia, and eventually publication and reprint. This is the tradition we find in the *agora*. It is what we find charged behind the concept of the engaged citizen - of the public philosopher, of the poet and performer, of the artist and politician seeking to move the audience to ruminative response or action.

From the beginning of the concept of literacy we see this dual aspect, a contradictory condition. This one word evokes the inward, contemplative realm (singularity, the beat of one's own), and the uttering, or externalizing, of our thoughts and emotions, which must bring enlarged forms of communication and expression, new language and the turbulence of technological extensions.

Emily Dickinson – stark, spare, lonely and audacious soul – wrote of these twin directions, the implications of literacy, in two fragments, one dated 1882 (fragment 1593), and the other undated (fragment 1696). Here she writes:

... this Bequest of Wings
Was but a Book – what Liberty
A loosened Spirit brings.

Now here the movement outwards, the rush of free flight. Then:

There is a solitude of space
A solitude of sea
A solitude of Death, but these
Society shall be
Compared with that profounder site
That polar privacy
A soul admitted to itself –

Observe the movement within. And the devastating puns: in “polar,” conjuring separation and cold outsider air, and in “admitted,” conjuring a hermetic confessional.

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These twin and yet contrary poles in the word “literacy” are further revealed in the public creation of new languages and new forms. Private minds, those inner sancta, crying out for contact and attachment. Dante’s *vulga*: the diction of his vast *Commedia*, the vision of Beatrice in the streets of Florence moving the poet into forging a common language for his lyric, metaphysical architecture. Wordsworth’s common speech becomes an incendiary manifesto for Romanticism. The modernists, especially James Joyce, turn their private labyrinthine work into multilingual artifacts – the novel and the poem become culture bearers. The exemplary postmodernist fictions – Salman Rushdie’s *The Satanic Verses*, Jeanette Winterson’s *Written on the Body*, Cormac McCarthy’s *Blood Meridian* – turn self-consciousness into epic constructs and meditations on transcendental ironies.

Consider the cultural legacies of the American and French Revolutions. There was an outpouring in those times of documents and declarations, pronouncements and polemics, the courageous rhetoric of rights and independence, aimed at an imaginative republic of readers. Our own guiding souls and intelligences were now the true kings and queens. Individual hunger and need led to the demands of a larger literate public. Old systems collapsed, crushed by the call for new representation. Leaflets, letters, newspapers, broadsides, pamphlets, novels, and satirical poems circulated: these formed key lifelines for the inner self and its longing for liberty and a responsive, open system.

In all these examples the solitary universe – the confidential realm, that soul admitting to itself – nevertheless longs for a receptive, transforming cosmos of the “loosened Spirit” with its “Bequest of Wings.”

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Now in our virtual venues, the televisual electroscapes, we are mesmerized by – and sometimes fireballed by – the next movement in the hidden phase of literacy: the cyber-revolution. Book people, like myself, sometimes squirm, often sneer, certainly worry, make dire pronouncements, or wail against “becoming digital,” like lost wilderness souls.

Let us say the cyber-revolution is the confirmation of the long struggle of consciousness – of the mind’s perpetual push from the inner to the outer – the ability to make languages, technologies, structures, forms, those expressions of inward originality, and the need to reach out from that inwardness. What revolutions or rebellions will rise when the public becomes cyber-literate?

The digital transformation is another form of the creation of private and public spheres. We sometimes see this vehemently debated in terms of division, insoluble conflict: screen and image versus word and page; publicity versus privacy. I see these energies and creations as complementary, in the way that physicists would use that word: twin aspects of the same historical human impulse and pulse, the soul’s progress toward the fulfillments of consciousness. Multiple literacies suggest the spreading and evolution of personal sensibility, singular intelligence. The unfolding cosmos does have a destiny, and it is mind.

In my new work on mysticism and media, I find myself venturing into areas of literacy that are at once old, a recollection of origins and lineage, and for me shockingly new, a movement beyond divisive, perhaps pointless polarities. If we are souls, if you accept the premise that we are more than matter and flesh – a premise I accept; many here may not – then it follows that we could treat our endeavors, our creations, whether literacy itself or the machines and mechanics of multiple literacies (book, TV, computer) in a metaphysical context. This would be grounded in the evolution of the sole mind, which is toward the community of souls, loving and liberty. I am haunted by these questions: Could there be, with our simultaneous convergences and agents of traditional literacies and cyber-literacy, a grammar of the cosmos? Where word and image may yet be perceived together in a reunited whole? And could there be a literacy or grammar of silence, of the gaps, of the stillness beyond words and images?

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Let us say that inside Living Literacies we have the opportunity to make and mark our space and time. We are here to let voices speak, images play – to be not at the mercy of systems that do not serve us, that we think beyond our control. We’re here to be informed, to

inform, to be inside restless metaphoric forms, to enform – a neologism for our event – to envision, to be torn away from preconceptions, to be those selves who could always do more.

Our ethical act – all of us who united, however briefly, to make Living Literacies – is to bring literature, image, conversation, philosophy, polemic, speculation, and dream, book and E-whirl, singing voice and formative and formidable lecture, into one vibrant place. To paraphrase James Joyce's description of his Ulysses, this event is not about something, it is something.

Over these days we won't set limits for ourselves. Civilizations and cultures must be known for their crystalline range of colour, for their tolerance and love for the light though innumerable, individual prisms. We may catch the trace of the uncapturable, the mystery, between the lines. And though surely there will be no agreement here – in fact, I anticipate much disagreement – I hope that there will be that light between words, light behind images, some vision somehow striking us from somewhere beyond the walls of this theatre.

The hidden history of literacy is the soul's route: light between words, light behind images.

The City Is the Classroom

by John O'Leary

In mid-February, 1899, a young Methodist minister boarded a train in Toronto accompanied by six university students. Almost twenty hours later, the train stopped in the middle of the night along a lonely stretch of track just north of Georgian Bay. The minister and his company hopped off the train with their snowshoes, camping gear, and a large sled piled high with books. As the train pulled away, the small party, huddled close against the cold, turned into the bush and, using a compass and the moonlight to guide them, set out to find a logging camp near the town of Nairn Centre. When they arrived, just after dawn, the camp was empty. The loggers were already at work. By the time the men returned that evening they found something new in their rough settlement, a tent. But it was not just any tent. A large banner on the tent proclaimed:

Reading Tent: All Welcome

The minister, Alfred Fitzpatrick, and his university volunteers sat in the tent at tables piled high with poetry, history, mathematics, and philosophy texts.

"Welcome, men," Fitzpatrick said, "welcome to Frontier College."

Thus began one of Canada's boldest adventures in education. Fitzpatrick's mission was simple – education for all. Every Canadian, not just a privileged few, must have access to basic education and the opportunity to study at the university level. The university belonged everywhere, not just within the comfortable halls of the academy. Fitzpatrick wrote:

Bring education to the people, not the people to education. Not only primary but secondary and university education should be placed within the reach of all.

Note his emphasis – not most, not many, but *all*.

The founders of Frontier College believed in the power of education to improve the lives of all people, including the loggers, miners, and railway workers whose work produced the wealth that made it possible for Dalhousie, Laval, Queen's, the University of Toronto, and the University of Alberta to construct the massive neo-Victorian halls where a tiny number of privileged students were able to study and learn.

"Open up these halls!" cried Fitzpatrick, echoing Walt Whitman.

He went further, insisting that the rough cabins and bunkhouses of the Canadian north could also be adapted and refitted into classrooms where workers could meet and study at the end of their twelve- to fourteen- hour workdays. The teachers would be volunteer students and faculty members from the universities. And they would be *labourer-teachers* working in the bush and on the rails all day alongside their coworkers and then voluntarily teaching evenings and weekends. The workers would teach the students by day; the students would teach the workers by night.

Fitzpatrick knew from his years of preaching in these isolated camps that working people possessed intelligence, curiosity, and a desire to learn. But they lacked the opportunity to

pursue these things, burdened by their work, by the strict class codes of the time and by the ignorance of most educators who felt education was exclusively for the professional class and that wider accessibility would dilute the value of education.

Frontier College proved these views were wrong. The bunkhouse classes filled rapidly, tents and reading camps were set up across the country, and, by the 1920s, Frontier College had been granted a charter, the right to grant university degrees to working people. Fitzpatrick and his determined teams of student volunteers had successfully connected the work camps to the academy.

One hundred and five years later, the frontiers still exist. They look different. The rail gangs and the logging camps have been replaced by the inner-city high-rise, the prison, and the homeless shelter; the loggers and miners have been replaced by cashiers and waitresses, burger flippers and migrant workers.

Canada has obviously come a long way since Fitzpatrick and his volunteers boarded the train for Nairn Centre: we have achieved a great deal in the pursuit of education for all. But there are still isolated people and places. There are still frontiers – frontiers of poverty, of despair, and of dispossession. And those are the places where Frontier College teaches today.

Our approach is to see the strengths and the intelligence that exist in these places in the same way the founders did more than a century ago.

The founders met loggers eager to study agriculture; we meet cab drivers eager to study literature. They turned log cabins into classrooms; we set up homework clubs for inner-city students in the MuchMusic studios. Fitzpatrick proved that every place is a learning place and that people can learn everywhere. What does that mean for today's Canada? How can we apply the same ingenuity that devised reading tents and teachers on horseback – another nineteenth-century Frontier invention – in order to teach workers in suburban strip malls?

Frontier College is a part of Living Literacies in order to get help in answering these questions. We want to expand the conversation about education. Teachers and literacy groups, ourselves included, see things in a certain way. But when you involve inventors, philosophers, authors, musicians, and poets in the conversation, you will get different responses. Our long partnership with the Chum-City group, for example, began almost 20 years ago when I asked Daniel Richler, then a MuchMusic VJ, about the link between rock music and literacy. Daniel took me with him on a visit to a suburban high school where he talked with the students about the references to Greek myths and Beat literature in contemporary music. That led to the first "Rock 'n' Roll 'n' Reading" video, broadcast nationally over MuchMusic, and a series of projects in support of turning teens on to the power of knowledge and ideas through the use of music and popular culture.

It is commonplace to note that we live in the knowledge and information age. But schools and teachers must acknowledge that one consequence of this is that, more than ever before, learning and teaching cannot be restricted to the conventional classroom.

In 1976, Marshall McLuhan wrote:

Most people in the community work mainly at exchanging knowledge and information with one another. This activity does not differ from the work done in schools. The work of the community has become a continuation of the work done in school; school work has become part of the work of the community. Since all the answers are available outside the classroom, it is a good strategy to put the questions outside the classroom. The city is the classroom!

The historic docklands of St. John's and Halifax, the former factories of Montreal and Toronto, and the vintage warehouses of Winnipeg and Calgary have been transformed into the labs and the offices where the knowledge economy, the learning society are being created. These enormous urban spaces where skilled but, by today's standards, barely literate stevedores, tradesmen, and teamsters once worked are now occupied by the knowledge workers of the high-tech sector. Sleek, brightly lit computer labs and microprocessors have displaced the massive machines and assembly lines of the last century.

These organizations deal in knowledge, innovation, ingenuity, creativity, and problem solving. The employees are highly educated, young, entrepreneurial, and unconventional. They think for a living.

Yet in all of these cities, within walking distances of these shiny labs and offices, you find dense, poor urban neighbourhoods – the contemporary frontiers.

In the same way the earliest Frontier College teachers turned camps into classrooms more than a hundred years ago, these high-tech labs and offices can be made into learning spaces for those people living in nearby inner-city high-rises. After-school homework programs, reading circles for children, and study circles, at all hours, for adults can be constructed in these places. The employees, people expert and enthusiastic about knowledge and ideas, become the teachers.

In order to organize this kind of new approach for literacy and learning, teachers cannot speak only to other teachers. Because the city is the classroom, teachers must seek solutions to our toughest problems in education, like dropouts and reluctant readers, from everyone in the community.

This is why Frontier College is part of Living Literacies. It is a way for us to continue pursuing that elusive dream of the founder, Fitzpatrick, who so eloquently wrote:

Education must be obtainable on the farm, in the bush, on the railway, and in the mine. We must educate the whole family wherever their work is, wherever they earn their living; teaching them how to earn and at the same time how to grow physically, intellectually, and spiritually to the full stature of their God-given potentialities. This is the real education. This is the place of the true university.

The Literacy Movement in Canada

by Senator Joyce Fairbairn

The promotion of literacy has become the cause of my life for nearly two decades. I was driven to it by my own ignorance of a fundamental social and economic fault line that had prevented millions and millions of Canadians from achieving their full potential or even dreaming about doing that.

When I finally saw the light, I decided to launch a debate in the Senate on Literacy in Canada. That was back in 1987. And it is revealing to the state of the issue at that time that this was the first time it had been discussed in a formal way in either House of Parliament. My frustration with myself caused me to describe the literacy situation in our country, then, as Canada's "hidden shame." And then I set out to try and see, even as one person, if I could do anything about it.

Now, my story is not unique among those marvellous activists who have brought so many into a state of concern and understanding on this issue over the years. For me it began when I was sworn in as a senator in 1984. While committing myself fully to the work in the Senate – and you may be relieved to know that the Senate does work – I had a strong commitment to active service in my province and, especially, my beloved home territory in the deep south of Alberta. With my appointment, I was also looking directly for a "cause" on which to focus. That is one of the good things about the Senate. If you want to invest the time and you have the energy, you can pick out issues that have fallen through the cracks or have been completely ignored. In my case I did not find literacy, it found me.

My very first assignment in the Senate was a Special Committee on Youth. It was chaired by Senator Jacques Hébert who created Katimavik to send young Canadians across the country, learning in their free time what it was like to live on the ground away from home in this country. Everywhere I go in Canada, and if I say I'm a senator, I find some person – now with a family of their own saying, "Do you know Jacques Hébert?" He is a wonderful advocate. And he was the chair of this committee.

Those were very tough times for youth in the mid-80s – high unemployment, disillusionment and even anger around the country. And so the group of us, including my dear friend, your president and my former Senate colleague, Dr. Lorna Marsden, set out across the country holding public hearings. Anyone could come. Parents, teachers, social workers, business, labour, people in all parts of public life at all levels and, of course, the young people themselves.

I can tell you, it was a riveting experience. We heard what we expected to hear about the lack of jobs, drug and alcohol abuse, teen pregnancies, family break-up, and all of that. But we also heard something that we had not expected. In every region of Canada witnesses of all ages spoke out about literacy and learning disabilities and the devastating impact that all this had on human lives. And we were shocked.

In our report released in February of 1986, among many other things, we called for a national campaign to tackle the problem of literacy. And then we went back to our regular work on other issues.

However, I was haunted by what I had heard. I began my career as a journalist. I have spent the rest of this part of my life, working always, with words. I could not imagine getting through a day without understanding words – their meanings and their contexts, in the most basic circumstances of human living.

So I was angry with myself because, for fourteen years, I had been working side by side with Pierre Elliott Trudeau, our most education-oriented prime minister, and the issue had never come up; not once – not for him, not for me. How could that be?

So I set out to find out where literacy was hiding in Ottawa and on Parliament Hill. I discovered we had not missed it, simply because it was not there. It had been deemed at some point to be an education issue and therefore, within that marvellous, compelling, and often totally confusing document we call our "Constitution," it was within the jurisdiction of the provinces. Now, there is no question, education is and should be a provincial responsibility. But in responding to the young woman who asked a question up here on the right, I believe that literacy moves well beyond all of those boundaries. It is a national and a human imperative. So it became my cause then, and now and forever.

Now, while reflecting on all of this, that great scholar, philosopher, teacher, hero in this community, Northrop Frye, riveted my attention many years ago when he said that if we were not alert and committed enough to battle this issue, it would become entrenched in our society as a generational reality, passed on from parent to child. And another cycle would begin.

Literacy is the foundation for everything we learn and do, and therefore we cannot and we must not ignore the fact that some eight million Canadians, over forty percent of our adult citizens, currently find themselves in one way or another marginalized because of varying degrees of difficulty in learning, numeracy, reading, writing, communication skills – unable to meaningfully contribute to and fully participate in our society.

John O'Leary hit the nail on its head today as he showed the pictures of the tremendous history of Frontier College, and then he talked about the new frontiers for the literacy movement in Canada. I might go even further to suggest to you that our very perception of literacy needs to be revised to take into account the new pressures and the expectations of this twenty-first century.

For me, one of our saddest statistics finds that some 1.6 million Canadians over the age of sixty-five are rated at the lowest level of literacy. Simply stated, that means that these seniors have difficulty reading at all. Now, how will they come to grips with the increased use of self-medication? Or with health and social services where communications are increasingly impersonal and automated? And, if you are looking for Home Care in a phonebook, it is rarely under "H." It's off in the purple section under something like "community services." Many seniors can't cope with that.

Mobility restrictions and sight problems can also lead to a loss of friends, personal contacts, plain old conversation. Their communication links are cut off. A lot of them are women, often isolated. Many cannot read or write letters. They cannot even enjoy a book as a friend.

Today, we in our society may think that literacy is somehow less important to our older citizens. After all, they are generally retired, their productive days behind them – I have heard that mentioned occasionally about myself! Well, this attitude totally ignores the fact

that seniors prize independence almost above anything other than health. And independence demands literacy.

I flew in here last night from the deep south of Alberta where I have been meeting with my friends in the Blood and Peigan Nations of the Blackfoot Confederacy, an historic group of aboriginal tribes in that area. They have problems with which none of us in this room could cope.

I cannot stand before you today and discuss this issue without offering a fervent plea for the importance Canadians must place on the inclusion of aboriginal people in this lifelong process that we are talking about here at York University.

Let there be no doubt that literacy and lifelong learning is at the heart of opportunity for our first citizens in every part of the country. It opens the doors to allow all these people to have equal access to the benefits of this wonderful land – a land that they cared for and protected, long before any of our ancestors ever came to the shores of what we now call Canada. And while this is a stated priority for all governments, we must hold them accountable, truly accountable, for a far greater effort, particularly with the children who must lead the future for their people.

Another issue that struck me as I was watching John's slides was a prison cell. As we hold this important meeting in the heart of our largest metropolitan area, we should note with alarm the link between literacy problems and crime. The statistics are appalling. Up to 50% of adult inmates can neither read nor write. That can rise to well over 80% in institutions with a high aboriginal population, particularly in western Canada. Over 75% of juvenile offenders have learning disabilities, and in some areas that figure rises to around 90%. And up to 90% of adult inmates are school dropouts.

So, the vast majority of offenders will eventually be released from prison and return to our communities. Is there any doubt that concentrated literacy programs during and after incarceration must be available to help them become better neighbours and contributing members of society? This is possible. It is being done – but not enough.

None of these issues are peculiar to Canada. Access to lifelong learning and literacy is a global deficit of proportions that we cannot even imagine.

We are at a point now where I believe we can achieve a comprehensive strategy to deal with this issue across the country. We call it lifelong learning. We call it a learning culture. Other countries have it, why don't we? Certainly we are capable of having it. But we have to be careful how we define that phrase, "lifelong learning." It is not just something that happens in that transition period between school and work, or when someone is coming back into the labour force, or when you have to acquire a response to technology.

For me, lifelong learning means exactly what it says. It starts when the smallest child can touch a book, can turn a page, recognize a picture, and can hear the sounds of reading from a friendly voice with a pair of arms securely wrapped around them. That is where it starts. It does not start in the middle, it starts at the beginning. Dr. Fraser Mustard has told us that here in Toronto in spades. By eighteen months of age, our children are ready to engage in the learning process. And then it keeps on going, through school, through work, through family, right until the very end.

Clearly, without that continuum, we isolate a huge segment of Canadian society and we undervalue our greatest national asset. Our host stated in the pre-conference materials that literacy must mean more than the mechanics of reading and writing, and I agree completely. And great strides have been made in research and innovation and through the partnerships evident in this conference and across the country. We are on the march. And in terms of human decency and compassion, with our small population, we simply cannot afford to leave anyone behind.

Each of us has a role to play. For what it's worth, I am not going away anytime soon either. In fact, I am more fired up than usual by a fierce determination that literacy, as the foundation skill, must and will prevail in this country. I have moved from earlier days of fighting for this cause on the basis of social justice or economic necessity, to a very stubborn insistence that literacy is a right and a responsibility of citizenship in this country for every individual wherever they live, whatever their age or circumstance.

I have talked, in every corner of Canada, in other countries as well, about the necessity of giving each and every individual a fair chance. A chance to fulfill their utmost potential. A chance to help others reach the same goals and the same dream. My friends, our country, our world, is far too precious a place to become somewhere where people simply cope. It must become a place where people have that fair chance to contribute and participate, and have a job and a decent wage to provide a vigorous future for themselves and their families.

This is not about special treatment. It is not about privilege. It is about glorying in acquiring knowledge that not only puts bread on the table, but entertains and comforts and enhances the soul.

I am telling you today, with all the heart and soul that I can muster, that however long or frustrating this journey will be, however rough the challenges, our spirits must not fail, because together, hand in hand, across this country, we will overcome and we will succeed. And this is one volunteer who'll be marching along with all of you and all of those who will learn from this conference, every step of the way. Thank you very much for inviting me. Thank you for being here. And thank you to all of you who are helping to provide that fair chance.

Literacy Entrances Everyone It Touches

by Barry Sanders

For the past ten years, I have been on safari. My aim was to explore the two largely uncharted domains of orality and literacy. I have found it difficult enough to grasp the latter, the one in which I spend a great deal of my time, but that other one, so remote and strange, and yet marked by the most familiar of activities – speaking and listening – has eluded me. It may be impossible to enter a world that has been untouched by print. Like a safari, my pursuit was probably wrong-headed, dangerously out of touch with the real action on the ground. I do not know. But I do know that a huge chasm prevents me, a creature of the Book, from seeing over to that far side, where even most experts have a hard time detecting the categories and qualities of primarily oral peoples.

I have been forced to get out of my Range Rover in search of something slightly less stringent but in the end much more realistic and more important for the study of literacy today: I want to uncover the power of the word *within* the context of an alphabetized world. The invigorated word, simply spoken, deeply uttered, intrigues me. For me, the entire project of literacy rests on such speaking.

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This afternoon, I want to turn to a more private enterprise, this one from the late Middle Ages, and to a Carmelite convent called St. Mary of the Angels, in Florence. In August 1582, on the occasion of her sixteenth birthday, Catherine de Pazzi entered the cloister, and immediately re-christened herself Maria Maddalena. Her dates, 1566 to 1607, are a bit modern for my taste but, on account of her assuming the veil, I grant her certain liberties. I have turned to Maria for what she can reveal about the nature of the word as she speaks it with the most potent meaning. Maria's experience comes to us so charged with otherworldliness that it's hard at times to even describe it with conventional grammar.

Periodically, Maria would fall into a rapture, but not to make contact with the Lord. Other mystics have found the divine that way. Maria went deeper: She needed to articulate the Word, that is, the capital word, the word that is Christ. As Maria put it, "the Word's mouth speaks." Such a plan presumes no *audience*, for hers was something other than a performance in that critical sense, of the sort that generally requires an auditor, the performer having to account for her behaviour. Maria had no desire to deliver a string of meaningful, coherent sentences to anyone else. Maria's mouth needed no ear. No evaluation, no validation. Nothing.

We thus cannot call her meditative journey an exercise in communication in any sense, not in the way we commonly use that word, not even in the electronically driven sense in which the computer reduces language to binary bits, and certainly *not* in the religious, *communal* sense. I cannot even call hers an exercise in self-expression, for she had given over her "self," had it vacated – had vacated it – to be replaced by the Living Word. She sought nothing other than the divinity – her Lord Jesus Christ – entering a solitary soul – Maria

Maddalena. She came as close as anyone can, I believe, to embodying what George Steiner calls, in his marvellous book of the same name, a *real presence*.

Despite her wishes and desires that the world in all its forms vacate, however, Maria's trance-talks, her peregrinations in place, resulted in a book. But not by her design. Beyond not wanting an audience, she wanted no response from her sisters. They had other plans. Eavesdropping on Maria's inner dialogues, they jotted down what they heard (what they thought they heard; what they wanted to hear), and then translated those notes not just into prose, but into a coherent, optically organized text, complete with chapters, paragraphs, an emotional trajectory, to a fairly sustained climax – a marriage to the Word – and a modest conclusion. They ordered her seeming disorder, and then sealed their work by giving it a title, *I Colloqui, The Dialogue*.

In her trance, Maria sometimes spoke nonsense. The sisters allowed no such breaches of logic, measuring all her sentences by the rationale, the ratio, of narration. She sometimes sobbed, pulled her hair, cried out loud, stuttered, and stammered. She sat silent for long stretches. None of that made it into the book. They yanked her from one world, orality, into a fairly straightforward kind of literacy, without ever deliberately waking her up. If Maria's rapture may be described by us moderns – postmoderns – as an unconscious encounter, theirs was a highly alert, conscious one. Were those two worlds of orality and literacy interacting with each other? It doesn't seem so, but maybe that's the way they must always play against each other, the nuns, to use the language of politics, in effect colonizing their strange *conversa*.

For her sisters had stolen not just her voice, but her experience. They had translated it, if you will, turning her mystical orality into recognizable Italian. Moreover, they had made it permanent, providing a record for posterity, *story* slipping into *history*. Maria reacted violently. Learning that her sisters had made of her inner dialogue a public document, she searched out all the leaves of the book she could find and tossed them into the fireplace. Her sisters, thinking that Maria had lost her mind, found better and more obscure hiding places for their treasure, some of the pages lost for hundreds of years.

Maria speaks – and I use *speaks* here to mean something different from the sentences she typically uttered – Maria speaks on another level, with another kind of orality – one that breaks the usual constraints of grammar. For example, she relates the desire of the Word to have His being summoned. And summoned solely by Maria. Her words *are* – I am reduced to the inertness of such a verb to capture the vibrancy of the relationship – her words are the breathing substance of the heavenly non-being. She reveals God not through language, but in language. The spirit of the divine cannot be expressed in mere words, she insists, but only in her oral utterances – the Holy Lord finding substance in phonemes. She speaks as if writing had never been invented. For prose blasphemes the word, as she knows it. The stillness of prose – the very fact of words tethered to the page, enabling readers to criticize, analyze, fight against, interpret, and reject sentence after sentence – the very fact of literacy, that is, denies existence to the Other. The reader usurps authority by setting aside the author and taking control of the experience: the reader can slow the action down, skip sentences, even slam the book closed. Maria's Lord has total hold of her. The nuns produced a lower ordering of prose, something quite corrupted from the glory that Hugh of Saint Victor and others promote in the divine contemplation of the text.

I do not know what that cloistered editorial board, Maria's sisters, had in mind. We do not have their explicit thoughts. But I want to suggest that they might have re-cognized in Maria's meditations the utter meaning that they so adamantly searched for elsewhere. That

is, they hoped to create a text, a page, that in its re-citation – making the words audible again – would reveal God’s presence.

Maria is speaking in such a context, in such a particular way, that no document, not even a word-for-word transcription, could capture the transaction, for she intends no communication; for she intends the words to immediately and fully evaporate; for her utterances are divinely inspired and divinely expired. She needs the words to leave her mouth and then to have them leave entirely and completely. In silence, the Holy Ghost lingers.

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I have tried to take the title of our conference – Living Literacies – seriously. I even acknowledge *living* as both adjective and verb. Maria Maddalena has been dead for nearly four hundred years. What can she possibly tell us? After such spectacular hospitality on the part of our hosts, I do not feel comfortable offering an example of *dead* or *dying* literacies. I resuscitate that long-dead Italian because I believe she speaks the word in the way, the only way, it *could* be spoken at certain moments – with the transcendent presence of The Other. Even her sisters, I believe, envied her. Maria reminds us of a time when people had the ability, the power, to speak words charged with ultimate meaning – when words reverberated with The Other.

I am not foolish enough to think that such a time can be recovered. But I do know that the door to The Other remains decidedly open for children, most of whom come into the world in love with sheer nonsense – with the thrill of making sounds – and move slowly, gradually, into more nuanced, mannered, and more understandable utterances. The propensity for the undiluted, penetrating remark, remains the privilege of the child. Children speak in disregard of any social filter. As adults, we are continually astonished at their comments. Where did she or he get *that*, we ask. Who taught this child that? No one, of course. The child speaks with a totally unauthorized mouth; and listens with fully authorized ears, for the weirdest of things – rhyme, sound, pitch, silliness, for funny stuff and friendly noises.

Most children inhabit a totally plastic and fully alive world. Language is brand new, and delightfully fun. Kids love to speak it backwards, in Pig Latin, to distort its meaning in code. Cold weather lets them mark their own breath. Through its youngest speakers, language gets refreshed. But, like an incoming tide, daily life erodes and erases the transcendent. The world moves faster and faster. We sprout tin ears. Language fades.

Maria meditated. She sat still and she meditated. These days, there is not much chance for meditation – actual or metaphoric. There’s just too much movement; we’re awash in movement – extreme, virtual movement at that, directed at and delivered most effectively and efficiently at the youngest audiences, by electronic technology, in video games, Game Boys, computers and TV. In my country, to make kids sit still, doctors prescribe drugs, the sedative of choice is Ritalin. I am interested in looking at the extreme edge of this kind of movement, a brand of virtual movement that electronic technology has whipped into a frenzy, and that goes by the name of *excitement*. Under such conditions, stillness is impossible; and meditative stillness is absolutely essential, at certain moments, for true literacy.

Let me first say something about the oddity of the word, and why I have settled on it. *Excite* derives from Latin *excitare*, to awaken, to call forth, instigate, set in motion. The word has no antecedent in Anglo-Saxon, appearing for the first time, in English, in the

fourteenth century, as a decidedly religious term, in a kind of mystical grammatical construction: "The singing of the psalms excites the angels to our help." The angels get sung into being. They wing *our* way on a melody of our making. From that early use of the word, as a verb, *excite* gets taken over by the Scientific Revolution, turned into a noun, *excitation*, to describe a state of electrical or magnetic attraction.

Through analogy, the word moves, in the seventeenth century, to physiology. First used by Shakespeare, *excitement* comes tinged with a sense of aberrant behaviour. Hamlet utters it in this new sense, in the fourth act, fourth scene, of his play: "How stand I then, that have father killed, a mother stained, Excitements of my reason, and my blood."

That complements – in the sense of completing – his famous "to be or not to be" soliloquy – Hamlet trying to decide what it means to be human, what it means to act. Or, perhaps more precisely, *how* to act. In his madness, or feigned madness, things come to tap him on the shoulder, events bombard him – he has visitations, perhaps from angels, perhaps from demons. He fears they may be the same. He is frightened, desperately aware of needing to do something, but awkwardly frozen in place. He cannot move, but he is fully ready to move. Hamlet, like a filament in a light bulb, has passed into a state of excitation. To be and not to be at the very same time.

The "to be or not to be" speech, for me, then, is less an exploration of suicide and more an exquisite rendering of a state of pure potentiality, where anything (or everything) is possible. It's neither action nor inaction, but the sheer tingling excitement of being alive – with all of its attendant problems and possibilities, fears and failures – a twinning of the self. But that moment in the word's history fades fast. Who can sustain such a raffling excitement? By the nineteenth century, physicians use *excitement* to denote a state of abnormal activity, a pathology in any organ.

In the modern sense, Hamlet is turned on. Excitement comes to turn us all on. We are not passive agents in the face of it. We invoke it. Does Hamlet like the state of excitement? I do not know. Clearly, he helps to bring it on. He certainly *feels* alive, so alive, so electrically charged, that he cannot stand it. Contrary to most interpretations, that Hamlet feels dead and emasculated, I say he feels too much alive. He lives in that liminal state suspended between being and non-being, alive at an emotional midnight hour. I know that at least some of us in the room have experienced that state, reading a great writer's sentences and having to drop the book, not out of regret or repulsion, but because the pages just take your breath away and you need for the moment to stop. If it were two hundred years earlier – during Maria Maddalena's time – and I would say Hamlet had fallen into a rapture – conscious and unconscious at the same time – in contact with something otherworldly.

The soliloquy suggests a Hamlet *beside* himself, one who stands outside himself talking to his self. Like Maria Maddalena, he is mad but north-northwest – slightly, momentarily off. Hamlet more than feels. In his immobilized state, he finds his deepest emotion. I do not say this to make cute etymological distinctions. Emotion had not yet appeared in the language, coming some seventy or eighty years after *Hamlet*, in 1692, in a book by the political philosopher, John Locke, titled *On Education*.

It is a curious word, *emotion*, first cousin to excitement. Feelings need proximity; the idea inheres in the word itself. But emotions need no such intimacy to set them spinning and churning. I can be touched from great distances. I can be moved without being physically touched. Emotion grows out of an internalized motion. Likewise, emotion causes motion, moves me to action. To be touched carries two meanings; to be moved carries two

meanings. None of this can happen without a highly active imagination, a rich, deep interior life.

Excitement operates differently from emotion. Excitement arrives as both stimulation *and* emotion – one undifferentiated charge, a loud *wow*, a “rush,” young people call it. It comes in such a powerful, massive way, it’s difficult for a person, especially a young person, to have any nuanced emotional response. When we are young, emotion requires *absolute* motion. Learning to stand up, to walk, literally turns into a *trip*. Slightly later for young people, excitement means going *somewhere*, some amusement park, for instance, where, because of the rides, parks become perpetual-motion machines.

I apologize for the drawn-out observations. I wanted to show something of the journey that excitement took from its earliest religious incarnation, to its disturbing enfleshment in the seventeenth century, to all forms of contemporary entertainment – fast action, nastily violent entertainment. These days, to tell from popular entertainment, killing is exciting: car chases, train and plane crashes, mayhem and torture – all exciting. *Fear Factor*, *Survivor*, *Extreme Games* – anything is fair game that brings people to the brink, to the clear expectation that something gruesome and bloody just might, with a little bit of luck, fill the totality of whatever screen they just happen to be watching. The titillation of disaster (how many times an hour did the Twin Towers collapse on television the day of September 11, 2001?) triggers in us an excitation. Of course the Twin Towers and even the White House had already blown into smithereens long before 9/11, in films like *Independence Day*.

In the Middle Ages, people invoked excitement, they called it forward, controlled it, by singing the psalms. Nowadays, we push a button, flip a switch, swallow a pill, inject with a needle, to have it pay a visit – and the age of the agent does not seem to matter. The images come flying – hundreds, thousands of images, relentlessly come flying at us. The imagination becomes a warehouse for storing, rather than an instrument for conjuring. One has to shake off the rush of simulated reality. But it’s hard to return to a world washed clean of special effects. The images linger from the electronic realm, the emotions still stirred, demanding some discharge.

I have also argued that the best, most strenuous exercise of the imagination comes through reading. But reading is slow and cumbersome; it lacks the pizzazz of thrill rides, extreme sports, and video games. Open a page: everything’s flat and utterly still. The words do not move. If anything moves, it’s the reader. Just watch kids fidget when they read; they follow the words and rock, like Hassidic Jews praying in *shul*. Kids love to move; they need to. It’s in their bodies that they find the rhythm of prose. After all, the music’s called rock and roll. Hip hop. (The metre of poetry is divided into feet, and those feet derive their names from dance steps.)

But the great, important movement remains out of view, invisible, acted out in the mind’s eye, or played out in the mind’s living room or rumpus room, or even gymnasium. The reason so many novels and poems and fairy tales involve pilgrimages, voyages, and road trips – from Chaucer to Kerouac – is that movement means that time has passed, and elapsed time implies change – emotional change, one of the hardest things to dramatize. We see Huck as a different boy at the end of his drift down the Mississippi – he thinks differently, he feels different. He knows it. He wants more. He cannot get any bigger without lighting out for the territory. Immensity is all. America’s the place to expand. It always has been.

The metaphors we use to capture the nature of thought: I *came* to this decision, I arrived at this conclusion, let me *walk* you through this argument. In the Renaissance, people devised mnemonic tricks as memory aides. The favourite one turned the inside of one's head into a house, divided it into rooms, and placed objects from a list that one wished to memorize in those rooms. To recall the list, one merely walked through each room and re-collected the objects. Three hundred years ago, people played with interior space; it became a form of entertainment.

When a thirteen year-old girl with the code name Genie arrived at the Department of Public Social Services (DPSS) office in Monrovia, California, in 1977, she walked – no, she negotiated space – with her arms extended in front of her. Her father had kept her locked in a room twenty-four hours a day, strapped to a potty seat in the daytime and to her bed at night. No one spoke to her – ever. She had no toys. She never went outside, never looked outside. No illumination in her room. She had *no* language. She also had no depth perception. She moved through the world, not with her mouth and mind, but with her arms and hands. Kasper Hauser, too, a young boy who emerged from the forest in early nineteenth-century Germany, experienced reality in two dimensions. He knew only grunts and groans. The world, he later reported, looked like someone had tossed buckets of coloured paint against the wall. Think about diagramming sentences – grammar suspends sentences in space. A distance separates subject from verb from object. Barely visible from where we stand at the subject end of the sentence, far out there waits the lonely, dependent object.

In that space, thoughts move. In that space, ideas work themselves out. That mentalized, interiorized space gets generated in the act of silent reading. Silent of course misstates the case, because internal vocalization excites images in just the way singing excites angels. Why not think of angels and images as similar – messengers from another world? I set my ideas in motion through excitement. Excitement gets me going.

Excitement is movement. Movement – motion, e-motion – requires an excitation. For me, this occurs most powerfully in reading. As a preparation for entertaining an entire range of emotions, young people get their training in orality – in stories that they hear out loud, that they make up themselves, in being read to out loud, in reading out loud to themselves, in reading silently, and finally, hopefully, in their desire to write their own stories. Wordsworth's walking, talking ramble with his sister Dorothy in his poem "The Prelude" has the same spatial, mobile, emotional drive, as Dante's circular stroll on his way to Paradise. Emerson takes his talk outside in his famous essay "Walking." One space – exterior – maps onto another – interior. Against a backdrop of a deeply personal, idiosyncratic orality, electronic technology works to sever the nexus of language that young people need and enjoy so much.

No wonder that, compared with moving pictures, pulsing pixels, and streaming videos, the word reading sounds terribly old fashioned and creaky. If the book moves, we as readers must make the letters dance. But try to explain that to a youngster. What to do? For it's in reading that I'm convinced young people learn not just to exert some control over their world, but to re-shape it, as well. I want to conjure something better, more demanding, than "The Terminator." I want to imagine something more hopeful than terror versus anti-terror. We must reach beyond good guys versus bad guys.

Manufactured, packaged and processed, technologically powered excitement is corrosive to lived experience. It has helped to rob the everyday and the mundane – the ordinary objects and events of daily life, the most commonplace of things – of their divine presence. More

than that, the new velocity of narration, storytelling as a top-speed, extreme event, driven by special effects, stifles young people from telling their own stories. How can they compete with the perfect simulation of power? Just as Maria's highly literate sisters imposed their rules on her, so electronic technology denies young people their own voice.

Young people are sleepwalking – deprived of the regularity of breathing, and the phenomenology of seeing that the deepest levels of orality promote. And orality is good at hiding its excitement: speaking, conversing, storytelling, all creep at a petty pace; ideas repeat themselves, double back on themselves. Events exist and do not exist; they're true and not true. Kids troop about in a dreamy state. Sometimes nobody's home, inspiration gets exhausted. The spirit flags.

Young people now expect the world to resemble in sight and sound a game of Doom or Sniper, or, perhaps knowing that it cannot, find lived experience a pale facsimile compared with the special effects version of it. The world and its copy have traded places, the simulation more powerful than the actual.

Excitement has replaced the richness of interior space. It's an internalized thrill ride, excitement is, and it works best when the self has been weakened. The enjoyment of the supernatural, Coleridge said, demanded the willing suspension of disbelief; excitement requires no act so deliberate – willingness and suspension both beside the point.

In the past, I have argued that young people must be taken out of their illiterate limbos – neither oral nor literate are they – and brought back to orality to start all over – from the beginning. Now, I believe it's important to pull young people out from their world of virtual movement and bring them back into that interior space, that meditative space, where motion and emotion begin their journey. In my country, youngsters gobble up Big Macs, Biggie Fries, and Super-Size Cokes. The amount they consume is staggering, not just in numbers, but in calories, as well. How can young people not grow fatter and fatter, ingesting huge amounts of calories with the *impression*, the *illusion*, that they have gone through great activity and movement just by watching it happen on the screen? While the movement may be virtual, the obesity is shockingly real. Is it possible that living in the virtual, electronic world of heavy-duty excitement creates the illusion that one needs more and more fuel?

Let us substitute one kind of orality – consumption – for another kind, one where youngsters practice their sense of timing, their sense of humor, where they can learn to love the power of a few words, or a quip, a couple of well-turned sentences, an image – where they come face to face with the thrill of language. All this oral activity in anticipation of, in preparation for reading and writing. It's in that oral state that interior space gets nurtured, as a preparation for young people coming into a fuller and more mature state – in literacy.

This is dangerous stuff, this culture of excitement. It may have even eroded some important elements of adult life. For many people seem to have lost the ability to understand or comprehend anymore the most aggressive and all-consuming form of action and movement – war itself. It's too remote, too highly technologized, and, for the most part, too *clean*. We know war best when something goes wrong, and then only for a flash. And only as an adjunct – something called collateral damage. But more than that, I suspect, no, I fear, the declaration of war may be just another one of those things, among scores of others, like wild movies, super-fast cars, high-octane fuel, that keeps the air crackling with excitement.

Advertisers use the phrase "high-powered" to sell all manner of things – cars, coffee, alcohol, salsa, and rifles.

Books cannot compete with the box office or B-1 bombers. But taking our students, no matter their age, back to a state of orality, to the free and easy, sheer pleasurable dance of words – *logopoeia*, as Ezra Pound calls it – can launch a young person on one of the most exciting journeys he or she can ever undertake. For literacy always begins in orality, and orality begins in a kind of meditative stillness. In the past, when someone asked me what I thought my task was as a teacher, I said, "to keep students awake during the electronic revolution." I wanted students who could speak truth to power. We are in a new world now. I now want young people who have the courage of the word, and the conviction of the heart, to speak up for *peace*.

What a strange state of affairs, that the perfect, fortified defense against outright attacks of exciting violence should find its match in the most basic, evanescent, precious, most invisible and at the same time most actual stuff–human breath.

The Rainbow/Holistic Approach to Aboriginal Literacy

by **Ningwakwe (Priscilla George)**

Acknowledgements

It is an honour to be selected to do a presentation at this "international gathering of writers, philosophers, critics, teachers, activists, technologists and performers to discuss the philosophy of literacy."

I commend the organizing team – Frontier College, Stong College, and the Department of English, York University – for their critical questions:

1. What are the many voices of literacy? How do voices articulate? How are they being heard?
2. Must traditional literacy understanding be transformed in the age of the electronic screen?
3. Has the professionalization of literacy studies divorced that study from literacy?
4. How do we connect academia to the literacy community and the electronic media?

Such overarching, visionary questions, along with the very name of this conference have literally opened the doors (of my mind) and brought me to speak to you about the Aboriginal concept of "energy." "Living" means have a life force, "energy." Jonathan Goldman, Director of the Sound Healers Association and President of Spirit Music in Boulder, Colorado, says:

Everything in the universe is in a state of vibration. The chair you may be sitting on is in a state of vibration ... "Resonance" is the frequency at which an object most naturally vibrates. Everything has resonant frequency whether or not we can audibly perceive it. From the orbits of the planets around the sun to movement of the electrons around atoms, everything is vibrating.... It is also important to note that, in alignment with this concept of sound, every organ, bone and tissue in your body has its own separate resonant frequency. Together they make up a composite frequency, a harmonic that is your own personal vibratory rate.

That is, everything is alive, everything is "living." It's just a matter of how we "read" that energy that becomes our "living literacies." But first a bit of background on how what I'm about to present to you came to manifest itself physically.

Introduction/Background

I have been so truly blessed in the past fifteen years that I've worked with Aboriginal literacy practitioners and Learners. It is through their sharing from their Hearts and Spirits with me that I have been able to make a few observations as to print-based and print-related ways to take a holistic approach to literacy – I say print-based because, to date, that's what the funders expect. It is my sincere desire that I do justice to the words and the hard work of the practitioners and Learners in what I am about to share.

I have come to understand literacy as being more than the written word in the two official languages of this country – English and French. I have been encouraged in this understanding through my frequent interaction with Elders, practitioners, and Learners.

The framework that I am about to present to you is really a story of a number of different literacies coming together.

In 1996, I was asked by Ministry of Training, Colleges and Universities (MTCU) to write a second book on Aboriginal literacy. My first one, *Empowering the Spirit*, written in 1991, described what programs in Ontario were doing. MTCU suggested that it was time for an update, and that this second booklet look at programming outside of Ontario.

I found out that Parkland Regional College in Yorkton, Saskatchewan, had put together an advisory committee of Aboriginal literacy practitioners from across Canada. They were overseeing the development of a multimedia kit for Aboriginal literacy. I realized that this group was just about to have a meeting in Saskatoon. I invited myself to their meeting, because I felt these people could give me some good insights into which programs to visit for inclusion in the booklet.

Through a "synchronicity," I went into that meeting with one contract, and came out with two. The group was looking for an author to do the written portion of this multimedia kit. They needed somebody Aboriginal, and somebody who knew literacy. The facilitator asked if I could step out of the room for just a few minutes. I did. When they called me back into the room, they offered me the contract. Things like this have been happening to me since I have consciously and consistently involved Creator in my work.

The best is yet to come. Not only did they offer me the contract, but they wanted me to approach the work in a specific way. This committee had been meeting for a few months, and had agreed that, for Aboriginal Peoples, there were many types of literacy – not just the written word. The committee asked that I use the rainbow as a symbol, that I research each colour of the rainbow, and assign a type of literacy for each colour. They had absolutely no way of knowing that my Anishnawbe Spirit Name translated into English is Rainbow Woman. Synchronicity! This was my sign that I was meant to be there, that I was meant to do this work.

Also in 1996, I was contracted to do some work with the Ontario Native Literacy Coalition (ONLC). The MTCU had just come out with a document entitled "Program Reform." This document basically defined literacy, who was eligible to participate in literacy programs, and who was not, what activities constitute literacy, and what the measurable performance indicators would be. Aboriginal language literacy had a narrow and restrictive definition. In fact, the definition of literacy itself needed expanding. It considered only cognitive outcomes that would result in Learners going on to further education or training, to getting a (better) job, or to independence. In a resounding voice, practitioners told me that the most important outcomes for the Learners with whom they were working were actually non-cognitive. In fact, those qualitative outcomes were actually a necessary foundation for the cognitive outcomes. So, it was really refreshing to see that a national committee of Aboriginal literacy practitioners had said that, for us, there are actually many types of literacies.

Institutional educational systems have tended to focus on Mind, through cognitive outcomes – and possibly Body, through physical education, and subjects that teach a physical skill, such as woodworking. That is, fifty percent of who we are, that is, our Spirit and Heart, is not being recognized and nurtured in the institutional educational system.

I believe that a lot of this reductionistic, compartmentalized approach stems from the seventeenth century. Rene Descartes, the philosopher sometimes referred to as the

founding father of modern medicine made a turf deal with the Pope. He needed human bodies for dissection, and promised that he wouldn't have anything to do with the soul, the mind, or the emotions. These became the purview of the church. This deal heralded the Cartesian era, or Cartesian thought, which is dominated by reductionistic methodology, which attempts to understand life by examining the tiniest pieces of it, and then extrapolating from these pieces to overarching surmises about the whole (Pert). Native Peoples on this continent did not know about Cartesian thought and still saw the four parts as an inseparable whole.

In compiling the research for the work that I did with the ONLC, I came up with a possible solution to the restrictive definition that MTCU had for literacy. A long-time friend, Diane Hill, Mohawk, Six Nations of the Grand River Territory had been part of a teaching team with the First Nations Technical Institute (FNTI). This teaching team had been using the Medicine Wheel as a model for education. This is sometimes referred to as the Wheel of Life.

Aboriginal traditional teachings tell us that we are Spirit, Heart, Mind, and Body (Hill). To have a life of balance, we must recognize and nurture all four parts of ourselves. That is, I suggest that Aboriginal literacy is about recognizing the symbols that come to us through Spirit, Heart, Mind, and Body, interpreting them and acting upon them for the improvement of the quality of our lives.

Through this research, I have developed an appreciation for some further work that the FNTI teaching team had done – postulating learning outcomes for each of:

- Spirit – an attitude or insight;
- Heart – a feeling about oneself or others;
- Mind – knowledge; and,
- Body – a skill.

I take this to mean that a holistic approach, one that addresses Spirit and Heart, focuses more on process than on product.

Since then, I have felt inspired to superimpose the Medicine Wheel over the Rainbow Approach, and to suggest a learning outcome for Spirit, Heart, Mind, and Body for each of the types of literacy. That work evolves as I hear from Learners and practitioners across the country.

I knew that if funders were to consider the Medicine Wheel model of learning, I would have to educate those with access to authority and decision-making in government (I had worked in the Ontario provincial government for seven years). This meant that I would have to find scientific and educational research that corroborated this Medicine Wheel Approach.

I found the work of The HeartMath Institute, which asserts that the electromagnetic frequencies (EMF) of the heart are five thousand times greater than that of the brain (Childre and Howard with Beech). That is, it's the heart that entrains the brain, not the other way around as we've been socialized to believe.

Aboriginal Peoples have always believed that everything has a "Spirit." In modern scientific terms, this could be called energy or an EMF. Aboriginal Peoples also believe that thoughts, words, intentions, and feelings have energy. I would like to quote Gregg Braden, who has professional careers in earth sciences, aerospace, and in senior computer systems:

The path of internal technology remembers that each cell of our bodies is approximately 1.17 volts of electrical potential. Statistics indicate that the average body is composed of approximately 1 quadrillion cells. One quadrillion cells times 1.17 volts of potential for each cell equals approximately 1.17 quadrillion volts of electrical potential per person.

1.17 quadrillion volts is a lot of energy. What activates this energy is our feelings which often translate into thoughts, words, and intentions. I don't know about you, but if I know that I'm capable of that much energy, I want to make sure that whatever I put out there in the universe is positive. In Aboriginal teachings, we say, "What goes around comes around."

My next question was, "*So what entrains or motivates the heart?*" Aboriginal Peoples believe that it is the Spirit. In *Spiritual Intelligence, The Ultimate Intelligence*, Danah Zohar and Ian Marshall postulate SQ, asserting that it has a neurological basis, and that it integrates all our intelligences. That is, science is just now discovering what Aboriginal Peoples have said all along about the holistic approach, or the teachings of the Medicine Wheel. Further, if Spiritual Intelligence integrates all of our intelligences, then, if we're concentrating on cognitive outcomes only, it's like we're building the third floor of a house when the foundation has not even been solidified yet.

Further, Melvin Morse, M.D., was delighted when:

In 1997, neuroscientists from the University of California at San Diego bravely proclaimed that they had found an area of the human brain that "may be hard-wired to hear the voice of heaven ... the right temporal lobe ... [is] attuned to ideas about the supreme being and mystical experiences." They called this area, "the God Module"

He goes on to say,

In three other books, I had already identified the right temporal lobe as the place where man interfaces with God. It is this area, an area I call "the God Spot" ... where God lives in each of us.

Melvin Morse, M.D., is a practicing paediatrician in Seattle, and has conducted near-death studies in children for fifteen years. Morse found that, after their NDE, these children are not only better balanced in their physical and mental lives, but they are better balanced spiritually. They eat better food, do better in school, and are more mature than most of their peers. They are aware of a connection with the universe that most other kids don't even know exists. They feel a purpose in living, and they don't fear that death is "the end of it all." They trust their intuitions and feel they can connect again with the divine presence they saw when they nearly died, **without having nearly to die again.**

He documented ten "habits" from the children that he studied that "helped them stay in touch with their inner light." They included (and I encourage you to ponder print-based and print-related ways in which we can accomplish these in literacy programming):

1. Exercise
2. Patterns (be here now) – pay attention to life patterns, thoughts and inner feelings ... silence your inner narrator.
3. Family and relationships – develop the habit of listening to others for at least fifteen minutes a day.
4. Trust your inner vision and intuition.

5. Service – help others, even in simple ways.
6. Financial planning ... easier to find spiritual harmony when you have money in the bank and are not burdened with a lot of debt.
7. Diet – eat more fresh fruits and vegetables.
8. Meditation/prayer.
9. Learn to love – acts of kindness to yourself and others.
10. Spirituality – rediscover your relationship with all parts of the Universe.

On a similar note, Howard Gardner of Harvard University has put forward a theory on Multiple Intelligences, or different ways of exploring a subject. Gardner says that human intelligence consists of three components:

- a. a set of skills that enables one to resolve genuine problems encountered in one's life,
- b. the ability to create an effective product or offer a service that is of value in one's culture, and
- c. the potential for finding or creating problems – thereby laying the groundwork for the acquisition of new knowledge.

Gardner suggests eight intelligences, which must meet stringent criteria to be admitted to the list:

1. Potential isolation by brain damage.
2. Existence of idiots savants, prodigies, and other exceptional individuals.
3. An identifiable core operation or set of operations.
4. A distinctive developmental history, along with a definable set of expert "end-state" performances.
5. An evolutionary history and evolutionary plausibility.
6. Support from experimental psychological tasks.
7. Support from psychometric findings
8. Susceptibility to encoding in a symbol system.

The intelligences are:

- i. linguistic – the ability to read, write, communicate with words
- ii. logical-mathematical – the ability to reason and calculate, to think things through in a logical, systematic manner
- iii. visual-spatial – the ability to think in pictures, visualize a final result – recognizes our creative people, such as artists, as well as our visions
- iv. musical – the ability to make or compose music, to sing well, or understand and appreciate music – recognizes our traditional singers
- v. bodily-kinesthetic – the ability to use your body skillfully to solve problems, create products, or present ideas and emotions – recognizes our traditional dancers
- vi. interpersonal – the ability to work effectively with others, to relate to other people and display empathy and understanding, to notice their motivations and goals – I believe this intelligence comes the closest to recognizing Heart
- vii. intrapersonal – the ability for self-analysis and reflection – to be able to quietly contemplate and assess one's accomplishments, to review one's behaviour and innermost feelings, to make plans and set goals, to know oneself – I believe this one comes the closest to recognizing both Heart and Spirit
- viii. naturalist – the ability to recognize flora and fauna, to make other consequential distinctions in the natural world and to use this ability productively. – recognizes our Medicine People.

To quote one of the Elders on the NADC, Denys Auger, from the Bigstone Cree Education Authority,

In our traditional culture, we “read” nature (the environment). We must read and interpret the information we find there, so that we can survive. We use our eyes and brains just like you. We also use our other senses – smell, hearing, taste, and touch – to read the coming weather, the presence of danger, and the health of the land, waters and air. When we don’t hear the frog’s song, we know the land and waters are polluted and cannot support life.

Gardner’s work goes beyond cognitive skills and outcomes. In fact, only two of the intelligences, linguistic and logical-mathematical, can be considered cognitive in nature. I find his work an affirmation of the Anishnawbe Life Road Teachings that we all have “gifts” that we need to recognize and nurture.

I admire the work of Daniel Goleman who postulates that a person’s academic and technical skills only provide them with a foot in the door – at school and at work. What makes the difference once they are in is their “*emotional intelligence*” – which includes factors such as self-awareness, self-discipline, and empathy.

In fact, *Knowledge Matters*, a federal discussion paper that may shape the way the government works with the field on literacy, suggests in Section 3, Strengthening Accessibility and Excellence in Post- Secondary Education, that, “Teamwork is an essential part of the production process, and **interpersonal skills are becoming key determinants of business success.**”

In addition, the *Adult Literacy and Lifeskills Survey* will measure Teamwork indirectly. In the first section, “About the Survey,” Teamwork is rationalized as:

the importance of interpersonal skills such as those required by teamwork in both work and everyday life ... [those] who wish to participate fully in community and professional life, **increasingly must possess the skills necessary to work in teams.**

In other words, many people are discovering what Aboriginal Peoples have been saying for a long time. There is more to life than the acquisition of cognitive outcomes.

National Buy-In

Two years later, in 1998, I was offered yet another contract. Beverly Sabourin and Associates asked me to help them compile a directory of Aboriginal literacy programs across Canada. These programs had to be Aboriginal-controlled, so they do not include programs that run out of community colleges or school boards. A team of us interviewed practitioners, mostly on-site. A common denominator in our interviews was the fact that practitioners felt isolated, and that they would like to have a national conference so as to meet and discuss with others of like mind.

In order to organize that conference, we put together a national committee. We started out with a core group of seven. Our key selection criterion was to include people who demonstrated their Hearts and Spirits in their work. We called ourselves the National Aboriginal Design Committee (NADC)

At our second meeting in December 1998, I showed this second national committee the work I had done for Parkland Regional College, which I had now come to call *The Rainbow/Holistic Approach to Aboriginal Literacy*.

Another synchronicity happened! Derek Payne, NADC Treasurer, a man from the Sto:lo Nation in British Columbia gasped. He shared that, on his way to the meeting, he had a window seat over the wing of the airplane. He said that, for about half an hour, he saw a circular rainbow on the wing of the airplane. The committee and I discussed the Rainbow Approach, and they endorsed it.

That night, I had a dream about an owl. I shared this dream with the NADC the next day. As we were from several Aboriginal cultures – Mi'kmaq, Anishnawbe, Sto:lo, Cree – we discussed our various understandings of the owl. Our common understanding was that the owl signified wisdom, which is what the various types of literacy meant to us – the acquisition of wisdom, rather than mere cognitive outcomes. Thus was born the logo of the NADC – an owl inside a circular rainbow.

In the meantime, as a result of the National Aboriginal Literacy Gathering, we had expanded the NADC to eighteen people, including Elders and Learners. When I presented the “blended” Rainbow Approach/Medicine Wheel to this expanded committee last year, they felt it had merit. In response to the presentation, Edwina Wetzel, Conne River First Nation, sent me a three-page letter outlining how their community is committed to nurturing Spirit first in their educational programming. I'll read a part of her letter to me:

In a community of 700 people ... There is 100% employment, either full-time or seasonal. Few people leave the reserve. All our directors are Band members.... We have four nurses, three lawyers, 20 educators.... You name it, we have it. We own hunting lodges, a garage, hardware store, grocery stores, construction co., etc.

We have done all this in 20 years.... I still believe we must heal the Spirit first. If your Spirit is dead, how can you get on with life or care? Heal Spirit first – Build self-confidence, self-esteem.

People's mind can dwell on knowledge and skills once Soul is quiet and they can see connection of education with everything else, especially the benefits.

Once they have calm and sense of identity, direction, they have tools to live in modern world & take advantage of what it has to offer

With education, skills and learning they can improve their health and physical world.

To date, I have done thirty-two presentations on parts or all of the Rainbow/Holistic Approach – to approximately fifteen hundred Learners, Elders and practitioners, in most provinces and territories, as well as in Atlanta, Georgia, Australia, and Brazil. Today's presentation makes it thirty-three. Twenty-five of those have been by invitation because people have heard about the work. Another two speaking engagements are lined up, including one in France at a First Nations Forum in February 2003, and another to educators at the Ontario Institute for Studies in Education.

The Rainbow

Red is the first colour of the rainbow, and the colour understood by some Aboriginal cultures to mean confidence, which has within it the knowing, the ability to plan, to start a process. Red represents the language of origin of First Nations individuals and/or communities.

Since time immemorial, Aboriginal Peoples have lived on this land. We believe that the Creator put us here. Our ancestors did NOT cross the Bering Strait. We had our own Aboriginal languages. A December 14, 1998, press release from Statistics Canada entitled, The Daily says that, as of 1996, Canada has fifty Aboriginal languages, belonging to eleven major language families. In the past one hundred years or more, nearly ten once flourishing languages have become extinct. At least a dozen are on the brink of extinction.

There are special initiatives in the Aboriginal community to keep our languages alive. The Royal Commission on Aboriginal Peoples recommends granting special status to Aboriginal languages, providing formal education in the language, and conducting research (Norris). The First Nations Confederacy of Cultural Education Centres (FNCECC) is in the initial stages of developing protective legislation for the preservation, maintenance, promotion, and use of Aboriginal languages in Canada. We need to pool our energies to help each other save Aboriginal languages.

The Assembly of First Nations (AFN) did a study a few years ago, and grouped each of our languages into one of these categories:

Flourishing;
Enduring;
Declining;
Endangered; and,
Extinct.

Of the fifty or so Aboriginal languages still alive in Canada, only three are flourishing – Ojibway, Cree, and Inuktitut. In 1992, the AFN summarized the importance of Aboriginal languages as follows:

The Aboriginal Languages were given by the Creator as an integral part of life. Embodied in Aboriginal languages is our unique relationship to the Creator, our attitudes, beliefs, values, and the fundamental notion of what is truth. Aboriginal language is an asset to one's own education, formal and informal. Aboriginal language contributes to greater pride in the history and culture of the community; greater involvement and interest of parents in the education of their children, and greater respect for Elders. Language is the principal means by which culture is accumulated, shared and transmitted from generation to generation. The key to identity and retention of culture is one's ancestral language (Ignace).

Only two languages have the status of being official in Canada. They are NOT the languages of the first peoples of this land. A policy or structure that does not recognize and affirm our language serves only to erode our culture, our worldview of interconnectedness.

Ruth Norton and Mark Fettes have this to say about revitalization of Aboriginal languages:

Conversely, a linguistic renaissance must be an integral part of the evolution towards local self-government and the restoration of spiritual and physical health to Aboriginal communities (Castellano, Dabis and Lahache)

Aboriginal literacy programs are part of this linguistic renaissance through the holistic approach that they take to Aboriginal language literacy. Joanne Boyer, Mississauga # 8 First Nation, recently had Learners involved in making medicine pouches. One of the Learners knew how to tan deer-hides and offered to teach that skill to the rest of the class. Learners received the relevant teachings, then went through the various steps of making their own medicine pouches – from tanning the deerhide to cutting and assembling the pouch. Learners had to calculate the costs of materials, as well as the time spent in making the pouch to arrive at a price that would honour their time and energy, yet be attractive to their potential buyers. Initially, they flipcharted the words they would need in English and Anishnawbemowin. They practised the words, then made a decision as to when they would no longer speak English as they continued the project. On one of my visits to their program shortly thereafter, on the walls, I saw flipcharts of their experience written up by the Learners in the language. Other exciting projects that this program has done include making cradleboards and quilts. Learners in this program use their literacy skills in Anishnawbemowin to recognize written words in English.

Aboriginal languages are very descriptive. The words themselves evoke images. In addition, each language has its own sound structure – some more guttural than others. Each has its own rhythm. It can be very comforting and healing to hear somebody speak your own Aboriginal language. We feel an “energy,” a sense of connectedness with this person and the language.

Orange – the second colour of the rainbow. It is understood by some Aboriginal cultures to mean balance, the place of choice where we are taught to exercise self-confidence, self-assuredness, self-control, and self-esteem, in order to keep emotions, such as fear, in balance. Orange is often used to denote fire. The first source of fire is the Sun, which is the centre of the universe. People are like the universe in that they also have a centre, a fire within. For Aboriginal Peoples, that centre is the teachings. Aboriginal teachings have been passed from generation to generation orally. Orange symbolizes **the skills required for oral literacy (speaking, listening ...)**

Since time immemorial, our culture has been an oral one. Many of our people have been known for their oratory skills – in their own language of origin and in English. Many of our teachings have been passed down orally – either in ceremony, through songs, or through story-telling.

As I understand it, many skills are required for oral literacy – outstanding listening skills, sometimes referred to as “wholly” listening, critical and reflective thinking, excellent memory and the ability to get one’s point across in a way that can be understood. In Talking Circle as Pedagogy, Fyre Jean Graveline describes this as a commitment “to sit and attentively listen, allowing the wisdom of the teacher/speaker to really be heard.” She says that, “Through respectful listening we are better able to enter into another’s experience through their words.”

In a sense, Aboriginal stories and teachings are like learning spirals – we can hear the same story or teaching a number of times and each time get a different “lesson” out of it, depending on where we are on our own “journeys.”

Words have an energy of their own. Think of the sentence, “I am so glad to see you.” How does it affect you when somebody says that? Is it just the words, or is it the sound of the voice as it carries the words? Jonathan Goldman says: “The human voice seems to be the

most potent creator of sound frequencies that can be coupled with intention ... the voice may be used to heal and transform."

Aboriginal literacy practitioners understand this very well, and they take the time to speak with Learners, ensuring that their words are encouraging – healing. They also teach Learners to find their voice.

Literacy programs are inviting Elders in to share the teachings, and to conduct Talking Circles, either on specific topics, or on something that is important to the Learner that day. In this way, the Learners can use Circle, as Graveline says, as "the building block of community." Certainly, I know that Leanne McLeod of Prince Albert, Saskatchewan, through her work in correctional institutions found that these sessions with the Elders gave the Learners a solid foundation for sharing with others in the Circle, and for writing their stories. To further quote Graveline, such a process provides a space so that, "Those previously silenced are encouraged to find their voice and speak up."

Yellow – the third colour of the rainbow, is the colour often used in reference to the moon, and the gathering of food. In Aboriginal tradition, crops are planted and harvested according to the phases of the moon. Some Aboriginal cultures understand yellow to mean creativity. Yellow refers to the creative means by which Aboriginal Peoples had to learn to communicate with others who spoke another language or through other than the written word, by using symbols (pictographs, and in contemporary times, artwork, music) and/or sign language.

Since time immemorial, because of our different languages and linguistic groups, Aboriginal Peoples have had to be creative in the ways in which we communicated – about how to interact/trade with each other, about events that have transpired, and about prophecies. We developed a kind of sign language. We used various art forms for our clothing, lodgings, and surroundings. Pictures or images and colours convey ideas or meaning without the use of words or sounds, but in a much more powerful way. In fact, today we can often tell from a person's regalia what nation they're from.

One of our longest-standing and best-known art forms is the petroglyph, which dates back thousands of years. Petroglyphs record events, visions, and storytelling. The following comes from an article in Discovery Magazine in 1998 by Grant Keddie, Curator of Archaeology, Royal British Columbia Museum:



For up to thousands of years, figures have been carved in stone along the beaches and in forests stretching around the Pacific Rim from California to China. Some of the human face and animal design elements found in British Columbia show interesting parallels with those found along the coast of Siberia.

One of the most common questions I am asked in regard to these rock carvings or petroglyphs is what are they, and what do they mean? Were these designs pecked into the rock by a shaman for a special purpose?

We cannot understand these images by trying to analyze them from the perspective of our modern culture. We need to look to traditional aboriginal cultures that experienced a different reality than that of Euro-Americans.

Reality is not just what we see, but what we have learned to see. In traditional hunter-gather societies, the human and "natural" worlds are interwoven by threads of spiritual power. The natural and supernatural worlds are inseparable; each is intrinsically a part of the other. It is generally understood that natural events that affect people's lives were caused or influenced by human actions.

The first weekend in April, I participated in an invitational conference in Montreal entitled, Literacy, Museums, and the Arts. This was held in conjunction with the Blue Metropolis Literary Festival. Other participants included artists, authors, a singer, and a dancer. It was an affirming experience to hear people talking about the different ways in which we communicate ideas, other than the written word.

In fact, I will share a personal experience. The dancer Lynn Snelling from Montreal did an interpretive dance for us. We were invited to speak into the microphones and share what words came to us, in whatever language they came. I could not find words to describe the welling up of emotion inside me as I picked up on the energy that she conveyed with her hands, eyes, and body movements. There are times when words are inadequate. Karla McLaren, an empath and healer who specializes in the field of physical and emotional trauma, refers to this as the "straightjacket of language." Lynn shared later that she believes that the body has a literacy all its own. If we pay attention, it will let us know what feelings are being blocked and need to be moved.

Literacy programs are using crafts as a way of helping Learners to get in touch with their creativity. Helen McPhaden of the Stardale Women's Association is getting the Learners to do weaving. Previous projects include pottery, quilts, and artwork. One of the Elders with whom Helen consulted on this project said that crafts are away of helping Learners to tap into ancestral memories, our "Spirit." Certainly, Helen finds that the images Learners choose indicate what issues are presenting themselves for healing, or what progress they've made.

Colours have their own frequencies. What colours do you gravitate toward when you are feeling different emotions? What colours do you surround yourself with when you need a certain energy or emotion? Learners in literacy programs are beginning to recognize their emotions by the colours they use or choose.

Green – the fourth colour of the rainbow, is often interpreted to mean growth, going beyond what is familiar, yet remaining true to the teachings. This allows us to live with respect and humbleness. It is used to represent grass and growing things on Mother Earth. Treaties and understandings with the newcomers often included the phrase, "as long as the grasses grow and the rivers flow." Green refers to **literacy in the languages of the European newcomers to this land a little over five hundred years ago, English and/or French, and which have also been given the status of official languages.**

The English and French languages came to this continent only a little over 500 hundred years ago. Yet today, they enjoy the status of official languages. This status means that they are considered to be the language of instruction, except in the territories where some of the Aboriginal languages are considered official in that particular territory.

Literacy practitioners are using literacy in the official languages as a way of reclaiming voice. Larry Loyie and Constance Brissenden have done workshops across Canada to accomplish just that. Larry, a former Learner with the Carnegie Centre in Vancouver, noticed that a lot of books on Aboriginal Peoples were written by non-Aboriginal peoples. He then vowed to be a vehicle for getting Aboriginal Learners to write their own stories. I have here a book entitled *Acimowina* that is an anthology of the writings of Learners in a workshop that Larry and Constance did in Wabasca-Desmerais, Alberta.

Larry has also written a play, *Ora Pro Nobis*, about his experiences in residential school. This play was featured in some First Nations communities and organizations across Canada. His newest book, just released, is *As Long as the Rivers Flow*.

A question that has entered my mind from time to time since I came back from Australia is this whole notion of being able to hear and replicate certain sounds. Western Australia has a policy of recognizing Aboriginal English. It is considered a language, not broken English, something to be fixed. They teach Aboriginal English in the first three years of school, then they move toward Standard Australian English, which is introduced as another way of speaking, rather than the correct way.

If you grow up hearing and using certain sounds, I believe that your voice apparatus is either built for this or adapts to this. What happens when you encounter another language with different sounds than the ones to which you're accustomed? Do you have trouble replicating them? How soothing/healing is that when you have to labour to first remember the word, then make the sounds that constitute the word? I don't have an answer for this yet. Perhaps someday I can discover why this question keeps coming back to me. That's an Aboriginal type of literacy – to recognize that there's a reason why something keeps coming back to you.

Blue – the fifth colour of the rainbow, which some Aboriginal cultures understand to mean truth. Knowing the truth means staying true to your vision, where commitment is most important. Blue is also used to symbolize the colour of the sky. With the coming of the Europeans, the skyline changed, and now contains the tools of technology, such as towers and satellite dishes, that send and receive signals. Blue refers to the skills required to communicate using technology.

For the purposes of literacy programming, I will keep this discussion to computers and on-line learning. I recognize that there are many other types of technology, and, in fact, Laara Fitznor, Doctor of Education at OISE, recently reminded me that our medicines and tools for communicating with the Creator can be considered "technology."

I shared with Charles Ramsey, Executive Director of the National Adult Literacy Database (NALD), that I had been invited to speak at a First Nations forum in Paris in October on *Maintaining a Cultural Identity in a Digital Era*. The program will focus on "Aboriginal New Identity," for which forum organizer, Fulvio Caccia, says "Literacy is a key." I needed a sounding board for how to shape my participation in this event that I see as an opportunity for getting Aboriginal literacy international recognition. Charles shared with me an incident in which he had a request from Pat Paul, Maliseet from the Tobique First Nation, New Brunswick. Pat asked Charles to write to some of the Aboriginal listservs to ask for the mailing addresses of publishers who might publish Aboriginal stories. Among the many responses was one from a woman in Australia who said that she had a web-site, and wondered if Pat would be interested in posting one of his stories. Charles and Pat sent,

"Geow-lud-mo-sis-eg: Little People." That posting resulted in a flood of events that fall into several categories:

1. People writing to say that they wanted to Pat's story on their Web sites as well – Minnesota, Hawaii;
2. People who are teachers in elementary schools who have an Aboriginal piece in their curriculum;
3. People who had heard other "little people" or "creation" stories and wanted to share them – Maine, New Mexico;
4. People who were doing genealogy research and wanted Pat to help them make links to their ancestors;
5. Europeans who are deeply interested in the North American Native cultures;
6. People who were either from Tobique, or their families were from Tobique, wanting to say hello to Pat and some of their relatives;
7. Students wanting Pat's help with their research;
8. Three different people who shared the same story of having been through a very serious illness and who, during the initial recovery period, were visited by the Little People. These Little People were instrumental in helping them through a successful and speedy recovery;
9. People offering interpretation of Native stories;
10. Aboriginal People in other countries wanting to communicate with Aboriginal People in Canada;
11. Requests for permission to translate the story into a foreign language and add it to the public school curriculum of that country.

To date, Pat Paul's story is shown on thirty Web sites. What a celebration and cross-fertilization of culture.

I would like to begin to build on Dr. Fitznor's reminder to me of Aboriginal "technology." From our perspective, the items that make up our medicine bundles have a purpose. They help us to perform a ceremony, to focus on and communicate with the Creator, to transmit and receive messages.

Through many of the faith systems that I've had the good fortune to study over the past few years, I've come to understand that our modern inventions are really just a prototype of what we're capable of if we remember who we are, that we are Spirit, that we are each Creator individualized. Many of us have grandparents who did not need a telephone or an e-mail to know that we were coming to visit. They just knew – a twitch over the eye, meaning that they were going to "see" someone.

Indigo – the sixth colour of the rainbow, is often referred to as the colour of the night-time sky, the dream time, when Aboriginal Peoples are more open to receiving messages from the Spirit World. This colour also refers to the "third-eye chakra," which means "spiritual seeing." Indigo refers to **the skills required for spiritual or cultural literacy – the ability to interpret dreams, visions, or natural events, which are seen to be messages from the Spirit World – the sighting of an animal, the shape of a cloud, seeing a certain person at a particular point in time, and so forth.**

Since time immemorial, Aboriginal Peoples have believed in a Spirit World, what we often refer to as our "unseen helpers" – unseen with the naked eye that is, but most certainly seen with the Spirit Eye.

We believe that Spirit speaks to us in imagery, thoughts, sounds, and feelings. Some cultures call this clairvoyance (images and visions), claircognizance (just a knowing, without even knowing how you know), clairaudience (hearing sounds, such as an inner voice or an actual voice, or even a certain song at a certain point in time so that it has a message for you), and clairsentience (feelings in or on the body – tingles, tiny tears at the corner of your eyes when you don't even feel sad). My experience has been that we need to learn to recognize these, and to interpret what they mean. The effects of the Cartesian Era and a system that focuses only on that which can be validated by science has socialized this way of knowing out of a lot of people, not just Aboriginal Peoples.

At the Niagara Regional Native Centre, Jacquie Labonte gave Learners the option of participating in a sweat lodge. Approximately forty percent chose to do so. As they related experiences in the lodge to each other, they began to interpret the images they had seen. They began to understand that, for Aboriginal Peoples, many events in life are to be interpreted symbolically and archetypally. At one point, this group was considering doing a "dictionary" of the images.

Violet – the seventh colour of the rainbow, is often thought to be a healing colour. Some Aboriginal cultures understand violet to mean wisdom, the ability to understand things, to have true power (inner and spiritual), to respect, and to know in a holistic way. Violet refers to **the holistic base to Aboriginal literacy, the way in which we integrate all of the above – facilitating spiritual, emotional, mental, and physical learning outcomes – striving for balance.**

Since time immemorial, Native Peoples have recognized the importance of nurturing Spirit, Heart, Mind, and Body. We have long looked to the teachings of the Universe to help us. In fact, in my Anishnawbe language, the word for teach, "ahkinomagai" means "The earth is our teacher." Through its cyclical changes, through the animals, through every aspect of Mother Earth, we learn about embodying kindness, sharing, respect, honesty.

When Learners come to literacy programs, this is often the very first time that somebody has treated them as a whole person. This is an energy they are not used to, and are hungry for. When Learners are "fed" with kindness, sharing, respect, and honesty, their Spirit is nourished, their foundation is strengthened.

I have an empirical hypothesis. When Learners' Spirits and Hearts are nurtured, they can learn at rates they never before thought possible. They go on to become role models for other Learners.

Literacy practitioners are teaching Learners to take care of themselves spiritually, emotionally, mentally, and physically. When their lives are out of balance, they learn to ask the most important question of themselves, "In what ways am I nurturing myself in each of those areas?"

In the words of Rita Buffalo, a Learner from Thunder Bay on the NADC,

It was important for me to know that I was always welcome in the program. There was no such thing as failure. When I did badly in some of the work, I was sat down and patiently taught the right way to do the work. I was encouraged and praised to go on, and not forced to complete in a certain amount of time what needed to be done.

Research shows that students rate the quality of their relationship with their instructor as the number one factor in whether or not they enjoy learning.

Conclusion

My Heart and Spirit go out to Aboriginal literacy practitioners. They see beyond cognitive outcomes. They help Learners to recognize their "gifts," only one of which is the ability to read and write in English. They go that extra mile to provide an atmosphere that makes space for the Learners to grow as a whole person. Each and every day, they make a difference in someone's life.

On October 24th, the NADC and I presented a Position Paper on Aboriginal Literacy to Senator Thelma Chalifoux, Chair of the Standing Senate Committee on Aboriginal Peoples. I invite you to share with me your most effective interaction with the Learners, to consider what made it effective. I'm positive that, in the process, you engaged Heart and Spirit – both yours and that of the Learner.

I started out my talk acknowledging many people. I would now like to acknowledge the Spirit World. Life took on a different tone for me when I learned to put my trust in Creator to guide and direct my work, my life. It's a privilege to walk with Creator and with all of you on this sacred journey.

Gichi Miigwech!

The History of Language and Writing

by Christopher Dewdney

Abstract

Literacy – meaning the ability to speak, read, and write a language – first appeared on our planet about six thousand years ago. Over the past decade, new neurolinguistic anatomical evidence as well as recent discoveries in ethnoarcheology have given us a much clearer picture of its origins than ever before.

The Rise of Literacy

The physical capability of speech is absent in all animals except birds and modern humans. It has been established that vocal sounds sufficiently complex to produce language can only be achieved if the larynx is positioned relatively low in the neck, as it is in humans and some species of birds. The lower positioned larynx elongates the pharynx and gives it the ability to produce speech. Pre-humans acquired this physiological feature as a consequence of their upright posture more than a million years ago, though it wasn't used for speaking until much more recently in the geological time scale.

But having the vocal equipment to produce language doesn't automatically confer the ability to speak. Without the impetus of interpersonal communication, a pharynx is like a violin without a musician. Although certain birds, notably the African gray parrot, possess both the ability to speak and to understand certain words, even African gray parrots can only imitate, or at best, associate a limited series of words within a given context. Human language is much more complex than that, and a sufficiently complex brain, re-wired by evolution to handle abstract concepts, is needed to produce what we call speech.

The Origin of Language

An area of the brain called "Brodmann's Area 44," a part of the speech cortex, is not only larger in the left hemisphere of humans, it is also larger in the great apes (chimpanzees, bonobos, and gorillas). As reported in *Nature* 29, 2001, researchers from Emory University speculated that this region of the brain is associated with gestures used by apes for communication, and that, thousands of years ago, it was co-opted for use by evolving humans as a speech centre. (The adaptation of an existing anatomical feature for an evolutionarily new function is called "exaptation.") This exaptation first appeared in *Homo heidelbergensis* in Ethiopia 600,000 years ago, but it was well over 570,000 years after that time (30,000 years ago) before there was any direct archeological evidence that language was being used.

(According to Ian Tattersall, an anthrologist, language was an adaptation that occurred, as I have already mentioned, long after the appropriate physical adaptations had evolved and were in place. The mechanism by which speech first arose, however, is purely speculative. Male paleoanthropologists seem to cleave to the theory that language arose when men had to co-ordinate hunts, calling out directions to each other, while female paleoanthropologists like to speculate that it was women who originated language, as a communicative skill necessary to keep the increasingly complex social fabric of hominid groups intact. Tattersall has a pet explanation that is independent of both of these – his notion is that hominid children first used speech as a sort of vocal mimicry during play and that as soon as adults grasped the communicative potential of their children's sound mimicry, they began to use it in practical situations. Eventually this vocabulary of mimicked sounds evolved into speech.)

It wasn't until homo sapiens began to reside in larger settlements, specifically in Mesopotamia, that the transition from hunter-gathering nomadic tribes into agrarian, city-states took place and the rise of written language began. Ten thousand five hundred years ago, this transition was well underway in the Zagros region of Iran. Two archeological sites there, *Tepe Asiab* and *Ganj-i-Dareh Tepe* reveal communities that were already planting experimental crops and using the earliest known clay tokens – abstract shapes in dried clay in the shapes of discs, spheres, cones, ovoids, cylinders, triangles, tetrahedrons, and rectangles. These were accounting devices meant to keep track of the numbers of animals in herds and the amounts of harvested crops that were stored in community storage bins. It is now thought that these token ledgers were the beginning of written language and it that is was in Mesopotamia where linguistic literacy began.

Over hundreds of years, the Mesopotamian tokens were gradually absorbed into two subsequent systems of record keeping. The first system used perforated tokens with symbols on them to represent specific possessions. These perforated tokens were then strung in series to keep tallies of possessions and to keep track of trading transactions. The second system used a clay "bullae" – hollow sealed pocket of dried clay that contained several tokens – to keep records of possessions as well as providing a method of verifying deliveries. (The recipient of a delivery could see if everything that had been purchased was actually delivered by breaking the bullae.) Eventually, as this record-keeping system evolved to become more efficient, the outside of the bullae were marked with representations of their contents and the need to actually open them eventually became a ceremonial formality that fell into disuse. It was these representations of representations that went on to evolve into the Sumerian cuneiform writing system, the first true written language, that developed simultaneously with the advent of the great Sumerian city states, such as Uruk, some six thousand years ago. The clay tablets that early cuneiform writing appears on are curved, much like the clay bullae that preceded them. Writing, it seems, arose directly from the proprietary economics of trade.

(Julian Jaynes, the renegade neurophilosopher, contends that human consciousness, at least as we know it, came into being at the same time. He claims that with the abstraction of written language, itself caused by the complexity of the new city states, that the first "silent" inward spoken ruminations in language, or in other words interior monologues, began to dominate the activity of the human mind. Jaynes theorized that, prior to written language, all human thinking was vocalized involuntarily, in the same manner that readers of written texts, up until the Greeks (and later), always spoke them aloud. (Silent reading was a hard-won skill for humanity. Saint Augustine observed that his first teacher was the first person he'd seen who could read silently without moving his lips!) Jaynes also contended that this internal monologue was responsible for the first theistic religions. He claimed that the inner voice, the interior monologue, must have seemed like the voices of the gods to the first truly literate humans in Mesopotamia because they were experiencing it for the first time. It is a highly speculative theory, but it does have some excellent metaphorical potential. For example, it provides an oblique look at the first written languages as they must have seemed at the time – as a new, sacred technology. For those first humans who used writing, literacy was a completely radical technology, a special form of external speech that was mute, sculptural, but ready to "speak" when activated by a "reader." In some respects Julian Jaynes' theory, half-cocked or not, gets at the root of the curious, philosophically fascinating symbiosis between language and consciousness.)

Written language allowed two things to happen that couldn't have occurred before its development. It allowed the unaltered transmission of ideas through time without having to resort to the vagaries of memorization and oral traditions, and it allowed complex ideas to

be represented and stored in an externalized, memory storage system. It also allowed for clear communication at distances between individuals who couldn't, for administrative reasons, leave their posts. Writing spread quickly amongst humans, who evolved as a mimetic species, that is, a species that copied patterns initiated by others of its species and perpetuated them as culture.

Susan Blackmore, in her article *The Power of Memes* in the October 2000 issue of *Scientific American* (283:69) says about the beginnings of culture and language that: it would pay for people to mate with the most proficient imitators, because by and large, good imitators have the best survival skills. Through this effect, sexual selection, guided by memes, could have played a role in creating our big brains. By choosing the best imitator for a mate, women help propagate the genes needed to copy religious rituals, colourful clothes, singing, dancing, painting and so on. By this process, the legacy of past memetic evolution becomes embedded in the structures of our brains and we become musical, artistic and religious creatures. Our big brains are selective imitation devices built by and for the memes as much as for the genes.

But there is another aspect of writing that became increasingly important in terms of the memetic evolution of humans, and that was specifically its ability to extend the capability of the human brain by providing an external memory repository. There is a current business term, "off-site data storage," that refers to a data security strategy that ensures the survival of essential corporate information. "Off-site" storage simply means that any important data should not only be regularly "backed-up," but should also be duplicated and stored at a location at some physical distance from the main data-storage site, in case of fire or other unforeseen calamity. In much the same way, written language, (as well as being the paramount method of human communication at a distance) is also a method of storing our thoughts and memories at an "off-site" location, distant from our own minds, consequently ensuring their preservation.

Furthermore, writing relieves the burden of memorization that preliterate societies had to bear. The rationale for poetic verse, for example, was that it was easier to memorize epic stories if they rhymed (although free-verse took thousands of years to develop after the necessity for rhyme had been removed by the technology of writing). Writing took the pressure off our retention capabilities, and in a sense it was a technological shortcut to greater memory capacity, not just for individuals, but for the species.

Writing was relatively new to the Greeks when, in 400 BC, in *Plato's Republic*, Plato declaimed writing (and writers) as those who "maim the thought of those who hear them," and that writing is "an imitation of imitations, even farther removed from the ideal." Literacy, for Plato, was a step backwards, a crutch that led to mental laziness. (There is something of Plato in our modern skepticism about the effect of computers on literacy today.) But, Luddites aside, written language supported the second greatest leap in our collective, technological evolution as a species – it allowed the seeds of crucial ideas to survive and to migrate across time and geography until they found fallow earth. The interlaced threads of ideas and knowledge contained in the world's written literature is the fountainhead of human progress and the ultimate source of our eventual transformation into what we will become.

The Origin of Language and the Co-Evolution of Literacy and Conceptualization

by Prof. Robert K. Logan

Living Literacies

The Living Literacies conference was appropriately named from this author's perspective because one of the theses of this essay is that verbal language is a living organism. This living organism, human language, has continued to evolve since its first emergence as speech, so that speech, writing, mathematics, science, computing and the Internet form an evolutionary chain of six distinct languages (Logan 1995; 2000a). The third theme we will explore is that a complete education entails mastery of all six languages (ibid.) hence the appropriateness of the plural form in the title Living Literacies. Literacy for me includes not only the literacy associated with reading and writing, but also orality, numeracy, science literacy, computer literacy, and Internet literacy. For the purposes of our discussion, science literacy entails an understanding of the scientific method and a passing acquaintance with the popular science literature and some of the basic principles of science. Computer literacy and Internet literacy entail the ability to use computers and the Internet respectively to access, create, process, and share information.

The subtitle of our conference, "What does it mean to read and write now?", appropriately generalized to include all six forms of literacy, provided me with the inspiration for my presentation and this essay.

One obvious response to this question is that to read and write now is to be able to access, transmit, and create information. Given my notion that there are six forms of verbal language, this ability to access, transmit and create information includes all forms of information: oral, literary, mathematical, scientific, and computer or Internet based. But to read and write now also mean one has an increased power of conceptualization, and that is the novel point I hope to make with this essay, namely, that there is an intimate connection between literacy and the ability to conceptualize or think abstractly.

In order to support this thesis I would like to draw upon my research over the past thirty years into the nature of communication, informatics, and language and their interrelationship. It all began in 1970 with my decision, as a physics professor who studied elementary particles and quarks, to share the ideas from my field with high school students and undergraduate humanities students at the University of Toronto. My course, The Poetry of Physics and the Physics of Poetry, was designed to provide liberal arts students who were challenged by mathematics with some much-needed science literacy. It also had the unintended result of starting me off in a whole new research direction which I have pursued ever since. I must confess that I am a physics prof who went astray into the humanities.

The Alphabet Effect

The first mystery I encountered in preparing material for my Poetry of Physics course was a puzzle presented by Joseph Needham, the great scholar of Chinese science and author of the book *The Grand Titration* (1969). He pointed out that abstract science had begun in Europe despite the fact that many technologies and inventions had emerged in China, ranging from paper, ink, printing, silk, and porcelain, to clockworks, water wheels, windmills, and the stirrup, just to mention a few. My first crack at this problem was to suggest that this was due to the fact that in the West there was a tradition of monotheism

and codified law that gave rise to a notion of universal law, an essential building block of abstract Western science.

Lest the reader should think that I have a Eurocentric bias, I want to briefly make a few pertinent points. First, Chinese culture and philosophy was highly spiritual, but they did not have a monotheistic tradition. As well, they had a sophisticated system of law, but not one that could be thought of as codified. Second, science is a universal activity and major contributions were not made only by Chinese and European cultures. Hindu and Buddhist mathematicians made a critical contribution with the invention of the concept of zero, completely missed by the ancient Greeks. The idea of zero led to the notion of place numbers, negative numbers, algebra, infinity, and the infinitesimal, without which modern science and mathematics would not have been possible. Third, I wish to draw the reader's attention to the contribution of Islamic culture, which rescued the early scientific works of the ancient Greeks and transmitted this body of work to European scholars at the end of the Middle Ages. But their contribution was more than just the transmission of this body of work because they vastly improved and enriched it, especially in the areas of chemistry and medicine. They also transmitted the notion of zero and place numbers and enriched mathematics. The words chemistry, algebra, and algorithm (which are derived from Arabic), and the term Arabic numerals are monuments to the contribution of Islamic culture to modern science and mathematics.

In 1974 I met Marshall McLuhan for the first time and shared with him my hypothesis that modern science developed in Europe partially due to the notion of universal law, which derives from their tradition of monotheism and codified law. Upon hearing my theory he immediately pointed out that the use of the phonetic alphabet was also unique to the West and that it influenced the development of abstract science and deductive logic. We (McLuhan and Logan 1977) combined our ideas and developed the hypothesis that the phonetic alphabet, codified law, monotheism, abstract science, and deductive logic formed a group of five self-supporting ideas that emerged in the West for the very first time between 2000 and 500 BC in the narrow geographic zone between the Tigris-Euphrates river system and the Aegean Sea.

The alphabet operates as a writing system by breaking down words into their basic phonemic elements and then representing those phonemic elements with meaningless visual signs. The use of the phonetic alphabet therefore requires analysis, coding, and decoding. It is the most abstract writing system ever developed and can represent any language with twenty to thirty signs. It also permits a perfect ordering or classification of all the words of a language. The phonetic alphabet was an invention of the Seirites, a Semitic people who mined copper, traded with the ancient Egyptians, and occupied the southern part of the Sinai desert almost four thousand years ago. All other phonetic alphabets are derived from this first alphabet and they all stimulate abstraction, analysis, classification, coding, and decoding all of which are essential for codified law, monotheism, abstract science and deductive logic. Please consult *The Alphabet Effect* (Logan 1986) for more details.

The alphabet effect taught me that a writing system can influence conceptual thinking in a fundamental way. My study of language and science revealed that there is no tradition of science without a tradition of both writing and mathematics, and that there has been no tradition of abstract science without the use of a phonetic alphabetic. It is obvious that the literacy of letters and numbers and conceptualization are linked in a very profound manner.

Six Languages: Speech, Writing, Math, Science, Computing, and the Internet

The next step in my study of languages beginning in the early 80s was to look at the impact of computers on education. My colleagues in this field were fond to point out that computers are informatic tools and I, loyal to my mentor Marshall McLuhan, insisted they were also a medium of communication. To me there was no conflict and I quickly concluded that computers are both a medium of communication and an informatic tool. After reaching this somewhat trivial conclusion I suddenly realized that this was also true of alphabetic writing as McLuhan and I had discovered in our study of the alphabet effect. I then generalized this idea and came to the conclusion that this was true of all forms of verbal language – they all allow us to communicate but they also help us to conceptualize (Logan 1995; 2000a). To my mind:

Language = Communications + Informatics

I also saw a pattern that connected the six forms of language into what I conceived of as an evolutionary chain of languages. Beginning with speech, each new form of language emerged to deal with the chaos of an information overload that arose with the use of the previous language(s). I made use of complexity theory and Prigogine's notion that a new level of order emerges out of chaos, which in the case of languages manifests itself as an information overload. The new level of order that emerges to handle the information overload is a new form of language.

Writing and mathematical notation emerged in Sumer shortly before 3000 BC to make a record of the tributes paid by farmers to the priesthood. The clay tokens used to record the agricultural commodities paid by the farmers were placed in clay envelopes whose purpose was to keep all the tokens securely in one single container. In order not to have to break open the clay envelope each time to see what was inside it, the practice of pressing the tokens onto the outer surface of the clay envelope while it was still wet and before closing it began. It was quickly realized that once the impression were made on the outer surface of the envelope one did not need to place the tokens inside the envelope and seal it. Thus was born the impressed clay tablet with a written notation to represent the agricultural commodities and a notation for numbers to represent the quantity of those commodities. Writing and mathematics notation were thus an invention of accountants and civil servants and not writers or mathematicians (ibid.). Another interesting point is that writing and mathematics notation arose at exactly the same point in times as revealed by my analysis of the data of Schmandt-Besserat (1992), the archaeologist who first deciphered the meaning and function of the clay tokens. This means that the skills entailed in literacy and numeracy are parallel and similar. In other words, if one can read and write one should be able to do math, and vice versa, if one can do math one should be able to read and write.

To teach young people how to read and write and use mathematical signs, the world's first formal schools were organized in Sumer shortly after the invention of writing and a math notation. Schools naturally led to teachers who prepared lessons in the forms of lists and thus were born the world's first scholars. Scholars led to scholarship and an explosion of knowledge and to still another kind of information overload. Science, which is basically organized knowledge, emerged approximately around 2000 BC to deal with the information overload created by teachers and scholars. Science in turn gave rise to its own unique information overload, which led to computing at first in the form of punched cards manipulated by mechanical machines, used for the first time for the 1870 US census by a company that later became known as International Business Machines. The mechanical computers eventually evolved into electronic computers beginning in 1945 with the Illiac and the Eniac. The overload from computer use in turn quickly led to the Internet, which represents a marriage of computing with telephony. This process of one form of language

giving rise to a new form of language as information overloads developed led to the evolutionary chain of six languages (Logan 2000a), namely :

1. Speech,
2. Writing,
3. Mathematics,
4. Science,
5. Computing, and
6. the Internet.

The justification for regarding each of these six forms of verbal language as distinct languages is that each has its own unique semantics or lexicon and each has its own unique syntax or grammar, which linguists such as Paivio and Begg regard as the criteria for identifying a system of communication as a distinct language. "Semantics and syntax (meaning and grammatical patterning) are the indispensable core attributes of any language" (25)

The Six Literacies

The vocabulary and grammar of spoken and written language are similar, but there are subtle differences. The vocabulary of math and science are completely different from each other and from spoken and written language. The vocabulary and grammar of computing and the Internet are also quite distinct from the other forms of language with elements in the case of computing such as word processing, databases, and spread sheets, and in the case of the Internet, such as Web pages, hypertext, and search engines. Another reason the six forms of language may be considered as distinct languages is that each helps us to think or conceptualize differently. It is for this reason that it is important to acquire all six forms of literacy, namely: 1. orality or rhetoric; 2. literacy; 3. numeracy; 4. science literacy; 5. computer literacy; and 6. Internet literacy.

The Origin of Speech

What about the origin of speech? Given that all of the other forms of language are derived either directly or indirectly from speech, the question arises: Where did speech come from and why did it emerge? What information overload was it dealing with? I claim that speech arose not out of the need to improve communication but rather as a cognitive tool that allowed conceptualization, a skill that became necessary as hominid life became more complex. The complexity of hominid life increased slowly over hundreds of thousands of years with the following advancements, each of which entailed new cognitive skills:

manual praxic articulation including toolmaking and the control of fire;

social organization or the language of social interaction required to maintain and control fire and organize food sharing and large scale coordinated hunting;

pre-verbal mimetic communication that entails the use of gesture, hand signals, body language, and prosodic vocalization, which facilitated various aspects of social organization (Donald 1991).

The three pre-verbal cognitive developments listed above were, according to Donald, the cognitive laboratory in which the skills of generativity, representation, and communication developed and, hence, were the source of the cognitive framework for speech. Each entails some form of sequential learning and processing and, hence, following the ideas of Christiansen, would have served as pre-adaptations for speech.

According to Donald, these three cognitive skills allowed a rather sophisticated level of performance and intentional communication for pre-verbal hominids.

Individuals can perform a variety of difficult functions without language, without even the possibility of internal speech. The range of their cognitive competence is impressive: it includes intentional communication, mimetic and gestural representation, categorical perception, various generative patterns of action, and above all the comprehension of social relationships, which implies a capacity for social attribution and considerable communicative ability (166).

If mimetics that pre-dated speech provided an adequate system of communication, then one is left with the conclusion that the principal function of language and the reason for its emergence was conceptualization (Logan 2000b). Donald was the first to suggest this:

Although language was first and foremost a social device, its initial utility was not so much in enabling a new level of collective technology or social organization, which it eventually did, or in transmitting skills, or in achieving larger political organizations, which it eventually did. Initially, it was used to construct conceptual models of the human universe (215).

I regard the transition from mimetic culture to semiotic (verbal) culture as the transition from percept-based mental processes to concept-based ones. As was the case with the notated forms of language – writing, math, science, computing and the Internet (Logan 1995, 2000a) – speech emerged as a form of conceptualization in order to deal with the complexity of hominid existence due to toolmaking, social organization, and mimetic communication. Verbal language did not emerge primarily for the purpose of communication because, as is claimed by Merlin Donald (1991) mimetic communication was quite a robust system of communication, though not a tool that allowed for conceptualization.

I believe that our first concepts were our first words. Each word acted as a strange attractor that united all the percepts associated with that word. For example, the word water brings to mind all of our percepts associated with water: the water we drink; the water we cook with; the water we bathe in and clean with; the water of rivers, ponds, lakes, and oceans; and the water that falls as rain, sleet, and snow.

Speech represents four distinct bifurcations:

1. the bifurcation from mimetic communication to verbal language,
2. the bifurcation from perceptual thought to conceptual thought,
3. the bifurcation from hominids to *Homo sapiens sapiens*, and
4. the bifurcation from the brain to the human mind.

Reflecting on these four bifurcations provides some interesting insights into the nature of language, literacy, and conceptualization. The bifurcation from mimetic communication to verbal language teaches us that there is an intimate connection between speech and the elements of mimetic communication. In fact speech or orality almost always entails the marriage of the spoken words with facial gestures, tone or prosody, hand signals, and body language. Without these devices borrowed from mimetic communication, the spoken word would be dead and wooden. It has often been pointed out that the words themselves in spoken language represent only a small part of what is communicated. This is perhaps an exaggeration but one that could only be made because mimetic communication is such an integral part of speech.

The second bifurcation from percept-based thinking to concept-based thinking bears on the many discussions we had at our conference of imagery versus literacy and the notion of

image literacy which was the focus of Geoff Pevere's presentation. Images are perceived and hence are processed by the more primitive mechanisms of our brain, whereas literacy entails concepts and concept-based thinking, which are cognitive processes of the brain that developed after or with the emergence of speech.

Some speakers spoke of the dread possibility that verbal language would be replaced totally by images or imagery. I think my analysis puts that fear to rest. Verbal language is here to stay because it serves a purpose that images, as powerful and persuasive as they are, cannot possibly serve, namely, conceptualization, which is so essential for abstract thinking, analysis, and planning. Images might be powerful persuaders of what to buy or what to wear but they cannot be used by us to determine whether the purchase is good for us and whether it supports our values.

It is conceptualization and verbal language that make us human, allow us to plan for our well-being, and allow us to determine our values and behave in a moral fashion. This is why I consider the emergence of verbal language as the bifurcation from hominids to humans, or *Homo sapiens sapiens*. It is verbal language that clearly distinguishes us from the other animals of this world and allows us to make plans, to develop morality, to tell stories, to pursue mathematics and science, and to create the fine arts – even those whose media are nonverbal, such as music, painting, dance, and sculpture.

It is for this reason that the literacies of which I spoke in this essay are so precious. It is because they are the entree or doorway to all these wonderful activities and creations of humankind. Not to enjoy them is a terrible loss for those who are not literate, which is why those who pursue the cause of universal literacies are so passionate about their work.

Concepts are "artificial percepts" – instead of bringing the mountain or the percept of the mountain directly to the mind, the word brings the mind to the mountain through the concept of the mountain. The concept of the mountain triggers instantaneously all of the mind's direct experiences of mountains as well as instances where the word mountain was used in any discourses in which that mind participated either as speaker or listener. The word mountain acting as a concept and an attractor not only brings to mind all "mountain" transactions but it also provides a name or a handle for that attractor/concept, which makes it easier to access memories and share them with others. They speed up reaction time and, hence, confer a selection advantage for their users. And at the same time, those languages and those words within a language which most easily capture memories enjoy a selection advantage over alternative languages and words respectively.

In suggesting that the first words were the strange attractors of percepts I did not mean to imply that all words arose in this fashion. I certainly believe that the first words to appear were the strange attractors of percepts, but once a simple lexicon of words and a primitive grammar came into being a new mental dynamic was established. The human mind was now capable of abstract thought and abstract concepts that would need to be represented by new words. These new words would not have emerged as attractors of percepts but rather as representations of abstract concepts.

The first words of this nature would have been, in all likelihood, associated with grammar and categorization. Examples of the former would be function words such as: this, that, and, or, but, if, and so forth; and examples of the words for categorization would be words such as: animals, people, birds, fish, insects, plants, and fruits.

The Origin and Evolution of the Extended Mind

The bifurcation from percept-based thinking to concept-based thinking also represents a fourth bifurcation from the brain to the human mind. Before verbal language, the brain was basically a percept processor. With language and the emergence of the concepts, the human mind also emerges – I define the mind as the brain plus language. Language extends the brain into a human mind.

I have attempted to develop insights into the role that language has played in the development of human thought and activity by combining ideas on the nature and function of language, the concept of bifurcation from chaos theory, and Merlin Donald's notions of evolutionary psychology. Building on these ideas I would like to tackle the age-old question of the relationship of the human mind and the brain. For some psychologists this is a non-problem as they believe that the brain and the mind are synonymous, just two different words to describe the same phenomena, one derived from biology, the other from philosophy. For others there is a difference. Some define the mind as the seat of consciousness, thought, feeling, and will. Those processes of which we are not conscious, such as the regulation of our vital organs, the reception of sense data, reflex actions, and motor control, on the other hand, are not activities of our mind but functions of our brain.

I believe that there is no objective way to resolve these two different points of view but that a useful distinction can be made between the mind and the brain based on our dynamic-systems model of language as the bifurcation from concrete percept-based thought to abstract concept-based thought. Therefore, I assume that the mind came into being with the advent of verbal language and, hence, conceptual thought. Verbal language extended the effectiveness of the human brain and created the mind. Language is a tool, and all tools, according to McLuhan, are extensions of the body that allow us to use our bodies more efficiently. I believe that language is a tool that extended the brain and made it more effective thus creating the human mind, which I have termed the extended mind. I have expressed this idea in terms of the equation: **mind = brain + language**.

The human mind is the verbal extension of the brain, a bifurcation of the brain which vestigially retains the perceptual features of the hominid brain while becoming capable of abstract conceptual thought. It also represents, for me, the final bifurcation of hominids from the archaic form of Homo Sapien into the full-fledged human species Homo sapiens sapiens. Humans are, therefore, the only species to have developed verbal language and also to have experienced mind. This is not to deny that our ancestors, the earlier forms of hominids, experienced thought and consciousness. Their thought patterns, however, were purely percept-based and their brains functioned as percept-processing engines operating without the benefit of the abstract concepts that only words can create and language can process. It follows that animals have brains but no minds and that the gap between humans and animals is that only humans possess verbal language and mind.

Conclusions

This essay may be considered by some to be somewhat academic from the point of view of promoting literacy but I remind the readers of the insight of one of my fellow presenters at the conference, Ruben Hurricane Carter, who reminded us that "understanding and action are simultaneous." To those engaged in the noble pursuit of promoting literacy, I believe, the following conclusions that can be drawn from this essay might prove useful for their work:

Speech or language emerged so as to facilitate conceptualization and hence abstract thinking;

Language = communications + informatics;

The emergence of language represents the transition from percept-based thinking to concept-based thinking;

Language evolved more sophisticated and abstract forms, namely, the notated forms of language, each of which requires its own unique literacy to access and use;

Speech, writing, math, science, computing, and the Internet represent an evolutionary chain of languages;

With the exception of speech, which is learned automatically whenever an infant is exposed to spoken language, all the other forms of language require instruction or formal schooling;

To read and write, to be numerate, to be literate in the other forms of language is to access languages that are more sophisticated than speech and whose use allows a greater power of conceptualization;

Computers and the Internet are great tools for teaching the three R's, reading, 'riting and 'rithmetic, because the more basic forms of language are easily accessed and manipulated in the electronic media;

Education should focus on conceptualization as a way of promoting the six literacies;

Numerical notation emerged at the same time as reading and writing, thus the skills of literacy with letters and numeracy are parallel and similar. If one can read and write one should be able to do math – and vice versa; if one can do math, one should be able to read and write.

If infancy were dead . . .

by Steve McCaffery

My own involvement with the Sandinista literacy campaign in Nicaragua gave me first-hand confirmation of the human right and imperative to read. That right is irrefutable. However, a talk in praise of literacy would be fatuous and repetitive and my chosen perspective this morning is one of scepticism. In fact this paper is not friendly to literacy and given my pretensions to being an agent provocateur as well as my predilection for political incorrectness this stance is quite predictable. The potential of literacy is always incommensurate to its application, and frequently literacy finds itself involved in acts of stupidity. Two examples: a multilingual public advertisement recently appeared in Toronto Transit shelters. "Literacy is a right and You can get help by calling this number." Precisely who is the designated addressee here? I'm literate so it's sure not me. Presumably therefore it's directed at those who can't read. Ergo, although one cannot read one must be able to read the claim that one has the right to learn to read. My second example: During the mass starvation in Biafra, much needed medical supplies were shipped in, but all items were labelled in English. Some bottles and packets carried a printed prescription "Take four times a day." But the concept of clock time does not exist in a community of starving and dying human beings and even if it did exist clocks were hardly a common household item in Biafra. As a practicing poet for the past thirty-five years, I felt it was apposite to address the stake of orality in the literatures of our new millennium. My start merits a quotation from a personal mentor and intellectual hero: Gilles Deleuze, that clarifies the background and challenge against which my own current artistic practice is formulated. It also describes the urgency I feel to stay an innovative poet.

If Literature Dies, It Will be Murder. People who haven't properly read or understood McLuhan may think it's only natural for audiovisual media to replace books, since they actually contain all the creative possibilities of the literature or other modes of expression they supersede. It's not true. For if audiovisual media ever replace literature, it won't be as competing means of expression, but as a monopoly of structures that also stifle the creative possibilities in those media themselves. If literature dies, it will be a violent death, a political assassination (as in the USSR, even if nobody notices). It's not a matter of comparing different sorts of medium. The choice isn't between written literature and audiovisual media. It's between creative forces (in audiovisual media as well as literature) and domesticating forces. It's highly unlikely that audiovisual media will find the conditions for creation once they've been lost in literature. Different modes of expression may have different creative possibilities, but they're all related insofar as they must counter the introduction of a cultural space of markets and conformity.... (1995, 131)

It's because this domesticating cultural space is already with us and irreversibly expanding at a vertiginous pace that the need for a critical avant-garde is of paramount importance. I want, in part, to revisit the classic avant-garde of Dadaism, a formative force in my own development as a sound poet through the 1970s, and reconsider its negative poetics of rejection and reflect on a crucial illiteracy at the heart of literate culture, an illiteracy that recent philosophical discourse terms *infancy*.

We're told that the current urgent literacy is the literacy of the interface in which the loop replaces the line as the dominant modality. Lev Manovich names our present culture an "information" culture. However, the neo-liberalized West's need for collective connectedness precipitates literate labour beyond information into a data-vortex that Donna Haraway aptly

christened informatics. I think information technology's a nightmare into which we're trying not to fall asleep. Around the world there are one billion e-mail messages sent each day. Like dream-shit, information passes through an alimentary tract of rapid metabolism, in which living literacy maintains a symbiotic relationship with dead letters. Sven Birkets is one of several conservative liberal thinkers who have advanced severe concerns about the information age. His fear is "that we are giving up on wisdom [and] pledging instead a faith in the web" (228).

The Web, in which a part of me participates, has been recently consecrated and celebrated as the triumph of potlatch, the birth of a hyperspatial gift economy of vertiginous excess and circulation. Architect Marcos Novak considers the web the realization of Constant's prophetic New Babylon of the 1950s. Notwithstanding this optimism I would mention Lev Manovich's likening of the internet to a Stalinist apartment. The conspiratorial relationship of literacy and surveillance is a well-established fact. So the dilemma is obvious: To enter literacy is to enter a complex of rules, restraints, and vulnerabilities. But not to enter it is to remain in another complex of rules and restraints. While having reservations about Birkets' claim, I agree with him on a different point: There is a critical distinction between instrumental communication and affective communication. The loss of affect in a regime of mediatization seems a crucial issue today and one that this paper will address.

Technological advances in literacy carry with them corresponding losses. It's a well-known fact that a Gothic cathedral is in part the Bible "written" for illiterates: a complex formulation of space, light, colour, symbol, and representation. The advent of the printing press and moveable type ushered in an unprecedented dissemination in reading material, a rapid transposition of vocalized into silent reading, and a radical shift from public declaration to private meditation. But it also occasioned a critical loss of the image-word interlacement so crucial to the complexity of medieval reading. Language and text became isolated and sovereign. To claim that print killed the margins is an apposite slogan. Prior to Gutenberg's invention, a vibrant tradition of decoration and commentary existed in the margins; and the consequent effect of the printing press is clearly stated by Michael Camille. "Language [after the invention of print] is now in a separate realm, written in discrete boxes or in fields hanging in the picture space" (158). In his *Poetria* the medieval poet John of Garland meditated on the figure of the idiota mentioned in Acts 4 and Corinthians 1. The idiota is the unlearned man, the rustic, the illiterate, whose illiteracy Brian Stock connects to the notion of "a `saintly simplicity' that allows intuitive understanding of the Scriptures" (qtd. in Leupin: 6).

Another urgent area of address is literacy's own illiteracies, those cannot read. After a couple of decades of focusing on the politics of identity we now find ourselves dealing with a less tractable phenomenon: the mobility of identities. Framed today within the complexities and shifts of cosmopolitan citizenship, literacy finds itself thrust into a new mode of illiteracy rapidly emerging in the form of *les gens sans papiers*. These "people without papers" read and speak but cannot be read; they escape the parameters that a power through literacy erects; they remain undocumented, unprotected, unrepresented, and unrepresentable.

As humans we suffer language, suffer through and suffer in the signifier. The call of Language is a call into Language for the profit of Language. Language can't escape this primal personification as the computer of Capital among whose several outcomes is the irreversible expansion of pestilential literacy. Jean Luc Nancy remarks on the nakedness of our information technology and its evasion of the issue of the meaning of Being.

If "communication" is for us, today, such an affair— in every sense of the word . . . — if its theories are flourishing, if its technologies are being proliferated, if the "mediatization" of the "media" brings along with it an auto-communicational vertigo, if one plays around with the theme of the indistinctness between the "message" and the "medium" out of either a disenchanted or jubilant fascination, then it is because something is laid bare. What is exposed is the "content"-less web of "communication" . . . We are "ourselves" too inclined to see in this the overwhelming destiny of modernity. Contrary to such meagre evidence, it might be that we have understood nothing about the situation, and rightly so, and that we have to start again to understand ourselves — our existence and that of the world (28).

Let me tender one advocacy that supplements Nancy's position and stands as clearly antithetical to the goals and aspirations of the "information age": a particular, ontological plea for illiteracy in a recovery of the most impossible of forms: infancy.

Ruminating on Ovid's version of the myth of Narcissus, Maurice Blanchot arrives at the image of a marvellous child who is dying. Narcissus, "having turned into an image . . . dissolves in the immobile dissolution of the imaginary, where he is washed away without knowing it, losing a life he does not have" (126). This lost life the infant never had marks a singular passage and a destiny: to die into language without knowing it.

Heidegger famously posits a double negative constitution of human being in the form of a being toward death and a being toward language, both language and death are our unavoidable, irreversible destinies, and somewhere in that transit is a stage named infancy. Infancy inflects pre-subjective intensities in "a pure immediate consciousness with neither object nor self " (Deleuze 2001: 26). It also inflects the more portentous advent of language as an infant's death. A child emerges from an infant corpse still warm outside, at the limit of the debt of life to living toward language. Already belated, this infant is there as a not-yet-something, and infancy has no survivors precisely because infancy is the non-ground of language withholding that secret of language "language" can never recover. Of course, this scenario that constitutes a primal scene is the happening of a non-event, an impossible event because the infant occupies the space of the imaginary. The phrase an "infant is being killed" is of the order of a phantasmatic designation of a passage in which there is a death of an infant and a one who survives. A recurrent theme in Rilke's poetry is the disinherited child suspended between two worlds "to whom no longer what's been, and not yet what's coming, belongs" (Agamben 43). This remarks the interstitial space of infancy, a brief epoch condemned from the start to a death.

Let me try to construct a poetics of infancy, one haunted by a death into language, by opening with this question: What would it mean to desire illiteracy as an intense, ephemeral condition of being without language? This question rephrases many similar ones that reverberated through the shattered utopian halls of mirrors of twentieth century avant-garde practice. And an answer is readily available. The meaning would be "to be in infancy." Lyotard defines the infantile as "whatever does not permit itself to be written, in writing"(qtd. in Harvey and Schehr: 25) and one response to the paralogicalities of literacy is to abandon words altogether: Such abnegation forms a key tenet behind the Dada sound poem, Nepomucin Miller's and Karl Reuterswald's punctuation poems, the marbled page in Tristram Shandy, and the gestural calligraphy of Henri Michaux. And from Aristophanes to John Cage, the evidence of attempts to escape the regime of the signifier are sufficient to constitute a literary counter-tradition.

Lyotard offers implicitly a gestural poetics when he asserts that the contemporary task of writing is to "extend the line of the body in the line of writing" and inscribe "the trace of the

initiatory event in language" (qtd. in Harvey and Schehr: 49). Ernest Enrolls situates the gesture at a point before both voice and writing, while Barthes notes the subordination of gesture to both speech and writing in the west. This call to gesture and initiatory event is precisely the telos of Henri Michaux's calligraphic inscriptions. Through a poetics of the doodle, Michaux inscribes physical actions and gestures onto paper. He describes the emancipator process in *Movements*, a series of twelve hundred sheets of these markings produced from 1950–51:

It's precisely because I manage to liberate myself from words, those sticky hangers-on, that the drawings are so slender and almost joyous, that their movements were so easy for me to execute, despite their occasional exasperation's. I see in them a new language, turning its back on the verbal, a liberator . . . an unexpected soothing mode of writing in which one would finally be able to express oneself far from words, far from other people's words (Harvey and Schehr: 46).

Refusing the infant death into language, Michaux inscribes the "etymologies of gestures, enactments of their own origin, miming's of the moment at which signs, not yet fully bearers of sense, become to *come into being*" (54). Michaux's markings are signifiers without signification on the way to language perhaps, but gestural inscriptions refusing the death of infancy into language. Gestures challenge literacy at the very moment of inscription. Detached from communication the gestural inscription frees writing from language and in that emancipation offers a new relationship to literacy. Michaux's gestures in ink help us understand Barthes' insight "that writing's truth is neither in its messages nor in the system of transmission which it constitutes for current meaning . . . but in the hand which presses down and traces a line, i.e. *in the body which throbs*" (240).

The sonic and gestural parallel to Michaux's inscriptions is the sound poem, an avant-garde genre practiced by the Dadaists and Futurists and generally judged to be grounded in a poetics of trenchant negativity beyond which lies the affirmative desire for unadulterated affect. Dada poet Hugo Ball (1886–1926) claims to have invented *verse ohne worte* (poetry without words) also termed *lautgedichte* or sound poem, a minor genre whose origin seems to be a blend of social critique and mantic mysticism. These phonetic poems Ball claimed "totally renounce the language that journalism has abused and corrupted [returning words] to their innermost alchemy" (71). Here's a short excerpt:

gadji beri bimba glandridi lauli lonni cadori
gadjama gramma berida bimbala glandri galassassa laulitalomini
gadji beri bin blassa glassala lauli lonni cadorsu sassala bim
gadjamatuVm i zimzalla binban Lila wowolimal bin beri ban
o katalominal rhinozerossola hopsamen laulitalomini hoooo
gadjama rhinozerossola hopsamen
bluku terullala blaulala loooo
(qtd. in Bohn: 37)

Ball's poetry readily approximated those undertakings of linguistic delirium that Foucault notes in *Brisset* – a restoration of words "to the noises that gave birth to words, [... reanimating ...] the gestures, assaults and violences of which words stand as the now silent blazons" (qtd. in Deleuze 1988: 149 n40), but insofar as it remains a phonetic construct, rebellious against but ultimately complacent to the phonetic rule of difference, it can be accurately described as a specimen of virtual semantics.

The decisive escape from Ball's impasse occurred in the early 1950s with François Dufrêne's *cri-rythme*, which he himself placed within the wider category of prelingualism. Less text than sonic expenditure, the *cri-rythme* is a kind of paralanguage, a high-energy expulsion of inarticulate sounds, cries, and grunts. Dufrêne's special achievement is to have renounced successfully the aura of the spoken and the phonetic and to have pushed to the centripetal limits of the poetic, exploring the micro-particulars of morphology and deploying the full expressive range of predenotative elements: grunts, howls, shrieks, and hisses. His is truly a profound disturbance of language "by the mad poetics of the scream" (Lecerclé 66).

If works of art are still possible, if the system is not what alone produces them and addresses them to itself, if therefore literature, art, and thought are not dead, it is because they hysterically cultivate [a] relation with what is irrelevant.... In order to give [words, sounds, and bodies] back to their silence, which makes so much noise in the human body, to expose them to their potentiality and to obtain from them the gesture of a poem (Lyotard 1997: 214).

This gestural poetics by which the poem is returned via sound to its own silence outside the interlocutory logic of clear and possible response remarks precisely the infant's condition of abandonment whose paradoxical registration is simultaneously noise and silence.

At a level below languages, works, institutions, always lying latent beneath the audible but never covered over by it, this breath does not speak, it moans, it mutters. It has no history, it's a lament "that appears always naked and new," that has nothing to tell. It appears invincible to articulation [to that death into language], implicitly understood and prostrate even in the discourse of forms. It wanders over lips, it swells "the almost sexual and ever bared protrusion of faces," it rests ensconced in the thrust of voices stacking themselves one before the other in their millenary commerce (224).

Such an infancy is not *before* language but *beneath* it, more on the order of a social sediment than an anthropological condition prior to language acquisition. Sonorous matter, Lyotard informs, "is the sound death makes in the living body" (230–31).

"The fundamental human right asserts Bataille, 'is to signify *nothing*'" (qtd. in Richman: 138). For Bataille, totality is grasped in a gesture of the meaningless. It is the socio-cultural denial to the body of a blank, meaningless space that supports a nihilism, not vice versa. The body is nothing when trapped within its systems of representations but becomes everything when posited outside of meaning. Sound is fundamentally unoriginal and language is nothing when it's crushed between your teeth and the shadow of a mouth recovers the breath of its morselations. Sound poetry's extreme mission from Artaud to the performative enactments of the 1970s was neither expenditure nor spontaneity per se but the murder of speech in its Capitalist embodiments. This death of speech – it should be qualified – entailed a theft of silence within sound. To paraphrase a thought of Valéry's that captures with beauty and accuracy the circularity of this mission: a scream escapes from pain. Out of this accident a poem is made, with an explanation round about it. In this context the scream acquires a role, a function. As was the case with Pascal's Thought: "I had a thought. I have forgotten it. In its place I write that I've forgotten it."

Norman O. Brown offers a brief account of a *verbum infans*: "the infant or ineffable word, is speech and silence reconciled" (257) and this may be worth pondering in relation to John Cage's notorious definition of poetry: "I have nothing to say and I am saying it and that is poetry." Underlying Cage's definition is not only the poet's insight that silence is the scream on the most effective side of the dictionary, but also the ethical implications of raw orality. I

believe we have an urgent need for an alliance between creativity and philosophy for the sake of ethics. This is an old call from Kant through Kierkegaard to Emmanuel Levinas. If not unethical, writing nonetheless evades the fundamental ethical encounter, which is not a self-addressed categorical imperative as Kant would have us believe, but the exposed encounter of two faces. The link here is that of ethics onto immediacy and immediacy to the infancy of encounter. Lyotard describes that infancy as a "welcome extended to the marvel that (something) is happening, the respect for the event" (Harvey and Schehr: 49). In his *Hérésies artistiques* Mallarmé too approximates this condition when faced with the mysterious unreadability of musical notation – an unreadability that he elevates to the poetic desideratum:

Opening Mozart, Beethoven, or Wagner at will, looking over the first page of their work with an indifferent eye, we are overtaken by a religious astonishment at the sight of those macabre processions and severe, chaste, unknown signs. And we close up the missal, virgin of any profane thought. I have often asked why this necessary trait has been refused to a single art, the greatest.... I am speaking of poetry (qtd. in Lacoue-Labarthe: 43).

This infancy arrived at through encounter unfolds of necessity another matter – the infancy of ethics itself.

Electronic Literacies

by Caitlin Fisher

My research and artistic practice is organized around the overarching theme of electronic literacies in the broadest sense and the research concerns of this emerging field: production by artists and writers of new kinds of texts, the way these cultural objects are encountered and understood, and the widespread implications of these new cultural artifacts. As a hypermedia theorist and storyteller – as both a reader and a writer of these arguably new kinds of texts, I believe that the way we tell stories matters in a profound way, that forms are never innocent, that storytelling has intimate connections to theory-making and that playing with ideas and forms is not only good for you, but can also result in some surprising, unanticipated discoveries. I would like to share some of these discoveries with you, here.

All of my work to date is invested in finding a common language between thinking and doing – to making electronic art and texts, as well as thinking about them and reading them. This is significant with respect to digital literacies because as McLuhan said, “we shape our tools and then our tools shape us,” (Lapham, xi) echoing Nietzsche who similarly observed that “our machines are working on our thoughts” (qtd. in *Machine*, n. pag..). An exploration of digital literacies necessarily, then, demands a consideration of both new ways and means of writing and new strategies and effects of reading.

The Living Literacies conference asked us to consider what it means to read and write now – and with respect to electronic literacies we need to consider specifically, I think, what it means to read and write nonlinearly, visually, and cinematically. Do these new cultural forms and digital grammars allow us to communicate differently? How? To what effect? How do digital technologies and new media tools modify the relationships between language, texts, and culture? How do we speak to one another, now? What are the benefits of reading digital text as a material mode of creating shaped by ideological concerns? What is the future of storytelling? In short, how will our encounters with new digital texts and possibilities challenge and change us?

These are the large questions in the field of electronic literacies of interest to this conference, as I see them, though it's impossible in one short piece, of course, to cover all that, and immodest to try. And so my focus here will be to sketch roughly for you a handful of the literacy skills I think electronic texts demand from us as readers and storytellers.

We will be challenged to:

1. read and write databases
2. read and write thought sculptures built through electronic linking
3. balance the need for experimentation with a current craving for readerly texts
4. read and write code
5. inhabit information architectures

First, though, some quick definitions. When I use the term electronic texts I mean texts not simply generated on a computer, like a word processed document, but a text that must be read on screen, one that demands the computer for its instantiation. A lot of my own early interest was in hypertexts. Electronic hypertext has been described as a system of nested, electronic footnotes, and early literary work in hypertext usually involved replacing one screen of text with another screen of text – and in this way they much more resembled print work than contemporary hypermedia works we now see in the field. Hypermedia refers

to texts combining word, sound, image, animation, or other components into fully coherent and integrated work – the words in hypermedia work are, then, only part of the text. Those of you who use the World Wide Web are already familiar with hypertext/ hypermedia – clicking on words that connect you from one (sometimes hypermedia-enhanced) document to another. Others of you who are not familiar with computers may be able to find a way to begin to imagine electronic hypertext through this suggestive list written by Susan Hawthorne:

Consider the form of a Hindu Yantra. This is hypertext.

Consider the form of the Kabbalah. This is hypertext.

Consider the paintings of Aboriginal artists.

Consider an astrological natal chart.

Consider the stained glass windows of a Gothic cathedral.

Consider the images you find in Russian or Greek Orthodox icons.

Consider the algebraic architectural and religious designs of the medieval Arab world.

Consider the image of the labyrinth, the maze. All are shorthand for hypertext.

(n. pag.)

So most of us, then, already have at least some complex, translatable literacy skills we can bring to electronic works. I'd like to talk now about my own work and experiments in this area and some of the things they have taught me.

I. Databases

My doctoral dissertation, *Building Feminist Theory: Hypertextual Heuristics*, explored the intersection of feminist and hypermedia theories and was written in HTML and a software program called Storyspace for stand-alone CD-ROM. It was an exploration, in hypertext, of the resonances and productive couplings between digital writing technologies and feminist theories and the dissertation used feminist and hypertext theories to build a new kind of text, a text that sought a form homologous with excentric knowedges.

Implicit in the title was the claim that the process of shaping this hypertext was itself a form of feminist theory production – that theory was “built” both by the structure of the dissertation and as an effect of reading. For example, the reader was challenged to choose her own pathways through the material from among many others I had coded; to build the text from fragments. No two readers were likely to have read the same screens in the same order.

I think of this text as my text of *jouissance*, which Barthes identifies as “the text that imposes a state of loss, the text that discomforts,” that “unsettles the reader’s historical, cultural, psychological assumptions, . . . [and] brings to a crisis his [sic] relation with language” (14). In other words, it was a text that very few people seemed to enjoy. Two years ago when hypermedia theorist Lev Manovich published his much anticipated book *The Language Of New Media*, I returned to my doctoral work to think about the “unpleasure” I had caused.

In his book, Manovich posits the database as the culture’s new symbolic form and the unordered list, the archive etc., as a challenge to traditional narrative. He goes so far as to suggest that “database and narrative are natural enemies. Competing for the same territory of human culture, each claims an exclusive right to make meaning out of the world” (225). He goes further to suggest that we may even call the database a new symbolic form of the computer age, a new way to structure our experience of ourselves and of the world.

Building Feminist Theory was composed of over fourteen hundred lexias, or screens of text. While I wrote my dissertation long before Manovich published this piece, a database was, in effect, what I had produced – a large database and instructions for reading across it. In short, one of the things I had learned in the process of producing *Building Feminist Theory: Hypertextual Heuristics* was to answer the call of the new symbolic form. In terms of emerging literacies, then, I agree with Manovich that we must learn or relearn to read archives and databases.

II. Thought Sculptures

But my own work wasn't simply a database.

One of the first things I came to know when I began to share my dissertation widely with readers was that, more often than not, my readers read nodes and not links; these reluctant bricoleurs read the words and quotations, the elements of the database, but not its structure or associative method of organization.

The lexias or screens full of text were understood as the "real" content of the dissertation and the structure itself – its contours, its conventions, new ground I'd hoped it might break – was largely unintelligible to many of them. For some months I understood the work as a catalogue of losses – the loss of polemic, of certain kinds of rhetorical gestures, of mastery.

While I believe even now we can begin to talk about a new grammar and aesthetics of digital media, I had undertheorized, I think, the ways in which readers – expert readers of linear texts – would experience this hypertextual work.

The intellectual core of the hypertext, and one of the most interesting aspects of hypertextual writing to my mind, is the constellation of ideas held aloft by the technology – the linked and coded concretization of the weaver's constellation I visualize as a thought sculpture. I have always seen my texts as three dimensional, sculptural. Perhaps this is why linear forms always felt one step removed from my writing process. I would build a set of notes with many linkages and then work hard to flatten it all out again to construct a persuasive, two-dimensional essay form. My understanding of the constellation and its philosophical and political importance emerges from my reading of the Frankfurt school: when we want to understand an object of interest – in the case of my doctoral work, for example, feminist hypertext theory – we must not look directly at the object, fetishizing the concept. For Walter Benjamin, the constellation is a multidimensional form: the arrangement or configuration in which a variety of concepts, models, ideas or other materials takes shape (in "Theses on the Philosophy of History" for example). In Adorno's extension of the idea, the constellation holds contradictions in tension and is addressed this way: "as a constellation theoretical thought circles the concept it would like to unseal hoping that it may fly open like the lock of a well-guarded safe deposit box: in response, not to a single key or a single number, but to a combination of numbers" (163). Sounds very hypertextual.

I use the word constellation with a nod to Benjamin and Adorno, among others, then, but it's different here in new media. How? Crucially, because this particular constellation has been coded, because the linking structure, however complex, is saved in computer memory, I can return to it, and I can share it with you.

In the case of my dissertation, the web of original lexias, quotations, and imagery and sound put into conversation was held together by more than 17,000 links. While it is sometimes assumed that "links are directly analogous to prose transitions, page sequence

or other connective structures in print" (Slatin, 871), as Burbules points out, there are different kinds of links that signal different kinds of associations: metaphors, metonymy, association not by similarity but by contiguity, synecdoche, antistasis, identity and catachresis: "novel, strange instances might spark reflections just as revealing and delightful as those one recognizes more readily" (111). The linking structure, in other words, was an integral part of the intellectual work necessary to produce the text.

Indeed, the linking structure – the ability of this writing technology to hold the all-at-onceness of theory as we build it, to communicate this constellation of ideas, and crucially, to have readers encounter and explore them (though never unmediated, of course) – is, I believe, one of the most theoretically interesting aspects of hypertext writing.

I associate this hypertext, in part, with the scaffolding of the academic enterprise, the unconscious of the philosophical line, whose communication, I suggest, has real academic, theoretical, and aesthetic value: the concretization of a web of signification – the constellation of ideas held aloft by the technology through its linking structure. While it's true that much digital work is increasingly televisual, time-based, and linear, that many new texts employ software like Flash and Director in ways that do not showcase classic hypertextual structure, and that some texts consist solely of unordered lists, in my own work and in the work of many others, links continue to be crucial to the writing/thinking practice. It is for this reason that simply learning to read archives or databases will not always be enough.

It won't be enough because to concentrate only on the dataset in our reading practices is potentially to miss the structure coded by the author and to miss entering into a relationship with that artful labour. This structure is what I'm calling the thought sculpture – the invisible intellectual labour that demands a new kind of literacy and one that risks remaining unintelligible to readers even though its contours have been given what we might call a certain kind of materiality through coding. This is a very important innovation, then: conceiving of the navigational apparatus not simply as a way to get around the text, but the navigational apparatus itself as a signifying component of the text (Hayles). And so we need to focus on finding ways to make the digital constellation intelligible to us. We will learn to read archives and datasets, yes, but we must also explore ways to teach ourselves to read and write and theorize the navigational apparatus, this thought sculpture, too – its contours, its grammar, its possibilities ... its poetry.

III. Balance

My first sustained attempt to think through what I had learned from my doctoral experience resulted in the writing of my recent electronic novella, *These Waves of Girls*.

Based on my theoretical understandings of emerging literacies, and my doctoral finding that readers of hypermedia typically still crave readerly texts, I constructed an architecturally and visually complex piece that nevertheless employed many of the traditional appeals of narrative. While some electronic writers predict that many of the current concerns about readability in hypermedia work will fade over time as the notion of reading itself makes the shift, and the scope of what we mean by "text" expands, I nevertheless deliberately set out to write *These Waves of Girls*, as a text of pleasure built in part as an echo of the dissertation.

The novella was awarded the 2001 International Electronic Literature Prize for Fiction, and I believe in large part *These Waves of Girls* won because it made concessions to people's existing literacy skills, allowed for closure and pleasure, and wasn't devoted to the

“unpleasure” of more experimental texts, including my own. Unlike my dissertation, people knew how to read it and people “got” it.

Still, at a theoretical level, the text considered complex questions around how narratives of girlhood are discursively produced and how hypermedia might enable a writer to craft a complex and new kind of text while resisting the impulse to produce a standard univocal account of the subject matter – a linear developmental tale. Although it’s a fairly narrative text, the small stories are to be encountered in no particular order. I wanted the stories and memories to crash like “waves” because I wanted possibly contradictory tales to emerge, for readers to encounter the complex nature of diverse girlhoods themselves – girls at once strong, as victims, as scheming, as vain, as kind, as wanting ... all of this within one girl. Or are there many girls here? Hypermedia made it possible for me to suggest all of this at once.

IV. Codework:

“Writing” in a digital environment consists of both text and code, and many of the other works on the shortlist for the Electronic Literature Prize might be called “codeworks,” works in which programming languages are revealed on the surface of the text, or executable code shapes the writing and reading of the text. Techniques vary, but the general result is a digital text that emphasizes its own programming, mechanism, and materiality. Rita Raley – whose important article “Interferences: [Net.Writing] and the Practice of Codework” forms the basis of the following discussion – notes that practitioners refer to the practice variously as: “net.wurked” language, “rich.lit,” codepoetry”; “digital visual poetics”; and “programmable or machine modulated poetry (n. pag.). Some works, for example, rely on operable code using algorithms and randomization functions to generate new texts from pre-existing ones. The new text is different every time it’s read, and you see it being built on screen a little at a time.

Other authors use code mixed with a natural language like English. The work of Mez – the screen name of Marianne Breeze, an Australian author – is a good example of this practice. Mez calls her hybrid language “mezangelle.” Mez uses code fragments visually, on the surface of her texts – square brackets, operators and those of you familiar with mobile phones, pagers, instant messengers, and other info shorthands will be familiar with the look of some of this work. Work like this interrupts and impedes smooth transmission of information, rendering meaning opaque and troubling interpretation, which results in another text of jouissance. Not surprisingly, lots of people dislike it. Mez receives email regularly from people asking “why can’t you just write in plain English?” and Mez’s answer is found in the work itself: “[meaning code: if narrative is essential to comprehension, then TTT is not for you. turn reading ‘off’ and filter ‘on’. if, on the other key, you enjoy dream sequences/ sequentials, reverse the last.]” (Mez, *Puzzle Pieces of a Datablede Jigsaw*)

Codework has roots in earlier avant-garde practices – found poems, concrete poetry, Oulipian texts, Dadaist composition – but the context and circulation of the texts is different. Mez makes clear that her writing practice has at its core an ongoing sense of performance and collaboration: “code wurk_remnants d-voted to the dispersal of writing that has been n.spired and mutated according 2 the dynamics of an active network” (qtd. in Raley).

As Raley points out, codework has interesting implications for literacies: “the reader-users will learn to process the meaning of some elements of code: a handful of operators, instructions, and characters” (n. pag.) We will also learn to process these hybrid, irregular, shorthand languages. Indeed, Raley suggests that codework like Mez’s facilitates a kind of

oppositional literacy, that the practice of mezangelle might well jam our complacent reading practices and awaken those that lie dormant; or, as Mez herself declares, "move through the neural in waves, swarming into active channels, critically hitting inactive potentials" (n. pag.).

V. Inhabit

Finally, another key area of interest of mine with consequences to literacy is hypermedia in virtual environments, particularly the work of writers built in virtual reality (VR) caves. Powered by high-performance computers, a cave is an eight-foot-square cubicle with high-resolution stereo graphics projected onto three walls and the floor to create a virtual reality experience. Special hardware and software keep track of the positions and movements of visitors entering the space, changing the images within in a way that allows them to feel immersed in the virtual space. Although the cave was initially embraced as a way to produce mimetic representations with application to medicine, archaeology, chemistry, applied mathematics etc., writers, performers, and dramatists, cultural theorists and visual artists are increasingly being drawn to VR as a new realm for their work.

I am particularly struck by the fascinating work undertaken in the VR cave at Brown University, under the direction of novelist Robert Coover. Coover and his students are the first to experiment with the use of written text in the caves, and are working with questions about how the spatial qualities of VR can be employed to create narrative experiences in new and innovative ways. Coover notes that "those of us who have loved the literary experience, the richness of reading, are working to preserve some of that experience inside the new media ... while acknowledging that there is no use trying to imitate the printed page" (Curtis 2000a: n. pag.).

One of the potentials of the cave is the creation of animated 3-D worlds and characters that a user can interact with, in effect making the user part of a story. I have been fortunate enough to explore some of these works – to step through boxes of text, to inhabit and explore a storyroom, to shrink a wall full of poetry so that it fit into the palm of my hand, to pull a giant letter "O" over my head before stepping through a doorway to interact with characters at a virtual cocktail party.

And so it makes perfect sense to me that the first graduate fellow in electronic literature at Brown, Talan Memmott, was trained as a visual artist in painting, video, installation art, and performance, and that he has worked in theater, as both an actor and a director. Memmott similarly feels that "electronic writing sort of pulls together all of these interests – from painting, to performance, theater and text. It's all part of what I think of as electronic writing" (Brown has its first graduate fellow, unpag.). Although the audience is limited owing, in part, to the physical limitations of the cave itself (only a handful of people can be accommodated at one time and the caves are very expensive to construct and calibrate), Memmott believes the cave nevertheless "puts literature into exhibition mode," and that "there's great potential for what I refer to as narr-act-ivity, rather than narrativity" (Curtis 2000b: n. pag.).

With respect to this, there's one other item I'd like to note before concluding. Theorist Greg Ulmer, who coined the term "electracy," has noted that with respect to electronic literacies, the kindergarten curriculum has much to offer the high schools. He writes "I am not saying to forget literacy, but to include aesthetic and performance experience in the educational process. K-3 teachers ... allow the children to ... relate to the story not so much in terms of meaning but doing. High schools to become electracy need to add this aesthetic performance dimension to learning as well" (Memmott, n. pag.) And many of us would

agree that more Kindergarten activities – hands-on, experiential – probably wouldn't be so bad at the university, either. Because as readers of electronic texts, it will be through *doing* – experimenting, making sense of, puzzling through – that we will begin to know and to learn what kinds of knowledges and ways of understanding these new artefacts demand, encourage, or make possible.

What I've suggested to you here today is that I think, at a minimum, we will be challenged by electronic texts to:

- learn to read databases. And if Lev Manovich is right, the database will increasingly compete with traditional narrative for our attention;
- we will learn to read digital constellations – to see the materiality and depth of code, the sculptures of stories, the scaffolding of essays, their shapes;
- we will continue to crave stories, closure, narrative pleasure, I think, but perhaps we will increasingly recognize code, its intrusions and enhancements of texts. Perhaps by rendering information more opaque these texts can, paradoxically, allow us to see things anew;
- we will, through virtual reality technologies like the cave, inhabit information architectures and change the stories we wander through for our having been there. There will be a new kind of "literature" in immersive virtual reality not readily described by old terms or understood with reference to the printed page.

Finally, and with a great deal of excitement, the only thing I can predict with any certainty: we will need to learn to read shapes and texts that none of us here has even begun to imagine.

Moses' Rap

Moses Znaimer

I come to talk to you today,
Not knowing exactly what I have to say.
Because our subject here today –
What the hell does that mean, hey?
B.W. Powe just lays the title down,
It's we who have to risk the clown.
Going down, laying egg, to find out –
What "Living Literacies" are all about.
Know what I'm sayin'?
Know what I'm sayin'?
(If you do, tell me!)
Literacy is making yourself understood;
No matter what your hood.
High or low, young or old.
Timid or bold.
A job for body, as well as spirit.
No reason to fear it!
My words have pictures,
Explainin' the scene.
Sharin' what I mean.
What I'm sayin' man
Is I'm here,
That you're there.

That's a relationship.

That's a fellowship.

Though made of air,

Its totally there.

You dig?

If you don't,

Move on –

Find somethin' more to your taste,

Don't waste,

My time

And yours

Resurrectin' a meaning that don't exist.

Abstraction?

Distraction?

If we don't stay alert,

We could get hurt.

Abstraction?

Distraction?

Real is what I can see.

The word alone,

Can be absurd.

Its image that makes the bird –

Fly.

The word is not in charge,

Man!

Not now,
Not ever!
It's no contest;
Between our gonads,
And our head.
Appetite that has to be fed.
Necessity overcomes reflection,
Making a lasting, deep impression.
Don't just read the book.
Look!
It's movement man.
Put your body in it.
Find the music in it.
Avoid confusion,
Process – not conclusion.
Pictures; everybody gets,
The flow – not just the show.
Illiteracy comes from words,
Just like birdshit,
Comes from birds.
The best TV,
Tells me,
What happened to me,
Today.
Consumption Is personal;

Who is bringing me,

The story?

My story?

TV sameness expands worldwide.

I say;

Resist the tide.

Local is;

Where its at,

Local is;

Where I hang my hat.

There is no mass,

No masses either;

Except by -

Compulsion.

Consumption.

Compulsion.

Consensus,

Subject to immediate change,

Not a problem,

To be solved-

But an instrument,

To be played.

The central business,

Of the age!

TELEVISION

Put your body in it,

Find the music in it.

An Emanation of Vacuity: (boobs on the book tube?)

by **Daniel Richler**

[On the screen behind Mr. Richler appears an infomercial for Nair Hair Removal Gel]

Well, people, that was what greeted me as I turned on our brand-new channel last fall. Mortified, I fired off an e-mail to my bosses:

I turned on BookTelevision this morning, expecting to see Writers' Profiles with – as is promised in the TV guides – George Orwell. What I saw was a woman removing swathes of hair from the back of a freakishly hirsute man with some miracle solvent. She did this repeatedly, turning a facecloth over in her hand to display the resulting dark and glutinous wad to the camera. Now that that disgusting monster midway exhibition is over, I'm watching a sequence of smiling fitness gargoyles demonstrate the wonders of the latest phony plastic exercise gizmo to end up featured on suburban lawn sales across the land next spring. Now, I know that writers are not always pretty or fit – John Irving is an interesting exception, being a hairy wrestler and a sexy beast – but this material was an offense to my eyes. Elsewhere on the schedule we put up a Viewer Discretion Advised warning at the drop of a hat, but nothing to prepare us for this. How do we reconcile the seriousness of our mission with the tasteless cheez of these infomercials? How much cash do these things earn us? Have you any idea what the press would do to us if they saw them? I can tolerate these embarrassments after midnight – under duress. But at 10:00am on Monday morning? The only saving grace as far as I see it is that we're lucky no one's watching.

It was put to me with much forbearance that if I knew of another source of revenue for the channel I should reveal it right away. As things stood, our new venture was haemorrhaging cash by the hour, so would I please pipe down and return to my oar. BookTelevision: The Channel – the world's first and only twenty-four-hour literary channel. One month in, and reality had already bitten hard. I had a flashback of my father's dubious expression over his reading glasses earlier that year, shortly before he died; I had proudly shown him our full-colour brochure, boasting not just a channel, but a bookstore, a library, and website, no less, with a library of forbidden literature called Archive 451, a spoken word and acid jazz venue we'd call The Lingo Lounge, book clubs nationwide and a creative factory that would for the first time make television ads for books affordable to publishers, create the literary equivalent of the Hollywood EPK (electronic press kit) to spare authors peddling their books on the road, and develop the literary equivalent of the rock video (reprising the work we'd done twenty years earlier with our rockumentary show, *The New Music*). Dad had emerged triumphant from the wilderness years of Canlit, lending this country international status, raising the bar for all future generations. He knew better than anyone how tough a row to hoe it is – he'd always said he didn't want five little Mordecais running around – and now here was I, his eldest son, setting up a rickety literary lemonade stand.

Television is generally thought of as monolithic, but the most accurate way to picture BookTelevision, I have had to accept, is as a corner store, a small business, an independent press, virtuous in its ambitions but something of a snake oil operation when it comes to achieving them. Here at the Living Literacies conference, as we discuss what it means to read and write in this day and age, I anticipate the cat will be skinned in many ways. There will, I imagine, be deconstruction galore – political critiques, racial analyses, class dialectic, the clash of high versus low culture, feminist perspectives, dire polemics about the death of

the word, the insidious tyranny of the paragraph, the imperialism of the noun, and so on. I would simply like to offer a nuts and bolts account of how we erected a book channel. I'll show you a glimpse or two of what it looks like, but too much would be a lazy way for me to occupy this stage. Moreover, it would likely fuel the academic's suspicion that TV people can't live without eye candy, and in any case, it would be against my greater interest, since I'd rather you subscribed to it if you want to see it.

Now I like to think the channel really began in 1989, when TVOntario commissioned me to investigate how a book show might fly in Canada.

I phoned around. I asked several authors how they felt about being on the box. The early results of this poll told me that TV appearances are more taxing for writers than for ordinary people. Martin Amis said he'd always hated it: "It's the fear of disgracing yourself. I used to want to smoke to calm my nerves, but I'd end up pinching my cigarette between my knees because I didn't dare hold up my shaking hands in front of the camera. Then one day my interviewer said, 'Excuse me, Mr. Amis, for interrupting, but your trousers are on fire.'" Ian McEwan revealed, with characteristic spleen, "I always feel a pot of tea is halfway down my cock."

John Irving recalled for me his time on the *Dick Cavett Show*. Cavett's reliance on research cards for questions and factoids so enraged him he demanded whether the host had actually read his book. Well, no, said Cavett, actually, not yet. (Irving digressed at this point to describe the other guest on that episode, Blondie's Debbie Harry, who'd fallen asleep on his shoulder, her face, he said, the ectoplasmic green of a bottle of Chardonnay when you look at it through the heel. I relate this to make the point that rock stars get nervous on TV too, but have fewer compunctions than most authors about resorting to drugs for relief.) Irving walked off the set. "If the ignorant, pretentious prick had admitted to it before the show began," he told me, "I would have understood – you can't be expected to read everything – but putting on that blithe, sophisticate act of his really made me want to puke."

John Updike, meanwhile, called appearing on TV "a truly raffish experience – to be in the same hospitality suite on *Good Morning America* as Mel Tormé and the woman who has given birth to sextuplets! I like it and I do it once a year."

Nonetheless, getting books on the air – not to mention their authors – was evidently going to be rough.

I happened to be taking a European holiday that summer and looked up Bernard Pivot in Paris. His world-famous programme, *Apostrophes*, was in its second decade and so successful it commanded a special "Books of the Week" table in almost every bookstore in France; it was accessible in quiz and encyclopaedia form on the country's *Minitel* database network; and it fuelled a European literary magazine called *Lire*. Its enduring success in French Canada, meanwhile, was a tweak on the noses of Anglophones here who professed to have a literary culture of their own. Yes, I presented myself as an innocent holidaymaker, but was in fact on a poaching mission.

Apostrophes' format was not complicated. Before a live audience, six authors gathered to chat. The themes they were asked to explore were not infrequently saucy: "Sexy, les Seins," "Pudeur, Impudeur," "Ça va saigner." I might have overlooked this fact were it not for the cover of *Lire* that week, which displayed a nude woman reading in bed, its main feature erotic lit. Laurence Kaufmann, *Antenne 2's* PR person, assured me rather sternly that, whatever I was suggesting, it was mere coincidence, but I had stopped listening by

then, my mind on fire: I was picturing Robertson Davies in a pose that recalled Burt Reynolds, a typewriter, hot from recent use, strategically placed.

Anyway, it might have been the jet lag, but having taken our seats in the studio for Pivot and company's round table on the secrets of the Romanovs' cuisine or some such arcana, my wife fell asleep on my shoulder – and this was her first appearance on French national television. Unimpeachably intelligent as the show may have been, *Apostrophes* did not always deliver the jolt-a-minute quotient that I felt would be crucial to success on Canadian TV. I started to suspect that some of *Apostrophes*' reputation around the world rested *un peu trop* on one notorious episode from some eight years earlier in the middle of which Charles Bukowski, drunk and bellicose, had been hauled off the set.

At the post-taping cocktail party I asked M. Pivot if in his estimation an *Apostrophes*-like show could be reproduced elsewhere. Modestly he replied, "Oh *mais oui*. Anyone could do it." Then he thought about his own remark and added, "You know, Sweden tried and failed – they're such a cold people, I suppose that's why. And Belgium tried, but went nowhere. They're so ... plain, it was inevitable. And the Italians, *alors*, on every show within fifteen minutes they're at each others' throats, so they took it off the air. So, no – no, I would say it is not so possible."

I thought about North America, a continent with more guns than books in her subways and school libraries; where teachers prioritize conflict resolution over spelling; where mail goes undelivered while disgruntled postal workers roam the inner cities. Given the viciousness of literary criticism in our neck of the woods, I'd want a weapons search before each interview.

In the US at that time even the Book of the Month Club, with its 1.7 million members and over thirty participating PBS stations, had failed to make a book show fly. When I asked the BOMC's President, Al Silverman, what he'd do differently were he given another go, he despondently proposed, "Keep a better stocked bar?"

Against all the odds, then, we launched a book show on TVOntario. Arguably more than other shows, *Imprint* faced a challenge to please every type of viewer, every type of reader. We felt, for example, that we bore some responsibility to nurture young readers, and so we featured the occasional punk descant and the occasional punk. I remember *Maggotzine #3*, which featured "Mondo Sex-O-Rama zinetime: shrunken heads, robot orchestras, grasshopper wrestling, pussy pussy, self-mortification and more!" Some fans of Alice Munro were not enchanted with the editor, a mohawked subterranean with an icetong in her nose. Conversely, we were not able to avoid "Modernity and its Discontents: The Death of the Prairie Epic?" forever. And when we did, I just know we got zapped.

We fired away regardless, on the one hand punctuating the show with videos and film clips, sales charts and reading lists, news hits and comedy skits; on the other, simply cramming the hour with every kind of writer we could find. Wags say if Shakespeare were alive today he'd be writing sitcoms. Well, we weren't snobs; we'd still have had him on the show. Chinese dissident poets, gangsta rappers, Tolkien nerds, gay pornographers, the toeheads who write the so-called instructions you get with your DVD player, even political speechwriters – all were welcome.

Serendipitously, *Imprint* also stumbled into the cleansing fire of political correctness, making for some white-hot arguments and lending the show an urgent, newsy flavour. Debates over racism in publishing, sexism in novels, and ageism in lullabies may have struck some viewers as overwrought, but the fact is they struck a lot of viewers, one way or

another, and reinforced what lovers of literature have always known: literature (to paraphrase Ezra Pound) is news that *stays* news.

Fast forward, now, to 1999: the recombination of my experience at TVO and the considerable juice of Moses Znaimer and his team at CityTV, plus the academic bona fides of Dr. Ron Keast and Canadian Learning Television in Edmonton, won us the bid for a TV license from Canada's regulatory body, the CRTC. Astonishingly, there was fierce competition for this. You would not imagine a book channel to be the most lucrative proposition – not when you could have gone for the sex channel or the speed channel or – and this one surely has greater potential – Jewish Television, with its Sabra Price is Right show and its twentyfour- hour UJA fundraiser, and its Klezmer music nights, and its Yiddish kitchen sink dramas, and more WWII retrospectives than even The History Channel, and – a real cost saver – nothing at all on between Friday sundown and Saturday evening. But books? Not likely. Why bother, especially when it's also an exercise in inevitable punishment, since television is usually blamed for the demise of the book itself ?

I announced my suspicion earlier that few of you subscribe to BookTelevision. Well, if you haven't yet, you're not alone. A senior bureaucrat at the Canada Council we'd invited to discuss the Governor General's Award the other day asked what format the show might take – since, he confessed, he didn't subscribe to digital TV. "Well," I said. "Since this is the only book channel on the planet, a real first, don't you think it behooves a Canadian – particularly of your high cultural office – to support it?" I can be a little touchy, I admit, feeling that this venture, while worthy in the extreme, could not suffer more from obscurity and neglect. (Oh, by the way, if I do pique your interest and you decide to subscribe, I will throw in a discount on any Nair hair-removal product with every subscription.)

It's quite amazing to think of the barrage of disdain that's been aimed at television from the start. Lee Loevinger himself, the Commissioner of the FCC between 1963 and 1968 in the US, once commented, "Television is really the golden goose that lays scrambled eggs. It is futile and probably fatal to beat it for not laying caviar." Television is something absolutely everyone feels qualified to criticize, regardless of their profession. Remember Frank Lloyd Wright, he of the immortal, "Television is bubble gum for the mind." And then Groucho Marx (though he can be forgiven for obvious reasons): "I find television very educational. Every time someone turns it on I go into the other room to read a good book."

Is TV a cornucopia of crap? Surely no more than all Lloyd Wright-influenced architecture looks like a Soviet apartment block. What is it about television as a whole, then, that arouses so much ire? I imagine it's partly to do with resentful perceptions of power – a hangover from the days when only a few networks commanded huge audiences, when watching the box felt like forced collectivity. There's also that unwelcome feeling that TV is watching you, not the other way around. For many people, watching TV is not so much a cozy cultural experience as a combative one, an embarrassing one; like a bright kid in a class of dim bulbs, you resent being dumbed down to. BookTelevision, in particular, has been greeted by the academic and literary communities with some suspicion; some snobs love to snort that we are an inherently oxymoronic proposition, and simply leave it at that.

But you know, there's really no one like a TV critic to lay on the lash. There they are, the champions of the people, all of them too smart for the boob tube. Have you ever read a film critic who dislikes film as much as, say, TV critics loathe TV? Or a restaurant critic who so hates food? What I find most aggravating is how, after howling column on column about the vulgarities of reality television, quiz shows, and the like, they will turn their noses up at us altogether because we're digital; all the major newspapers in Canada, each one a part of a

multimedia conglomerate, have policies (more or less unspoken) of not reviewing digital TV because it reaches a marginal number of households. But the dislike of television among print people is even more visceral than that. Let me illustrate.

The *Observer's* former TV critic, John Naughton, is one of the few who's copped to this in writing. Once, in the course of commenting on television coverage of the Chinese pro-democracy movement and its bloody suppression, he'd remarked on the increased harassed appearance of the BBC's Diplomatic Editor, John Simpson: "He began the week ... looking as usual like an expensive rubber beach toy and ended it like a deflated barrage balloon in a club tie." Later, Naughton has confessed, he read in *Granta* Simpson's personal account of how a mob had surrounded an armoured personnel carrier, set fire to it, pulled out two of the three soldiers manning the vehicle and beat them savagely to death. Unable to maintain journalistic detachment any longer, he'd used his physical bulk to prevent the third soldier from being butchered. Which explained why Mr. Simpson had not looked his best toward the end of his tour of Tiananmen Square. Now, I've never stuck my neck out like Mr. Simpson, but as someone who has never worn a plastic wig on camera, I seize on this story to argue that it is *critics* of TV who are obsessed with appearances, not necessarily us.

On BookTelevision, incidentally, we are plotting the sweetest revenge: a show called *Everyone's a Critic*, which will regularly analyze and criticize what the critics have written – not just about TV, but books too, restaurants, cars, goalies, the House of Commons. It will be a show about critical writing, a show that ought at least to soothe the savage soul of the critic by letting him know someone cares about what he has to say.

Quotes on screen

"I don't own a television."

Dr. John Meisel – Chairman, Canadian Radio-Television Commission,
1979–83

"Television is the literature of the illiterate, the culture of the lowbrow, the wealth of the poor, the privilege of the underprivileged, the exclusive club of the excluded masses."

Lee Loevinger – Commissioner, US Federal Communications Commission,
1963–68

"Television is at its most trivial and therefore most dangerous when its aspirations are high; when it presents itself as a carrier of important cultural conversation."

Neil Postman – author of *The End of Education*

"The smallest bookstore still contains more ideas of worth than have been presented in the entire history of television."

Andrew Ross – Journalist

"It is destroying our entire political, educational, social, institutional life. TV will dissolve the entire fabric of society in a short time."

Marshall McLuhan – Media Scholar/Critic

"Don't you wish there was a knob on the TV to turn up the intelligence? There's one marked "Brightness," but it doesn't work."

Gallagher – Comedian

“Television was not intended to make human beings vacuous, but it is an emanation of their vacuity.”

Malcolm Muggeridge – Journalist

In our first year on the air we featured, in a mix of documentaries, archival footage, news reports, in-depth interviews, book fair coverage and even vampirological game shows: Allen Ginsberg, Alistair MacLeod, Andrew Pyper, Anthony Bourdain, Armistead Maupin, Christopher Hitchens, Chuck Palahniuk, David Suzuki, Douglas Coupland, J. M. Coetzee, Laurence Ferlinghetti, Gilbert Sorrentino, Irvine Welsh, Margaret Atwood, Mario Puzo, Maxine Hong Kingston, Michael Franti, Michael Ondaatje, Michael Redhill, Evelyn Waugh, Naomi Wolf, Martin Amis, Kingsley Amis, Anaïs Nin, Nick Bantock, Nino Ricci, Paul McCartney, Rohinton Mistry, Salman Rushdie, Stephen King, Yann Martel, Yashar Kemal, Naomi Klein, Austin Clarke, Umberto Eco, Jamaica Kincaid, Margaret Drabble, Brian Fawcett, Michael Ignatiev, Susan Faludi, Timothy Findley, Mark Kingwell, Peter Carey, Jonathan Franzen, Mavis Gallant, Annie Cohen-Solal, Aharon Shabtai, Janette Turner Hospital, Barbara Gowdy, Ian McEwan, James Joyce, Henry Miller, Jack Kerouac, William Burroughs, William Gibson, George Orwell, Melvyn Bragg, William Baldwin ...

I don't sound too defensive, do I? Of course, it is possible that we had these people on the channel in a very stupid way, asking them dumb questions, misunderstanding everything they said, wrote, and stood for. But I don't think so. More likely is that unimaginative people cannot even conceive of our full potential. You should see most people's faces when they hear there's a book channel, as they picture the inert tome on the screen with its indecipherable title and leaden promise, the farthest thing imaginable from exciting television, and then the author, seated with a TV host afflicted with myopia and dandruff, answering academic questions in a monotone. I have a certain sympathy with this view, but I was saddened to see that in a recent season opener issue of *The Globe and Mail's Broadcast Week* surveying the most intelligent new TV channels in Canada, BookTelevision was not even mentioned.

How do we address this problem? For surely the world opened up in books is infinite in its variety and potential majesty, and therefore on TV too – a place at present almost entirely unexplored, scarcely imagined, like Borges' Uqbar with its transparent tigers and towers of blood and playing cards and mythological terrors. Now, obviously, some people will never be persuaded, but for the reachable ones our channel must be advertised as funny, aggressive, original, challenging, and respectful of their intelligence. I say, “advertise” because yes, we are marketing literacy here. That is as much my job this week as interviewing writers in Turkish prisons was last month. And so the channel must adopt all the tricks and tropes of traditional TV, with its theme music and animated openings and game shows and news shows and bumpers and stings and entertainment beat reporters and – to utterly convince the dubious viewer that this is a channel worth watching – ads; ads for expensive cars, international airlines, and computers.

But about the programming: At a party last year the writer M. T. Kelly was complaining to me about a friend of his, a professor of ancient Greek literature, who claimed kids today are unreachable. M. T. argued that there are parallel heroic themes between the Homeric narrative – of Achilles on the blood-boltered plains of Troy – and the lyrics of the gangsta rapper Tupac Shakur, gunned down a few years ago in the streets of Las Vegas. So we took him up on it, videotaping him on a brutal literary tear both in the Royal Ontario Museum and the graffitied alleys of downtown Toronto, and then putting the argument together in the form of a scratch music video.

The problem with this outlaw approach to books is that the serious book-set tend to sniff at such lowbrow material. Readers are just as tribal as pop fans, and though you'd think twenty-four hours a day was enough time for everyone, it always seems that Mrs. Teakettle from Flin Flon is tuning in during the musical Marquis de Sade revival hour, and the punks you promised some serious action always find Bonnie Burnard.

In time, there will be a show for everyone. The natural progression of narrowcast TV with its specialty channels heralds the end of the one-size-fits-all book show. At TVOntario I experimented with this as well, creating a show about SF, comix, and graphic novels called *Prisoners of Gravity* that took the form of an extraterrestrial rogue veejay broadcast. At BookTelevision right now we are developing a show called *The Biz*, about business writing in books, magazines, and newspapers, as well as an erotica show called *Lust*. There's no reason why one day we shan't have a show specifically for mystery lovers too, for philosophers, for émigrés of war-torn countries.

But meanwhile, if there is to be a show for followers of Derrida or Chomsky or Amiri Baraka, I need your help. Over the years I've been, shall we say, *impressed* by the anger and determination worked up on campuses across the continent over the political ideas contained in literature. At Lakehead University in Thunder Bay one year, before a colloquium of Student Council Presidents, I remember attempting a critique of the word "Holocaust" as it had been used by protestors outside the Royal Ontario Museum's "Out of Africa" exhibit. To say "African Holocaust," I argued, was appropriation of voice, for the word derives from the ancient Greek meaning "to be burnt whole," was formerly used to describe a sacrifice by fire on the altar in Jewish religious practise, and was clearly associated with the agonies of Jews cremated at Auschwitz. For descendants of slaves to convey the agonies of their forbears, and not to invite suspicions of anti-Semitism and competitive suffering, I requested an original and possibly more accurate term be used. One student barked out, "Asshole!" Another demanded to know what right I had to be on stage with a microphone, and was not dissuaded when I replied that the Council of Students had invited me. A third lectured me with ferocious condescension about the "witches" who'd been burned in the sixteenth century – a holocaust, in other words, for feminists. Without a doubt I was perceived as a member of the exclusive white male club, evidently of inherited wealth, power, and influence. But I was appalled at how these little ideologues, so attuned to the plights of Western society's underdogs, to "otherness," could be so insensitive to anyone but themselves and their adopted cause. To be fair, they'd all grown up in an era of inaccessible, big corporate TV that never asked them for their opinions. But not one person thought to approach me with ideas for any TV of their own.

Even in the era of affordable, homemade, hand-held TV equipment, the power remains in the hands of the powerful. Still today, one hears complaints that TV does not afford everyone a voice. This is true to a dismaying degree. (I once attended a lecture delivered by Mark Starowicz, Executive Producer of *The Journal*, in which he promised us a people's revolution of TV thanks to handycams. A colleague sitting beside me whispered, "Yeah. And when they invented the typewriter everyone became a novelist.") Think how quickly the technology that exposed the beating of Rodney King and promised the democratization of the news has devolved into slick, banal, so-called reality shows, desert island survival adventures in which no one is ever seen leaning against a palm tree and reading a book – not Sun Tzu, not Machiavelli, not Napoleon – in order to get ahead.

But the intellectuals are to blame as well. Like so many other critics, for example, Pierre Bourdieu complains in *On Television* about the inherent constraints of the TV format – seven-second soundbites, trumped-up polarizations of opinion, and all that. My first thought

on reading *him* was, "My God, I've seen French television, and no longwinded philosopher is wanting for airtime there," but I also wondered, given his impenetrable prose, who exactly he imagined was going to invite him on.

Similarly, one of our esteemed colleagues here at *Living Literacies* once gave me a very hard time when I was at TVO. Taking offence at comments made about her on *Imprint*, she *demande*d equal time – demanded it, I felt, in a rude, intractable, imperious and opportunistic fashion that quickly led to an escalation of rhetoric (public, on her part) and a hardening of both our positions. *Equal* time? I finally said. okay, let's calculate it. You, Madam, were commented upon for precisely one minute and fourteen seconds. I'll be generous: You may have two minutes. This resulted in her excoriating article about the white media establishment and me, "2 Minutes in the New Jerusalem," which caused me considerable pain, since I'd always imagined myself to be sympathetic to the grievances of visible minorities. Why, I wondered, weren't there pickets outside the egregiously insensitive, starched, and exploitative mainstream TV studios? It struck me as cowardly on her part to be stabbing at the soft underbelly of white liberalism, and above all counterproductive not to plead her case more imaginatively.

On the other hand, I've never been happy with the way our quarrel went. *Why couldn't* we have been more accommodating? What would it have cost us to give this or any other person an *entire* show if they asked for it? I know that we felt besieged. We felt that the public could not be allowed to dictate our content. We spoke of principles and precedents. And yet, and yet, were we not a publicly funded station?

So there is a certain irony in me standing here today, representing a privately owned, commercially minded TV station asking: Literacy, what is it? Access, power, privilege. Belonging. Enabling. Yet I insist, I remain impressed by how few academics, how few intellectual interest groups, how few aggrieved minorities have approached me with a plan. Where are they? Where's the democratic media revolution? Where are the homemade documentaries? What's coming out of university multimedia facilities? We have a national network here, folks. Let's use it like the televangelists do. Save some illiterate souls! Think commercially, charismatically. In case you haven't noticed, the public trough is drying up. Together we ought to be finding sponsors, underwriters, advertisers. *This revolution is brought to you by Nair Hair Removal Gel!*

It seems to me the sky is always falling for academics. We receive dire warnings that reading is on the wane. The esteemed George Steiner has remarked that while the classical act of reading broke down around 1914, the real trouble began with modern media: "Gutenberg was not a fundamental revolution," he has written, "as the current technological revolution is." But before television, how many people were literate? What romantic idea do we harbour of a well-read populace of yore? Besides, television actually requires a great deal of reading – there's text on the screen all the time. And, as communications technologies converge, try getting around the Internet without reading skills. I might propose that, in fact, the classical act of reading broke down around 1923, at the Frankfurt School, for in my experience, critical theory on campus has done far more damage to basic literacy skills than TV ever did. The tortured prose! A simulacrum of language! The de(con)struction of English. The murder of the author in his own write!

Perhaps I should get back to my point: that those who worry we live in an illiterate age should seize the tools available to them, one of those being television. There is no tenure to be had here, no grants or guarantees, but there is a new future in specialized, narrowcast, digital, and ultimately interactive TV. I cannot do it all myself because, quite

frankly, running a book channel totally gets in the way of my reading, so I appeal to you to get down out of your ivory towers and contribute to the cause in a language the masses – on whose behalf you express so much concern – can understand. As a matter of fact you already have, just by being here, for the TV cameras you see in this hall belong to Canadian Learning Television, our sister station, and in a few months thirteen Living Literacies programs will air there and on Book Television. Which is, at least, a start.

Violence of the Virtual and Integral Reality

Texte par: Jean Baudrillard

Translation by: Marilyn Lambert-Drache

"One should not believe that truth remains truth when you remove its veil" – therefore the truth has no bare existence.

"One should not believe that the real remains real when illusion has been taken away from it" – therefore the real has no objective reality. "We have suppressed the true world (*le monde vra*) – what kind of world does then remain? The world of appearances? Not at all. While suppressing the true world we have also suppressed the world of appearances."

– Nietzsche

What happens to the world when it is freed from truth and appearances? It becomes the real universe, the universe of integral reality. Not truth, nor appearance but integral reality.

If the world in the past leaned toward transcendence, if it fell on occasion into other rear-worlds (*arrières-mondes*), today it is falling into reality. From one transcendence in the heights to another one, this time in the depths. It is as it were the second fall of man that Heidegger talks about: the fall into banality – this time though, no redemption is possible.

According to Nietzsche, once the true world and the world of appearances are lost, the universe becomes a factual, positive universe, such that it does not even need to be true.

This world is as factual as a *ready-made*. Duchamp's "fountain" is the emblem of our modern hyperreality. It results from the violent counter-transfer of every poetic illusion into pure reality, the object transferred onto oneself, every possible metaphor cut short.

The world has become so real that this reality is only bearable at the expense of perpetual denial. "This is not a world," after "this is not a pipe," Magritte's surrealist denial of evidence itself – this double movement of, on one hand, the absolute and definite evidence of the world and, on the other hand, the radical denial of this evidence – dominates the trajectory of modern art, not only of art but also of all our deeper perceptions, of all our apprehensions of the world. We are not talking here about philosophical morals, we are not saying "the world is not what it should be" or "the world is not what it used to be." The world is the way it is. Once transcendence is gone, things are nothing but what they are and, as they are, they are unbearable. They have lost every illusion and have become immediately and entirely real, shadowless, without commentary. At the same time this unsurpassable reality does not exist anymore. It has no reason to exist for it cannot be exchanged for anything. It has no exchange value.

"Does reality exist? Are we in a real world?" – here is the leitmotif of our current culture. This only expresses the fact that the world is prey to reality and it is only bearable as radical denial. All this is logical: as the world can no longer be justified in another world, it needs to be justified here and now and to find strength in reality while purging itself of any illusion. At the same time, as the very result of this counter-transfer, the denial of reality as such grows.

For reality is no longer prey to its natural predators, it proliferates very much like an algae, or like the human species in general. The real grows like a desert.

"Welcome to the desert of the Real" (*The Matrix*).

Illusion, dreams, passion, madness, drugs but also artifice and *simulacrum* were the natural predators of reality. All these have lost their energy as if they were suffering from some incurable, surreptitious disease (that might very well be reality itself). One needs then to find an artificial equivalent for them. Otherwise, once it has reached a critical mass, reality will spontaneously destroy itself. It will implode by itself – which it is already doing now, making room for the Virtual in all its forms.

The Virtual is the ultimate predator, the plunderer of reality. Reality has generated the Virtual as a kind of viral and self-destructing agent. Reality has become prey to virtual reality. The ultimate consequence of a process that started with the abstraction of objective reality and ends in integral reality.

The Virtual is not about a "rear-world" (*arrière-monde*): The replacement of the world is total, it repeats itself identically, a perfect lure. So the question is resolved by the sheer annihilation of symbolic substance. Even objective reality becomes a useless function, a kind of trash, the exchange and circulation of which has become more and more difficult. We have moved past objective reality into something new, a kind of ultra reality that puts an end both to reality and to illusion.

The hypothesis is the following: the world is given to us. The symbolic law says: what is given must be given back. In the past one could give thanks, in one way or another, to God or any other authority, and respond to the gift by sacrifice. From now on there is no one to give thanks to, for transcendence has vanished. If one cannot give back anything in exchange for this world, it is unacceptable. We then need to get rid of the natural world and to substitute an artificial one for it, built from scratch, a world for which we do not have to account to anyone.

Hence this gigantic undertaking of technically eliminating the natural world in all its forms. Anything that is natural will be irrevocably rejected, sooner or later, as a consequence of this symbolic rule of (impossible) exchange. It is the final solution (including extermination).

This does not resolve anything of course. It is impossible to avoid this new debt we have contracted to ourselves. How can we be absolved from this technical world and this artificial power? We again need to negate or destroy this world if we cannot give it back, or exchange it for anything (and what would we exchange it for?). That explains, as our building of this artificial universe is moving forward, the huge negative counter-transfer against the integral reality we have created. Deep denial is now present everywhere. What will prevail over it? This irresistible undertaking or this violent abreaction?

Let us now enter this sphere of integral reality (we have yet to determine if this reality has one, or two, or three dimensions).

Here is an example – integral music. It is heard in quadrasonic spaces and it can be "composed" on a computer. A music whose sound has been clarified and purged, a music restored in its technical perfection. The sound there is not the result of a form; it is actualized by a programme. A music reduced to a pure wavelength. The final reception, the

sensorial impact on the listener is also programmed with precision like that in a closed circuit. A virtual music in other words, flawless, deprived of any imagination, mistaken for its own model, the enjoyment of which is also virtual. Is it still music? Nothing is less certain; it was even suggested to reintroduce noise to make it sound more "musical."

The same can be said about synthesized and digital images, images that are pure creations, with no real reference, and from where the negative itself has disappeared – we are not only talking about the negative of the photograph but about the negative moment at the core of the image, an absence that makes the image vibrate. A digital image is technically perfect. There is no room there for *fuzziness*, no tremor either, or any space left for chance. Is it still an image then?

Take now the example of the Integral Man (*Homme Intégral*), the human being, genetically modified and edited for perfection. It is purged of any accident, of any disease, any emotional problem, for genetic manipulation does not aim at reproducing the original human formula but a formula that is the most standardized for efficiency (serial morphing).

The movie *Minority Report* gives us a taste of this. In this movie crime is prevented and punished before it even takes place, before anyone knows whether or not the crime would have taken place. Nipped in the bud, in imagination even, according to the now universal principle of precaution.

The movie is naive and anachronistic, however, because it still involves repression. In the future, prevention will be genetic, *intragenic*. The "criminal gene" will undergo prophylactic sterilization at birth or even before birth (this will need to be systematized, of course, because in the opinion of the police or of the powers that be, we all are potential criminals).

This manipulation is a fine illustration of what will happen to the future human being. It will be modified and corrected. Straightaway, it will be what it should be ideally; it will never become *what it is*. It will not even be alienated anymore, by virtue of its pre-existential modification for better or for worse. It will not even have to face its otherness as it will have straightaway been suppressed by its model. All this relies on a universal process of identification of Evil that, of course, aims at eradicating. While it used to be metaphysical or moral, Evil now is materialized, embodied in the genes (it can just as well be turned into the Axis of Evil). It becomes an objective reality, objectively dispensable. We will manage to eradicate it completely, and with it everything that made dreams, utopia, illusion, fantasy – all of this, according to the same global process, is being taken away from the possible, to be poured back into the real.

The same goes for everything that has to do with virtual reality and synthesized models. Digital and programmed, the real does not even have time to happen. It is sanitized (*prophylactisé*), pulverized, short-circuited in its shell like the crime in *Minority Report*. Thinking itself is anticipated by models of artificial intelligence. Time itself, the time already lived out that has no more time to take place, is captured and spirited away by virtual time, which we choose, mockingly no doubt, to call "real time." The historical time of the event, the psychological time of affect and passion, the subjective time of judgment and will, all are being questioned simultaneously. We will not even *give time to time*.

Last but not least: by some strange surgical operation, language, in its digital version, has been purged of its symbolism, of everything that allows language to be more than what it means. Any absence, any vacuum, any literalness in it – anything that prevents its meaning

from being brought into focus – has been eliminated like the negative in a synthesized image. Such is the integral reality of language.

It is also the death of the sign. Integral language does not contain any signs – the sign and its representation have disappeared. Now it is precisely when the sign and the real are no longer exchangeable that reality, now left alone and meaningless, veers off exponentially and proliferates infinitely. The death of the sign paves the way to integral reality.

We often hear that the real has disappeared because of the hegemony of the sign, the images and the *simulacrum*, that reality has been erased by the artifice. This analysis underlies the concept of the *Société du Spectacle*. We need to reverse this overly common analysis and say: We have lost both the sign and the artifice for the benefit of the absolute real. We have lost everything: the spectacle, alienation, distancing, transcendence, abstraction – everything that was defending us from the onset of integral reality, of the immediate realization of a world with no reprieve.

With the disappearance of the *simulacrum* as such, a later stage in the process of simulation has been reached, namely the simulation of a real more real than the real, the simulation of a hyperreal.

What does then make the exchange impossible if not the abstract transcendence of the value? What makes the exchange of language possible if not the abstract transcendence of the sign? All this is now liquidated, pulverized. The value as well as the sign is affected by the same dizziness of deregulation. It is not the real but the sign and, with it, all the universe of meaning and communication, that is subjected to the same deregulation that affects the markets (maybe this came even before the deregulation of the world market).

The caves of Lascaux offer an almost trivial example of this confusion. The original caves having been closed for a long time, visitors line up in front of a replica, a *simulacrum* of the caves, Lascaux II. Most visitors do not even know that what they are seeing is a replica as there is nowhere any indication of the existence of the original caves. What awaits us is a kind of prefiguration of the world: the replica is so perfect that we will no longer know that it is a replica. Now, what happens to the original when the replica stops being a replica? Such is the ironical dialectics of the *simulacrum* at a later stage of disappearance. Even the original is equal to the artifice. There is definitely no more God who can recognize His own (from that point of view, one may at least say that God is indeed dead). Here we have a kind of justice, the privileged and the underprivileged ones are now equal in an artificial world. As soon as the original becomes an allegory among others in a technically completed world, democracy is then realized.

As well, what becomes of the arbitrariness of the sign when the referent stops being the referent? Without the arbitrariness of the sign, there is no differential function, no language and no symbolic dimension. As it stops being sign, the sign becomes a thing (*chose*) among other things. It becomes something of a total necessity or of an absolute contingency. Without the *instanciation* of the meaning by the sign, only the fanaticism of language remains – this fanaticism that Ferlusio defines as an “absolutist inflammation of the signifier.”

My hypothesis is that a kind of radical fetishism, resulting from the eclipse of every process of meaning, underlies the transformation of the real into pure information and the cloning of the real by virtual reality.

What hides behind the immateriality of the technologies of the virtual, of the digital and of the screen, is indeed an injunction, an imperative that McLuhan had already spotted in the television and media image: an imperative of reinforced participation, an interactive investment that may turn into fascination, into the "ecstatic" implication that we see everywhere in the cyberworld.

Immersion, immanence, and immediacy characterize the virtual. No more gaze, no more stage, no more imaginary, no more illusion even, no more exteriority, no more spectacle: the operational fetish has absorbed all exteriority, all interiority and even time in the operation of "real time." It is the realization of utopia.

We are this way getting closer to the real world, a world "integrally" realized, affected and identified as such. We are talking about the real world not about the *world-as-is*, which is totally different. The world-as-is is in the nature of appearances (or even of integral illusion because there is no possible representation of it) or as Nietzsche says "while suppressing the true world we have also suppressed the world of appearances."

Video, interactive screens, multimedia, the Internet, virtual reality – we are threatened on all sides by interactivity. What used to be separated is now merged; distance is everywhere abolished: between the sexes, between opposite poles, between stage and audience, between the protagonists of action, between subject and object, between the real and its double. This confusion of terms, this collision of poles means that there is no more possibility of a moral judgment, neither in art nor in morality nor in politics. With the abolition of distance and of the "pathos" of distance, everything becomes undecidable, even in the physical realm: when the receiver and the source of transmission are too close together, a feedback effect known as the Larsen effect occurs which muddles up the transmission waves; when an event and the broadcasting of that event in real time are too close together, the event becomes undecidable, virtual, stripped of its historical dimension and removed from memory. We are in a kind of generalized Larsen effect.

Wherever distance is abolished, wherever a collision of poles occurs, we get a Larsen effect.

Even in reality TV, where, in the live telling of the story, in the immediate televised acting, we witness the confusion of the existence and its double. No more distance, no more vacuum and no more absence: one enters the screen and the visual image without encountering any obstacle. One enters one's life while walking onto a screen. One puts on one's own life like a digital suit.

Unlike photography, cinema, and painting, where there is a scene and a gaze, the video image and the computer screen induce a kind of immersion, a kind of umbilical connection and of "tactile" interaction, as McLuhan said of television. A cellular, corpuscular immersion: one enters the fluid substance of the image in order to possibly modify it, in the same way as science infiltrates itself into the genome, the genetic code, to transform the body itself. One moves as one likes, one makes of the interactive image what one wishes to. Immersion is the price to pay for this infinite availability, for this open combinatory of elements. The same goes for any "virtual" text (the Internet, word processors): it is worked on like a computer-generated image; it has nothing to do anymore with the transcendence of the gaze or of writing. In any case, once in front of the screen, one no longer sees the text as text, but as image. It is only in the strict separation of text and screen, of text and image, that writing is an activity in its own right – never an interaction.

As well, only the strict separation of stage and audience will allow the spectator to be a participant in one's own right. Everything today contributes to abolishing that separation. The spectator is immersed in a user-friendly, interactive spectacle. Is it the *apogée* of the spectacle or is it the end of it? When all become actors, there is no action, no scene anymore. It is the end of the aesthetic illusion.

Another form of implosion is the feedback. Integral reality refers to everything that works in an integrated circuit. When everything that happens gets immediate feedback. May '68 and the radios on the barricades. One no longer does anything unless one sees oneself do it. Even irony is part of the mechanism. Immediate promiscuity of the control screen, even in our head.

Once again it is not a representation but a rotating movement of things that are jumbled together, joined, saturated.

It is a perfect reality, in the sense that it is realized right through (*perfectum*). In a perfect reality nothing is "verified" unless it is "pasted" on and mistaken for its own image. Feedback best illustrates this process. It affects the visual and mediatic universe as well as the political and intellectual life, the daily and individual life, our movements, our thinking. This automatic refraction of our thoughts affects us deeply in our own perception of the simplest and most natural world. Feedback seals everything by focusing on it, by automatically simulating it. In a way, feedback is the virus of our postmodernity.

Feedback short-circuits the gaze; it short-circuits the representation by, so to speak, duplicating things beforehand and by interfering with their progress. Feedback covers everything with a "performance veil" – a particularly sensitive phenomenon in the photographic universe where beings and things immediately "put on" a context, a culture, a meaning, an idea of themselves while blocking off every vision and creating a sort of blindness that Raphaël Sanchez Ferlosio denounces:

There is a terrible form of blindness that very few notice. It allows you to look at and to see but not to see at once without looking at. It is the way things used to be: one would not look at them, one would just see them. Today everything is caught in duplicity; there is no pure and direct impulse. This is how the countryside has become "landscape," that is to say a representation of itself....

In this way one may say that our perception itself, our immediate sensitivity have become aesthetic. All our senses – sight, hearing, touch, smell, taste – have become aesthetic in the worse meaning of the word. Therefore any new vision can only result from a deconstruction of this feedback, from a resolution of this counter-transfer that blocks off any vision.

One needs to distinguish the process of confusion with one's own image from the process of representation where we differ from each other by our opposite image and enter an open form of alienation, an open form of play with the image. It is precisely the mirror, the image, the gaze and the scene that were opening onto a culture of the metaphor.

Machines produce only machines. This is increasingly true as the virtual technologies are becoming more perfect. At a certain level of machine-ness, of immersion in virtual machinery, there is no more distinction between man and machine. The machine is on both sides of the interface. You may indeed be merely the space of the machine now: man has become the virtual reality of the machine, its mirror operator. This has to do with the very essence of the screen. One cannot look "through" the screen as if it were a looking-glass.

The dimensions of time itself merge there in "real time." The characteristic of any virtual surface is first of all to be there, empty and thus likely to be filled with anything. It is left to you to interact in real time with the vacuum.

Machines produce only machines. The texts, images, films, speeches, and programmes that come out of computers are machine products. They have the features of machine products: they are artificially expanded, facelifted by the machine; the movies are full of special effects, the texts full of lengthy passages and repetitions, which are the consequences of the malicious will of the machine to function at all costs (for that is its passion), and of the operator's fascination with the limitless opportunity of operating the machine. Hence the wearisome character of all this violence and "pornographed" sexuality, which are merely special effects of violence and sex that are no longer even fantasized by humans. This pure mechanic violence does not affect us any longer. Hence all these texts which can be regarded as the works of "intelligent" virtual agents, whose only act is the act of programming. The rest unfolds in a purely automatic fashion. This has nothing to do with automatic writing (*écriture automatique*), which played on the magical telescoping of words and concepts, whereas all we are left with here is the automatic programming of all the possibilities. Forward, the machine design of the body, the *make-up* of the text and the image. This is called cybernetics: controlling the image, the text, the body from within, as it were, by playing with its genetic code or modalities. It is this phantasm of the ideal performance of the text or image, the possibility of correcting endlessly, which triggers in the operator this dizziness of interactivity with his/her own object and, at the same time, the anxious dizziness of not having reached the technological limits of his/her possibilities. In fact, the virtual machine is speaking you, it is thinking you.

Is there, by the way, any possibility of discovering something in cyberspace? The Internet merely simulates a mental space of freedom and discovery. Indeed it merely offers an enhanced, yet conventional, space, in which the operator interacts with known elements, pre-existent sites and established codes. Nothing exists beyond these search parameters. Every question has its anticipated response. You are the automatic questioning-and-answering device of the machine. Both coder and decoder, you are, in fact, your own terminal. That is the ecstasy of communication.

No more "other" facing you. No more final destination. Any destination, any correspondent will do. The system goes on, without end and without purpose with the sole potential for infinite reproduction and involution. Hence the comfortable dizziness produced by this electronic interaction that acts like drugs. One can spend one's entire life at this, without any interruption. Drugs themselves are only the perfect example of a crazed, closed-circuit interactivity.

In order to win you over to it, people tell you that the computer is merely a handier and more complex kind of typewriter. But this is not true. The typewriter is an entirely external object. The page flutters in the open air, and so do I. I have a physical relation to writing. I touch the blank or written page with my eyes, which is something I cannot do with the screen. As for the computer, it is a true prosthesis. I am in a tactile and intersensory relation with it. I am becoming myself an ectoplasm of the screen. Hence, in this incubation of the virtual image and of the brain, the technical faults which afflict computers and which are like the *lapsus* of one's own body.

On the other hand, the fact that priority is given to the identity of the network and never to the individuals' identity implies the option of hiding and disappearing into the intangible space of the virtual and thus, the option of not being located anywhere, which resolves all

problems of identity, not to mention those of otherness. The attraction of all these virtual machines undoubtedly derives not so much from the thirst for information and knowledge as from the possibility to dissolve oneself into a phantom conviviality. A feeling of "being high" takes the place of happiness. Virtuality comes close to happiness only because it surreptitiously removes every reference from it. It gives you everything, but, at the same time, it subtly takes everything away from you. The subject is realized to perfection, but then, it automatically becomes object and panic sets in.

It is against this world that has become entirely operational that the denial and disavowal of reality develop. If the world is to be taken as a whole, it must be rejected as a whole, the way the body rejects a foreign element. There is no other solution. Thanks to a form of instinct, of vital reaction we are able to rise up against this immersion in a perfected world, in the "Kingdom of Heaven" where real life is sacrificed to the hyper realization of all these possibilities, to its maximal performance, the same way the human species is sacrificed to its genetic perfection. Our negative abreaction results from our hypersensitivity to the ideal life conditions that are offered to us.

This perfect reality, to which we are sacrificing every illusion, is, of course, a phantom reality. It belongs to another world. If both reality and truth were to be subject to a lie detector, they would confess that they do not believe in this perfect reality. Reality has vanished, and yet we are suffering as if it still existed. We are like Ahab in *Moby-Dick*: "If I feel the pain in my leg, although it no longer exists, who can assure me that you will not suffer from the torments of hell even after your death?"

There is nothing metaphorical in this sacrifice. It is more of a surgical operation, which provides oneself some kind of self-enjoyment: "Humanity that, long ago, with Homer, was an object of contemplation for the Olympian gods, has now become its own object of contemplation. Its alienation from oneself is such that it is now experiencing its own destruction as a first-rate aesthetic sensation" (Benjamin). Self-destruction is indeed one of all the options offered to us. It is an exceptional option for it poses a challenge to all the other ones.

Focusing on a perfectly integrated reality is bound to entail many forms of exclusion, of eccentric or parallel worlds – not only marginal or peripheral ones as they exist in traditional societies, but worlds that find themselves clearly dissociated at the very core of this total integration.

The homogeneity and the very coherence of life are, for that matter, turning us off. What applies to the real applies to the social: one day everything will be social, everything will be real but we will not be there anymore. We will be elsewhere. Everything will be social and dissociated. Double lives, parallel worlds will be our both negative and happy fate. We will be freed from the grip of the real.

Are all the functions – the body, the real, sex, death – not destined to live on as parallel worlds, as autonomous peculiarities, completely dissociated from the dominant world?

Finally, what is fundamental is the stranger-ness (étrangeté) of the world, the one which resists the status of objective reality. The world itself resists globalization. As well, what is fundamental is our own stranger-ness, the one which resists the status of subject. Double illusion: the illusion of an objective reality of the world and the illusion of a subjective reality of a subject. They are reflected in the same mirror and are one and the same founding movement of our metaphysics.

As for the world-as-is, it is not at all objective. It rather looks like a strange *attracteur*. Since the world and the appearances are dangerously attractive, we prefer to exchange it for its operational *simulacrum*, its artificial truth and its automatic writing. This is yet a bit risky because everything with which we defend ourselves against vital illusion – this entire strategy of defence by the principle of reality – acts as a true emotional shield and becomes unbearable to us.

In all those forms of disavowal, denial, *dénégation* (in the sense of the German *Verleugnung*, not *Verneinung*), we are no longer confronted with a dialectics of negativity or with the work of the negative. This move no longer concerns notions of ultimate purpose, or of contradiction, as in simple negative critique; it has to do with reality as such, its principle and its hard evidentiality. The larger the space taken by positivity, the more likely it is that denial – possibly even silent – will turn violent. We are all dissenters of reality today, clandestine dissenters most of the time. When there is no possibility of exchange between thought and reality, immediate denial becomes the only way to think reality.

Negativity used to correspond to plain positivity, or critical reality, that had not yet crossed over to the other side of the mirror. When positivity turns out to be absolute, denial becomes radical. Every option of dialectical negativity has been absorbed and liquidated. The limiting case of that ultimate reaction to the fundamentalism of reality is absolute denial (i.e. *négationnisme*, as we speak of “denying” the Holocaust). Think about it: it is the virtual itself that is *négationniste*. It is the virtual that takes away the substance of the real, setting it off balance. We are living in a society of *négationnisme* by virtue of its virtuality. Disbelief reigns everywhere. No event is perceived as “real” anymore. Criminal attempts, trials, wars, corruption, opinion polls: all of that is either falsified or undecidable. State power and its institutions are the first victims of the disgrace of the principle of reality. Hence the moral urgency, in the face of rampant *négationnisme*, of recovering the “citizen’s viewpoint,” taking one’s stand *for* reality, against the frailty of all information. The mirror of information has been broken. The mirror of historical time has been broken. This is why it has become possible to negate the existence of the Shoah, together with the rest (the Pentagon crash, man landing on the moon). The reign of the virtual is also the reign of the principle of uncertainty. It is the inevitable counterpart of a reality turned unreal by excess of positivity.

Will this last forever? Are we doomed to remain captives of this transfer of the real into total positivity, and of its no less ponderous counter-transfer shift toward pure and simple negativity?

Against total absorption, against extinction of the sign and its representation, we have said it was imperative to save difference, all differences. In particular, to save the distinction between the world-as-is and the real world. Whereas everything pushes us toward the virtual realization of the world, we need instead to wrench the real out of its reality principle. In fact, it is this very confusion that prevents us from seeing the world-as-is. In the words of Italo Svevo: “the search for causes is an immense misunderstanding, a clinging superstition, preventing things and events from coming into being as they are”. Namely: in their singularity. The real world belongs to the order of generality, the world-as-is to singularity. To repeat: not only is it a world of difference, it is one of absolute, radical difference, more different than difference, at the remotest distance from that sort of fusion /confusion.

Toward literalness.

Consider the literalness of the image.

The image is not related to the truth. It is related to appearances. Hence its magical affiliation with the illusion of the world-as-is – an affiliation which reminds us that, whatever its content, the real (like the worst) is never a certainty and that, perhaps the world may do without the real and the principle of reality.

I believe that images affect us immediately, well ahead of, at an infra-level to representation, at the level of intuition, of perception. In that sense, an image is always absolutely surprising. Or at least it should be so. Sadly, because of that, we can say that images are scarce. The force of images, most of the time, is cut off, deflected, intercepted by everything we want them to say for us.

So you can see there is a blur in the real. Reality is not focused. The world-as-is cannot be brought into focus (which makes it very different from the real world). Bringing the world into focus would refer to objective reality, so-called reality on the side of the objects, that is to say bringing it into focus on models of representation – as it happens when we bring the lens of the camera into focus on the object, aiming for absolute precision of the image. Fortunately, this definitive level of precision is never achieved. Full control through verification and identification of the world cannot be achieved. The lens displaces the object. Or the other way around. In any case, there is displacement.

There is an aphorism by Lichtenberg that speaks of “tremor.” Indeed, all gestures, including the most assured, begin with a tremor, like a fuzziness of motion. And there is always a trace of it left behind. Without that tremor, that fuzziness, when a gesture is purely procedural, when it is brought into perfect focus, we have something of the order of madness. So, genuine images are those which attest that tremor of the world, whatever the situation or the object: pictures of war, still-life compositions, landscape, portrait, art, and documentary.

At this point, the image is something that belongs to the world, it is a part of its becoming, it participates in the metamorphosis of appearances. The image is a fragment of the hologram of the world. Every detail of it is a refraction of the whole. A nice metaphor for this is found in the movie entitled *L'étudiant de Prague*. After selling his image to the Devil, he breaks up the mirror of representation (that is his lost image). Only then does he find his genuine image, in the shards of the mirror – and he dies.

The purpose of a photograph is not to document the event. It aspires to be the event itself. Logic will claim that, first, there is the event, first comes the real, then only will the image appear, to document it. Sadly, this is what happens most of the time. A more poetic sequence intends that the event has never taken place in an absolute sense, that it remains in some way a stranger to itself. Something of this strangeness survives in every event, in every object, probably in every individual. This is what the image must account for, or “develop” so to speak, and for this to be developed, the image itself must remain, in some way, a stranger to itself. It ought not to reflect itself as medium; it must not take itself for an image. It ought to remain a fiction, an echo of the irresolvable fiction of the event. The image must not be caught in its own trap; nor should it let itself be trapped by the feedback loop. The worst part for us today is the impossibility of seeing a world without feedback – so as not to have it recaptured, raptured, filmed, photographed, before we can even see it. That is lethal not only for the “real” world, but for the image itself, since, if everything is an image, the image is nowhere, at least as an exception, an illusion, a parallel universe. In the visual flow of events in which we find ourselves submerged, the image itself does not even have the time to become an image.

Can photography be an exception in the face of that outpouring of images, can it restore them to their initial power? To do so, the clatter of the world must be suspended; the object must be grasped at the only moment of true magic, the first contact, when things have not yet sensed our presence, when absence and vacuum have not yet evaporated In fact, it is necessary for the world itself to act out the role of the photographer – as if it had the possibility to appear to us outside ourselves.

I dream of an image that would be the automatic writing of the singularity of the world – after the Iconoclastic dream of Byzantium. The Iconoclasts held that the only genuine images were those in which the divine figure was immediately present – as in the veil of the Holy Face – an automatic writing of the singularity of the divinity, of the face of Christ, without any interference from the human hand. I have a dream of an immediate calque, like the reverse image of the negative in photography. The Iconoclasts rejected violently all other images, human-made icons that, according to them, were mere *simulacra* of the divine, *acheiropoiesis* (etymologically: *not* fabricated by a human hand).

Similarly, we, modern iconoclasts, might reject all those images that are mere *simulacra* resembling the real, or an idea, an ideology, whichever truth. Most images are of that type, but virtual images even more so. They resemble nothing.

This is exactly it. What is *cheiropoietic*? What is *acheiropoietic*?

Isn't the *act* of photography in this sense properly *acheiropoietic*? Automatic writing by virtue of light, without interference from the real or the idea of the real? Such automaticity would make photography the prototype of the literalness of a world from which the human hand has disappeared. The world as self-generator, radical illusion, pure trace, with no simulation, no human interference, above all without truth. If there is a product *par excellence* of the human mind, a *cheiropoietic* product, it has got to be the truth, objective reality.

Have we not had, ever since the beginning, the profound fantasy of a world functioning without us? The poetic temptation to see the world in our absence, exempt of all human intervention, the all too human willpower? What is so immensely pleasurable in poetic language, in *le mot d'esprit*, is to see language operate by itself, in its materiality, its literalness, without being mindful of meaning. This is what fascinates us so much. The same thing goes for anagrams, anamorphosis, the "figure hidden in the carpet." Does not photography also operate as a means of revelation in both senses of the word in French – it develops, technically; and it reveals, metaphysically – "the figure in the carpet"? Italo Calvino wrote: "The lesson of a myth is in the literalness of its narrative. Every interpretation impoverishes the myth and strangles it. Better to meditate on each detail patiently, never abandoning its figurative language."

Even dreams, in their psychoanalytic versions, lose their literal character. They fall prey to meaning and interpretation. Dreams, however, like myths, are cunning. They contest, like language in general, what we want them to signify. There is a cunning of literalness that goes against analytic exegesis and that resuscitates ever so subtly (is this not the secret of literacy?) the world-as-is, a world which is, literally speaking, only what it is.

These are the stakes nowadays. We are being faced with a new fundamentalism, a genuine fanaticism that, with the help of all the data provided by all the technologies, is taking us further and further from the literal and material world, further and further from a truly literal world, off toward a world technically "real."

The Cultural Phenomenology of Literature

by William Irwin Thompson

Introduction

First of all, I would like to thank you for inviting me back to York for this conference, for this is a particularly appropriate time for me to return. If I were still on the faculty at York, this would be the year of my compulsory retirement, so I look upon this as my Last Lecture or Swan Song. It is doubly appropriate for me to give this lecture here, for it was in this very room in 1971 when I was an Associate Professor of Humanities that I organized a conference entitled "Thinking on a Planetary Scale," to which I invited the global theorist Bucky Fuller, the ecological architect Paolo Soleri, and Richard Falk, Professor of International Law at the Woodrow Wilson School at Princeton. The conference was my effort to express to my colleagues that business as usual was not enough and that we were living through a radical juncture in history in which a new planetary culture was emerging, a culture that was distinct from the internationalism that had characterized the world-system since the end of World War II.¹

Wissenschaft und Wissenskunst

Since B. W. Powe has asked us in this conference to think about the meaning of literacy in an electronic age, let me take a moment to address myself to this, the central question of our gathering. In my own writings of the time when I was here at York – in works such as *At the Edge of History and Passages about Earth* – I tried to use the structure of Romantic "Poems of Description and Meditation," as the internal structure for non-fiction essays.² In this work, I was also trying to respond to the challenge of Marshall McLuhan's work. I first met McLuhan at a faculty seminar at MIT in the sixties, and then when I moved to Toronto, I attended one of those legendary meetings at the Coach House at the U. of T. McLuhan had challenged scholars to be more sensitive to the implications of the new electronic era in which we were living and not simply hide out in academic reservations of literacy. I responded to this challenge by seeking to turn non-fiction into a work of art on its own terms. Rather than trying to be a scholar or a journalist writing on the political and cultural news of the day, I worked to become a poetic reporter on the evolutionary news of the epoch. Of course, I was not alone in this impatience with novel and newspaper, as other writers then also felt the lift of the zeitgeist and were not content to write more realistic novels or more confessional poems – writers such as Lewis Thomas, Carlos Castaneda, Stanislaw Lem, Norman Mailer, and Tom Wolfe. McLuhan pointed out to us that a new technology obsolesces a present technology and retrieves a previously obsolesced technology, and I instinctively felt that the new electronic technology was not simply obsolescing print and melting down the alphabetic mentality but was retrieving animism in all its variants – from Yaqui shamanism with Carlos Castaneda to Celtic animism at Findhorn in Scotland. The traditional academic lecture also became for me an occasion to transform the genre, to present not an academic reading of a paper, but a form of Bardic performance – not stories of battles but of the new ideas that were emerging around the world. So I would run off to Cape Kennedy to talk to the astronaut Rusty Schweickart, and then rush back to Toronto to write a lyrical essay of description and meditation on Apollo 17 for the entire op-ed page of *The New York Times* for New Year's Day, 1972. Then I would riff on this material in a talk for my freshman humanities class here at York. In this same New Year's break, I also went to talk to Werner Heisenberg, C. F. von Weizsäcker, and Gopi Krishna in Munich, and then came back to talk to my students about yoga and quantum physics. In Germany, after my conversation with Heisenberg, I felt I needed a new word for this essay-narrative that was not simply "non-fiction," but something more artistic for a culture that was no longer simply orally bardic or academically literate. Since I was in

Germany and could find no word for it in English, I coined the term *Wissenskunst* – as opposed to *Wissenschaft* – and I am happy to report that the Germans have taken the word into their language, as you will see if you type the word with the Web search engine *Google* and see what comes up on your screen.

The course I was teaching here at York was a large freshman humanities course of over two hundred students, because only at the freshman level could one avoid specialization and look at the Big Picture. My big picture was to consider the entire panorama of cultural evolution. The course was called “The Transformations of Human Culture,” and it went from the “Hominization of the Primates to the Planetization of Humanity.” The course was meant to be a performance of the very reality it sought to describe. In trying to understand the cultural shifts of the past, the course performed the presence of the cultural shift we were living through and it explored the myth of the future as the new horizon of human identity. For this sort of intellectual work, I felt that both the lecture and the essay needed to be transformed into more of a performance of pattern-recognition than the unfolding of a single line of academic indoctrination. For *Wissenskunst*, the mode of discourse is more polyphonic and fugual – more of a *moiré* than a line, the wave and not the particle; it was more of a risk-taking venture in which multiple disciplines came together in the Humanities Division here at York than it was a secure assertion from within the traditional confines of an English Department.

The New Historicism

Now in this study of mythic horizons of identity, I was building on the historical study of my first book in which I looked at the way in which the myth of the Irish past affected the identity-formation of the revolutionaries in the Easter Rising of Dublin, 1916.³ In seeking to study the role of the imagination in history, I was breaking away from the New Criticism that was popular when I was an undergraduate, and the Structuralism that was popular when I was a graduate student. I broke away from the New Critics to study the historical context of the literary work, because I felt a personal loss of history in growing up in Los Angeles in the post-war era. As the public transportation system of the red Pacific Electric trains was replaced with freeways and smog, and as orange groves were replaced with subdivisions, I looked around at the new theme-park approach to historical quotation in the form of a movie-set restaurant or apartment house, and wondered what was real, what was historical reality. I imagined that Ireland must be a real country, the true homeland, the mythical country of Yeats and Joyce. I became drawn to Yeats’s romantic mode of rejecting industrialization to posit an imaginary landscape with its exaltation of the mystical peasant. I was drawn to Yeats’s edge between Irish agricultural and English industrial because I was living through the transition from Eastern industrial to Western post-industrial. I had an old, used 1940s car in high school that I used to navigate through the cloverleaves instead of the shamrocks, and I went to Disneyland soon after it opened. But I wanted none of it. I wanted the Land of Heart’s Desire in a nostalgia for Ireland. My grandmother Margaret O’Leary was born in Ireland (another O’Leary like one of this conference’s sponsors, John O’Leary), but she died in Chicago when my mother was only a year old, so she was an imaginary relative, an ancestor, and not a visible member of the family.

Posthistoric L.A. was a landscape of gas stations looking like space stations and hotdog stands shaped like hotdog buns; object, sign, and symbol were all jumbled up together as one dined and lived in moviesets of historical fantasies. I wanted to be real. And when Dylan Thomas came to America and became in the fifties what a rock star was to become in the sixties, I wanted to be Celtic and not Californian. The Celtic Renaissance wasn’t over for me, and the literate world of Dylan Thomas, Yeats, and Joyce called out “Come away, O human child!” So there was something Celtic, something literary and mystical that called

out to me in the midst of the postliterate electronic world of L.A. – that fake world that was about to become everybody's reality as movies, television, and advertising would spread out from Hollywood around the world.

So when McLuhan addressed himself to this cultural transformation, I knew he was talking to me. In fact, at the small faculty seminar at MIT, where I first met McLuhan, the faculty became enraged at his metaphoric and aphoristic mode of thinking, but I was absolutely enchanted. In his final work, McLuhan pointed out that when one technology is obsolesced, a previously obsolesced technology is culturally retrieved. If New York and Boston were rational and sensible, L.A. was not, and the occult and mystical were everywhere to be found. But for the Jews fleeing Hitler's Germany and re-establishing themselves as the new intelligentsia of New York, the occult was Hitler and the mystical *Bruderbund* of the S.S. If there is one thing that is not allowed in academic circles it is to be interested in the mystical. But what the Jewish intelligentsia of New York did not realize about the new American reality of growing up in L.A. was that mysticism was being retrieved in the new electronic meltdown of print and what Jean Gebser called perspectival consciousness. But even within the world of print, as a high school kid in the fifties, I read Emerson and Whitman, and this American mystical and transcendental tradition was democratic, safely middle class, and as far away from fascism as L.A. is from Nürnberg. Since my uncle had died on the beach of Normandy, I did not grow up enamored with fascism, and my favourite philosopher in high school was Whitehead, not Heidegger. I went from lectures at one occult society to another, and hung out in the occult and esoteric section of Pickwick Books up on Hollywood and Vine, and so when it came time to read Yeats's *A Vision* at Pomona College, I had already encountered those cosmologies that so befuddled my professors. In graduate school at Cornell, in Meyer Abrams seminar, I soon learned that you were not to take *A Vision* seriously. George Orwell called it "that tomfoolery of wheels and gyres," and W. H. Auden dismissed it as "the Southern California side of Willie Yeats." Well, having grown up in Southern California, Yeats's mysticism did not seem so dark to me, but when in my first book I took it, and the ideas of A.E. seriously, I got mightily slammed down in *The New York Review of Books*.⁴ To be accepted as an intellectual in the US you have to be Marxist, or at least neo-Marxist, and always anti-mystical. When I wrote *At the Edge of History* and appeared to be only a detached observer, Christopher Lehman-Haupt raved twice about the book in a single week in *The New York Times*, but when I actually went to spiritual communities like Findhorn in Scotland and Auroville in India, and wrote sympathetically about them in my next book, *Passages About Earth*, Lehman-Haupt refused to review the book. It was as if I had fallen off the edge of history and become a Scientologist or member of some other crazy cult.⁵ So the new historicism that I was articulating in 1967 would have no effect on English departments, and when the New Historicism finally came into attention in the 1990s, it would be another expression of Marxist materialism as led by Professor Stephen Greenblatt at Harvard. Greenblatt's work fits nicely into the academic fashion of deconstructing the canon of what used to be called "Greats" at Oxford – the old lineage of dead white males of Chaucer, Shakespeare, Milton, Pope, and Eliot – for in the New Historicism one takes an obscure and quotidian work of the chosen period and reads "the lesser" in the light of "the greater" only to find the greater work to be lesser.⁶ For the new location of culture by Homi Bhabha at Harvard and Gayatri Spivak at Columbia, subaltern studies are the approved means of showing that a proposed "work of genius" is merely a work of cultural oppression in a discourse of domination. A masterpiece is a cultural erection, a logophallogocentric projection in a constructed discourse within a patriarchal system of capitalist oppression. But in my new historicism way back in 1967, I had shown how history was a weapon, and how the English had erased Irish history to write their own as an apology for empire. Unfortunately, however, I had shown how important the role of imagination was in the creation of identity for the rebels, and I talked about how important the mysticism of A.E. was in formulating an alternative to the industrial materialism of

England. I did not just talk about the Great Strike and Lock-out of 1913. And I did not talk about ideologies as expressions of the means of production or myth as the false consciousness of the oppressed.

The imagination is a motive engine on its own, and in a revolution it has the power to unite the bottom of the top with the top of the bottom as intellectuals and artists come together with rural peasants and urban working classes. In the 1950s – following the publishing innovations of Penguin Books that were designed for the backpacks of soldiers in the two world wars, Signet Classics in New York began making classics and masterpieces available in cheap thirty-five cent paperbacks, so as an Irish working-class kid earning my own money in a grocery store after high school, I could afford to start buying books. I found the *Tao Te Ching* and the *Bhagavad Gita* in a wire rack in my local drugstore, and once accustomed to the habit of buying books and going into bookstores, I bought an inexpensive, hardbound Modern Library edition of *Moby-Dick* and read all of it. Joyce's *A Portrait of the Artist* became my bible in breaking away from the Catholic Church and exploring the Vedanta that Christopher Isherwood talked about in his introduction to the *Gita*. For privileged Ivy League professors struggling for tenure, the Canon may seem oppressive, but for working-class kids it was liberating. To escape South Central L.A., where it was unsafe to go out in the schoolyard if you were an intellectual, and to be able to sit under a tree in Marston Quad at Pomona College and read Dylan Thomas and Gerard Manley Hopkins was not to be oppressed by a discourse of domination. (Though I do notice that although Spivak questions the canon, she has a canon of her own and always privileges any mention of Marx or Foucault.)

You can see the positive side of the canon in George Steiner's autobiography, *Errata*. Steiner attended the University of Chicago in its most charismatic time. After the end of the Second World War, when America had joined with Europe to defeat fascism, there was a need to articulate "Western Civilization," both to prevent the United States from retreating back into its isolationism and "know nothing" contempt for European scholarship and culture, and to prevent McCarthyism from eliminating a new and ambitious meritocratic class. Robert M. Hutchins created his Great Books curriculum at Chicago, and Harvard began to transform itself from a New England college for gentlemen into a great and greatly ambitious university. Like *Levis* and *Coca-Cola*, Harvard became an instrument of American corporate globalization and is today the world's most recognizable brand-name university. But back in the late 1940s, the new "Western Civ" curriculum was basically a miniaturization of civilization aimed at enculturating a whole new and expanding middle class. My parents were not educated beyond the eighth grade, because in industrial and immigrant America, "high" school was high because it was meant for the clerical and not the working class. University was only needed for the professional class of doctors, lawyers, and clergymen. But when FDR pulled America out of the Depression and saved the American capitalist system, he did so by extending government credit to the manufacturers. After the war, when a whole generation of hitherto unemployed men returned home with the new skill of having been trained to kill, there was a general fear of instability. The G.I. Bill, in essence, followed FDR's move, but this time credit was extended to the consuming and not just the producing class. The soldiers went to college, and were given grants to buy homes, and out of that subsidy came the suburbs, the automobiles, the freeways paid for by the National Defense Act, and finally the shopping malls of a new postindustrial economy of credit cards and a Cold War-supported California aerospace defense industry. Along with that social experiment came the University of California, the largest experiment in public education in the history of the world. York University is basically a Canadian copy of this post-industrial innovation.

But hardware requires software, and universities require a curriculum. Just as once before in "Western Civilization," the Irish monks miniaturized Graeco-Roman civilization in the form of a curriculum for medieval European civilization, so now the Hutchins and the Conants miniaturized Western European Civilization to make it into a curriculum for American post-industrial civilization. The same thing happened in the Sui and Tang dynasties in China, when the Confucian classics were turned into a cognitive foundation for the imperial unification of China.

George Steiner was blessed to be at the University of Chicago in the greatness of its *kairos*; mine was a different *karma*, and I was in California at the time when a completely post-European American culture was emerging, and it sent me scurrying for cover in safe havens like Pomona College and Cornell. At Cornell, I sat around the table of Robert Martin Adams's seminar on James Joyce with Gayatri Spivak. She chose to follow the lead of Paul De Man, who was also at Cornell then, into the deconstruction of Yeats; I chose to go to Ireland in a mythic quest for the symbolic meaning of the construction of Yeats's tower – a construction that allowed him to pace upon the battlements and stare at the breathless, starlit air. De Man had erased his own traces of the fascist and anti-Semitic articles he had written in Belgium before the war, and was then using decentring and deconstruction as ways of covering his own lack of values and an inner center. I went to one of his lectures, read his reading of Yeats's "Among School Children," and was revolted. In my revolt, I published my own reading of that poem,⁷ and decided I would go to Ireland and take Yeats at his word.

When I returned from Ireland to take my first teaching position at MIT, L.A. went up in flames in the Watts riot, and the Vietnam war escalated to the point that the faculty became split between the Hawks, with Ithiel da Sola Pool in Political Science, and the Doves with Noam Chomsky in Linguistics. My department was taken over by a cabal of Maoists who wished to eliminate the canon and replace Wordsworth with Eldrige Cleaver. I quit MIT and came here to York in 1968. That year was the year of Paris, when Foucault's star was on the rise; it soon became a sun that blanked out all the other constellations of thought in literature departments in North America.

Dr. Spivak went on from Cornell to play St. Paul to Derrida's Jesus; together, their success in transforming literary studies in North America was indeed a remarkable millennial movement. But now that we are into this new millennium, we can see that their success was bittersweet, because the economists and businessmen who control our universities have taken deconstruction to heart and have deconstructed English as the foundation for a liberal arts education – the kind of education I experienced at Pomona. The administrators are now doing to English what a previous generation did to Classics as the foundation for a Western Civ curriculum. There are now no jobs for Ph.D.s in English, the number of graduate students is shrinking, and the few required classes of English that remain for the freshmen headed for law and business schools are being staffed by post-doctoral lecturers who are forever denied full benefits and access to tenure. In the new disliterate culture of the United States – one in which sports, politics, and the celebrity arts are glorified in the spotlights of the State of Entertainment – the economists and businessmen have found that the deconstruction of the critical liberal arts and the construction of costly sports facilities provide a greater return on their investment for the enspirited alumni who will become future donors.

Jesse Jackson – a good and charming man who should know better – now chants at demonstrations and assemblies, "Hey Ho! Western Civ has got to go." But the question remains, if we erase the post-war curricular movement of Hutchins and Conant, with what do we replace it? Do we replace it with the equivocating vacuity of Homi Bhabha and an

endless teetering back and forth between an ironist metropole and an enraged subaltern former colony? Or do we locate culture in something deeper than the constructed discourses of domination?

Planetary Culture and Complex Dynamical Systems

When I was here at York in 1969, I was invited to one of the Couchiching Conferences in Southern Ontario, where I met Ivan Illich for the first time. He gave one of the most mind-altering lectures I have ever heard. I became fascinated with his idea of the "counterfoil institution," and when my time for sabbatical came up in 1972, I decided to look at all these intellectual alternatives to corporate globalization that were appearing around the world. I went to the Research Foundation for Western Science and Eastern Wisdom in Germany, met with Paolo Soleri at Arcosanti in Arizona, White Bear Fredericks in Old Oraibi in the Hopi Nation, and with Carlos Castaneda in Los Angeles, and visited Esalen and Zen Center in California, Auroville in India, and Findhorn in Scotland. When I returned to York in 1973, York generously promoted me to full professor at the tender age of thirty-five, but I knew I could not continue to work within the post-industrial form of the suburban university, and York was becoming less open to intellectual innovation and more committed to its economic niche, what I snarkily called at that time "Yorkdale University." So I quit and went down to New York to establish my own counterfoil institution.

To escape the old split between the two cultures of the sciences and the humanities that I had experienced at MIT, and to escape the countercultural split between spirituality and intellectuality that I had experienced at Findhorn, I decided to work to build a bridge between the university and the ashram or spiritual community. Basically, I pulled the two DNA strands of the humanities apart by energizing meditation and mysticism in place of scriptural hermeneutics, and energizing Pythagorean science instead of scientific and technological materialism. (Clearly, my old love for Whitehead during my high school days resurfaced.) I had used Gregory Bateson's *Naven* in my Pomona College Honors Thesis as a way of trying to support my efforts to articulate systems of mutual causality, and so when I met Gregory Bateson at an Esalen meeting in New York, it was a small step to invite him to become our first Scholar-in-Residence at Lindisfarne in Southampton. Gregory came to live with us and wrote his book, *Mind in Nature* in one of our small cabins on the shore of Fishcove in Peconic Bay. Together, Gregory and I organized a small conference of the same title and invited Francisco Varela, who then became our next Scholar-in-Residence. And then "the pattern that connects" was in place, and a self-organizing dynamic emerged that was far beyond any "conscious purpose" I had in mind when I founded Lindisfarne in 1972. In 1981, I invited James Lovelock, Lynn Margulis, Heinz von Forster, and on, and on for twenty years, from the Chaos Dynamics of Ralph Abraham's work of the middle '80s to Complex Dynamical Systems and Stuart Kauffman's work in the '90s. Like Bauhaus or the Macy Conferences before it, Lindisfarne became a gathering in which a new world view was being articulated. We became one of the institutions that was performing the shift from the linear Galilean Dynamics of European modernism to Complex Dynamical Systems and a new planetary culture. Tibetan Buddhism and Cognitive Science were brought together, and the work of Francisco Varela in Paris and Evan Thompson in Toronto was supported by Lindisfarne.⁸ My point in reviewing all this personal cultural history is to show that when my work slipped beneath the horizon of notice of English departments, this is what I was working on at the same time that my colleague from Cornell, Gayatri Spivak, was deconstructing "English" in particular and literature in general in a new kind of textual sociology. "English," as I knew it as an undergraduate at Pomona has disappeared, with deconstruction pulling in one direction, and media studies pulling in the other. For teachers intimidated by Derrida, Foucault, and Spivak, pop culture and media studies have provided a way for them to be popular with students by lecturing on myth in *Buffy the Vampire Slayer* or moral conflict in *The Sopranos*. Lindisfarne has also disappeared, for the general

movement of complex dynamical systems is now world wide, and the Dalai Lama himself is continuing to direct and support conferences on meditation and neuroscience. It is not the calling of an intellectual or artistic movement to become a permanent institution; it is more like a crocus of spring signalling a change of season than a permanent and enduring institution. So Lindisfarne is gone, but York is still here, and in my beginning is my end. But let me end by giving you another way of looking at literature that is also not "English."

The Cultural Phenomenology of Literature

To consider the whole cultural phenomenology of literature, one has to shift levels of perception. Think of it in terms of a Landsat satellite view of the Earth below; at that level from above all kinds of configurations are visible, but you don't see the warring ideologies, though you do see the impact of human cultures on the biosphere. My generation, I guess because of the dramatic break with conventional history marked by the explosions of nuclear weapons, was drawn toward interdisciplinary macrohistory. But, as the ancient Taoists say, "reversal is the movement of Tao," so the younger generation is more interested again in single disciplines and microhistorical studies that have more compatibility with "les petits récits" that Lyotard says is characteristic of postmodernism. I am not now, nor have I ever been, a postmodernist, and my 1968 humanities course here at York tried to look at history through the quantum steps of cultural evolution. My course looked like this:

- I. Hominization, 2,000,000 BCE
- II. Symbolization, 200,000 BCE
- III. Agriculturalization, 8,000 BCE
- IV. Civilization, 3500 BCE
- V. Industrialization, 1500–1851 CE
- VI. Planetization, 1945 CE

As you can see, the chronology presents us with a logarithmic progression in which the rate of change contracts from millions of years with the hominization of the primates to decades with the planetization of humanity. The transformation is now visible within the time scale of the individual life, so the students' consciousness of historical unfoldment could affect the coming unfoldment of history, or so I thought at the time that I designed this course for York students.

Ralph Abraham, a chaos mathematician from U.C. Santa Cruz and a Lindisfarne Fellow, and I have been collaborating on various projects through Lindisfarne for over twelve years. In response to Ralph's papers and book, *Chaos, Gaia, and Eros*, I developed a theory that there were five archetypal literary and mathematical mentalities in cultural history from the Ice Age to the present.⁹ These mentalities are based upon a configuration, in which objects are articulated in a constructed space, and a configuration of time, a narrative, in which identities are unfolded. The former is a world, the latter, a self.

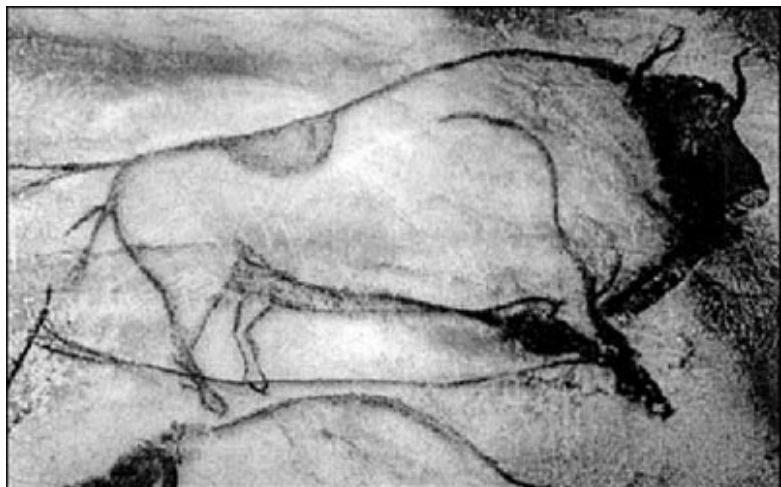
- The Arithmetic (Ancient)
- The Geometric (Classical)
- The Algebraic (Medieval)
- The Galilean Dynamical (Modern)
- The Complex Dynamical (Contemporary)

The Arithmetic Mentality arises in the Ice Age and reaches its climactic formation in Sumerian civilization; the Geometric, which arises in Egypt and Babylon, reaches its climactic formation in the classical civilizations of Greece, Rome, Persia, India, China, and

Mesoamerica; the Algebraic, which arises in Islamic Baghdad, reaches its climactic medieval formulation in the Mediterranean cultural ecology; the Galilean Dynamical, which arises in Renaissance Italy, reaches its climactic formation in the late nineteenth century; and, finally, the Complex Dynamical Mentality arises in Paris in 1889 with Poincaré, and has now become a widespread mentality among a scientific and artistic avant-garde. For each of these mentalities there is a cultural ecology in which it was embedded at its emergence, and for each there is an archetypal object that embodies the unique character of its performative life in the new culture.

Cultural Ecology	Mentality	Archetypal Object
Riverine	Arithmetic	The List
Transcontinenta	Geometric	The Temple
Mediterranean	Algebraic	The Esoteric Code
Oceanic	Galilean Dynamical	Currencies/Ballistics
Biospheric	Complex Dynamical	Self-Consciousness

If we go back to the beginnings of art and signs in the Chauvet Cave of 35,000 BCE – this is double the age of Lascaux – we can observe that the beautifully painted image of the European bison is superimposed upon the spot that had already been selected by the cave bear as the place of its clawed markings. Here we can see that Derrida was right, that the engraving, the *gramé*, is coeval with ritual or chant, and there is no archaic privileging of the oral as prior to the engraved.



One can imagine the numinosity of the cave for paleolithic humans. One enters the cave and discovers the huge and hibernating bear and kills it when it is utterly vulnerable in its winter trance. Either out of awe or remorse, these ancient humans set up an altar to hold the bear's skull and mandible, and put on the skin as a ceremonial cloak for the shaman. In other words, "We slay with technology, and save the victim with art" – which is my own aphoristic way of responding to McLuhan's tetrad, or his aphorism that the sloughed-off environment becomes a work of art in the new and invisible environment. The trance state also becomes the chosen medium for the shaman to leave his body and take on the body of the animal spirit in rituals of animal possession. In sculpture and painted images on the cave walls, we see just such half-man, half-animal iconography.



Humans have two hemispheres, and two modes of archaic expression – sign and sound – and both co-evolve together in the causal process that the Buddhists at the time of Nagarjuna called dependent co-origination, *pratityasamutpada*. Similarly, tool manufacture and language also co-evolve and bring forth the emergent domain of archaic human culture: to make a rock conform to the class of fist-hatchets, a hominid's actions shift its membership from one class to another.

If humans have two modes of expression through sign and sound, we need to recognize that space is separating and sound uniting. Through chant or music, we feel exalted out of our isolated spatial condition; we become at one with the universe, transfigured in a Hallelujah Chorus. A chant in a place like Chauvet Cave or Lascaux would enhance trance states, and for the archaic self, which was probably much more labile than the modern ego, entry into these states was probably not difficult. And here we also need to recognize that there is more to Mind than consciousness; consciousness is the phase-space of the perceptual-motor system, but, as every mystic knows, there are forms of Buddhistic-mind that are first of sound, then of light – that are not figure-ground constructed in the perspectival syntax of self and world. This is difficult for non-meditators to understand, but a more accessible example of non-conscious participation in an ambience of sound has been reported recently by scientists doing research on neonates in a hospital in Helsinki. The scientists put little electroencephalograph bonnets on neonates and discovered that while the infants were sleeping their brains were still at work processing the sounds and phonological distinctions of their native language.¹⁰ So, when a nursing mother is singing a lullaby to her infant, the infant is taking in language along with its mother's milk in precisely the way Wordsworth described in *The Prelude*.¹¹ The origins of language do not come from Man the Hunter, who needs to be silent as he stalks his prey, but in the humming and nursing mother at the home base, where mothers and grandmothers, through nursing and gathering, contributed far more to human evolution than the excessively celebrated man the hunter – the great meat-eating, killer ape of the narratives favoured by male, suburban, barbeque-cooking anthropologists.

Other research on neonates has discovered that they recognize faces, can mimic gestures – such as the sticking out of the tongue – and that they move their arms and legs on their backs in rhythm to the pulses of the sound of the mother's speech. Music and dance are therefore not representative arts, but ontic arts; they are performances of our basic ontology, and we start to dance and babble within days of our birth.

What we also can see from the image of the bison in Chauvet Cave is that this art is fine right from the start. Leroi-Gourhan's notion from the 1960s that there was a developmental progression from primitive to advanced, no longer computes. Chauvet Cave is as advanced as Lascaux, which comes almost 14,000 years later.

Now, let's pause for a moment to consider my axiom: "We slay with technology and save the victim with art." In paleolithic cultures, the victim is the animal. In neolithic cultures, the dying male is the victim that is saved in art, as we see in the images of the male placed in the vulture shrines of death at the Çatal Hüyük of 6,000 BCE. In the shift from prehistoric

matristic cultures to ancient patriarchal societies, there is a shift in sexual valuation and woman becomes the victim – as we see in the classical mythic stories of Persephone and Eurydice, or of Tiamat in Babylon. In industrial societies, nature and traditional religion become the victims saved in art, and so we have romanticism, or, in the medieval court of the Crystal Palace of 1851, the Gothic Revival in which industrial society becomes fascinated with the middle ages – with Catholicism in the Oxford movement, and with Pre-Raphaelite visions of Arthurianism and the age of faith. Potted plants and ferns are moved inside living rooms and iron sewing machines are decorated with vines. In the shift from industrial to post-industrial through television, the mind becomes the victim, as politics, sports, pop culture, and entertainment become one in collective media feedlots where our minds are prepared for slaughter. And now in the realm of artificial intelligence, Ray Kurzweil of MIT prophesies that by the year 2030, humans will be passed up in evolution by machines. According to this commercial for MIT, we humans will become the house pets or potted plants of “the Age of Spiritual Machines,”¹² or, if we are lucky, like the tiny mitochondria that moved inside the eukaryotic cell and were able to keep some of their ancient DNA. In this shift from evolution by natural selection to evolution by cultural intrusion through genetic engineering, artificial intelligence, and inserted nanotechnologies, the human genome becomes the victim. Expect to see an art that crosses genes, DNA spirals, music and vibration into some new form of installation art. In fact, the poster that came with the publication of the guide to the human genome in *Nature* was already suitable for framing and placement on a wall. In the terms of McLuhan’s famous tetrad, now it is human sacrifice that is being culturally retrieved. Kids unconsciously sense this and can feel that they are now evolutionary waste, and so they microwave their brains with long conversations on cellphones, insert metal all over their bodies, and turn their tattooed skin into elegiac broadsides marking the dehumanization of the primate, homo sapiens.

If we place McLuhan’s progression of cultural change alongside Jean Gebser’s structural transforms in the evolution of consciousness, we can see that both the Canadian and the German scholars were noticing isomorphic patterns of cultural change.

McLuhan: Communications Media

1. Oral
2. Image to Script
3. Script to Alphabetic
4. Print
5. Electronic

Gebser: Structures of Consciousness

1. ARCHAIC (Prehistoric, but also Ever-present)
2. MAGICAL (Neolithic)
3. MYTHIC (Ancient Civilizations)
4. MENTAL (Classical to European Civilizations)
5. INTEGRAL (Emergent)

For some reason unknown to me, North American scholars of literature ignore Gebser, which is rather strange since Gebser was a friend of Lorca and Picasso and was intensely interested in artistic works as markers of the process of the evolution of consciousness.¹³ As someone who has spent the last forty years moving in and out of various cognitive domains, artistic, spiritual, and scientific, it does seem to me as if academic scholars live in an intellectual ghetto in which they rarely leave “the hood.” But here again the case may be simply one in which Gebser is guilty of having written sympathetically about Zen or Sri Aurobindo.

In the isomorphism of Gebser’s and McLuhan’s narratives we can see that both these cultural historians were sensitive to a complex dynamic in which the later stages recapitulated earlier structures of consciousness. McLuhan called this process “retrieval,” and Gebser called it “diaphony,” and both recognized that the foundational stage – oral or

archaic – had not been eliminated but abides as an Ever-present Origin in the contemporary transformation that Gebser saw as Integral and McLuhan saw as a Dantean vision of the reintegration of humanity in the Mystical Body of Christ. Clearly, this is a grand narrative and not one of “les petits récits” favoured by the postmodernists in English departments.

In Gebser’s terminology, when a new structure of consciousness emerges, the old becomes deficient as the new becomes efficient. Shamanism is the efficient structure in archaic societies, but in the shift to civilized societies based upon myth and archaeoastronomy, shamanism becomes the deficient form of sorcery, black magic, and human sacrifice. The battle between the magical and the mythic structures of consciousness is registered in the stories of Orpheus in Greece and Quetzalcoatl in Mesoamerica. For our times of emergence from industrial to planetary culture, postmodernism is the deficient form of the perspectival consciousness of the Mental structure and not the emergent form of the Integral. This understanding of emergence and complex dynamical systems enabled both Gebser and McLuhan to avoid the political slips to left and right that characterized those academics who became caught by the fascism of Heidegger or the Stalinist apologetics of Althusser.

The old mental structure of perspectival consciousness – of a single individual in his book-lined study looking out at the world from the perspective of an ideology – is now being replaced by a more complex ecology of consciousness in which, as Niels Bohr once said of wave and particle, the opposite of a fact is a falsehood, but the opposite of one profound truth is another profound truth. This new planetary culture emerges where several cognitive domains cross and interpenetrate, as in the Dalai Lama’s Mind Life Conferences in which Tibetan meditation masters and neuroscientists come together to explore the nature of consciousness. The university department becomes the anaerobic dark where the old methane atmosphere of poisonous ideologies hides from the light and the wide blue sky of the planet as a whole. So although textual sociologists like Gayatri Spivak and Homi Bhabha speak of subaltern studies and giving a voice to the voiceless, they ignore the cognitive domains of contemporary spirituality and the contemporary sciences of complexity. Since they cannot change, and English departments are now followers of this ideological movement, there is no likelihood that the shift to an appreciation of complex dynamical systems will occur until after this generation has retired. As Max Planck said of the physicists opposed to the new quantum mechanics, old scientists do not change their minds; they simply die, and new and younger scientists come along for whom the new paradigm is not so threatening.

Peter Drucker has also commented on an even more entrenched academic mentality in the medical schools at the time of the French Revolution. So committed were the professors to Galenic medicine and so resistant were they to clinical medicine, that there was absolutely no hope of introducing clinical medicine in the education of doctors. So the French Revolution closed the medical schools and started all over again. We, however, won’t have to close the English departments because they are already going through their own process of capitalistic deconstruction, but I do hope that new colleges can arise in which the Dalai Lama’s program of contemplative studies and the process of cultural phenomenology I am outlining here can become the basis of a new curriculum. What Hutchins did for the University of Chicago at the time of George Steiner needs to be done all over again, but this time not just for the culture of Western Civilization, but for the whole world. As a step in this new direction, here is one way of miniaturizing the cultural phenomenology of planet Earth into a four-year curriculum for a liberal arts education.

The Literary Milestones of the Arithmetic Mentality:

Formative: Sumerian, "Inanna's Transfer of the Arts of Civilization from Eridu to Erech" (This work shows the archetypal and generative power of the list.)

Dominant: "Inanna's Descent into the Netherworld." (This work shows the cultural shift from village agriculture to the city-state in which a priestly class develops astronomy as a mythopoeic system of knowledge.)

Climactic: The Gilgamesh Cycle, both the Sumerian cycle, and the Akkadian epic. Lao Tsu's *Tao Te Ching*. (The Gilgamesh epic shows the war of the sexes and the tension between matristic systems of prehistoric authority and charismatic military leadership with its new heroic system of values. *The Tao Te Ching* is the swan song for the anarchic, pre-state values of the Eternal Feminine and the creative and generative power of the Tao.)

The Literary Milestones of the Geometric Mentality:

Formative: The Babylonian Creation Epic, "Enuma Elish"; the Egyptian play "The Triumph of Horus." (The Babylonian text shows the destruction of the prehistoric Great Mother and the shift to the military patriarchal state. The Egyptian text shows the rise of the power of the Father and dynastic succession with the son and the consequent displacement of power from the mother's brother.)

Dominant: Aeschylus's *Oresteia*, the Chinese *Book of Odes*. (These texts are supreme examples of the shift from prehistoric blood rituals to rationality, temple formation, and patriarchal succession.)

Climactic: Plato's *Timaeus*, Confucius's *Analect*, the canonized *Old Testament* (these documents become "classics" and therefore lock in patriarchy and geometrical order as the system of civilization for temple and state.)

The Literary Milestones of the Algebraic Mentality:

Formative: The *Koran*, *Wis and Ramin*, *The Story of Layla and Majnun*, Jayadeva's *Gita Govinda*. (One interesting feature of the shift from the concrete to the abstract is expressed in the shift from sexual love – the kind we see expressed in Horace, Ovid, and Catullus – to romantic love and erotic mysticism. This shift seems to start in India and Persia and soon spreads across Western Europe and reaches a climax in the elaborate behavioural code of courtly love in the high Middle Ages.)

Dominant: *Tristan et Iseult*, *The Quest for the Holy Grail*, *The Death of King Arthur*. (*The Quest for the Holy Grail* is a prime example in which the concrete landscape becomes an allegorical code. For me the medieval Algebraic Mentality is an algorithmic logical operation that says: If the daughter does not belong to the father, she belongs to me because I love her (the Persian poem, *Layla and Majnun*). If the wife does not belong to the husband, then she belongs to me, because I love her, (the Persian *Wis and Ramin*, and the Celtic *Tristan et Iseult*). If God is not a vengeful and frightening patriarchal Yahweh who belongs only to the Ark, the temple, and the high priest, then God is the Beloved and belongs to me as my heart's desire (Rumi and Sufism in general).

Climactic : Dante's *Divine Comedy*. (Dante and Fra Angelico are great artists whose imaginations can carry them beyond the limits of the mentality of their times. In his "Letter to Can Grande," Dante shows how the allegorical mode is transcended by the hermeneutic of the anagogic, and with Dante, courtly love becomes cosmic love: "*l'amor che muove il sole e l'altre stelle.*"

The Literary Milestones of the Galilean Dynamical Mentality:

Formative: *Lazarillo de Tormes*, Cervantes's *Don Quixote*, Descartes's *Discourse on Method*. (The picaresque narrative celebrates the new non-heroic individualism of the common man, and shows life as a process of learning a new science and wisdom through trial and error.)

Dominant: *Faust* (all versions as performances of the European myth). Faust shows man challenging sacerdotal authority to gain power over nature, which is the dominant scientific myth of modernism. Melville's *Moby-Dick* goes back to the *Gilgamesh* epic in its vision of male bonding and slaying the beast of nature.

Climactic : James Joyce's *Ulysses* is a conscious recapitulation of literary history, from the Homeric epic to the modern novel, and a brilliant performance of the shift from the linear narrative of a single hero to the complex dynamical system of an ecology of consciousness – a movement that he completes with *Finnegans Wake*.

The Literary Milestones of the Complex Dynamical Mentality:

Formative: Virginia Woolf, *The Waves*; James Joyce, *Ulysses* and *Finnegans Wake*.

(The characters in Woolf's *The Waves* seem like a coral reef of consciousness, as we pass like an ocean current from one mind to another. In this shift from the stream of consciousness of a single mind to an ecology of consciousness, Woolf, along with James Joyce, was one of the major artists articulating the emergence of complex dynamical systems in literature. We are still only in the early stages of this cultural shift. We saw the shift from text to cinema at the beginning of the twentieth century, and the shift from cinema to electronic media in the middle, and the multi-dimensionality of hypertext at the end of the century. God only knows what "krypton crystals" technology is next.)

For each of these literary-mathematical mentalities there is a charismatic object that embodies the uniqueness of its world view. For the Arithmetic Mentality, it is the list, and the recitation of the list carries a performative magical power that captures the mystique of generation – of the many from the One. Originally, the One is the Great Mother, but in the patriarchal shift to a male priesthood, the generative power is contained within the geometrical form of the temple and a new class of specialists begins to dedicate itself to mythic narratives and astrological observances. For the Geometrical Mentality, the characteristic object is, therefore, the temple. When the alphabet arises to liberate writing from the exclusive possession of temple scribes, and when the Aramaic alphabet is transformed into the new lightness of the Indian numeral system, then calligraphy and a celestial code begin to be the new charismatic vehicle of the divine. This entrancement with a celestial code of the Algebraic Mentality introduces a new mysticism, as well as a new erotic mysticism, and the feminine returns in a new cultural system of retrieval in poetry and rituals of courtly love. But as the Taoists of the *I Ching* comment, "Reversal is the movement of Tao," so the introverted mysticism of the medieval mentality is succeeded by the extroverted mentality of modernism in the Galilean Dynamical Mentality. With the fall of the fortress of Byzantium in 1453 from heavy artillery, ballistics introduces a new era of

moving objects in space – from cannonballs to sailing ships to currencies in capitalistic world trade to the calculus of motion for Galileo, Newton, and Leibniz. This era of single causes, linear narratives, and individual perspective comes to an end in the a-perspectival world of complex dynamical systems – the new world view of Poincaré, Picasso, and Einstein.

The Literary-Mathematical Mentalities and their Contradictory Polarities

I. Arithmetic	I. Sacrificial, or carnal/excarnal
II. Geometric	II. Bellicose, or constructive/destructive
III. Algebraic	III. Mystical, or transcendental/erotic
IV. Galilean Dynamical	IV. Materialist/Abstract
V. Complex Dynamical	V. Node/lattice– cloud/atmosphere – or neuronal/discarnal

The first year of a given college's core curriculum could be devoted to the Arithmetic and Geometric mentalities; the second year to the Algebraic; the third year to the Galilean Dynamical mentality, and the final year could focus on complex dynamical systems in multi-generic arts and the emergence of a new planetary culture. Those familiar with St. Johns College in Annapolis and Santa Fe will recognize that mine is simply a more global approach to their Graeco-Roman, Western Civilization, Great Books curriculum. My recommendation to Ontario would be that a college within York University, or Trent University in Peterborough, should try this out as an alternative to what they already have in place.

We are now in the time of bifurcation in which we experience the shift to a new world-system – intellectually and politically. As we shift out of modernism, we are experiencing the return of the seventeenth century's age of religious wars and the emergence of novel mathematical mentalities that we went through at the time when Western Civilization truly broke away and began to pass up the Ottoman Empire.¹⁴

From the influence of Dutch capitalism on England in the Glorious Revolution, England founded the Bank of England and began to use indebtedness to expand the phase-space of its economy. In the debates in Parliament, the old Tory lords defined the gross national product of England as the sum of all the rents of the land of England, and thus they showed that they did not understand the new economy and were still locked into a classical geometrical mentality.

This new economy involved a shift in the perception of value from the past to the future and from an unchanging and fixed Platonic order to a world view of motion and change. Ming Chinese society was based upon ancestor worship and the mandate from heaven to the Emperor in the past. The Ming Court was locked into a single center, suspicious of peripheries and foreigners, and unable to understand the shift to the new mathematical mentality, and so it ordered the contraction of Xeng He's naval world projection, moved the capital from coastal Nanking to inland Beijing, and imploded in a tightly geometric Confucian world view with its rigid and unchanging social order. Xeng He was a Muslim eunuch Admiral and not a Confucian lord. Had Ming China – then the world's most advanced civilization equipped with print, monetary currency, and gunpowder – been able to complete the shift from the geometric mentality to the algebraic and dynamical mentalities, we would all now be speaking Chinese instead of English. The projection of a civilization into a new world economy fell to Europe, and Western Europe, reinforced by the new mentality in mathematics and capitalism, projected energetically in a complex and mutually competing polycentric civilization. The new economy in the Anglo-Dutch Glorious Revolution shifted sovereignty from the sovereign to the parliament, created the Bank of England based upon

the model of the Bank of Amsterdam, and unconsciously shifted their sense of value from the past to the future when one's ship came in and the risk paid off. Interestingly enough, at this time, children begin to be seen as carriers of the value of the future in Dutch domestic and genre paintings – such as those of Jan Steen and Judith Lester.

If we wish to tell the truth about the cultural phenomenology of humans on planet Earth, then Asia and Africa have to take their medicine and swallow the bitter pill that the reason we are now living in a Eurocentric projection is because Europe effected not just one, but two world cultural bifurcations. The first was the Galilean Dynamical Mentality, reinforced by the mathematics of Newton and Leibniz and Anglo-Dutch capitalism; and the second was the Poincaré bifurcation and the emergence of complex dynamical systems, reinforced by American globalizing capitalism. Trying to erase these embarrassing facts in a PC and po-mo ideological shift away from Eurocentric narratives does not explain why these Asian and African cultures feel dissed in the first place. After all, Gayatri Spivak teaches at Columbia not Calcutta, and Homi Bhabha teaches at Harvard not Bombay.

In the first European world projection, ballistics and currencies became the charismatic object that expressed the uniqueness of the new world view. Money became a dominant theme in the English novel, and the new narrative of motion described the path of the individual, released from bondage in medieval serfdom, from rags to riches. In the second European projection, identity is no longer exclusively based upon land or class but on consciousness and knowledge. Consciousness becomes the new charismatic object or vessel that carries the uniqueness of the new world view. Consciousness is to us what soil was for an agricultural society; it is the ground of our being. For those students of history who like events sharply perceived in dates – such as 1453 – we can date this emergence of the shift from the industrial nation-state to the noetic polity to 1889.

In the year 1889, Poincaré discovers the homoclinic tangle and realizes that the solar system is not the neat, elliptically revolving system of Kepler, but a chaotic system. It is also the year of the Universal Exhibition in Paris, when, for the first time, a human structure is built that is higher than the Great Pyramid. It is the year when Indonesian gamelan music comes to Paris, and Satie is enthralled and realizes that time is not a mechanical unit measured out by the metronome, but an extensive tonal *durée*. And in these studies of human phenomenological time, Bergson and Proust are also at work in the excavations of past time and human consciousness. There is not simply one mind at work here on the problems of matter and memory but a larger mind whose phase-space is the city of Paris, and this is precisely what I mean by the emergence of a noetic polity. Poincaré will influence Einstein, and both will influence Picasso, and from Picasso's retrieval of African masks, a-perspectival space, and Einsteinian relativity, art and science will begin a process of parallel processing that is characteristic of a noetic polity. Small wonder that Walter Benjamin called Paris the capital of the nineteenth century.¹⁵

A noetic polity is a culture in which identity is based upon participation in an ecology of consciousness. In tribal societies, identity is based upon blood – upon a sanguinal identity in which we are known as the children of Abraham. In a kingdom or empire, identity is based upon land and location – a characteristic feature of the Geometrical Mentality. In an industrial nation-state, identity is based upon economic class, language, and parentally derived accent. In a noetic polity, culture is generated by the mutually interacting causal systems of art and science, and a new kind of personal, post-religious spirituality that we see prefigured in the Rosicrucianism of Satie, the theosophy of Kandinsky, Mondrian, and George and William Yeats, and in the scientific cosmic mysticism of Einstein. In this personal and fractal (self-similar) metabolism of unique mind and Universal Mind, identity is based

upon the participation through conscious experience more than doctrinal belief. This ecology of consciousness is more like a cloud than a clod, a circulating atmosphere more than a fixed continent.

Notice now in our contemporary war between globalization and terrorism that neither one is an expression of a territorial nation-state. Both multinational corporate globalization and Al Qaeda hold nation-states hostage to advance their cause. Al Qaeda uses global-positioning satellite phones, launders money and moves it around globally as effectively as any multinational corporation. It camouflages itself with medieval Islam, in precisely the same way that globalization camouflages itself with Enlightenment rhetoric and democratic values. Bush talks about free markets and free trade, but everywhere his anti-democratic putsch seeks to control populations for the benefit of corporations and has sought to eliminate environmental protection and worker safety in factories. He speaks out against terrorism but reserves the monopolistic right to apply violence to advance his party's aims to control critical resources and maintain American military-industrial supremacy. This Bush-Bin Laden planetary civil war is not a war between nation-states, but a war of identity between two competing noetic plasmas struggling to become world polities.

We are no longer living in the inter-national world system that came into being after World War II and the formation of the United Nations. Small wonder that both NATO and the UN are in disarray. National noise is drawing the world-system toward a new basin of attraction. It is in the nature of a complex dynamical system that tiny initial conditions can create a cascade of effects that makes the outcome of a chaotic system totally unpredictable. No one knows how this new world-system will play itself out. Certainly, I don't.

But precisely because world civilization is at stake, we need to appreciate the positive side of the values of the European Enlightenment – the spirit that freed artists and scholars from being the domestic servants of aristocrats – the spirit that enabled Schiller to defy the Duke of Baden's demand that he be a military doctor and not a playwright and encouraged him to escape his feudal imprisonment for a freer life in a larger world. To move from an eighteenth century European Enlightenment to a twenty-first century planetary Enlightenment, we are going to have rethink the nature of education, to shift it from job-training for a globalizing economy to a new form of contemplative education that empowers the individual's sense of value within a curriculum that situates the enlightened self in a planetary culture greater than that of warring tribes, races, nations, economic classes, and religions.

Endnotes

1. This conference at York University proved to be only the beginning of a whole series of conferences that I would continue to organize for a generation from 1974 to 1994. See *Earth's Answer: Explorations of Planetary Culture at the Lindisfarne Conferences*, eds. M. Katz, W. Marsh, and G. Thompson (New York: Harper & Row/Lindisfarne Books, 1977). See also *Gaia, A Way of Knowing: Political Implications of the New Biology*, ed. W. I. Thompson (Hudson, NY: Lindisfarne Press, 1987), and *Gaia Two: The New Science of Becoming*, ed. W. I. Thompson (Great Barrington, MA: Lindisfarne Press, 1991).
2. At Cornell, I had written my Master's essay on poems of this genre. See W. I. Thompson, "Collapsed Universe and Structured Poem: an Essay in Whiteheadian Criticism," *College English*, Vol. 28, No. 1, October, 1966, 15–39.
3. This was *The Imagination of an Insurrection: Dublin, Easter 1916* (New York: Oxford University Press, 1967).

4. Throughout my career, I have been hammered by leftist critics, from Conor Cruise O'Brien in *The New York Review of Books* on *The Imagination of an Insurrection* in the '60s, to Paul Zweig on *Darkness and Scattered Light* in *The New York Times Book Review* in the '70s, to Jean Bethke Elshtain's review of *The Time Falling Bodies Take to Light* in *The Nation* in the '80s.
5. For the rest of my academic career, I would remain beneath the horizon of scholarly notice for Departments of English. Interestingly, even at the Living Literacies Conference, to which I was invited to give this talk, mine were the only books that were not present outside in the bookstall of the presenters at the conference or at the reception for the speakers in the university bookstore.
6. See Catherine Gallagher and Stephen Greenblatt, *Practicing New Historicism* (Chicago: University of Chicago Press, 2000).
7. See endnote 2. The reading of Yeats's "Among School Children" was republished in Paul Engle's textbook, *Reading Modern Poetry* (Glenview, IL: Scott, Foresman, 1968).
8. This work was published and became the book, *The Embodied Mind: Cognitive Science and Human Experience*, F. Varela, E. Thompson, and E. Rosch (Cambridge, MA: MIT Press, 1991).
9. This work was given as the Marvin B. Anderson Lectures at the Social Science Research Institute of the University of Hawaii at Manoa; it was subsequently published as Chapter 3 in my book *Pacific Shift* (San Francisco: Sierra Club Books, 1985). The final development of this theory, "Literary and Archetypal Mathematical Mentalities in the Evolution of Culture" will be published in 2003 or 2004 in the *Journal for Consciousness Studies*.
10. See M. Cheour et al., 2002, "Psychobiology: Speech Sounds Learned by Sleeping Newborns," in *Nature*, 415, 599-600
11. Book One, ll. 269-281.
12. See Ray Kurzweil, EDGE [online], March 25, 2002; see also his *The Age of Spiritual Machines* (New York: Viking, 1999). Also Hans Moravec, *Mind Children: The Future of Robot and Human Intelligence* (Cambridge, MA: Harvard University Press, 1988).
13. There is one edition available in English. See Jean Gebser, *Ever-present Origin*, trans. Noel Barstad with Algis Mickunas (Athens, OH: Ohio University Press, 1991). There is a German paperback of selected works, *Jean Gebser, Ausgewählte Texte* (München: Goldmann Verlag, 1987); and the complete works are available in a boxed set as *Jean Gebser, Gesamtausgabe* (Schaffhausen, Switzerland: Novalis Verlag, 1986).
14. See Bernard Lewis, *What Went Wrong? Western Impact and Middle Eastern Response* (New York: Oxford University Press, 2002, p. 118).
15. See Walter Benjamin, "Paris, die Hauptstadt des XIX Jahrhunderts," in *Illuminationen: Ausgewählte Schriften* (Frankfurt am Main: Suhrkamp, 1974). Surprisingly, Patrice Higonnet, in his *Paris: Capital of the World* (Cambridge, MA: Harvard University Press, 2002) misses the significance of Poincaré and chooses the year 1889 to mark the end of the mythic era of Paris. His point of view is too narrowly political and literary, and a much more sensitive understanding of the importance of science to art is to be found in Arthur I. Miller's *Einstein and Picasso: Space, Time, and the Beauty that Creates Havoc* (New York: Basic Books, 2001); see especially his Chapter 4, "How Picasso Discovered *Les Desmoiselles d'Avignon*," pp. 85-127.

Introduction to George Steiner

By Maurice Elliott

Presenting Professor George Steiner is difficult, if only because his learning and eloquence are legendary. I feel that it should be done in at least three languages, and probably in a verse form appropriate for someone who shares a birthday with Shakespeare. Fortunately, Professor Steiner's courtesy and grace are also legendary. Did he not once say, "I think we must all learn to be guests of each other." Therefore I may be forgiven a salutation stolen from Chekhov, who has a schoolmaster in one of his stories addressed as "Your Scholarship." Educated in Paris, and at Harvard, Chicago, and Oxford, Professor Steiner is "Extraordinary Fellow" (how apt!) of Churchill College, Cambridge, Professor Emeritus of the University of Geneva, and the first Lord Weidenfeld Professor of Comparative Literature at Oxford.

I hesitate to call Professor Steiner a literary critic, not least on account of Rilke's advice to a young poet: "Read as little as possible of literary criticism – such things are either partisan games, which have become petrified and meaningless, hardened and empty of life, or else they are just clever word games, in which one view wins today, and tomorrow the opposite view. Works of art are of an infinite solitude, and no means of approach is so useless as criticism." Perhaps his first two books, *Tolstoy or Dostoyevsky* (1958), and *The Death of Tragedy* (1960), are literary criticism – arising out of a debt of love, he might argue – but the major portion of his work of over twenty volumes, including prize-winning fiction, and in addition to his two hundred or more appearances as a reviewer in *The New Yorker*, has concerned two inextricably related topics, and in many ways forms an arabesque on a double-braided theme: the mysterious problem of evil, particularly in relation to the Shoah and like events; and the crisis in language and humane culture, the relation between aesthetics and the barbaric. Central to his thought, he has said, "is my astonishment, naïve as it seems to people, that you can use human speech both to love, to build, to forgive, and also to torture, to hate, to destroy and to annihilate." It has been a complaint of his critics, that Professor Steiner repeats himself. Well, there is a short riposte: "He needs to!" It is clear that he has a custodial and ever-vigilant eye – for example, on outbursts of racism and neo-Nazism. "Lest we forget" might also be said of Kristallnacht, November 1933; and in 1994 Professor Steiner wrote that of the Jewish boys and girls in his school class or circle, only two, including himself, had survived. It is clear from each of his works that his theme is unending and that his passionate commitment to understanding spurs him to apocalyptic eloquence and provocative expression, qualities that do not suit all tastes. In a fine tribute to Hermann Broch, Elias Canetti (as always, alert to the conscience of words) gives a version of the artist as one who shares the tortured gravel of everyday life with the "dog-like vice" of "sticking his damp nose into every thing." For Broch, says Canetti, this vice takes the form of breathing – "he has a memory for breath," which amounts to an intelligent and refined study of the relationships between people.

As it is not possible for me to summarize in five minutes the whole body of George Steiner's work without travesty, or at least with greater aphoristic skills than I possess, I should like therefore (as Frederick Maurice said of Coleridge) to put you in "a way of reading" by offering a maniple of brief points.

First: that the breadth and scope of this Living Literacies conference in which you have participated realizes Professor Steiner's armed vision that "specialization has reached

moronic vehemence. Learned lives are expended on reiterative minutiae." Write that in your commonplace books!

Second: if you are starting out to explore his works, perhaps you may begin with "The Uncommon Reader" in the book of essays *No Passion Spent*. It is clear, careful and challenging – and to be challenged. Or treat yourselves to *Language and Silence*, a book that was appropriated by everyone and his partner in the '60s, one which passed into the general academic consciousness – often without acknowledgement

Third: just listen to these sentences!"

"Literary criticism should arise out of a debt of love." (1959)

"We are entering on large difficult ground. There are landmarks worth noting from the outset." (1961)

"When he looks back, the critic sees a eunuch's shadow. Who would be a critic if he could be a writer?" (1966)

"That it is untranslatable is one of the definitions offered of poetry. What remains after the attempt, intact and uncommunicated, is the original poem." (1966)

"It is not the literal past that rules us, save, possibly, in a biological sense. It is images of the past." (1971)

"Historians and sociologists agree, and after all we should sometimes believe them too, that there has been a marked decline in the role played by formal religious systems, by the churches, in western society." (1974)

"Act II of *Cymbeline* closes with a monologue by Posthumus." (1975)

"If there is currently a debate on 'culture' – as distinct from a merely formal academic-journalistic rhetoric or rhetorical gossip – it involves, it must, where it is honestly pursued, involve the nature of 'texts.'" (1978)

"The crisis of spirit suffered by Germany in 1918 was more profound than that of 1945." (1978)

"Chardin's *Le Philosophe Lisant* was completed on 4 December, 1734. It is thought to be a portrait of the painter Aved, a friend of Chardin's." (1978)

"Between c. 1790 and c.1905, it was widely held by European poets, philosophers, scholars, that Sophocles' *Antigone* was not only the finest of Greek tragedies, but a work of art nearer to perfection than any other produced by the human spirit." (1984)

"We still speak of 'sunrise' and 'sunset.' We do so as if the Copernican model of the solar system had not replaced, ineradicably, the Ptolemaic. Vacant metaphors, eroded figures of speech, inhabit our vocabulary and grammar. They are caught, tenaciously, in the scaffolding and recesses of our common parlance. There they rattle about like old rags or ghosts in the attic." (1989)

"Rain, especially for a child, carries distinct smells and colours." (1997)

"We have no more beginnings. *Incipit*: that proud Latin word which signals the start survives in our dusty 'inception.'" (2000)

These are the opening sentences of Professor Steiner's major works. I have cited them as a kind of collage, because in this density they demonstrate one of the major qualities of this "general reader." They are challenging and declarative, inviting and seductive, and, above all, clear. You might resist the persuasion, but you will not be assaulted. You will find a stringency not acceptable to all tastes, for, as he has said, he has never been able to disguise his faith in Spinoza's equation of excellence and difficulty. For powerful driving rhetorical force you may try the series of T. S. Eliot Memorial Lectures titled *In Bluebeard's Castle*. Perhaps follow it with that extraordinary allegory of argument, Professor Steiner's powerful expression of evil as he gives A. H. the jungle podium in *The Portage to San Christobal of A. H.*

Fourth: may I offer a personal note. I haven't been on the campus here for five or six weeks, and it felt strange on Thursday morning to be parking in an unfamiliar place and to be watching the bustle of others – sweet was the breath of morn, as the poet says – and it did not feel quite right not to be in the classroom. When I registered for the conference, the young lady assistant knew me, although I had not recognized her, and she said that she had been in my class last year, and had thoroughly enjoyed it. Apart from the immediate vanity, expressed in a blush of pleasure, I was reminded of the long affair I have had with teaching and of how gracious the young can be. How polite they are in general, and how much, as Mr. John O'Leary told us so eloquently, they want to learn. If the unending task of teaching teaches one anything (in answer to an important question raised) it ought to teach humility. But we don't say much about our teachers, I fear. I have had some wonderful students, but I had two magnificent supervisors: Elaine Feinstein and Kathleen Coburn. I was very fortunate, I think. So you may imagine that I find admirable the magnanimity of Professor Steiner's views on his great teachers. Chapter nine of his memoir begins: "J'eu de la chance avec mes professeurs," and he goes on to praise Blackmur, Sirluck, Scholem, and others. We share Ernest Sirluck; but another important teacher whose acquaintance we shared was F. R. Leavis. It has always seemed to me that there is not only a justness in Professor Steiner's account of that austere and difficult man, but a conclusion that serves as a touchstone for his own passionate advocacy of teaching, indeed of literacy. He says that if there is some nagging doubt about Leavis's claims to be ranked among the great modern critics, "it is simply because criticism must be, by Leavis's own definition, both central and humane. In his achievement the centrality is manifest, the humanity has often been tragically absent."

Finally, such graciousness returns us to Professor Steiner's real presence here today. It has been generally conceded by reviewers that *Grammars of Creation* is a crowning achievement to a life of writing. In this book he seeks to give language its mouthful of air, to set it breathing creatively again in a way that can match the ethos and beliefs of our complex, anxious, information w/racked world; to find what Professor Powe on Thursday called the "the soul's route." How can we make imagining concrete? "I am haunted by the possibility," he says in his autobiographical memoir *Errata*, "that out of our mammalian midst, a Plato, a Gauss or a Mozart, justifies, redeems, the species which devised and carried out Auschwitz."

Professor Steiner, Your Scholarship, we are honoured and pleased to have you with us. Welcome to York University.

Grammars of Creation

by George Steiner

Many years ago, one evening in Massey College, I sat with Robertson Davies, Norrie Frye, Kathleen Coburn (the world's greatest Coleridge scholar), when there walked in a very much younger Marshall McLuhan. Astounded, and without thinking, I turned to Professor Frye, and said, "There's Marshall McLuhan." I cannot hope to reproduce the air of sardonic melancholy which immediately invaded Norrie's features. He had a long look, and said, "So the man alleges." This is to say what Toronto was at that moment – and perhaps will be again? – the absolute centre for the study of Letters and the Humanities, possibly in the world. I wonder whether it has struck our host, B. W. Powe, and those with us this today, that reading and writing are a brief, ephemeral form in human history. Millennia of orality precede and surround the written word and the arts of reading. Homer is immediately closer to Flaubert or Proust. Homer is twenty thousand years removed from the far origins of the mythological material he deals with. Endless communities on earth do not have what we consider to be literature. There is no community on earth known to anthropology that does not have music. I will come back to that, music being far more universal than language. There is also a second great code – mathematics – untranslatable and universal, which I will also come back to shortly.

The historical prestige, the authority (I am simply translating the Latin, "auctoritas") of reading and writing may well prove to have had a relatively brief run in the history of the species from, say, the early Proto-Chinese inscriptions and Sumerian clay tablets to the nascent age of the electronic – a blink of the eye in the biological and social history of man. The origins of classical literacy are highly specific. They are those of the priesthood, of power, or of what Max Weber called "an aristocracy of the intellect," or what we can also call a clerisy, les clercs. The capacity to write and read was in the hands of a gradually expanding elite. Remember that Socrates only twice consults a written text in the whole of that great classical corpus. There are only two moments when he asks for a scroll to be brought to verify a citation. Jesus probably did not know how to write. The pericope of the woman taken in adultery, in that mysterious passage in the Gospel according to John about tracing words in the dust and immediately effacing them, is, according to biblical scholarship, a much a later insertion. Neither Socrates nor Jesus published.

I've had the privilege recently of being a Harvard University professor, and there I learned one of the greatest of Harvard jokes. A group of rabbis are on the road to Golgotha and Jesus is coming by under the cross. The young rabbi bursts into tears and says, "Oh, God, the pity of it!" The old rabbi says, "What is the pity of it?" The young rabbi says, "Master, Master, what a teacher he was." "Didn't publish!" That cold tenure-joke at Harvard contains a deep truth. Indeed, Jesus and Socrates did not publish. Moreover, even during the golden age of what is called mass literacy – a brief age – the degree of actual capacity and usage remained exceedingly difficult to access. We now have the documents – they've only been studied fairly recently – of the examinations undergone by the conscripts in 1914 in France at the height of that Republic. In fact, over seventy percent of the conscripts from rural areas, and from less privileged urban areas also, could read only a few words, if at all. The French army instituted a rush program of elementary literacy. That's 1914. Or the decisions throughout North America today, be it in ads or in the press, to never use dependent clauses because, to most human beings, they are indecipherable. Thoroughly literate societies remain few. There is no serious bookstore as distinct from a kiosk between Rome and Bari, not one.

I loved the story from 1938, precisely documented, of one of the last exams for the baccalaureate in the University of Salamanca. The government knew the candidate was the young Duke of Alba. The government officials say to the examiners, "No nonsense, no nonsense! It is his grace, the Duke of Alba." "Yes, Yes." The Duke comes in and the trembling examiners ask, "Your Grace, you have read *Don Quixote*? Long silence. "Why should I?" he answered. If you are the Duke of Alba you don't need to read *Don Quixote*, or anything else. The point I am trying to make is that what was often confidently asserted as being literacy was nothing of the kind. Literacy was complex, often fragmentary, often local.

Why should I read? Classical literacy, *literi humanoraes* – what a magnificently proud and arrogant word – entails a number of fundamental assumptions and expectations that we rarely pause to examine. There is a sacredness of the foundational text, of the Ur-text, itself usually revealed or dictated, as on Mount Sinai, or on the Isle of Patmos to John.

One night in the very grim moments of Apartheid, when I was among my South African students, Nadine Gordimer did me the honour of inviting me to her house, along with ANC leaders – really militant ANC leaders. The police cars were lined up in front of Nadine's house. They knew exactly who was coming, but they didn't move. It was a peculiar twilight of permitted exceptions to the rule and Nadine's home was, in a sense, taboo. As my main virtue in life is a lack of tact, I decided to ask one of the great leaders, one of Slovo's lieutenants, "Look, help me. Even among the worst moments of occupation under the Waffen SS – and they were very good at occupying, believe me – from time to time, someone killed one of the bastards. You are thirteen to one in Johannesburg. Thirteen-to-one! It's a demographic balance. Without weapons, all you need to do is close in on the street around a white person. What is it that keeps you from acting?" The answer was one of the turning points in my life: the ANC leader said, "You Jews, you have your Talmud, your Midrash, your Mishnah. Communists among us, who are few, have Das Kapital. Christians have their Gospel. Muslims among us have their Koran. We have nothing. Africa has not produced a book." It is an enormous answer. Think of it. *We do not have a single foundational classic by which we could come to rally around an image of ourselves.* It needs a lot of thinking to grasp the full power, depth, and scruple of that answer. "We have no book."

The complex dialectic of letter via spirit, which underlies our tradition, even at its most secular, of the cleric, of the scholar, derives from the traditions of Scripture and inscription. The two words, of course, are cognate. My I remind you what the word underwritten means? Underwritten is re-insured by the theological: what Wittgenstein says on completing his investigations, "If I could, I would dedicate this book to God." That's Wittgenstein. The *magnum opus* in the Western traditions, "Le livre qui est le but de l'univers" of Mallarmé; or in Borges, a simulacrum of the book that simply calls itself the Book, the Bible. In certain traditions, Judaism for example, the notion of secular authorship, of reading for pleasure, comes very late. It arrives only with modernity and it leaves the greatest of all Jewish writers, Franz Kafka, radically uncomfortable. The arts of memory are correlative with those of all higher literacy. They constitute the bridge between the oral and the written. Plato fears writing precisely because it will enfeeble the muscles of memory; hence, the central, crucial, irreplaceable role of learning by heart. What you love, you start learning by heart.

We started in the French Lyceé, tiny children in those ridiculous blue Smocks: five lines and ten lines and twenty; learning by heart. For what you love, you will want to have inside you. We learned Pope's Iliad by rote. We learned Lear's nonsense rhymes by heart. Those children learned to tell the two apart and never say, "that ought I wrote in love I wrote only

for love of art." These lines of Robert Graves accompany me day and night. But there are so many others. What you have by heart, no one can touch. They cannot take it from you.

Consider the example of a Russian woman who was a teacher of English Romantic literature in the University in Kazakhstan. It was the Brezhnev years, relatively less hellish than Stalin, but still hell. She was imprisoned, with no light, on some trumped up charge, for three years, in solitary. Now, in Russia, for reasons I am not wholly competent to judge, Byron's Don Juan has canonic presence. It's regarded, maybe justly, as one of the transcendent achievements. This young woman knew it, thirty or thirty-four thousand lines by heart. And in the dark she dictated to herself a Russian verse translation. She lost her sight. But when she emerged, she dictated her translation, which is now the classic one in Russian. There is nothing you can do to a human being who is like that. No state can touch this. No despair can touch it. What you don't know by heart, you really haven't loved deeply enough. The poetry of Mandelstam, you remember, survived when Nadezhda, after the death of the poet, had ten people, no more, learning one of the poems. That was enough. There were no copies, and the KGB could do nothing. As long as ten people know a poem, it will live. Ben Johnson had the wonderful word for it, which we have lost: to ingest the text, to internalize it in the viscera of your spirit. The culture decays in precise proportion to its neglect, or suppression of memorization.

Again, in the Russian Writers' Congress of '37, in the blackness of the blackness, Boris Pasternak was told, "If you speak, we arrest you. If you don't, we arrest you, as a sign of contempt" Pasternak was tall, very handsome; he stood out in a crowd fantastically. On the third morning his friends said, "Boris, say something. They are going to arrest you, but say something. Give us something to remember, to live by." When the moment came, Boris got up and spoke a number. It took twenty seconds, maybe thirty, before two thousand people rose, holding hands, and began to recite Shakespeare's sonnet of that number, of which Pasternak's translation is a Russian classic, like Pushkin. He spoke out loud, "When I summon up remembrance of things past," and they didn't dare touch him. That culture was never in ultimate danger. Ours is every day. There is an immense difference. *"When I summon up remembrance of things past."*

The classic act of reading, of literacy, presumes three possibilities. Silence: the availability of silence, when today silence has become the most expensive luxury, when even in the new expensive apartments, the walls are thin. When the fear of silence is such that you cannot even step into an elevator in New York without the muzak oozing on. They explain that people are frightened of silence, frightened to be alone. Silence has become almost unattainable. Children are afraid of it. We are enveloped by constant noise. Privacy, which is related to silence, requires being unafraid to be alone. On the contrary, one covets it, seeks it out; one does not know that nonsense phrase, "peer pressure." There is no pressure except that of one's own integrity and concentration. Malebranche, as quoted by Heidegger over and over again, said, "Concentration is the natural piety of the soul." To be able to concentrate totally. You cannot read a difficult text without total concentration.

America – and this is not an anti-American comment (I hate that sort of cheapness) – is more honest of its disasters than we are in Europe. The latest statistic is that over eighty percent of American adolescents cannot read in silence without some kind of music in the background. Also quite terrifying is the flicker effect at the edge of their vision, the television. What this does to the cortex we haven't begun to understand. It would need extensive psychological and social examination of the current experience of solitude as punitive and traumatic, of the shortening of the attention span among the young and adults.

It would be sentimental nonsense to think that we can officially recreate the foundations of the classic act of literacy. Pythagoras and Plato intuited, and Galileo demonstrated that, to quote his famous saying, "Nature speaks mathematics." Since Galileo and Newton, that speech has become the ever-expanding idiom of a scientific and technological handling of the world. It is the lingua franca of the reality principle. Verbal and written languages cover less and less of verifiable, evolving experience. No aspect, no single facet of our lives, inward and outward, will be unchanged by the three horizons now looming. I owe this, of course, not to any competence on my part but I have had the privilege of living among the great scientists. Heidegger used to say if you are really stupid, you tell a story. I confess to that guilt. Recently we had a truly delightful American guest at the high table of my college. He had been for a holiday in Scandinavia and, in the nicest way, he was saying to us, "I hope all of you do that. It is the nicest, friendliest place on earth." And he turns to a very shy, gray-haired colleague sitting next to him. "Have you been to Stockholm?" My colleague, keeping his head down, said, "Once." The guest didn't understand, and we were so shy for the guest that we rapidly covered it with conversation. We didn't want him to be embarrassed. My colleague had not meant to be clever or arrogant, God knows. He was simply being accurate. Of course, when you say "once" in Cambridge to the question "have you been to Stockholm," you have gone for the Nobel. That is what I call the aristocracy of the mind; that is what I want to live among, and have been lucky to be able to do.

Here are the three horizons of which my colleagues are trying to give me a layman's stupid inkling: the creation of life in vitro; self-replicating molecules, which they put at ten years away (this may be conservative); and the theory of everything, which is a technical expression. A theory of everything, as Hawking and his colleagues are developing it, is on the origins of the universe and of time. We translate it more or less metaphorically. The neuro-chemistry of consciousness – the word I, moi, ego – is an arrangement of blood sugar. This is by no means fantastic or remote – for instance, we have no theory of aspirin (no one knows why an aspirin works, or what it does when you take it). We have no theory regarding the fact that there are many human beings for whom even one drink – a drop of alcohol in the cortex – can have severe consequences. And so the notion that consciousness may be a matter of neuro-chemistry is already imaginable even to the layman.

These are what they call the three "holy grails," a curious borrowing, which at the moment concentrate the most active, adventurous minds among us. Any serious grasp of what is involved requires a numeracy of increasingly sophisticated order. It is numeracy, rather than literacy, that will enable the majority of human beings to cope with their altering world, the joy of their world.

I hope many of you remember the passage in Cellini's autobiography when he is going to find out whether the great statue of Perseus has burst or is alright within the hot casement, the melting wax having being knocked away to reveal it. Not only Cellini, but the Florentine historians say several thousand people crowded in the street that night, hoping to see it, hoping to find out.

I guess hundreds of people were crowding in the streets of Little Cambridge, in East Anglia, the night Professor Wiles said he would announce the solution to Fermat's last theorem. After 370 years, a solution arrived at, not by any computer or electronic nonsense, but a pencil and paper and seven years of unrelenting thought. People were crowding the street. The little hall in the Institute for Mathematics, where it was to be revealed, can take eighty people or so; the rest were in the street. And among those eighty, I was told, two could follow the demonstration. That didn't matter. My common room that night sang like a beehive. I can put it in no less naive a way. I said, "Can you help me?" And they said, "Look

Steiner, there were four roads of approach and he chose the most beautiful." And I said, "Right, you can help me. Keats chooses beauty. Beauty, truth." "No," they said, "we are using beauty not in a metaphoric sense but in a concrete sense, in an enormously concrete, specific sense." Again, I can be a great bore, so I said, "Can you help me?" Now, great scientists are generous, not like we humanists. And so they tried, and finally one of them said, "Don't get angry. It would take twenty years to get you to the edge of elliptical curve theory, where the edge begins, so you could know what Professor Wiles has done to solve Fermat's last theorem and the beauty of it." And so I, in a rearguard action of absolute despair, said, "That's alright." Professor Weseltier of Harvard once said to me, "Before you are allowed to look at a page of Kabbala it is twenty-five years of preparation." I felt an ache, a physical ache, of the beauty of it, totally inaccessible to me.

Literature has scarcely begun to do minimal homework. Hence it's thinness and domesticity; hence the belief that adultery in Long Island is an interesting subject. It has scarcely begun to be serious. There has been a small number of very great writers who have not been lazy, who've actually tried to find out what the world is now about – Thomas Mann, who worked two years with a tutor before doing the magnificent chapters on astrophysics in *Felix Krull*; Robert Musil, who was, of course, a trained mathematician and engineer; and perhaps Pynchon and the masters of science fiction, whom we tend not to take seriously but whose vision has been clairvoyant, terrifyingly prophetic. In essence, the novel inhabits a nineteenth century cosmology. We tend to forget that the heroic verse epic continued for many centuries until it came to its dismal end, having totally outlived the mythological and cosmological structures that had generated its validity.

The second subversive element of any classic literacy is even more radical and difficult to define. I may have this totally wrong. In the West, the status of death is undergoing a sea change. We are in the midst of what may be the deepest reaching tectonic-plate shock in Western history. From 1914 onward, we see bewildering new worlds of mass death on a wholly unprecedented scale. Remember Passchendaele, when on the first day in 1916 an estimated 45,000 people died. The new worlds of cloning, of genetic manipulation, of transplant, are what Foucault called "the abolition of the self." This is now taking on biological potentiality. "Death, where will be thy sting?" This is an immensely perplexing and fascinating mutation of consciousness that I can only allude to, but it bears directly on our subject. Western literacy has been one of the strategies, one of the master strategies contra death. It has harboured intimations, as Wordsworth would have it, of immortality, aspirations to immortality, from its origins on. Magnificently, Pindar says, "The city for which I am writing this ode will perish. The language in which I am writing it may perish but my poetry will live forever." Horace and Ovid were translated into what every child still had to learn in my time. Tougher than brass, stronger than marble, these lines will live. That fine, Stalinist poet, Paul Éluard, puts it in a single phrase, "le dur désir de duré": The harsh desire to last. That is the mechanism of all attempts at great literature. Today already a certain embarrassment attaches to this commanding motion. If you want to be funny in France you cite the title given to themselves by members of the French Academy, *Les Immortels*. This fills everyone, except the gentlemen in question, with embarrassment.

Art is flirting with the aleatory, and with self-destruction. M. Baudrillard movingly evoked the caverns of Lascaux, or I could say Altamira. This came to an end on a specific date: it being rare that a great movement in history has a calendar date. It came on a late afternoon in the courtyard of the Museum of Modern Art in New York. Tinguely, in front of a large crowd, having set up a splendid metal and partially Calderesque but very different structure of meaning, set fire to it and as it collapsed he said quite clearly, "Je ne veux pas durer": I don't want to last. And perhaps with that ended that which at Altamira and

Lascaux had begun by saying, I want to last. Tinguely doesn't want to last. It's ephemeral. It's collective. It's anonymous. It's a happening. It's a moment. Because the desire to last is, at a central level, that of a very natural and often vulnerable artistic vanity. It is that of a link with a transcendent belief now no longer available. In this light, it is both uncertain and blinding. It is in the light of these changes that we must together try and redefine the word literacy, even though in only the most provisional, tentative way. Anything else would be arrogance.

The saturation of daily lives by electronic means of communication, of information storage and retrieval and learning methods, will inevitably comport increasing familiarity with the near mathematical and logically formal languages and sensibility. Never forget that your computer, wherever it is in the world, is speaking Victorian English; its structure is that of Boolean algebra, which is not the only algebra available. It could have been based on Indian algebraic thought, which is very different. It is speaking a kind of Esperanto with deep roots in the nineteenth-century English confidence in logic. Increasingly, orality, writing, and reading, as we have known them, will take on highly specialized functions, as did reading and writing throughout the ancient and medieval worlds. There is nothing new in this. We harbour the illusion that our literacy was an inevitable, natural, and ubiquitous form. It was not. There may again be what Rabbi Akiba, after the destruction of the temple, called "houses of reading" for people who actually know how to sit in silence and read a serious text without secondary sources of any kind.

My illustrious colleague in Geneva, John Starobinski, never had a book of criticism on any desk. He read the text. He read it at four levels, which I then tried to do. I said we will start with the dictionary, the infinite poetry, the poetics of looking up words, of knowing, trying to know their history. Secondly, we will proceed with something difficult: grammar. Grammar is the music of the mind and of thought. I can't take seriously someone who waffles to me about Milton's greatness and can't explain to me why there are four gerunds in the beginning of "Lycidus," someone, in short, who probably doesn't know what a gerund is. Milton did. Milton was a supreme musician of syntax. It is no accident. He is no latinate show-off. Imagine the music student who would dare say to the teacher, "No, no scales. I have deep feelings about Chopin." This is what we in Letters have done. We have sold out to trash. We ask less and less of our students. We no longer ask for the ancient languages, without which I did not take students in comparative literature. It is criminal nonsense to say that you can talk about European literature without some attempt to know Greek and Latin and how they live in the vulgate. And then I'm told, "How, for God's sake, can you ask that?"

When you pass from the first year, which is an apprentice year – provisional, tentative – to the second in the Harvard Medical School, you can only go on to the second year if you take the pharmacology exam, which comports learning by heart some twelve hundred formulas, many of them intricate. And it is the same story every year. For the first few weeks, it is "I will commit suicide. I will quit medicine. I have ten Valiums a night." Slowly, slowly these perfectly wonderful young human beings realize they can do it. The powers of memory are infinite. The muscles of memory, once you wake them and exercise them, they can take the exam. It's not a sadistic or trivial demand. If you get the wrong formula, the patient dies. So it's about something – something real and important. And we in the arts ask less and less; how deeply ashamed we should be. As Spinoza said, "All things excellent are difficult."

The way you honour a human being is to ask of him an effort. In the hopeless popularization and down-marketing of our crafts we don't honour the student. We condescend to him and that is a hideous contempt. You honour him by what you ask and

demand. If the dear old Lombards had passed eleven kilometres nearer to St. Gal when they poured down the Alps and set it on fire as they did every other monastery, we would not have our Horace, our Virgil, our Catullus, our Ovid. One monastery hung by a thread, the monks copying the text, copying day and night and saving for us what was, until very recently, the literacy, the alphabet of civilization.

Numeracy will move closer to centres of competence and we have been desperately slow and unimaginative about teaching mathematics, about introducing what Virginia Woolf called "the common reader" to its creative powers and beauty: that being the other great universal language. Please, let's have no nonsense about Anglo-American being the planetary language. When I was at the Institute in Princeton as a young man, one was allowed, by the grace of Oppenheimer, to sit in sometimes on the seminars, even if you could not understand. I watched at the board some of the princes of the world, Japanese, Russian, and American, working together at top speed without sharing a word of each other's language: Leibnitz's great dream, mathematics with its dialects, its wit, its sadness, its grandeur, belonging to the whole world. Everyone could speak to the man next to him as they worked together. The most eerie and wonderful moment was when they laughed. Either, as I gather because it had gone wrong or because there is a wit, which we can't fathom, as there is in many Haydn studies. Many Haydn cadenzas are funny and are meant to be funny. Music and mathematics: the two codes of universality.

All I am doing is quoting Plato, of course. We haven't tried to understand how to teach. Give me any child from any background and I will put on the blackboard one, two, three, four, five, six, seven, eight, and underneath, the even numbers, two, four, six, eight, ten. I will ask the child, "How can there be as many even numbers as there are numbers?" I will try to have the nerve to let the silence settle, because it is out of the silence that there may come very slowly, tentatively, God knows, the spark of the question, of the wonder, of the exasperation which will lead, believe it or not, to the notion which Descartes says is the proof of God in us: the notion of the infinite, because only that can help you understand why these two series are homological, one to one to one. And there will be in that room children for whom the fire will start. And it need never go out if they are properly taught and loved, if they are not condescended to. And they don't need to know that transfinite cardinal numbers are a damned difficult concept, far beyond me. They don't need to know that. That's how this demonstration starts. We can start there and stop at a much earlier moment, with the sheer joy of it, the sheer animal joy of understanding something infinitely deep.

And there are bridges. Two fields that should be part of early school training are architecture and music. Goethe said, when going to the temple of Sagesta in Sicily up on the mountain, "Now I know the gods have visited man." It is perhaps the most perfect temple built. Henry Adams said when he wrote his book on Chartres, "Now I know that man's aspirations can reach to God." I hope many of you, like myself, have been to Bilbao to see the Guggenheim Museum. It will stand with Sagesta. It will stand with Chartres. It soars into infinity. I can't put it any other way. The light travels along the walls, reshaping at every hour as the sun circles. There are areas of silence in it that have an indescribable power and beauty. At every moment it is counterintuitive. The architect has put the heavy on top and the light below it. When you read Mr. Gehry's notes, and I hope you will, he says, "Careful, I didn't do it." He names the computer program in California that, far beyond the present possibilities of the human cortex, can figure out what critical curves are possible for walls of titanium. It can tell him how the light will move in different months of the year and different hours of the day. It will tell him – apparently a fantastically difficult thing – what happens to sight lines and noise when you have a lot of people in the museum, when

you have a few people in the museum, or when they come from one hall to the other. This is entirely beyond our present computational mental abilities, but it is open to the computer. Of course, one wants to say to him, "But, Sir, you asked the right questions and that is an immortal achievement." But it is already something very different from the architects of Chartres and Segesta. To come somewhat near it, to teach children and ourselves what Plato knew by heart: the way in which architecture and mathematics play together with space and volume and light and sound is one possible program. The other, of course, is music.

From Vladivostok to Tierra del Fuego, on the Walkman, they are listening to the same hit as they walk down the street. Levi-Strauss defined this as "Le mystère suprême des sciences de l'homme," the supreme mystery of the sciences of man, "l'invention d'une mélodie," the invention of a melody. Music is a totally universal language. Children are magnificently good at it and responsive to it. Also, and I quote Boulez, "So much of my music now can only be fully understood by those who can read an algebraic algorithm." Again, joy, the wonder, the fun of it, the marvellous fun of it, so much of which has gone out of traditional forms of humanistic teaching. These are not, in any way, utopian or science fiction counsels. They can be shown to work. They demand the solution that you pay your teachers in school, your teachers of languages and mathematics, as much as a university professor and see that the society honours them correspondingly. We now, in England, have a death-trap situation. Cambridge is, along with MIT, Stanford, and Harvard, still *primus inter pares* in mathematical teaching. They are good on research, but the excellent go immediately for vast salaries into public accounting and banking: salaries which even at the start, outstrip what a professor can hope for at the end of his life. And the very bad go to teach mathematics.

We classify a first, a second, or a third. Those who get thirds will teach mathematics. So you have a self-reproducing cycle of vengeful mediocrity in the most crucial moments, that of the child. But it can be solved. The Stalinist solution worked, and for many years. Russian primary and secondary school training in mathematics, sciences, and languages was the best in the world. It honoured the teacher, making it the most rewarding and not the most punishing of careers. This does not mean for a moment that we will not continue to love literature – that we will not continue in a few of our cases to try and learn it by heart, a little bit every day, a little bit every morning. And I can tell you that trying to learn prose by heart is hell. I know people that can do it very beautifully, but it's very, very difficult. You have to hear the music in the prose, you have to let your memory pick up the syncopation, and even then it is difficult – but do try, even if you fail.

Know that Heidegger is both right and totally wrong when he says, "The sciences only have answers, the arts, only questions." It's both right and wrong. It is a wonderfully provocative challenge. The questions posed to us by great literature are indeed the recurrent ones, but to persist in asking them without the scruple of awareness of what is happening to our intellectual world is, I think, a blind arrogance for which we are already paying a very high price. God knows, statistics must not be taken verbatim. Nevertheless when UNESCO, in last year's survey of education, claims that some eighty-two percent of those at the highest end of the curve of intelligence are now in the sciences, that's something to think about.

There are bridges. There are efforts to be undertaken. Above all, there are joys, enormous joys to experience. Do honour to your students. I had the incredible luck to be at the University of Chicago with Hutchins one day, and Hutchins had a rule that even freshmen were allowed to sit against the wall in a graduate seminar on the condition that they didn't open their mouths. I had heard that Leo Strauss had announced a seminar, "Plato and the Polis." I sat against a wall, and this little, formidable man walked in and said, I have never

forgotten a single second of that moment, "In this seminar, the name of who was incomparable will not be mentioned." I didn't catch the name. I was nervous, and I went up to a graduate student afterward, and I said, "Look, can you help me?" He said, "I will write it down for you." Martin Heidegger. So I rushed to the library on the Midway and got out *Sein und Zeit*. I couldn't understand the first sentence; I was totally helpless. And I kept trying and trying. I kept it open in front of me, and I felt, not defeated, not mocked, not condescended to, but infinitely honoured by the provocation.

What should a teacher be? A person with a summons, with a calling, *provocare*. A provocation is what teaching is – to call you out. A good Anglo-Saxon expression: I shall call you out. "Have at you, Sir, be on guard." Provocation: You must always pitch above the head of your student until his fingers ache with reaching. I think it is the most exciting process in the world. I. A. Richards said, "The two most complex processes on this planet are the mathematics of a string quartet and the translation of a Chinese philosophic sentence." He may be right. They are worth pursuing, and are in certain respects wholly familiar to Plato when he writes over the doors of the Academy, "Let no one enter here who is not a geometer." Wholly familiar to Plato, wholly familiar to Pythagoras, with his hope that music would open the doors to cosmology and to the problem of the inner harmony of human beings. For others, of course, there will be a post-humanity, which, I am not altogether sorry, I will not live to see.

The Limits of Image Literacy

by Geoff Pevere

One of the most famous of all birth-of-motion-picture stories concerns the Lumières' train.

It goes like this: On December 28, 1895, Louis and Auguste Lumière – sons of a French photographic equipment manufacturer – ran the very first program of moving pictures to a paying public at the Grand Café in Paris. It consisted of a number of single-shot, fixed-camera tableaux of non-fiction Parisian scenes, including the arrival of a train at a local station.

While all of the Lumières' scenes caused a sensation that day, the train, so the story goes, nearly caused a riot. When people saw the image of the locomotive apparently coming in their direction (actually, it was photographed at an angle), they screamed and lurched backward in their chairs. Some accounts have them actually running from the café, others merely gasping at the sight.

Whatever the truth, it seems clear that something happened that day resulting from these pioneering spectators' "illiteracy" when it came to reading moving images. Watching this projected two-dimensional moving image of a locomotive heading roughly their way, they did not yet have the visual literacy to interpret the image as a representation. As far as Grand Café patrons were concerned, they were in danger.

Twenty years later, the Canadian-born pioneer filmmaker Allan Dwan stood on a New York location trying to figure out how to shoot a scene. In the film *David Harum*, the title character is required to stroll down a street greeting everyone he meets. He's a hail-fellow-well-met kind of guy, as this scene was supposed to demonstrate. Conventionally, the walk would have been broken down into edited shots showing David greeting different people: the camera would shoot, stop, move back, set up, shoot again, stop, move back, and so on. This suddenly struck Dwan as cumbersome and wasteful. He looked at the camera.

"It occurred to me," Dwan told interviewer/filmmaker Peter Bogdanovich in the late 1960s, "Wouldn't it be nice if we could just *move* it backward with him. I said to the cameraman, 'How can we move it back?' And he laughed at me." (Bogdanovich, *Who the Devil Made It*, p. 68)

It had never been done before. But Dwan did it: he fixed the camera to a nearby Ford and backed away from David Harum with film rolling. The dolly shot, one of the most basic moves in cinematographic vocabulary, was born.

It was not an immediate success. "The scene was effective," Dwan told Bogdanovich, "except that when we put it in the theatres, the movement – according to theatre managers – disturbed the audience. They said it made them feel dizzy. Some of them grabbed their chairs and hung on because they thought *they* were moving." (Bogdanovich, p. 68).

Like the Lumières' train panic, the dizziness caused by the dollying camera would pass. People learned how to read the image for the two-dimensional representational trick it was, and – crucially – to *enjoy* it for the pleasure it and just about every artificial sensation of movement motion picture technology offered.

But in the evolution of cinematic language, pleasure and understanding always involve a process of orientation. My father, a Depression-era kid with a lifelong love of movies, often told me how, in the 1940s, he'd tried in vain to convince his grandfather to take him to "the show." The old man wouldn't go. Remembering his few experiences during the silent era, my great-grandfather said he couldn't stand the way the movies "flickered."

In 1999, a century after the train incident at the Grand Café, there were indications that the learning curve of moving image literacy could still be sufficiently steep to induce butterflies. When the all hand-held digital video horror movie *The Blair Witch Project* opened, there were widespread reports of people reeling from the theatre feeling the optical equivalent of seasickness – as the camera lurched steeply into the movie's woody darkness, so did some viewers' stomachs.

These stories, though spanning the first full century of the movies, share two key elements. Because they describe moments of initial disorientation caused by technical innovation, they reveal the process by which audiences learn to "read" movies. As a visual medium based in the mechanical simulation of sound and movement, they require viewers to "learn" the new technical vocabulary. When D. W. Griffith introduced such imminently basic cinematic narrative elements as the close-up and cross-cutting between two scenes, he too faced initial resistance on the part of "illiterate" audiences. Sergei Eisenstein's radically dissonant experiments in editing – in films like *Potemkin* and *Strike* – are still capable of jarring the uninitiated viewer. Jean-Luc Godard's bold use of jump-cuts in *Breathless* (1959) – now a staple visual tic in TV advertising, music video, and movies – proved similarly challenging to audiences. Today, many Hollywood action movies are paced and structured to simulate the relentless velocity of video games – a familiar audio-visual language to those who have played them, a confusing, skull-splitting blur to those who haven't.

Secondly, as far as the technical evolution of the movie experience is concerned, what all these incidents involve are innovations related to the way motion pictures *move*. If they can be understood as expansions in the expressive narrative vocabulary of film, they are expansions transpiring in the realm of the *kinesthetic*. They mark leaps forward in the way movies generate pleasure and fascination through the visceral sensation of simulated movement.

In this sense, the video game esthetic is both the logical and ultimate expression of motion pictures' evolution toward total simulated subjectivity: your eye and the camera are fused into a single, synchronized first-person joyride. This roller coaster principle of popular entertainment is also emphasized by the new theatres we tend to experience these post-video game movies in. With their unobstructed stadium seating, Dolby surround sound systems, and general architectural emphasis on rendering the movie-going experience as something considerably closer to a monumental arcade than an old-fashioned theatre, the megaplex is an environment facilitating pure sensation.

This brings us to the basic contradiction in the very idea of moving image literacy: most of the more radical expansions of the language of popular filmmaking – and our comprehension of them – are the result of the medium's ongoing evolution toward a state of pure kinesthetic stimulation. The more we learn to orient ourselves to or "read" moving images, the less "readable," in the literary sense, those images are: we may now be capable of understanding images at a faster rate than any previous generation, we may be surrounded by more images than any previous generation, and our visual vocabulary may be more extensive, but what kind of knowledge does that represent? A question presents itself: Is it literacy if it's felt but not interpreted?

The evolution of motion picture technology, an evolution that must be understood to include television and all forms of computer imaging as well as movies, is a commercial evolution: the mainstream of all these media exist to sell either themselves or other products, and their increasing technical sophistication – which is to say their expressive vocabulary – is the result of this commercial impulse.

The slicker – more real, sensational, viscerally stimulating and satisfying – they are, the more efficiently they perform as consumable goods. Consumption is fundamentally irrational – it must convince us to want what we do not need – and the activation of irrational impulses is achieved through the stimulation of emotional states like fear and desire. If a basic principle of print literacy is based in the isolation of words and language for purposes of understanding and interpretation – the breaking down of the systems for purposes of re-building them – the basic principle of contemporary image culture is unceasing and constant flow: the pictures must never stop, and the act of interpretation must always represent a struggle, an effort, against this tendency. By its nature, interpreting moving images goes against this flow. Reading images is work, while experiencing them is easy.

Here's a test: smoke a joint. Read a book for half an hour. Then watch TV. Then try, just try, to turn it off after half an hour. Then ask yourself which was more fun – which felt more natural and effortless under the circumstances of herbal intoxication. Next morning, try to remember anything you watched.

If the movies' technical evolution is primarily a function of attracting audiences for commercial purposes, and if the visual language of advertising exists primarily to persuade, there is a fundamental contradiction in the suggestion that we learn to read images the way we learn to read words. The latter exists to promote thought and interpretation, while the former exists to promote impressions and feelings. One seeks to work consciously, the other unconsciously. If one reaches the emotions only after a process of intellectual interpretation, the other can be intellectually interpreted only after being emotionally experienced first.

As a movie critic for a major daily newspaper (the *Toronto Star*), it is my peculiar job to work against this fundamental tendency of motion pictures. I take these emotional experiences – comprised of light, colour, motion, and music – and render them as words. As fundamentally absurd as this may seem from some perspectives, from others it makes perfect sense. In order to properly analyze, respond to, and evaluate movies, for whatever it's worth to do so, it is first of all necessary that one translate their visceral effects into language. The flow of images, that is, must be interrupted in order to be evaluated.

If this evokes an image of someone standing in a raging torrent, it is not altogether overdramatic image: the torrent of flowing images has never raged more ferociously than it does now, and the process of evaluating moving images is fundamentally – and necessarily – an act that tilts itself against the prevailing currents of motion picture production.

It is in the nature of contemporary commercial moving image production to flow incessantly: to maintain the appeal to the emotions and circumvent the process of intellectual interpretation – which, by its very nature, isolates and short-circuits the connection between emotion and consumption – it is in the interest of moving pictures to keep on moving – faster than the speed of thought, faster than the speed of intellectual response, and certainly faster than the reasonable tendency to question just what all these images are for. The state of satisfied passivity is image culture's goal, for the more passive the audience is the more suggestive it is to the call to consume. And so it is a critical

priority of moving pictures in consumer capitalist society not only to keep moving, but to do so with such constant ubiquity their very artificial nature becomes virtually natural – part, that is, of the environments we live in, as seemingly natural as weather, or a flowing river, itself.

With these words, for example, I can do something I am otherwise disinclined to do in my daily urban life: provide an account of the moving image landscape; itemize the extent to which I am surrounded by moving images whose primary purpose is to stimulate a purely irrational desire to consume. There are billboards in my neighbourhood that change pictures, and there are bus shelter roll-up ads that do the same thing. There are video monitors displaying advertising messages in banks, grocery stores, department stores, and franchise outlets in malls. In the core of my city, there are scores of strategically high-altitude Blade Runner-like pixelboard and video screens, and there are television screens everywhere: in shop windows and hotel lobbies, behind pharmacy cosmetic counters, in every one of the dozens of music, video, or electronic equipment outlets within just a few kilometres of my home. Every time I turn on my computer and log on to the Internet, I am offered countless opportunities for imagistic distraction. They call it surfing, and that's something you do on water, isn't it?

When I go to the commercial cinema nearest to where I live – one of those cacophonous monstrosities built to the blueprints of the roller coaster principle, I am confronted by moving picture pitches from the moment I approach the theatre – thanks to outside monitors displaying movie trailers on streets – to the moment I exit. In between: monitors in the lobby where tickets are sold. Monitors above the concession stand where corporate franchise junk food is sold. Advertisements on screen in a theatre too dimly lit to do anything (like read, perhaps?) but watch them. Commercials before the trailers and trailers before the movies and product placement in the movies that follow the trailers and the commercials.

Were I to remain consciously, discerningly, and deconstructively aware of all these images all the time, I wonder how long I might maintain sanity. At a certain point, survival in the atmospheric riot of commercial moving pictures necessitates the nullification of the interpretive mechanisms – to merely cope and prevent an overload of signification, one has to stop thinking about what's going on. It's the modern media equivalent of breathing: if one was consciously aware of each intake of breath one took, breathing itself would become an exercise of Herculean effort. Survival depends on a certain amount of automatic response and reflexive obliviousness. As it is in the atmosphere of oxygen, so it is in the atmosphere of commercial images.

This is not to say I am not aware of these images, just that most of the time I am not engaged in a conscious process of interpreting them: I am not reading them the way you are reading these words. And while I have no doubt that a certain process of neurological refinement has taken place over my life, which has acclimatized me to the evolutionary shifts and developments of these audio-visual systems, I am reluctant to call that acclimatizing process literacy. Adaptation to environmental change, perhaps, but not literacy.

When it comes to the idea of image literacy, this is a crucial distinction. While it is possible to process images subconsciously, one cannot read words passively: the act of reading language involves active processes of engagement, interpretation, and response that reacting to images does not. If this capacity for purely visceral stimulation is why moving pictures are such an overwhelmingly powerful force in the process of stimulating

consumption – a process which only stands to collapse if subjected to too much reasonable thought – it also explains why image literacy is a fundamentally different process than print literacy.

While there is no question that the mere capacity to navigate oneself through the contemporary electronic environment involves a level of neurological sophistication that previous generations of homo sapiens did not possess – and while it seems only likely that each generation marks a certain degree of evolution in image literacy over its predecessors – it's a form of literacy that functions primarily on a non-intellectual level. So it must. For the most part, our image culture exists to maintain a consumer culture, and consumer culture depends for its very existence not on thought but emotion, and not on interpretation but stimulation. If this is why image literacy must be considered an essentially different process than print literacy, it is also why the latter is perhaps a more crucial form of literacy than ever before: by its nature, it arrests the flow of images that would otherwise seek to wash us away in their currents of passive consumption. I can choose not to think about the images that flow around me. I am compelled, however, to think about what I read.

In my quiet, extra-megaplex moments, I take keener pleasure in reading than I ever have. This is partly because it now feels like an almost subversive activity, a quasi-clandestine practice that pulls not only one's attention but one's entire mode of thought away from the ceaseless cacophony of hard-sell, soft-thought image culture. I practically never watch television either, because it insists in its very form on the presumption of perpetual engagement – one must always watch lest one miss something – there is something almost criminally satisfying in simply ignoring it. But what do I like to read about more than anything else? Movies, naturally. And popular culture. Words about pictures. Thoughts about feeling. The interpretation of sensation. The resistance of language.

At Both Ends of the Spectrum

Gayatri Chakravorty Spivak

To read and write is not simply to learn to make and manipulate letters. Is reading and writing responsibly losing ground because of the many advantages of specifically electronic telecommunication? If you ask this kind of question, you are assuming one sort of society. Or can reading and writing not establish itself because of enforced illiteracy, which is quite often mistaken and celebrated by cultural relativists as orality? Now you are talking about another kind of situation. Or, indeed, can it not be practiced because of the trivialization of the humanities in the general education system, which cuts across the university system worldwide?

We betray contempt for the poor when we think of literacy merely as a primary vocational skill, although it is that too, and if we think employability is identical to freedom, although employability is indeed necessary for legitimate social mobility. I speak from experience. My mother was an indefatigable social worker. At age eleven I learned (I was a bit precocious) how to grade papers, because my mother worked day and night to make destitute widows employable. So I am not speaking out of some ivory tower sentiment. My mother and I talked about what employability meant since I was a pre-teen. I do believe that although employability is indeed necessary for legitimate social mobility, to equate it with freedom is a major mistake and it shows contempt for the poor. Have we ever known what it is to read and to write – two separate but related activities – performances that transform our selves and the world (it is not just learning to read and write but learning to read and write ourselves)? Yet it allows us to privatize the public sphere and to contextualize and decontextualize the other. At the same time, all reading transforms and holds the key to making public our most private being.

My father's mother could read a bit but could not write, I've heard. What can it mean to read and not to write? I have taken as my title "At Both Ends Of the Spectrum." All the colours of the spectrum work together to annul difference and make the equality of the selfsame light appear. All our concepts and metaphors of the coming into appearance of the phenomenal world, of the sensible world of space and time, relate to light. Yet we do not all have an equal right to dispose of the phenomenal world. From my own experience over the last thirteen years, teaching the children of the poorest of the poor, and training their teachers, I would say that it is not access to the phenomenal world that we are talking about. It is of the right to dispose of the phenomenal world that we speak. I must think of our everyday light as divided into the ghostliness of the spectrum. The spectrum, and this is its primary meaning, is the ghost of light that we want to deny. In a little, I will show you a bit of writing from the other end of the spectrum from this well-lit place. I have learnt that it is there that the philosophical questions have the greatest purchase and there is no one there to tell me that I cannot be understood.

Let me begin, however, at this end, in New York City, where I also teach. There, too, the ghost of light appears and is denied. I am a university teacher there. I am going to talk about CUNY, the public, urban university, and Columbia, a more elite, private university. And this difference is felt in the division of the City into uptown, downtown, and midtown. From 1990 to 2000 a commission appointed by Rudolf Giuliani investigated the City University of New York (CUNY) and criticized the system because 87% of its incoming graduate class was in remedial English. The mayor's report separated the old minorities from the new and went on to say, "during the 1990s the white population of New York City

declined by 19.3% while the black, Hispanic and Asian populations have risen by 5.2%, 19.3% and 53.5%." This mayor's report makes for very interesting reading.

I sat in on some of those so-called remedial English classes offered by the public urban university, very different from the Columbia campus scene. I perceived the institutional incapacity, even when the teacher had the best will in the world, to come to grips with the actual play of the choice of English as the dominant tongue in the imaginations of working-class, new immigrant survival artists. This is very different from the place of English in India, altogether different. I am speaking of this end of the spectrum. I am involved in teaching English in New York City. The mayor and CUNY were going to banish this spectral light to the lesser colleges of the City University system. I had been asked to provide an alibi, I realized later, in order to be able to say that we had asked radical academics to come and give their opinion. There I was. But what did I know? I am an idiot. I actually went to these remedial reading classes, and that, indeed, completed my education, although it was for nothing. The Haitians and West Africans in those classes whose imaginations were crossing and being crossed by a double aporia, the cusp of two imperialisms, Creole, French, so-called pidgin, and English as a second language crossing into first, or Puerto Ricans and Dominicans and others ringing similar changes with Spanish, taught me that there was a kind of reading/writing that does not graduate into a writing that can be recognized as fully literate because the teacher may live on another planet. Of all the benevolent attempts to help these poor kids, et cetera, that's the thing that riles me most. I mean, even in my Columbia class some student will say something clearly coming from a – I can't call a student racist so let's just say double standard – and then she will say, "Sorry, of course, I am speaking from privilege." And I will say, "No. It is a failure of imagination. It is not privilege. Don't look at it always as the benevolence of the privileged."

Anyway, I remember sitting in one of those remedial classes and silently noting the students' imaginative flexibility, so remarkably stronger than the Columbia undergraduates', which latter is generally held up by the life-support system of a commercializing Anglophone culture that trivializes the humanities. And this ability to manipulate a life-support system is described as civilization.

I remember particularly a student's comment in the remedial class on the return of the daughter from the foster home to the care of her indigent mother in Tilly Olson's "I Stand Here Ironing," a text some of you would know, much anthologized and much taught. "It reminds me of my brother coming back from prison," said this laid-back Puerto Rican student. There was an embarrassed silence. The comment was coded as unsettling for the young East Asian female teacher who had clearly been put there because she, too, was hyphenated. The fact that she was incontrovertibly upper class had, of course, not been noticed. Race was all that mattered, and not even "race," whatever that might be in the abstract, but rather hyphenation with America – that selfsame white light to produce a magical empathy because you are all immigrants. So the student makes this remark. I remained silent, of course. It was not my class. The young man had caught Olson's spirit that the organizational indifference of the welfare state separating the child from the mother can make any institution an imprisonment. He had earned the right to rewrite Tilly Olson's story in his own idiom, offering the same critique of governmentality in however illiterate a form. Here, I do differ some from Ms. Sontag. I don't just think writers are readers. I think good readers reading transformatively earn the right to rewrite the text in its idiom, a Freud reading Hamlet. But the moment could not be acknowledged. The teacher proceeded to an academically approved close and ended the reading with a feminist account of mothering.

I witnessed many such missed encounters in my experience going from remedial reading class to remedial reading class all over New York. There is no guarantee that such flexibility of the imagination in the underclass as instrument of survival would survive gentrification. This is another thing that we need to realize when so-called national origins claim authenticity to avoid doing homework, and I speak as one of them. I speak as one of them. I am totally combative against white racism, but that's also not a good way to go. My Columbia classroom is full of gentrified diasporics. They are, of course, abundantly literate in the minimum sense of the term, but neither cultural instruction nor institutional tradition prepares them for that painstaking and caring practice where the reader reads others' writings with respect and patience as if to earn the right to rewrite the text in the spirit of its writing. This is a simple sentence but it is difficult to understand. The fact of making your sentences simpler doesn't mean that you become easier to understand. This is a scary lesson.

I am a New Yorker and I love New York City and I do believe that it is not like any other place. Nonetheless, sometimes one has to drag one's love into the rational abstractions of logic. This is the way I speak about India also. I would not remain a teacher of the humanities if I did not believe that, at the New York end, standing metonymically for the dispensing end as such, the teacher can try to rearrange desires noncoercively through an attempt to develop in the student a habit of literate reading, suspending oneself into the text of the other, for which the first condition and effect is a suspension of conviction that I am necessarily better, I am necessarily indispensable, I am necessarily the one to right wrongs, I am necessarily the end product for which history happens, and that New York is necessarily the capital of the world leading to the United States as the new empire. It is not a loss of will especially since it is supplemented in its stand by its political calculus where the possibility of being a helper abounds in today's triumphalist society.

A training in literate reading is a training in how to learn from the singular and the unverifiable. Although literature cannot speak, this species of patient reading, miming an effort to make the text respond, as it were, is a training not only in accessing the other so well that probable action can be prefigured but striving for a response from the distant other without guarantees. This is the reason I am speaking like this. It is not because I want to spin difficult prose, but because I am actually talking about what my undergraduate students do when they go out into the world, either toward Silicon Valley intellectual property or toward human rights, most of them into the corporate world and certainly toward international civil society. I have no moral position against grading or writing recommendation letters, but if you are attempting to train in literate reading, the results are not directly ascertainable by the teaching subject and perhaps not the taught subject either. In my experience, the proof comes in unexpected ways from the other side, but the absence of such proof does not necessarily mean nothing has been learned. This is why I say no guarantees.

Yet this is the one field where databasing is taken to be the last instance. Anyone who has gone to any of the UN organizational meetings in the name of international feminism knows exactly what I am talking about. A desire to redistribute is not the unproblematic consequence of a well-fed society. In order to get that desire moving by the cultural imperative of education you have to fix the possibility of putting not just wrong over against right, with all the genealogical lines compressed within it, but also to suggest that another antonym of right is responsibility, and further, that the possibility of such responsibility is underived from right, so that today we have not the white man's burden, but the burden of the fittest to guilt- and shame-trip the rest of the world into behaving correctly. That kind of implicit social Darwinism is what I am questioning here.

Databasing for literacy among the less well fed bypasses this problem. Training into the general culture is reflected by the fact that Morgan Stanley, Dean Witter, Merrill Lynch and other big investment companies are accessing preschoolers. Children are training parents to manage portfolios. There is a growing library of books making it "fun" for kids to invest and giving them detailed instructions on how to do so. The unquestioned assumption – to be rich is to be happy and good – is developed by way of many educational excuses. The recent dissatisfaction with corporate corruption has not significantly altered this assumption. It has simply produced the awareness that the successful rich cheat us on our way to happiness. Let me quote a brief passage from a book called *Wow the Dow*. "Children are never too young to start grasping the fundamentals of money management." (I am looking at problems at the top of the spectrum because we always speak benevolently of those people who, unfortunately, are getting trampled by us.) "Even toddlers understand the concept of mine." Exclamation point. So why talk about the other? "In fact, it's the idea of owning something they like that sparks their interest in investing. Rest assured you won't turn your child into a little grubber by feeding that interest. Through investing, you are going to teach him more about responsibility, discipline, delayed gratification and even ethics than you ever thought possible." Another exclamation mark. Now this, we have to look at this before we just go on shedding tears for the other end of the world. Such a training of children builds itself on the loss of the cultural habit of assuming the agency of responsibility as located in something that is radically other. However "literate" they are, it is a killing literacy, not a living literacy.

This process is followed through by relentless education into business culture and academic, and on-the-job training, and management and consumer behaviour. At my university, I am told that even at Columbia, education is a business, and so we should look at investment in this way and that way. I have become a little expert. Prepared for by the thousands and thousands of business schools all over the global south as well as the north, training undergraduates into business culture, making it impossible to strengthen the responsibility-based grassroots layer by the ethics of class/culture difference, consolidating class apartheid. Gentrification kills an imagination focused only on survival, the imagination that I met in those remedial reading classes.

However utopian it might seem, it now appears to me that the only way to living literacies, at both ends of the spectrum, is for those who teach in the humanities to take seriously the necessary but impossible task to construct a collectivity among the dispensers of bounty as well as the victims of oppression. Learning from the grassroots comes, paradoxically, through teaching. In practical terms, working across the class/culture difference which tends to misfire or refract effort, trying to learn from children and from the behaviour of class inferiors, the teacher learns to recognize, not just a benevolently coerced assent, but also an unexpected response. For such an education, speed, quantity of information and number of students reached are not exclusive virtues. Those "virtues" are inefficient for education in responsibility, not so much a sense of being responsible for but as being responsible to – before good intentions, so that it becomes reflexive. We have lots of examples of how, in fact, welfare does not by reflex act well toward others. Institutionally, the humanities, like all disciplines, must be subject to calculation. It is how we earn our living. But where living has a larger meaning, as I hope it does in your title, the humanities are without guarantees, and that is their strength. I speak at such length about this end of the spectrum because I am fortunate enough to be deeply involved at both ends. I can speak with confidence against the idea that this end gives and the other end receives, that the death of literacy is only a problem for the poor. I have nothing but contempt for cultural relativism or cultural conservatism, so that is not what you are hearing.

I will now go on to speak of the poor end. When I finish, please, do not have questions only about the distant poor or tell me you or someone you know is doing exactly that kind of thing. Please remember to pay attention to the mortal illiteracy at the affluent end, an illiteracy that contaminates our everyday and perpetuates the divided world. Whoever wishes to involve herself at the poor end (I am sorry at this point I don't have vocabulary for this, so I just use "rich end" and "poor end." You will see what it means by the end. In fact, there is a children's book, *Rich Dad, Poor Dad*). Whoever wishes to involve herself at the poor end must have the patience and perseverance to learn well one of the languages of the rural poor of the South. For the purposes of the essential and possible work of righting wrongs in the political sphere, the great European languages are sufficient, but for access to the mindset down there, you have to really learn the language well. This cannot be done without the language. You know you can't go to a psychoanalyst that doesn't know your language. Teaching is not a well-paid profession like psychoanalysis but, on the other hand, in order to get into this work with the largest sector of the electorate in the global south, you certainly have to learn at least one language. There is no alternative to that at all.

Access to the mindset of those who have been forced down is to devise a pedagogy that respects the delegitimized ethical tradition. This respect must take into account the multiplicity of neglected languages. I have no doubt that English is more convenient for the world to go around, but we are not talking about convenience here. Your title, *Living Literacies*, is not about convenience. This is because the task of the educator is to learn to learn from below, to learn the lines of conflict resolution undoubtedly available, however dormant, within the disenfranchised cultural system, giving up convictions of triumphalist superiority. It is because of the linguistic restriction that one is obliged to speak of just the roots one works for but, in the hope that some who are interested in comparable work will hear these words, I always push for generalization. In order to generalize, I go regularly to a few rural schools in Yunnan province in the People's Republic of China. I used to go to Algeria for this reason until 1994, when it became impossible. I believe these attempts to generalize are not idle. It is instructive to see, all over the world, the cultural assumptions of the already subordinated positions that did not translate, or are not translating, into the emergence of early capitalism. We are now teaching our children in the north, and no doubt in the north of the south, that to learn the movement of finance capital is to learn social responsibility. It is in the remote origins of this conviction – that capitalism is responsibility – that we locate the beginning of the failure of the aboriginal groups of the kind with whom I work. We Indians are also a colony, from millennia before the European incursion. It is in the remote origins of that history that we locate the beginning of the failure of the aboriginal groups that I will go on to touch, their entry into a distancing from modernity as a gradual slipping into atrophy, [a process that is] a few thousand years old. In our case, the colonial encounter started longer ago than in Australia or South Africa.

This history breeds the need for activating an ethical imperative atrophied by a gradual distancing from the narrative of progress, colonialism, capitalism. This is the argument about cultural suturing, learning from below to supplement with the possibility of the subject-ship of rights, of someone who can, indeed, be the capital "I," who speaks inalienable rights for everyone, rather than just the beneficiary of a threatened and menaced state. The subject-ship of rights comes with cultivating an intuition of the public sphere. I will talk about this intuition of the public sphere in a moment.

The national education systems are pretty hopeless at this level because they are the detritus of the post-colonial or post-imperial state, an imposed system turned to rote, unproductive of felicitous colonial subjects like ourselves, at home or abroad. This is part of

what started the rotting of the cultural fabric of which I speak. Yet the state bureaucracy dismisses what it perceives as procedural interference.

I am not just saying that the poor should have "the kind of education we have had." As I have indicated again and again, the need for supplementing metropolitan education, the kind of education we have had, is something I am involved with every day in my salaried work. Here I am talking for a modest fee to a somewhat filled auditorium. When you are actually confronting the post-colonial state, which is much more comfortable with the remote impatience of the United Nations Development Program, it is hard to say, "education like ours is not what we are talking about." Local people who work at that end don't have any idea of what really goes on at the other end. Even if they have been abroad, they wouldn't have been teaching English, the dominant language of the metropolis. The people who produce critical reports are, at best, education specialists from local universities or mid-level government officials. One of the local primary school headmasters said to me after a particularly scathing report was issued, "Sister, what are we going to do with this report? We are not doing our job well, I noticed. But where is the 'how to'?" And his schools are above the level I am speaking about.

This entire question of "the kind of education we have had" is a red herring. There is an immense difference between our social production and theirs. "Same education" applies only to the "same class of people." And when I say rote I am not speaking of a student resorting to it as a quick way to do well on an exam. I am speaking of a scandal in the global South. In the schools of middle-class children and above, the felicitous primary use of a page of language is to understand it. In the schools for the poor, it is to spell and memorize so that you do not understand what you are reading. That, too, is called literacy. I know this especially since I am involved in New York. I know that the actual class difference in educational standards exists everywhere. I am not interested in playing comparative victimage. The dollar income private sector in the countries of the south are comfortable about presenting themselves as national identities, and, when they settle abroad, as victims of exilic sorrow. I will leave that alone. The second group often writes well, with clever self-irony. The folks I'm talking about don't complain about education. The problem is precisely that they think this is normal. They think this is education. They do not even say, "But Sister, you live abroad." The children certainly, and even their teachers, don't know what America is. Is it possible to think that these people vote as citizens, in the so-called largest democracy in the world? They think (and this is an intelligent analysis) that parliamentary democracy is like a competitive sport. Their votes are bought, of course. The party that promises most, pays best, and performs least wins. This is an intelligent analysis and, *mutatis mutandis*, applies de facto to the US. Anything else would be counterintuitive. Trying to explain the principles of parliamentary democracy is absolutely useless there. What we are talking about is the development of the reflexes of democracy, mental habit rather than words. "Teaching democracy" as mere self-interest of the poor leads to fascism.

I am speaking then of the scandal that, in the global south, in the schools for the poor, what one does with the page is spell and memorize, and even that not too well. Consider the following – the misfortune of a local effort undertaken in the middle of the nineteenth century. Ishwarchandra Bandyopadhyay, better known as Ishwarchandra Vidyasagar, a nineteenth-century intellectual from rural Bengal was twenty when Macaulay wrote his minute on Indian education. Vidyasagar fashioned pedagogic instruments for Sanskrit and Bengali that could, if used right (the question of teaching again) suture the "the natives" old with Macaulay's new, rather than reject the old and commence its stagnation with that famous and horrible sentence very well known in this auditorium I am sure. "A single shelf of a good European library is worth the whole native literature of India and Arabia." The

Vidyasagar primer is still used in state-run primary schools in rural West Bengal. It is a modernizing instrument for teaching. It activates the structural neatness, produced in the nineteenth century, of the Sanskrit and Bengali alphabet for the teacher and the child, which is ruined by the new edition. If you read the alphabet up and down rather than from side to side, you see how rationalized the old system is, with the aspiration increasing on the same pattern of consonants. All of this is totally ruined by today's unexamined revisions. As a modernizing instrument, the nineteenth-century primer undermined rote learning by encouraging the teacher to jumble the structure and course of teaching at the same time. The wherewithal is all there but no one knows how to use it anymore. The first part of the book is for the active use of the teacher.

You go to Calcutta and you talk about trying to get recruits. Obviously, one can't do this alone, and I wouldn't join an NGO if you paid me a million dollars. So, when I try to recruit the Calcutta benevolent folks, I hear, "We are writing new textbooks." These rural teachers don't know how to use a book. Writing new textbooks will do nothing, but it's an easier solution. So, the first part of the nineteenth-century book is for the active use of the teacher. The child does not read the book yet, just listens to the teacher and learns to read and write by reading the teacher's writing and writing as the teacher guides. Reading and writing are thus not soldered to the fetishized schoolbook. In very poor rural areas with no books or newspapers anywhere this would still be a fine way to teach if the teacher knew how to read or use a book. (If you have been stumped a hundred times in a lot of places by both teacher and student producing some memorized bit from the textbook when asked to write whatever comes to mind, you are convinced of this. If you just go for a single photo-op you will never know this.)

Half way through the book the child begins to read a book and the title of that page is: Prothom Path, First Reading – not First Lesson. What a thrill it must have been for that child, undoubtedly a boy, to get to that moment. Today, this is impossible because the teachers and the teachers' teachers, indefinitely, are clueless about this book as a do-it-yourself instrument. And this is just one example. Well-meaning education experts in the capital city, whose children are used to a different world (who have probably read John Dewey – *that* class difference is theorized into cultural instruction), inspired by self-ethnographing bourgeois nationalists of a period well after Vidyasagar (Dewey plus Montessori if you like, if young enough perhaps some experience with schools for Bangladeshi immigrants' children in London, et cetera) have transformed the teachers' pages into children's pages by way of ill-conceived illustrations.

In the rural areas, this meaningless gesture has consolidated the book as an instrument for dull, rote learning. The page where Vidyasagar encourages the teacher to jumble the structure is now a meaningless page routinely ignored. I could multiply examples such as this, and not in India alone. Most of the subordinate languages of the world do not have simple, single language dictionaries that rural children could use. Efforts to put together such a dictionary in Bengali failed, lost in false promises and red tape. The habit of independence in a child's mind starts with the ability to locate meaning without a teacher. If the kind of well-meaning experts who put together the pictures in the primer put the dictionary together, it would be geared for the wrong audience. Even the teachers don't understand the dictionary that is produced for class four in the capital city. The generalizing significance of this case is that, at the onset of colonialism/capitalism, when the indigenous system of teaching began to be emptied of social relevance, there *had* been an attempt to undo this. The discontinuity between the upwardly mobile colonial subject and the rural poor is such that the instruments of such undoing were thoughtlessly deactivated.

I am giving you a Bengali example because I am a Bengali Europeanist, but there must be comparable efforts in the other Indian languages. My involvement tells me that if the first language is not learnt well, there is no hope of learning English. If I began to talk about the problems of teaching and learning English at this level, I would never stop.

The fact is there was Indian class collaboration with British education, and why not? What are we doing here, today? You say the British created the desire but what is education but an uncoercive rearrangement of desires? you can't just have those neat formulas, separating colonizer and colonized. You have to think through how these things fall. The metropolitan specialist has no sense of the pedagogic significance of the instruments. My discovery of the specific pattern of the primer was a revelation that came after eight years of involvement with using the primer, five years ago. Since I do not consolidate instruction for the teacher except in response to a felt need, it came only when I was letting the teacher at one school take down hints as to how to teach the students at the lowest level. As I continued, I realized that the primer had pre-empted me at every step.

I hope the impatient reader will not take this as just another anecdote about poor instruction. I hope I have made it clear by now that, in spite of all the confusion attendant upon straying from the beaten track, the practice of elementary pedagogy for the children of the rural poor is a very important weapon. But it is a hands-on, labour-intensive work of training the teacher to change teaching into teaching literate reading and writing. You have to begin from the language. Nothing but the mother tongue allows this. This is not the kind of metropolitan bilingualism where subcultural attention to language is always congratulated: Oh, yes, very nice, but at home you talk Persian. I am talking about something else. It is only through learning the mother tongue that we actually get into that uncanny experience of the synthetic a priori, if you want a European phrase. That the child inserts itself into a language with a history and a language that will continue later and you have to use that in order to make this change.¹

The incident involved the children writing to the state to ask for a tube well. I carried the letter, to no avail. Through the writing of this letter, with mistakes that I did not correct, they actually became aware of the public sphere. They became actors in the public sphere. And they also learnt an important lesson: the heartlessness of the public sphere without short-term resistance talk. Such talk, like the survivalist imagination in the remedial classes, doesn't last. In the best case scenario, resistance talk may be okay as long as it is freedom *from* but it is not okay when it is freedom *to*, because you have not been teaching in this other way, to rearrange desires. *Mutatis mutandis*, I go with W. E. B. DuBois rather than Booker T. Washington. It is more important to develop critical intelligence than to assure material comfort. This may or may not bear immediate fruit. Let me repeat yet again, although I fear I will not convince the benevolent ethnocentrists, that I am not interested in teaching "self-help." Many, many indigenous NGO's have names that mean self-help in the original language. That's another crock that I will not open for the moment. I'm interested in being a good enough humanities teacher in order to be a conduit; Wordsworth's word. I am a bricoleuse between subaltern children and their subaltern teacher. That is my connection with DuBois, who writes a great deal about teacher training.

The teachers on this ground level at which we work tend to be the worst products of a bad system. Our educators must learn to train children by attending to the children. For, just as our children are not born electronic, their children are not born delegitimized. They are not yet "least successful." It is through learning how to take children's responses to teaching as our teaching text that we can hope to put ourselves in the way of "activating democratic structures."²

My experience of learning from the children for the last decade tells me that nurturing the capacity to imagine the public sphere and the fostering of independence within chosen rule governance, is the general hypothesis of democracy, which will best match the weave of the torn but greatly detailed fabric of the culture, long neglected by the dominant. The trick is to train the teachers by means of such intuitions. Uncoercively rearranging desires is a scary thing (but, on the other hand, a teacher is a teacher, and I am speaking of myself). It contests, most often, unexamined desires for specific kinds of futures for the children. No mean trick to rearrange here. For these teachers have been so maimed by the very system of education that we are trying to combat and are so much within the class apartheid produced by that, that they would blindly agree and obey while the trainer was emoting over consciousness raising. Great tact is called for if the effort is to draw forth consent rather than obedience. In addition, the children have to be critically prepared for disingenuously offered cyberliteracy if these groups get on the loop of "development." I am thinking of the way in which Inuit here and Native Americans there are used to open these great cyberliteracy conferences with some so-called tribal rite, et cetera. Think twice about what that means.

The hope is that this effort with the teachers will translate into the teaching of these reflexes in the educational method of the children who launch the trainer on the path of this general hypothesis. The children are the future electorate. They need to be taught the habits and reflexes of such democratic behaviour, even as children at this end are taught how to manage portfolios. Necessary yet seemingly impossible, you cannot gauge this one by way of statistics and photo ops. Produced by this class corrupt system of education, the teachers themselves do not know how to write freely. They do not know the meaning of what they "teach," since all they have to teach when they are doing their job correctly is spelling and memorizing. They do not know what dictionaries are. They have themselves forgotten everything they memorized in order to pass out of primary school. When we train teachers, as I train teachers at the top in my Ph.D. classes at Columbia, we must, above all, leave them alone to see if the efforts of us outsiders have been responsive enough, credible enough without any material promises.

In the interest of time I will simply recapitulate. First, the cultural responsibility is as corrupted here as there, but in different ways. The effort is to learn it with patience from above or below and to keep trying to suture it to the imagined felicitous subject of universal human rights. I teach Kant here. "Religion Within the Boundaries of Mere Reason" is that from the eighteenth century on down, this great text has been psychologized. You must undo that – for at this end of the spectrum the culture is personalist. So, the point is that you have to get into the cultural texts of the students at both ends. Second, the education system there is a corrupt ruin of the colonial model, just as here it is a trivialized replica of social imperialism. The effort is to undo it persistently, to teach the habit of democratic civility rather than talk about a call to arms in the classroom, globalism, post-nationalism, depending where you are teaching, resistance talk in between, and identitarianism. Among the books I read in preparation for this conference two stand out – *Literacy: A Critical Source Book*, edited by Ellen Cushman, Eugene Kintgen, Barry Kroll, and Mike Rose, and *Writing Without Words: Alternative Literacies in Mesoamerica and the Andes*, edited by Elizabeth Boone and Walter Mignolo. The first is a stunningly well-researched book, and yet, in spite of the regulation Paulo Freire piece, it is too thoroughly North American to call itself a source book, but who is noticing? The very first paragraph of the introduction, "Literacy Surrounds Us" makes this abundantly clear. It makes me go back to where I began, with an exhortation to modify, qualify, situate, and imagine, imagine, imagine. Don't just be benevolent. The other book, the book by Boone and Mignolo, brought home to me once again the hurtfulness of history. I have repeatedly deplored the cultural systems that have been delegitimized since the beginning of what we must call our world as we stand in this

room. No project can make that other literacy, that literacy of orality, live again. The literacy of robust orality cannot live again. The best we can hope for is to turn tradition into theatre by way of the museum, the performative into performance, and that is a discussion that belongs elsewhere. Thank you for your patience.

Endnotes

1. Here I had given an example of my attempt to insert the children into the intuition of the public sphere – the intuition that the state exists to serve the citizen. This can provide for the later, rational lesson that the vote is a sign of citizenship, if and when the student is about to graduate. In the current state of play, there is no such operation at work. I have since used the example in "Righting Wrongs," in Nicholas Owen, ed. *Human Rights, Human Wrongs*, Oxford, 2003; and in "Ethics and Politics in Tagore, Coetzee, and Certain Scenes of Teaching," forthcoming in *Diacritics*, June, 2004, n.p. Indeed, much of what I spoke of in Toronto had been rehearsed in the earlier essay, at greater length.
2. I contrasted Melanie Klein and Jean Piaget here but that can now be found in "Righting Wrongs."

BIOGRAPHIES

Jean Baudrillard

Translation by Marilyn Lambert-Drache

Jean Baudrillard, Professor at the University of Paris, is a famous social philosopher. He is a leading critic of postmodern culture, the economy of communication, and the media system. He is the author of *System of Objects*, *The Consumer Society*, *For a Critique of the Political Economy of the Sign*, *The Mirror of Production*, *Symbolic Exchange and Death*, *On Seduction*, *Simulacra and Simulation*, and *Fatal Strategies*.

Christopher Dewdney

Christopher Dewdney, widely known as a communication philosopher, has published over ten books of poetry, including *Predators of the Adoration and Radiant Inventory*, both of which were nominated for Governor General's Awards. A first-prize winner of the CBC Literary Competition, he also received a third Governor General's Award nomination for *The Immaculate Perception*, a non-fiction book of popular essays about consciousness, language, and dreams. His most recent book is *Acquainted with the Night: An Hour-by-Hour Celebration of the Art, Science, and Culture of Nighttime*.

Maurice Elliott

Maurice Elliott is a University Professor (emeritus). He is still teaching, primarily in the poetry of the Romantic Period and Irish writing in English. He was University Orator, and has served as Master of Winters College, Chair of the English Department, and Chair of Senate. He was also a Member of the Board of Governors.

Joyce Fairbairn

Senator Joyce Fairbairn has been a strong advocate for literacy action in Canada over the past eighteen years. She works closely with many national literacy partners such as Frontier College, Laubach Literacy, Movement for Canadian Literacy, National Adult Literacy Database (NALD), La Fédération Canadienne pour l'alphabétisation en Français (FCAF), and ABC Canada, as well as provincial coalitions and numerous community literacy groups. She is also a key participant in the annual Literacy Action Day on Parliament Hill, International Literacy Day, and Family Literacy Day.

Caitlin Fisher

Caitlin Fisher is a theorist, creative writer, and web artist with broad interdisciplinary interests. Her research and teaching focus on the social and cultural aspects of communication technologies, hypermedia, feminist theory, and digital multimedia work. Her most recent publication is *These Waves of Girls*, a hypermedia novella that won the Electronic Literature Organization's 2001 Award for Fiction. She currently teaches Fine Arts Cultural Studies at York University.

Ningwakwe - Priscilla George

Priscilla George is Anishnawbe from the Chippewas of Saugeen First Nation in Southern Ontario. She firmly believes in the holistic approach to literacy and to life: balancing the Spirit, Heart, Mind, and Body. An educator for over thirty-five years, George developed the literacy program at the Native Women's Resource Centre in Toronto in 1987. She has also authored books on Native Literacy for national projects with Parkland Regional College and with the Ontario Native Literacy Coalition.

Robert K. Logan

Robert Logan is an Associate Professor of Physics at the University of Toronto and cross-appointed to OISE's Curriculum Department. His research interests include the origin of speech, the evolution of language, the use of computers in education and work, and the history of information processing and education. He was a collaborator with Marshall McLuhan on many projects and has been a member of the board of directors of the McLuhan Program at the University of Toronto. Prof. Logan was also a Senior Fellow in the Department of Environmental Studies at York University. He is the author of *The Sixth Language* (winner of the Suzanne K. Langer Prize of the Media Ecology Association in 2000) and *The Alphabet Effect* (first published in 1986 and to appear in a second edition by Hampton Press in 2003).

Steve McCaffery

Steve McCaffery is author of fifteen books of poetry and one novel. He has twice received the Gertrude Stein Award for Innovative American Poetry (1993–94 and 1994–95). *Theory of Sediment* was nominated for the Governor General's Award in 1992 and *The Black Debt* was short-listed for the 1990 Before Columbus Award. Volume 1 of *Seven Pages Missing* was also nominated for the Governor General's Award in 2001. He has performed his poetry worldwide and his work has been widely translated. He is a Professor of Poetics, Critical Theory, and Contemporary Literature at York University and is the current Director and founder of the North American Centre for Interdisciplinary Poetics.

John O'Leary

John O'Leary has been involved in the Canadian literacy movement throughout his twenty-eight-year career as an educator. He joined Frontier College as a teacher in a prison literacy program in 1976 and went on to successfully establish literacy coalitions outside the educational field, with labour, business, non-profit, and non-government organizations. Since being appointed the President of Frontier College in 1991, O'Leary has launched several innovative and wide-reaching programs, including a national initiative to organize literacy programs with volunteers from every university and college campus in Canada.

Geoff Pevere

Geoff Pevere is the co-author of the national best-seller *Mondo Canuck: A Canadian Pop Culture Odyssey*, which was on The Globe and Mail's non-fiction bestseller list for fourteen weeks and was one of the top-selling Canadian titles of 1997. He is a regular cultural columnist with both the Toronto Star and Canadian Forum, and has contributed extensively to magazines and publications both in and outside Canada.

B. W. Powe

B. W. Powe is widely regarded as one of the most unconventional and unclassifiable authors in Canadian writing. He is the author of a novel, *Outage: A Journey into Electric City*; a number of non-fiction books, *A Canada of Light*, *The Solitary Outlaw*, and *A Climate Charged*; and even a CD-ROM, *Noise of Time: The Glenn Gould Profile*. Powe teaches at York University. He was the program co-ordinator for the McLuhan and Trudeau conferences at York; and he was also the program coordinator for Living Literacies. He has also been involved with literacy programs at Frontier College. His new books include a volume of poetry, *The Unsaid Passing* (Guernica), and *Media Illuminations* (Penguin Books).

Daniel Richier

Daniel Richier is an author and broadcaster. He is currently the Editor-in-Chief and Supervising Producer of BookTelevision: The Channel, the world's first and only twenty-four-hour TV station devoted to literary matters, the publishing industry, and the evolution of the word. His novel, *Kicking Tomorrow*, was one of the *New York Times Book Review's* top books of 1991.

Barry Sanders

Barry Sanders is the author of *A Is for Ox: Violence, Electronic Media, and the Silencing of the Written Word*; *ABC: The Alphabetization of the Popular Mind*; and *Sudden Glory: A Brief History of Laughter*. He is a Professor of English and the History of Ideas at Pitzer College, Claremont, California.

Gayatri Chakravorty Spivak

Gayatri Chakravorty Spivak is the Avalon Foundation Professor in the Humanities at Columbia University, New York. Her reputation was first made due to her translation and preface to Derrida's *Of Grammatology* (1976), and she has since applied deconstructive strategies to various theoretical engagements and textual analyses: from Feminism, Marxism, and Literary Criticism to, most recently, Post-colonialism.

George Steiner

George Steiner, Emeritus Professor of the University of Geneva, is an internationally renowned scholar of Western culture, language, and intellectual history. He was named the 2001–02 Eliot Norton Professor of Poetry at Harvard University and is currently an Extraordinary Fellow of Churchill College at the University of Cambridge. His books include *After Babel*; *Grammars of Creation*; *No Passion Spent*; *In Bluebeard's Castle: Some Notes Towards the Redefinition of Culture*; *Antigones: How the Antigone Legend Has Endured in Western Literature, Art and Thought*; and *Errata: An Examined Life*. Prof. Steiner has also given the Massey Lectures for the CBC, later published as *Nostalgia for the Absolute*.

William Irwin Thompson

William Irwin Thompson, a poet and cultural historian, has taught in various fields of the humanities and social sciences at Cornell, MIT, York, Syracuse, and the Universities of Toronto and Hawaii. He was nominated for the National Book Award in the US in 1972 and received the Oslo Poetry Festival Award in 1986. Since 1973 his major effort has been in the founding and directing of the Lindisfarne Association as an educational alternative for the humanities in a technological society. Over the years, Lindisfarne has been a moveable feast, with activities in Manhattan, New York; Southampton, Long Island; San Francisco, California; and Crestone, Colorado.

Eric Willis

Eric Willis is the current Master of Stong College at York University, where he has been a professor in the School of Kinesiology and Health Science since 1973. His current interests are coaching theory and practice. He lives with his wife, Margaret, and children Andrew and Liam, in Collingwood, Ontario.

Moses Znaimer

As a producer, director, presenter, and channel creator, Moses Znaimer's name has become synonymous with the transformation of television content, format, and style. He is presently Chairman/ Executive Producer of the Access Media Group, comprising Access: The Education Station; Canadian Learning Television: Television That Teaches; BookTelevision: The Channel; CourtTV Canada, The Learning Annex Canada, and *ideaCity*. Moses' television concepts and innovations have achieved widespread recognition and use throughout the international broadcasting community His formal education was completed at McGill (Honours B.A.) and Harvard (M.A.). He holds Doctor of Letters degrees (Honours Causa) from Athabasca, York, and Windsor Universities. He is currently a Senior Resident at Massey College, University of Toronto.